PORTLAND INDUSTRIAL PARK

Traffic Impact Analysis

July 2020

Kimley»Horn

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TRAFFIC IMPACT ANALYSIS

Portland Industrial Park

Deltona, FL

Prepared for:

Seefried Properties

Prepared by:

Kimley-Horn and Associates, Inc.

James M. Taylor, P.E.

PE #69979

July 2020

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EXECUTIVE SUMMARY

Kimley-Horn has performed a Traffic Impact Analysis (TIA) for the proposed Portland Industrial Park development generally located on the east side of Normandy Boulevard and south of Graves Avenue in the City of Deltona, Florida. The proposed development will consist of approximately 500,000 square feet of industrial warehouse space, a 1,000,000-square foot high-cube fulfillment center warehouse, a 500,0000-square foot industrial park, and approximately 15,000 square feet of ancillary retail space. The TIA has been performed in accordance with the River to Sea Transportation Planning Organization (TPO) TIA Guidelines and the methodology reviewed and approved by the City of Deltona and Volusia County.

Access to the site will be provided via three access connections to Normandy Boulevard and one cross-access with the Deltona Village development on the north side of the subject property. One of the access connections on Normandy Boulevard will be a directional access (left-in/right-in/right-out) and the other two will be full-access connections.

The Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition* and *10th Edition Supplement* were referenced to calculate the anticipated trip generation potential of the project site. The Portland Industrial Park is anticipated to generate 5,407 net new external daily trips, 612 AM peak hour trips, and 546 PM peak hour trips, of which trucks are expected to account for 848 daily trips, 53 AM peak hour trips, and 52 PM peak hour trips.

The traffic analysis was performed considering a buildout timeframe of two years (2022) for the proposed development program. The operating conditions within the study area were evaluated for future background (without project traffic) conditions and buildout (with project) traffic conditions. Many segment and intersection improvements were identified within the study area as being needed under future background traffic conditions prior to the addition to project traffic. No further improvements were identified under buildout conditions beyond those required to accommodate background traffic.

The developer will work with the City of Deltona and Volusia County to determine which improvements identified in future background conditions are feasible or desired and calculate proportionate share mitigation costs per applicable Florida Statutes and local code.

In addition to proportionate share contribution towards off-site improvements, transportation improvements are needed to accommodate project traffic at the site access locations on Normandy Boulevard. These improvements include ingress turn lanes at each of the three access connections on Normandy Boulevard and the signalization of the southernmost connection (Driveway 3). Site access improvements are the responsibility of the developer.

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INTRODUCTION

Kimley-Horn has performed a Traffic Impact Analysis (TIA) for a proposed industrial warehouse development generally located on the east side of Normandy Boulevard and south of Graves Avenue in the City of Deltona, Florida. The development is proposed to consist of approximately 500,000 square feet of industrial warehouse space, a 1,000,000-square foot high-cube fulfillment center warehouse, a 500,0000-square foot industrial park, and approximately 15,000 square feet of ancillary retail space.

Access to the site will be provided via three access connections to Normandy Boulevard and one cross-access with the Deltona Village development on the north side of the subject property. One of the access connections on Normandy Boulevard will be a directional access (left-in/right-in/right-out) and the other two will be full-access connections. A copy of the current Conceptual Site Development Plan illustrating the site location and proposed project access is included in **Appendix A**.

The TIA identifies transportation needs within the study area under 2022 future background (without project traffic) and 2022 buildout (with project) traffic conditions. The analysis has been performed in accordance with the River to Sea Transportation Planning Organization (TPO) TIA Guidelines and the methodology which was reviewed by the City of Deltona and Volusia County. The approved methodology and methodology correspondence are included in **Appendix B**.

This TIA is based on data collected by Kimley-Horn and supplemented by information obtained from City of Deltona, Volusia County, and the Florida Department of Transportation (FDOT) sources. The study observed the established procedures found in Institute of Transportation Engineers (ITE) sources, FDOT sources, and the *Highway Capacity Manual* (HCM 6).

PROJECT TRIP GENERATION

Trip generation for the proposed development was calculated according to the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. Trip rates for ITE land use codes 130 (Industrial Park), 150 (Warehousing), 155 (High-Cube Fulfillment Center Warehouse), 932 (High-Turnover [Sit-Down] Restaurant), and 934 (Fast-Food Restaurant with Drive-Through) were applied to the proposed project. The ITE trip generation estimate for the development is anticipated to be 5,407 daily trips, 612 AM peak hour trips (445 in/167 out), and 526 PM peak hour trips (193 in/333 out) upon buildout. **Table 1** summarizes the trip generation calculations.

Given the industrial nature of the proposed Portland Industrial Park, the City of Deltona and Volusia County reviewers were particularly interested in the anticipated truck trip generation of the proposed project and any associated impacts. Truck trip generation rates published in the ITE *Trip Generation Manual, 10th Edition Supplement* (published February 2020) were utilized to estimate the number of heavy vehicle trips anticipated for the project site. Approximately 848 daily truck trips, 53 AM peak hour truck trips, and 52 PM peak hour truck trips are anticipated in association with the Portland Industrial Park. Truck trip generation calculations are included in **Table 1** and supplemental information is included in the approved methodology included in **Appendix B**.

The trip generation potential of the proposed Portland Industrial Park is utilized to assess future impacts of the site on the surrounding transportation network. Since some end users are not yet known for the Portland Industrial Park, some flexibility was desired in the land uses proposed for the site. To allow for this flexibility, two trip equivalency matrices were included in the approved methodology provided in **Appendix B** that outline the rate at which land uses can be exchanged to keep the overall traffic impacts of the site consistent with the analysis included herein. The ancillary retail trip equivalency matrix was approved with the condition that ancillary retail uses may not exceed 20,000 square feet in gross floor area or 4,400 daily trips generated (before any reductions for internal capture or pass-by rates).

Table 1 - Trip Generation Calculations

ITE Land Use Code	Land Use	Size	Units	Daily Trips	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
130	Industrial Park	500	1,000 Sq Ft	1,686	200	162	38	200	42	158
150	Warehousing	500	1,000 Sq Ft	836	85	65	20	95	26	69
155	High-Cube Fulfillment Center Warehouse	1,000	1,000 Sq Ft	1,810	150	122	28	160	62	98
932	High-Turnover (Sit-Down) Restaurant	7.5	1,000 Sq Ft	842	75	41	34	73	45	28
934	Fast-Food Restaurant w/ Drive-Thru	7.5	1,000 Sq Ft	3,534	301	154	147	245	127	118
			Gross Project Trips	**8,708**	**811**	**544**	**267**	**773**	**302**	**471**
Internal Capture [1]				*15%*		*15%*			*15%*	
130	Industrial Park [2]			253	30	14	16	30	6	35
932	High-Turnover (Sit-Down) Restaurant			349	19	10	9	26	14	12
934	Fast-Food Restaurant w/ Drive-Thru			1,467	78	39	39	91	39	52
External Trips										
130	Industrial Park			1,433	170	148	22	170	36	134
150	Warehousing			836	85	65	20	95	26	69
155	High-Cube Fulfillment Center Warehouse			1,810	150	122	28	160	62	98
932	High-Turnover (Sit-Down) Restaurant			493	56	31	25	47	31	16
934	Fast-Food Restaurant w/ Drive-Thru			2,067	223	115	108	154	88	66
	Total Driveway Trips			**6,988**	**703**	**491**	**212**	**652**	**257**	**384**
Pass-by Capture		*Percentage*								
932	High-Turnover (Sit-Down) Restaurant	*43%*		242	28	14	14	24	12	12
934	Fast-Food Restaurant w/ Drive-Thru	*49%*		1,012	110	55	55	76	38	38
10% of Adjacent Street Traffic [3]				***990***	***72***	***36***	***36***	***96***	***48***	***48***
Net New External Trips										
130	Industrial Park			1,433	170	148	22	170	36	134
150	Warehousing			836	85	65	20	95	26	69
155	High-Cube Fulfillment Center Warehouse			1,810	150	122	28	160	62	98
932	High-Turnover (Sit-Down) Restaurant			251	41	24	17	23	19	4
934	Fast-Food Restaurant w/ Drive-Thru			1,077	166	86	80	78	50	28
	Net New External Project Trips			**5,407**	**612**	**445**	**167**	**526**	**193**	**333**
Truck Trips										
130	Industrial Park			215	20	18	2	17	4	13
150	Warehousing			226	11	8	3	14	4	10
155	High-Cube Fulfillment Center Warehouse			362	14	11	3	11	4	7
932	High-Turnover (Sit-Down) Restaurant			13	0	0	0	1	1	0
934	Fast-Food Restaurant w/ Drive-Thru			32	8	4	4	9	6	3
	Net New Truck Trips			**848**	**53**	**41**	**12**	**52**	**19**	**33**
	Net New (Non-Truck) Trips			**4,559**	**559**	**404**	**155**	**474**	**174**	**300**

Trip generation was calculated using data from the ITE Trip Generation Manual, 10th Edition

Industrial Park [ITE 130]
Daily — T = 3.37*(X), X is 1,000 Sq Ft Gross Floor Area; 15% truck trips
AM Peak Hour of Adjacent Street — T = 0.40*(X), X is 1,000 Sq Ft Gross Floor Area; (81% in / 19% out); 12% truck trips
PM Peak Hour of Adjacent Street — T = 0.40*(X), X is 1,000 Sq Ft Gross Floor Area; (21% in / 79% out); 10% truck trips

Warehousing [ITE 150]
Daily — T = 1.58*(X) + 45.54, X is 1,000 Sq Ft Gross Floor Area; 27% truck trips
AM Peak Hour of Adjacent Street — T = 0.17*(X), X is 1,000 Sq Ft Gross Floor Area; (77% in / 23% out); 13% truck trips
PM Peak Hour of Adjacent Street — T = 0.19*(X), X is 1,000 Sq Ft Gross Floor Area; (27% in / 73% out); 15% truck trips

High-Cube Fulfillment Center Warehouse [ITE 155]
Daily — T = 1.81*(X), X is 1,000 Sq Ft Gross Floor Area; 20% truck trips
AM Peak Hour of Adjacent Street — T = 0.15*(X), X is 1,000 Sq Ft Gross Floor Area; (81% in / 19% out); 9% truck trips
PM Peak Hour of Adjacent Street — T = 0.16*(X), X is 1,000 Sq Ft Gross Floor Area; (39% in / 61% out); 7% truck trips

High-Turnover (Sit-Down) Restaurant [ITE 932]
Daily — T = 112.18*(X), X is 1,000 Sq Ft Gross Floor Area; 5% truck trips
AM Peak Hour of Adjacent Street — T = 9.94*(X), X is 1,000 Sq Ft Gross Floor Area (55% in / 45% out); 1% truck trips
PM Peak Hour of Adjacent Street — T = 9.77*(X), X is 1,000 Sq Ft Gross Floor Area (62% in / 38% out); 3% truck trips

Fast Food Restaurant with Drive-Thru [ITE 934]
Daily — T = 470.95*(X), X is 1,000 Sq Ft Gross Floor Area; 3% truck trips
AM Peak Hour of Adjacent Street — T = 40.19*(X), X is 1,000 Sq Ft Gross Floor Area (60% in / 40% out); 5% truck trips
PM Peak Hour of Adjacent Street — T = 32.67*(X), X is 1,000 Sq Ft Gross Floor Area (50% in / 50% out); 11% truck trips

(1) Internal capture is calculated considering retail uses both on the Portland Industrial Park site and the adjacent Deltona Village site. A maximum of 15% is applied.
(2) Industrial Park trips are considered Office trips for Internal Capture calculations.
(3) Pass-by capture is limited to 10% of traffic on the adjacent segment of Normandy Blvd [9,900 daily, 715 AM, 964 PM]

TRIP DISTRIBUTION, ASSIGNMENT, AND STUDY AREA

A projected traffic distribution was developed using output from the Central Florida Regional Planning Model (CFRPM) version 6.1, which is based on the Florida Standard Urban Transportation Model Structure (FSUTMS). Hand adjustments were made to the model output based on engineering judgment and knowledge of the area to establish a reasonable estimation for the project's travel patterns within the study area.

Project traffic was assigned within the study area by applying the external trip distribution to the trip generation potential and considering the proposed access scenario. The study area roadway segments and intersections were defined in accordance with the R2CTPO TIA Guidelines and are as follows:

- Any major roadway segment on which the project traffic consumes three (3) percent or more of the peak-hour two-way service volume for the minimum acceptable level of service standard.
- Any roadways considered critical or near critical by Volusia County in the project vicinity (within a three-mile radius of the project site).
- Intersections within study area roadway segments.

According to R2CTPO Guidelines, any segments within a three-mile radius of the project site considered critical or near critical by Volusia County should be considered in the analysis. Based on this criterion, the following roadway segments were analyzed as part of this study:

- Graves Avenue from Veterans Memorial Parkway to Howland Boulevard
- Dr. Martin Luther King Jr Beltway from Orange Camp Road to SR 472
- Normandy Boulevard from Saxon Boulevard to Tivoli Drive
- Fort Smith Boulevard from Providence Boulevard to Newmark Drive
- Providence Boulevard from Elkcam Boulevard to Fort Smith Boulevard
- Saxon Boulevard from Veterans Memorial Parkway to Normandy Boulevard
- Howland Boulevard from Interstate 4 to Elkcam Boulevard
- Catalina Boulevard from Howland Boulevard to Sixma Road
- Lake Helen-Osteen Road from Catalina Boulevard to Haulover Boulevard
- Tivoli Drive from Saxon Boulevard to Providence Boulevard
- Veterans Memorial Parkway from E Rhode Island Avenue to Harley Strickland Boulevard
- Interstate 4 from Dirksen Drive to Saxon Boulevard

The following roadway segments were analyzed as part of this study based upon the project traffic consuming three percent (3%) or more of roadway segment peak-hour two-way service volumes (segments that meet this criterion, but are identified by Volusia County as critical/near critical were included in the previous section):

- Kentucky Avenue from SR 472 to Graves Avenue
- Normandy Boulevard from Graves Avenue to Saxon Boulevard
- Elkcam Boulevard from Normandy Boulevard to Fort Smith Boulevard
- Fort Smith Boulevard from Elkcam Boulevard to Providence Boulevard
- Saxon Boulevard from Tivoli Drive to Providence Boulevard
- Catalina Boulevard from Sixma Road to Lake Helen-Osteen Road

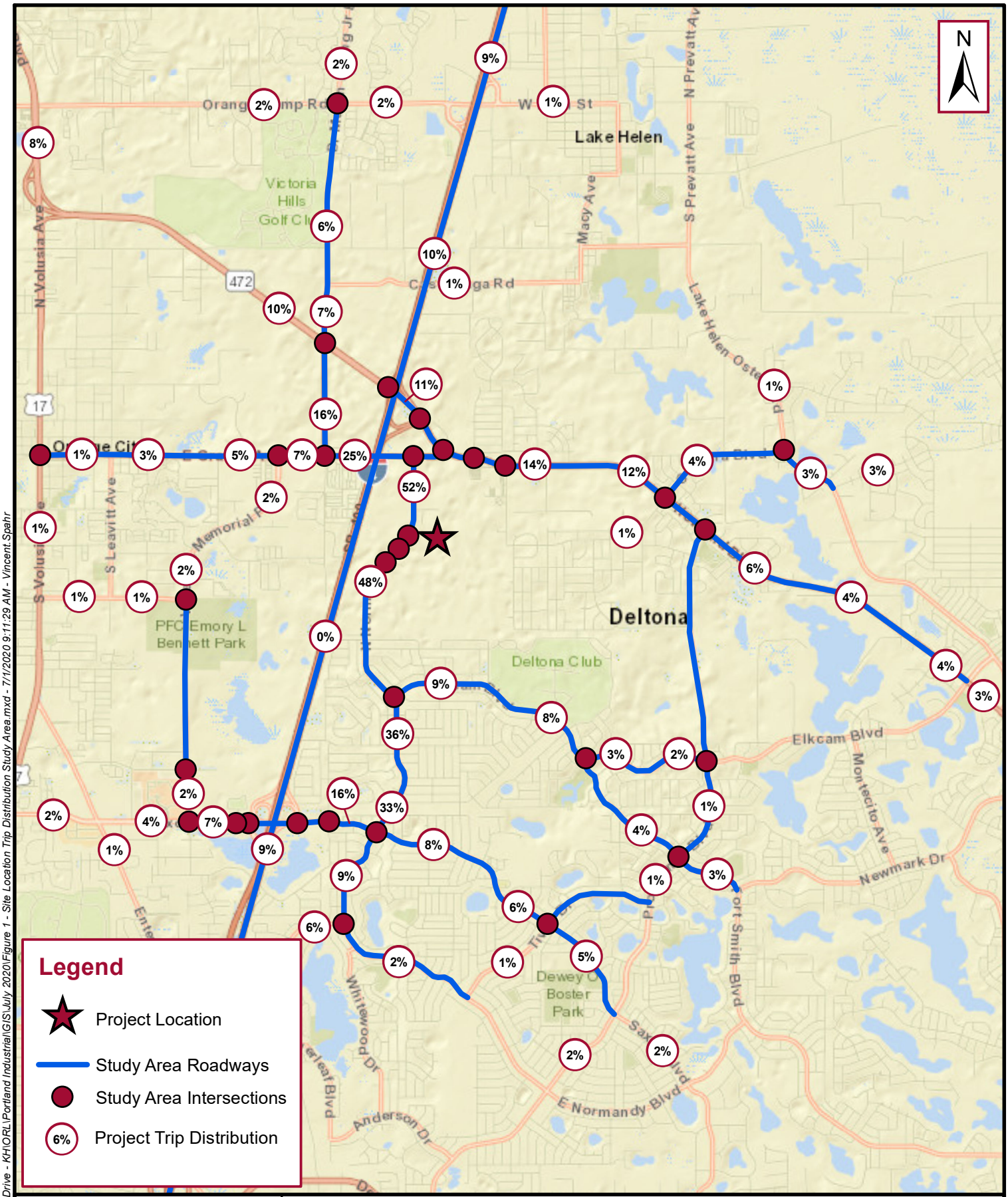
The following roadway segments were analyzed at the request of City of Deltona and Volusia County traffic staff:

- Graves Avenue from US 17/92 to Veterans Memorial Parkway
- Elkcam Boulevard from Fort Smith Boulevard to Providence Boulevard
- Saxon Boulevard from Normandy Boulevard to Tivoli Drive
- Finland Drive from Saxon Boulevard to Sullivan Street
- Interstate 4 from Seminole County to Dirksen Drive
- Interstate 4 from Saxon Boulevard to SR 44

In addition to roadway segment analyses, the following intersections were evaluated for existing AM peak hour (7:00 AM–9:00 AM) and PM peak hour (4:00 PM–6:00 PM) traffic conditions, as outlined in the approved methodology:

- Graves Avenue & US 17/92
- Graves Avenue & Veterans Memorial Parkway
- Graves Avenue & W Volusia Avenue (Kentucky Avenue)
- Graves Avenue & Normandy Boulevard
- Graves Avenue & Howland Boulevard/SR 472
- SR 472 & W Volusia Beltway (Dr. Martin Luther King Jr)
- SR 472 & I-4 EB Ramps
- SR 472 & I-4 WB Ramps
- W Volusia Beltway (Dr. Martin Luther King Jr) & Orange Camp Road
- Normandy Boulevard & Project Access Locations (3)
- Normandy Boulevard & Elkcam Boulevard
- Normandy Boulevard & Saxon Boulevard
- Normandy Boulevard & Deltona Boulevard
- Elkcam Boulevard & Fort Smith Boulevard
- Elkcam Boulevard & Providence Boulevard
- Fort Smith Boulevard & Providence Boulevard
- Saxon Boulevard & Veterans Memorial Parkway
- Saxon Boulevard & FDOT Park & Ride
- Saxon Boulevard & I-4 EB Ramps
- Saxon Boulevard & I-4 WB Ramps
- Saxon Boulevard & Finland Drive
- Saxon Boulevard & Tivoli Drive
- Howland Boulevard & Forest Edge Drive
- Howland Boulevard & Wolf Pack Run
- Howland Boulevard & Catalina Boulevard
- Howland Boulevard & Providence Boulevard
- Catalina Boulevard & Lake Helen-Osteen Road
- Veterans Memorial Parkway & Rhode Island Avenue
- Veterans Memorial Parkway & Harley Strickland Road

Figure 1 illustrates the site location, trip distribution, study area segments, and study area intersections for the traffic analysis.



C:\Users\vincent.spahr\OneDrive - KH\ORL\Portland Industrial\GIS\July 2020\Figure 1 - Site Location Trip Distribution Study Area.mxd - 7/1/2020 9:11:29 AM - Vincent.Spahr

Kimley»Horn

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189 Orange Avenue, Suite 1000, Orlando FL 32801
Phone: 407 898 1511
www.kimley-horn.com CA 00000696

SITE LOCATION, TRIP DISTRIBUTION, AND STUDY AREA

PORTLAND INDUSTRIAL
CITY OF DELTONA, FLORIDA

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EXISTING (2020) CONDITIONS ANALYSIS

Data Collection

No new data was collected for this TIA due to the ongoing COVID-19 pandemic and associated state and local stay-at-home orders. The latest available turning movement data was collected from recent TIAs completed in the area and was approved by City and County staff as part of the methodology review process. For most intersections, turning movement data collected in June 2019 for the Normandy Industrial Warehouse TIA is utilized. For intersections that were not included in that study, turning movement data from other recent studies in the area was provided by the City and County and serves as the basis for estimating existing year 2020 turning movement volumes. All turning movement counts were approved as part of the methodology review process.

Using annual growth rates developed on a link-by-link basis, the turning movement counts were forecasted to year 2020 volumes and used for the existing conditions analyses and as a basis for forecasting the future year turning movement volumes. The turning movement counts are included in the approved methodology provided in **Appendix B**.

Peak season factors from FDOT for the various data collection periods were utilized to adjust the observed traffic volumes to peak season. The FDOT seasonal factors are included in the approved methodology provided in **Appendix B**. Existing intersection lane geometries were observed via aerial imagery. Existing signal timings obtained from Volusia County were utilized in the analysis of signalized intersections and are included in **Appendix C**.

Roadway Segment Analysis

Study roadway segments were evaluated to determine the existing AM peak hour and PM peak hour levels of service and to provide a basis for the future conditions analyses. The maximum service volumes were obtained from the latest Volusia County Roadway Segment Tables and the 2013 FDOT Quality/Level of Service Handbook (provided in **Appendix D**).

The existing AM peak hour and PM peak hour directional traffic volumes on the roadway segments were calculated using the AM peak hour and PM peak hour turning movement count (approach/departure) data collected at the study area intersections. The reported existing traffic volume is an average of the recorded approach and departure volumes, forecasted to year 2020 and adjusted to peak season using the applicable FDOT peak season conversion factor.

Table 2 and **Table 3** illustrate the existing peak hour volume and level of service for roadway segments in the study area during the AM peak hour and PM peak hour, respectively. The following roadway segments are shown to exceed their adopted level of service standards under existing AM and/or PM peak hour conditions:

- Graves Avenue – from Veterans Memorial Parkway to Kentucky Avenue
- Normandy Boulevard – from Saxon Boulevard to Tivoli Drive
- Providence Boulevard - from Elkcam Boulevard to Fort Smith Boulevard
- Saxon Boulevard – from the FDOT Park & Ride to Normandy Boulevard
- Howland Boulevard - from Providence Boulevard to Elkcam Boulevard
- Catalina Boulevard - from Howland Boulevard to Sixma Road
- Lake Helen-Osteen Road - from Catalina Boulevard to Haulover Boulevard
- Veterans Memorial Parkway - Rhode Island Avenue to Harley Strickland Boulevard
- Interstate 4 - from Seminole County Line to Saxon Boulevard

Table 2 – Existing (2020) AM Peak Hour Roadway Segment Summary

Roadway		Roadway Attributes [1]				Peak Hour Two-Way Maximum Service Volume [2]	Existing Peak Season Conditions				
							Volumes [3]		Two-Way Peak Hour Volumes [3]	V/C Ratio	LOS
From	To	Functional Classification	Area Type	Adopted LOS	Number of Lanes		NB / EB	SB / WB			
Graves Avenue											
US 17/92	Leavitt Avenue	Major Collector	U	E	2U	1,330	154	250	404	0.30	C
Leavitt Avenue	Veteran's Memorial Parkway	Major Collector	U	E	2U	1,020	206	264	470	0.46	C
Veteran's Memorial Parkway	Kentucky Avenue	Minor Arterial	U	E	2U	1,620	380	784	1,164	0.72	D
Kentucky Avenue	Howland Boulevard	Minor Arterial	U	E	2U	1,620	403	526	929	0.57	D
W Volusia Beltway (Kentucky Avenue)											
SR 472	Graves Avenue	Major Collector	U	E	2U	1,540	323	370	693	0.45	C
W Volusia Beltway (Dr. Martin Luther King Jr.)											
Orange Camp Road	Cassadaga Road	Minor Arterial	U	E	2U	1,540	481	293	774	0.50	D
Cassadaga Road	SR 472	Minor Arterial	U	E	2U	1,540	419	363	782	0.51	D
Normandy Boulevard											
Graves Avenue	Project Access Location	Major Collector	U	D	2U	1,150	517	210	727	0.63	C
Project Access Location	Rhode Island Avenue	Major Collector	U	D	2U	1,150	459	209	668	0.58	C
Rhode Island Avenue	Elkcam Boulevard	Major Collector	U	D	4D	2,630	401	205	606	0.23	C
Elkcam Boulevard	Saxon Boulevard	Major Collector	U	D	4D	2,630	271	541	812	0.31	C
Saxon Boulevard	Deltona Boulevard	Major Collector	U	D	2U	960	310	261	571	0.59	D
Deltona Boulevard	Tivoli Drive	Major Collector	U	D	2U	960	418	129	547	0.57	D
Elkcam Boulevard											
Normandy Boulevard	Fort Smith Boulevard	Major Collector	U	D	2U	960	161	458	619	0.64	D
Fort Smith Boulevard	Providence Boulevard	Major Collector	U	D	2U	960	128	230	358	0.37	C
Fort Smith Boulevard											
Elkcam Boulevard	Providence Boulevard	Major Collector	U	D	2U	960	123	75	198	0.21	C
Providence Boulevard	Newmark Drive	Major Collector	U	D	2U	1,260	176	547	723	0.57	D
Providence Boulevard											
Elkcam Boulevard	Fort Smith Boulevard	Minor Arterial	U	E	2U	1,020	332	324	656	0.64	D
Saxon Boulevard											
Veteran's Memorial Parkway	FDOT Park & Ride	Minor Arterial	U	E	6D	4,280	955	1,616	2,571	0.60	D
FDOT Park & Ride	I-4	Minor Arterial	U	E	6D	3,410	951	2,061	3,012	0.88	C
I-4	Finland Drive	Minor Arterial	U	E	4D	3,410	864	2,131	2,995	0.88	C
Finland Drive	Normandy Boulevard	Minor Arterial	U	E	4D	3,410	562	1,826	2,388	0.70	C
Normandy Boulevard	Tivoli Drive	Minor Arterial	U	E	4D	3,410	450	1,050	1,500	0.44	C
Tivoli Drive	Providence Blvd	Minor Arterial	U	E	2U	1,020	224	477	701	0.69	D
Finland Drive											
Saxon Boulevard	Sullivan Street	Local	U	E	2U	1,270	111	501	612	0.48	D
Howland Boulevard											
I-4/SR 472	Wolf Pack Run	Minor Arterial	U	E	4D	3,410	556	1,963	2,519	0.74	C
Wolf Pack Run	Catalina Boulevard	Minor Arterial	U	E	4D	3,410	505	1,666	2,171	0.64	C
Catalina Boulevard	Providence Boulevard	Minor Arterial	U	E	4D	3,410	460	1,016	1,476	0.43	C
Providence Boulevard	Elkcam Blvd	Minor Arterial	U	E	2U	1,230	320	766	1,086	0.88	C
Catalina Boulevard											
Howland Boulevard	Sixma Road	Major Collector	U	D	2U	960	138	609	747	0.78	D
Sixma Road	Lake Helen-Osteen Road	Major Collector	U	D	2U	960	107	570	677	0.71	D
Lake Helen-Osteen Road											
Catalina Boulevard	Haulover Boulevard	Minor Arterial	U	E	2U	1,020	692	156	848	0.83	D
Tivoli Drive											
Saxon Boulevard	Providence Boulevard	Major Collector	U	E	2U	960	195	432	627	0.65	D
Veteran's Memorial Parkway											
Rhode Island Avenue	Harley Strickland Boulevard	Minor Arterial	U	E	2U	1,540	358	629	987	0.64	D
Interstate 4 [4]											
Seminole County	Dirksen Drive	Principal Arterial	U	D	6D	10,060	4,678	5,788	10,466	1.04	E
Dirksen Drive	Saxon Boulevard	Principal Arterial	U	D	6D	10,060	4,280	6,420	10,700	1.06	E
Saxon Boulevard	SR 472	Principal Arterial	U	D	6D	10,060	3,858	4,772	8,630	0.86	D
SR 472	Orange Camp Road	Principal Arterial	U	D	6D	10,060	3,163	3,913	7,076	0.70	C
Orange Camp Road	SR 44	Principal Arterial	U	D	6D	10,060	3,127	4,690	7,817	0.78	C

Notes:
1. Roadway attributes were obtained from the 2018 Volusia County Average Annual Daily Traffic & Historical Counts Report.
2. Peak Hour Two-Way Maximum Service Volumes were obtained from the 2018 Volusia County Average Annual Daily Traffic & Historical Counts Report.
3. Existing peak season two-way peak hour volumes are based on existing turning movement data collected in 2017, 2018, and 2019 and forecasted to year 2020.
4. Existing peak season two-way peak hour volumes for I-4 roadway segments were based on the Florida Department of Transportation 2018 Annual Average Daily Traffic Report for Volusia County, forecasted to year 2020.

Table 3 – Existing (2020) PM Peak Hour Roadway Segment Summary

Roadway From	To	Roadway Attributes [1] Functional Classification	Area Type	Adopted LOS	Number of Lanes	Peak Hour Two-Way Maximum Service Volume [2]	Existing Peak Season Conditions Volumes [3] NB / EB	SB / WB	Two-Way Peak Hour Volumes [3]	V/C Ratio	LOS
Graves Avenue											
US 17/92	Leavitt Avenue	Major Collector	U	E	2U	1,330	257	318	575	0.43	C
Leavitt Avenue	Veteran's Memorial Parkway	Major Collector	U	E	2U	1,020	312	367	679	0.67	D
Veteran's Memorial Parkway	Kentucky Avenue	Minor Arterial	U	E	2U	1,620	942	773	1,715	1.06	F
Kentucky Avenue	Howland Boulevard	Minor Arterial	U	E	2U	1,620	846	579	1,425	0.88	D
W Volusia Beltway (Kentucky Avenue)											
SR 472	Graves Avenue	Major Collector	U	E	2U	1,540	368	621	989	0.64	D
W Volusia Beltway (Dr. Martin Luther King Jr.)											
Orange Camp Road	Cassadaga Road	Minor Arterial	U	E	2U	1,540	561	534	1,095	0.71	D
Cassadaga Road	SR 472	Minor Arterial	U	E	2U	1,540	633	542	1,175	0.76	D
Normandy Boulevard											
Graves Avenue	Project Access Location	Major Collector	U	D	2U	1,150	361	639	1,000	0.87	C
Project Access Location	Rhode Island Avenue	Major Collector	U	D	2U	1,150	343	593	936	0.81	C
Rhode Island Avenue	Elkcam Boulevard	Major Collector	U	D	4D	2,630	325	539	864	0.33	C
Elkcam Boulevard	Saxon Boulevard	Major Collector	U	D	4D	2,630	681	554	1,235	0.47	D
Saxon Boulevard	Deltona Boulevard	Major Collector	U	D	2U	960	441	535	976	1.02	E
Deltona Boulevard	Tivoli Drive	Major Collector	U	D	2U	960	357	616	973	1.01	E
Elkcam Boulevard											
Normandy Boulevard	Fort Smith Boulevard	Major Collector	U	D	2U	960	551	299	850	0.89	D
Fort Smith Boulevard	Providence Boulevard	Major Collector	U	D	2U	960	342	208	550	0.57	D
Fort Smith Boulevard											
Elkcam Boulevard	Providence Boulevard	Major Collector	U	D	2U	960	126	167	293	0.31	C
Providence Boulevard	Newmark Drive	Major Collector	U	D	2U	1,260	617	457	1,074	0.85	D
Providence Boulevard											
Elkcam Boulevard	Fort Smith Boulvard	Minor Arterial	U	E	2U	1,020	515	530	1,045	1.02	F
Saxon Boulevard											
Veteran's Memorial Parkway	FDOT Park & Ride	Minor Arterial	U	E	6D	4,280	1,968	1,572	3,540	0.83	D
FDOT Park & Ride	I-4	Minor Arterial	U	E	6D	3,410	2,045	1,669	3,714	1.09	F
I-4	Finland Drive	Minor Arterial	U	E	4D	3,410	3,265	1,493	4,758	1.40	F
Finland Drive	Normandy Boulevard	Minor Arterial	U	E	4D	3,410	2,247	1,148	3,395	1.00	D
Normandy Boulevard	Tivoli Drive	Minor Arterial	U	E	4D	3,410	1,323	722	2,045	0.60	C
Tivoli Drive	Providence Blvd	Minor Arterial	U	E	2U	1,020	534	346	880	0.86	D
Finland Drive											
Saxon Boulevard	Sullivan Street	Local	U	E	2U	1,270	336	259	595	0.47	D
Howland Boulevard											
I-4/SR 472	Wolf Pack Run	Minor Arterial	U	E	4D	3,410	1,990	1,038	3,028	0.89	C
Wolf Pack Run	Catalina Boulevard	Minor Arterial	U	E	4D	3,410	1,644	904	2,548	0.75	C
Catalina Boulevard	Providence Boulevard	Minor Arterial	U	E	4D	3,410	1,211	687	1,898	0.56	C
Providence Boulevard	Elkcam Blvd	Minor Arterial	U	E	2U	1,230	929	514	1,443	1.17	F
Catalina Boulevard											
Howland Boulevard	Sixma Road	Major Collector	U	D	2U	960	617	426	1,043	1.09	F
Sixma Road	Lake Helen-Osteen Road	Major Collector	U	D	2U	960	553	286	839	0.87	D
Lake Helen-Osteen Road											
Catalina Boulevard	Haulover Boulevard	Minor Arterial	U	E	2U	1,020	379	721	1,100	1.08	F
Tivoli Drive											
Haulover Boulevard	Elkcam Boulevard	Minor Arterial	U	E	2U	1,020	588	372	960	0.94	D
Veteran's Memorial Parkway											
Rhode Island Avenue	Harley Strickland Boulevard	Minor Arterial	U	E	2U	1,540	910	710	1,620	1.05	F
Interstate 4 [4]											
Seminole County	Dirksen Drive	Principal Arterial	U	D	6D	10,060	4,678	5,788	10,466	1.04	E
Dirksen Drive	Saxon Boulevard	Principal Arterial	U	D	6D	10,060	4,280	6,420	10,700	1.06	E
Saxon Boulevard	SR 472	Principal Arterial	U	D	6D	10,060	3,858	4,772	8,630	0.86	D
SR 472	Orange Camp Road	Principal Arterial	U	D	6D	10,060	3,163	3,913	7,076	0.70	C
Orange Camp Road	SR 44	Principal Arterial	U	D	6D	10,060	3,127	4,690	7,817	0.78	C

Notes:
1. Roadway attributes were obtained from the 2018 Volusia County Average Annual Daily Traffic & Historical Counts Report.
2. Peak Hour Two-Way Maximum Service Volumes were obtained from the 2018 Volusia County Average Annual Daily Traffic & Historical Counts Report.
3. Existing peak season two-way peak hour volumes are based on existing turning movement data collected in 2017, 2018, and 2019 and forecasted to year 2020.
4. Existing peak season two-way peak hour volumes for I-4 roadway segments were based on the Florida Department of Transportation 2018 Annual Average Daily Traffic Report for Volusia County, forecasted to year 2020.

Intersection Analysis

The existing intersection operating conditions were evaluated based on the data collection efforts summarized above. The operating conditions at the study intersections were analyzed using *Synchro 10* software, which implements *HCM 6* procedures. Turning movement volumes collected between 2017 and 2019 were forecasted to year 2020 and adjusted to the peak season for the existing conditions analysis. Existing lane geometry, peak hour factors, truck percentages, U-turn percentages, and right-turn-on-red percentages were input into the capacity analyses.

Table 4 provides a summary of the average delay and level of service during the AM peak hour and PM peak hour under 2020 existing traffic conditions. All study area intersections operate with overall intersection level of service (LOS) E or better under existing AM peak hour conditions with the exception of the following intersections:

- SR 472 & W Volusia Beltway (Dr. Martin Luther King Jr Beltway)
- Saxon Boulevard & I-4 WB Off-Ramp

All study area intersections operate with overall intersection LOS E or better under existing PM peak hour conditions with the exception of the following intersections:

- Veterans Memorial Parkway & Graves Avenue
- Saxon Boulevard & I-4 WB Ramps
- Saxon Boulevard & Finland Drive

Additionally, several intersections are shown to operate with individual turning movements having a volume to capacity (V/C) ratio exceeding 1.0 during one or both peak hour conditions, as summarized in **Table 4**. *The Synchro 10* analysis output is provided in **Appendix E**.

Per the approved methodology, an arterial analysis was performed for the following roadway segments during AM and PM peak hour 2020 existing conditions:

- *SR 472 from Martin Luther King Jr. Beltway to Wolf Pack Run*
  - AM Peak Hour
    - Eastbound - LOS D
    - Westbound - LOS D
  - PM Peak Hour
    - Eastbound - LOS E
    - Westbound - LOS D
- *Saxon Boulevard from Veterans Memorial Parkway to Normandy Boulevard*
  - AM Peak Hour
    - Eastbound - LOS B
    - Westbound - LOS C
  - PM Peak Hour
    - Eastbound – LOS D
    - Westbound – LOS C

The *Synchro 10* arterial analysis output is also provided in **Appendix E**.

Table 4 – Existing (2020) Conditions AM and PM Peak Hour Intersection Analysis

Intersection	2020 Existing AM Peak Hour Conditions				2020 Existing PM Peak Hour Conditions			
	Intersection LOS	Intersection Delay (S)	Max Movement V/C	Movement Direction	Intersection LOS	Intersection Delay (S)	Max Movement V/C	Movement Direction
Unsignalized [1]								
15 Fort Smith Blvd & Elkcam Blvd	B	13.4	0.25	NBL/R	C	16.3	0.28	NBL/R
21 I-4 WB Ramp & Saxon Blvd	F	51.7	0.93	SBR	F	117.9	1.12	SBR
Signalized								
1 Dr MLK Jr Bltwy & Orange Camp Rd	C	34.8	0.87	EBT/R	E	56.7	1.05	WBT/R
2 Kentucky Ave/MLK Jr Bltwy & SR 472	F	80.7	1.07	WBT	E	77.1	1.09	WBL
3 I-4 WB Ramp & SR 472	C	24.1	0.84	EBT & WBL	C	31.0	0.94	WBL
4 I-4 EB Ramp & SR 472	C	28.4	0.87	NBL	C	31.2	0.88	NBL
5 US 17/92/Volusia Ave & Graves Ave	B	19.1	0.82	WBL	C	23.3	0.85	WBT/R
6 Veterans Memorial Pkwy & Graves Ave	B	17.9	0.83	WBL	F	81.8	1.34	NBR
7 Kentucky Ave & Graves Ave	C	20.6	0.81	WBT	C	26.6	0.83	EBT/R & SBL
8 Normandy Blvd & Graves Ave	B	13.7	0.77	NBL	B	14.2	0.74	NBL
9 SR 472/Howland Blvd & Graves Ave	C	29.8	1.50	WBR	E	67.5	1.51	WBR
10 Catalina Blvd & Howland Blvd	C	33.5	0.90	SBR	C	23.9	0.80	EBL
11 Lake Helen-Osteen Rd & Catalina Blvd	B	10.3	0.63	NBL	B	18.8	0.77	SBT/R
12 Providence Blvd & Howland Blvd	C	22.3	0.83	NBL	B	11.5	0.76	EBT
13 Veterans Memorial Pkwy & Rhode Island Ave	B	18.7	0.85	SBT	B	17.5	0.82	SBT
14 Normandy Blvd & Elkcam Blvd	B	16.5	0.82	WBL	B	13.0	0.75	WBL
16 Providence Blvd & Elkcam Blvd	C	22.3	0.71	WBT/R	C	26.8	0.79	EBT/R & SBT
17 Providence Blvd & Fort Smith Blvd	B	17.7	0.69	WBL	C	20.7	0.77	NBT
18 Veterans Memorial Pkwy & Harley Strickland Blvd	B	18.9	0.53	WBT/R	D	41.4	1.05	EBL
19 Veterans Memorial Pkwy & Saxon Blvd	B	16.1	0.83	SBL	E	61.9	1.30	SBL
20 FDOT Park and Ride & Saxon Blvd	A	5.8	0.46	WBT/R	B	10.2	0.52	EBT/R
22 I-4 EB Ramp & Saxon Blvd [2]	B	15.8	0.92	EBL	D	43.9	1.07	NBR
23 Normandy Blvd & Saxon Blvd	D	51.1	1.28	SBR	D	52.3	0.95	EBL
24 Tivoli Dr & Saxon Blvd	C	20.2	0.85	WBT/R	D	38.0	1.13	EBL
25 Normandy Blvd & Deltona Blvd	B	10.6	0.72	EBL	B	15.2	0.79	EBL
26 Forest Edge Drive & Howland Boulevard	B	13.2	0.91	WBR	C	29.9	1.02	EBT
27 Wolf Pack Run & Howland Boulevard	B	15.2	0.87	WBT	A	7.0	0.90	WBL
28 Finland Drive & Saxon Boulevard	E	63.8	1.69	SBR	F	89.9	2.29	NBL

Note:
1. Intersection LOS and delay at unsignalized intersections are reported for the stop-controlled approaches only.
2. HCM 2000 analysis output was used for this intersection as HCM 6 can not evaluate the intersection phasing settings.

FUTURE CONDITIONS ANALYSIS

Committed and Planned Transportation Improvements

The following roadway improvements funded for construction within three years from the City's Capital Improvements Element (CIE), Volusia County's Capital Improvement Program (CIP), River to Sea Transportation Planning Organization's (R2CTPO) Transportation Improvement Plan (TIP), and FDOT 5-year work program were included within the study:

- *Tivoli Drive & Saxon Boulevard (FDOT Project Number 4409201)* – Improvements include an exclusive southbound right-turn lane and an extended southbound left-turn lane
- *Tivoli Drive & Providence Boulevard (FDOT Project Number 4409201)* – Improvements include an exclusive eastbound left-turn lane
- *Howland Boulevard (Volusia County Project Number IFZ3-1)* – Widen from 2-lane facility to a 4-lane facility from Providence Boulevard to Elkcam Boulevard
- *Orange Camp Road (Volusia County Project Number IFZ4-1)* – Widen from 2-lane facility to a 4-lane facility from Dr. Martin Luther King Jr. Beltway to Interstate 4
- *Graves Avenue* – Widen from 2-lane facility to 3-lane facility from Veterans Memorial Parkway to Kentucky Avenue
- *Saxon Boulevard (FDOT Project Number 444107000) – Widen from 4-lane facility to 6-lane facility from Interstate 4 to Finland Drive*

Further planned improvements within the study area that are not funded within the next three years, but are identified as needed improvements in the River to Sea TPO 2040 Long Range Transportation Plan (LRTP) include the following road segments within the study area:

- *Providence Boulevard*
  Widen to 4 lanes from Debary/Doyle Road to Elkcam Road
- *Saxon Boulevard*
  Widen to 4 lanes from Tivoli Drive to Providence Boulevard
- *Normandy Boulevard*
  Widen to 4 Lanes from Firwood Drive to Howland Boulevard
- *Elkcam Boulevard*
  Widen to 3 lanes from Normandy Boulevard to Fort Smith Boulevard
- *Fort Smith Boulevard*
  Widen to 3 lanes from Elkcam Boulevard to Providence Boulevard
- *SR 472*
  Widen to 6 lanes from Graves Avenue to Kentucky Avenue/Dr. Martin Luther King Jr Beltway
- *W. Volusia Beltway (Kentucky Avenue)*
  Widen to 4 lanes and realign facility from SR 472 to Harley Strickland Boulevard
- *Rhode Island Avenue Extension*
  Extend Rhode Island Avenue from Veterans Memorial Parkway to Normandy Boulevard This project will be a part of the I-4 Ultimate project
- *Interstate 4 (I-4 Ultimate)*
  Widen to 10 lanes from Seminole/Volusia County line to east of SR 472

These improvements are not assumed in the background conditions since funding sources have not yet been identified.

Additionally, development agreements with approved developments within proximity of the development—Halifax Crossings, Deltona Village, the Normandy Boulevard Industrial Warehouse, and Parc Hill—show the following committed improvements:

- Halifax Crossings
  - Construct a northbound right-turn lane on Howland Boulevard at Graves Avenue
  - Construct a second exclusive westbound left-turn lane on Graves Avenue at Howland Boulevard
  - Construct a second exclusive southbound left-turn lane on SR 472/Howland Boulevard at Graves Avenue
- Deltona Village
  - Construct a second exclusive northbound left-turn lane on Howland Boulevard at Graves Avenue
  - Construct a second westbound travel lane on Graves Avenue from Howland Boulevard to 400 feet east of Interstate 4
- Industrial Warehouse (West of Normandy Boulevard)
  - Widen Normandy Boulevard to 3 lanes from Graves Avenue to south of the development
  - Construct a second northbound right-turn lane on Normandy Boulevard at Graves Avenue
  - Construct an exclusive eastbound right-turn lane on Graves Avenue at Normandy Boulevard
  - Construct an exclusive southbound right-turn lane on SR 472/Howland Boulevard at Graves Avenue
- Parc Hill (City of Orange City)
  - Widen Veterans Memorial from two lanes to four lanes from Harley Strickland Boulevard to south of Rhode Island Avenue

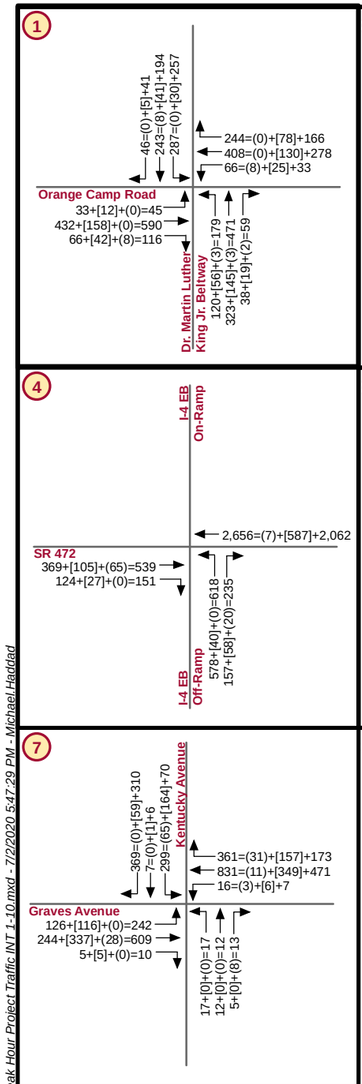
Committed transportation improvement information is provided in **Appendix F**.

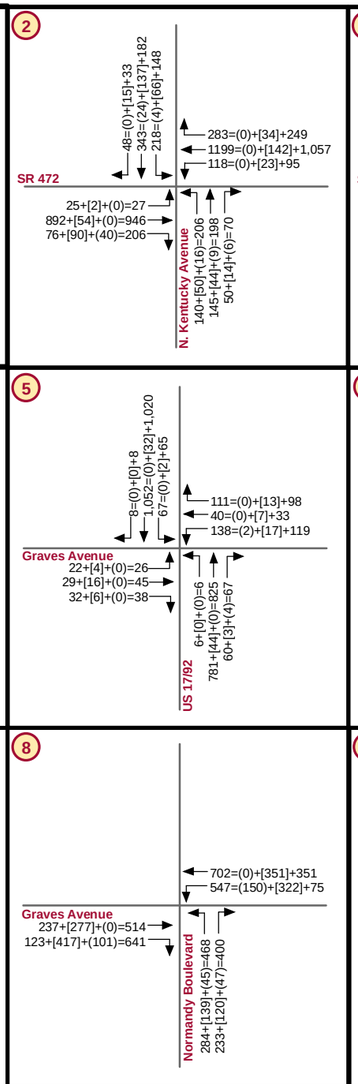
Traffic Volume Development

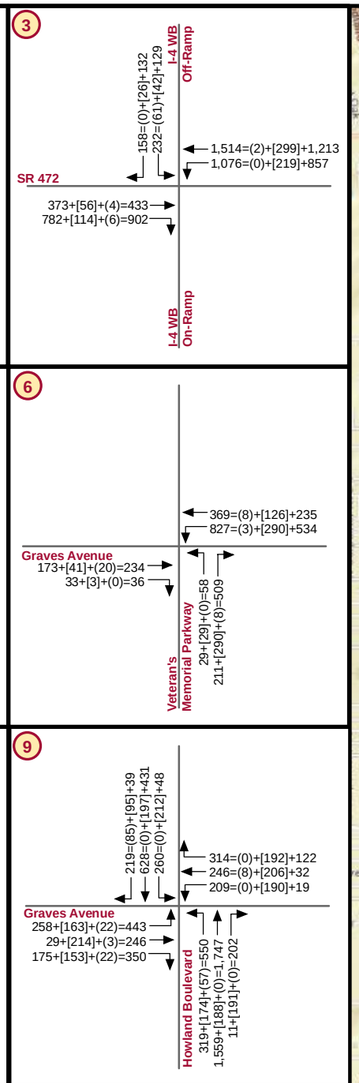
Future background (without project) and buildout (with project) traffic volumes within the study area were calculated based on the approved methodology. Future background traffic volumes were calculated using existing peak season traffic volumes, annual background growth rates applied over a 2-year buildout timeframe, and vested traffic from approved developments within the study area provided by the City of Deltona, Orange City, and Volusia County. Vested segment traffic volumes were distributed at each intersection approach proportionate to the observed turning movement volumes at the intersection. Vested traffic information is included in **Appendix G**.

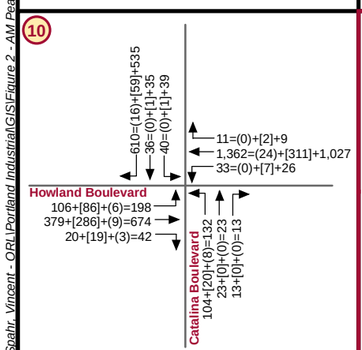
Total buildout traffic volumes were calculated as the sum of the background (without project) traffic volumes and project traffic. Segment AM and PM peak hour project traffic volumes were calculated as an average across the segment length for the future roadway segment evaluation.

Worksheets detailing the development of future conditions intersection volumes are provided in **Appendix H**. The buildout total traffic volumes during the AM peak hour are illustrated in **Figures 3 through 5**. The buildout total traffic volumes during the PM peak hour are illustrated in **Figures 6 through 8**.







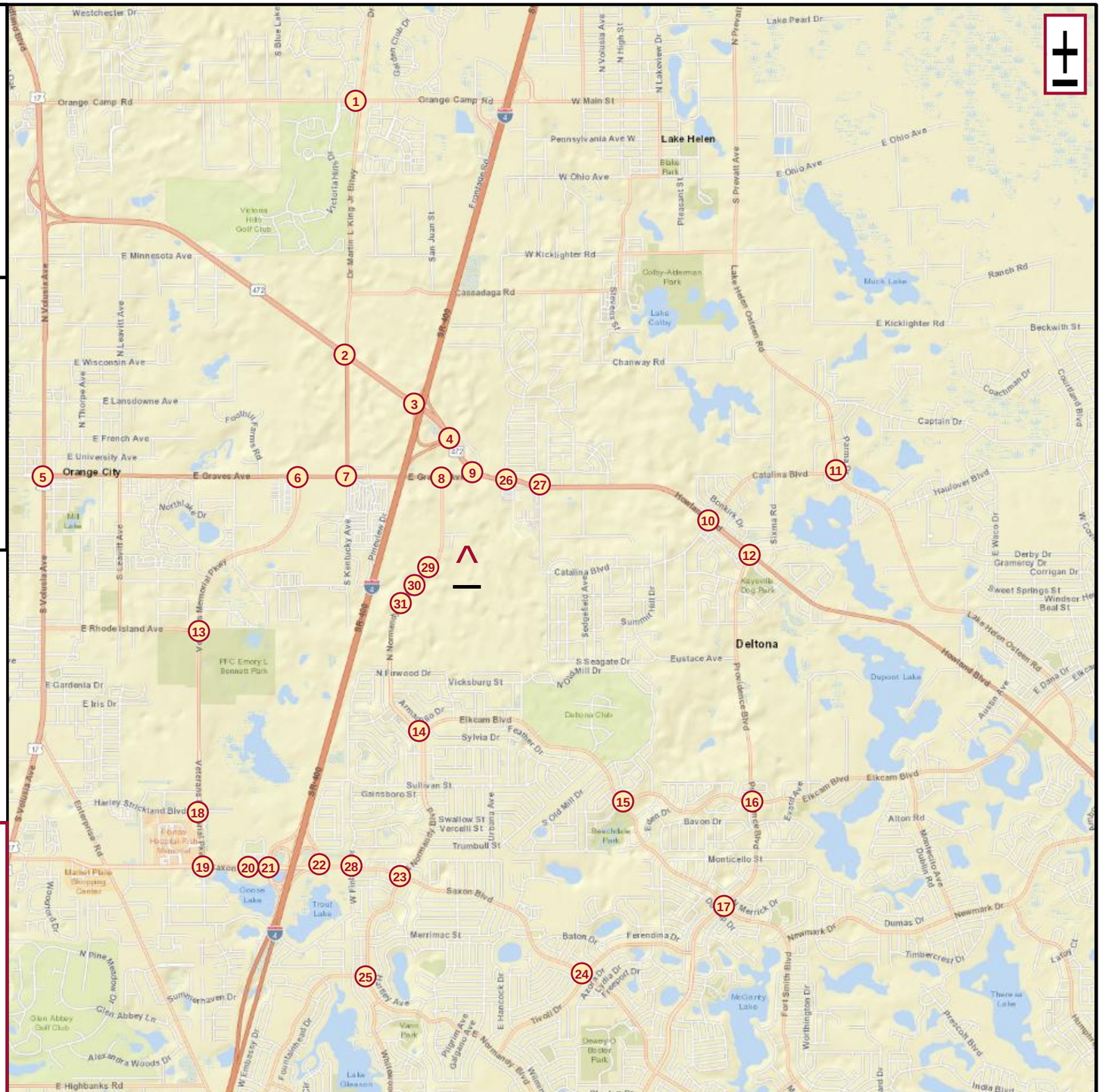


Legend

X — Study Area Intersections

Roadway Network

Existing + [Background Growth]
+ (Project Traffic) = Buildout Total Traffic



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Phone: 407 898 1511
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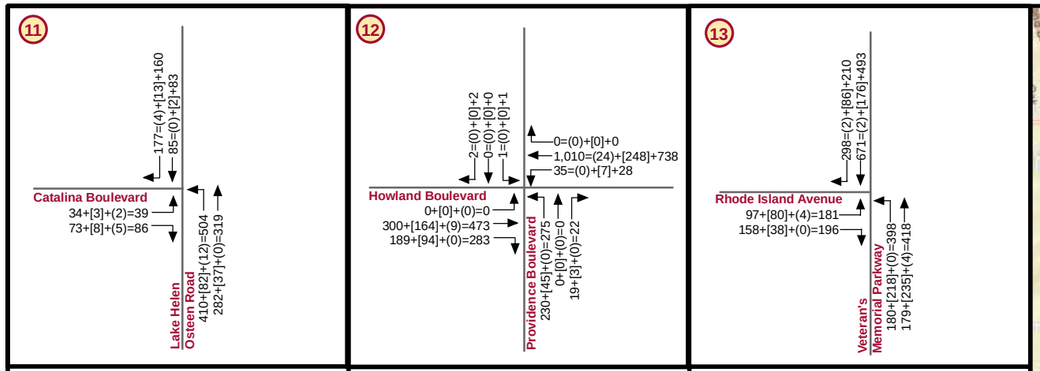
FIGURE 2 - AM PEAK HOUR BUILDOUT TOTAL TRAFFIC VOLUMES FOR LOCATIONS 1-10

PORTLAND INDUSTRIAL PARK
CITY OF DELTONA, VOLUSIA COUNTY, FLORIDA

Project No: 046448001

July 2020

C:\Users\michael.haddad\KHSaahr, Vincent - ORL\Portland Industrial\GIS\Figure 2 - AM Peak Hour Project Traffic INT 1-10.mxd - 7/2/2020 5:47:29 PM - Michael.Haddad

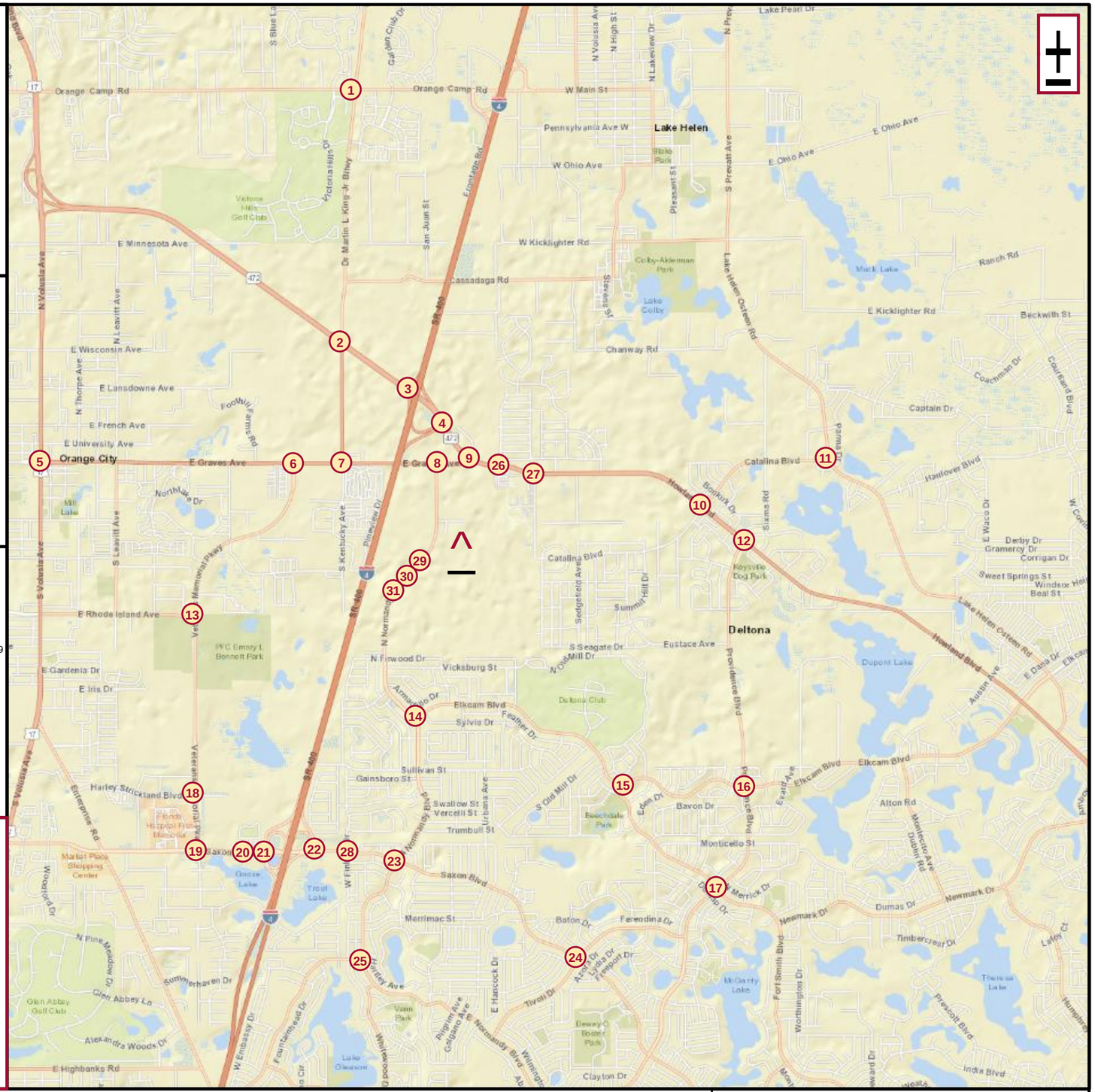


Legend

X — Study Area Intersections

Roadway Network

Existing + [Background Growth] + (Project Traffic) = Buildout Total Traffic



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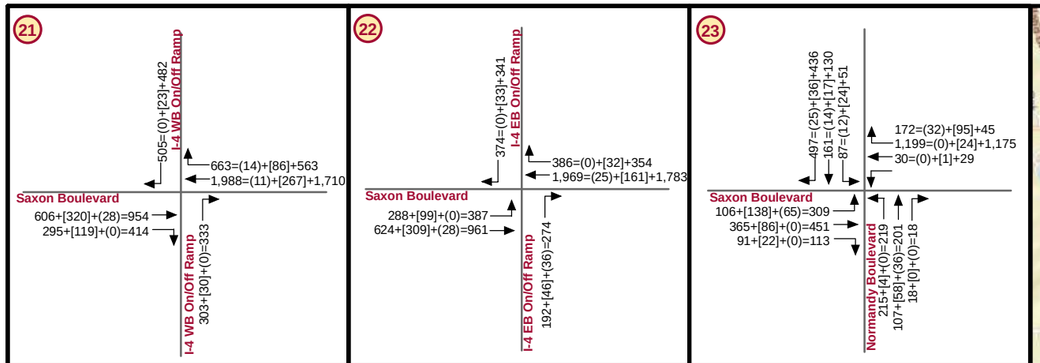
FIGURE 3 - AM PEAK HOUR BUILDOUT TOTAL TRAFFIC VOLUMES FOR LOCATIONS 11-20

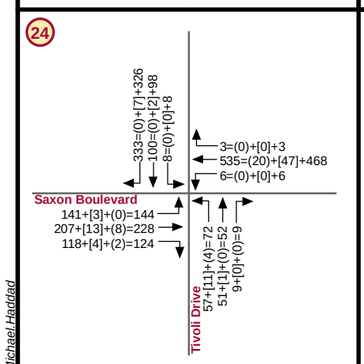
PORTLAND INDUSTRIAL PARK
CITY OF DELTONA, VOLUSIA COUNTY, FLORIDA

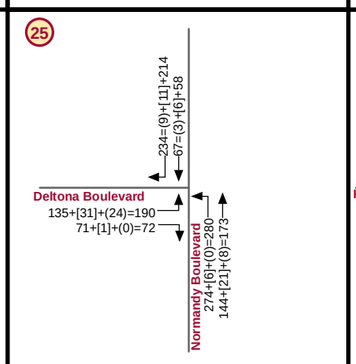
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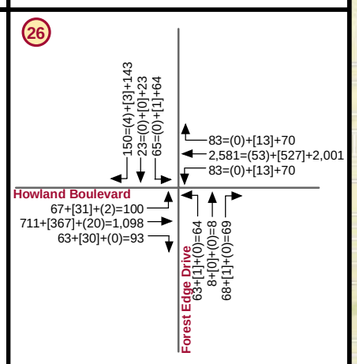
July 2020

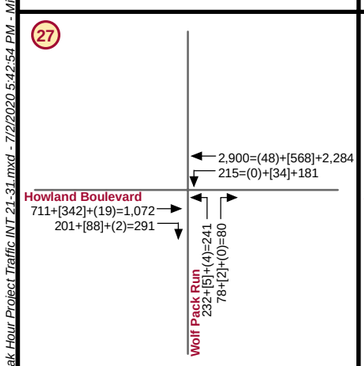
C:\Users\michael.haddad\Kh\Shared Vincent - ORL\Portland Industrial\GIS\Figure 3 - AM Peak Hour Project Traffic INT 11-20.mxd - 7/2/2020 5:45:15 PM - Michael Haddad

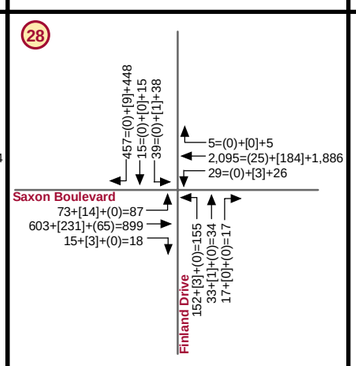


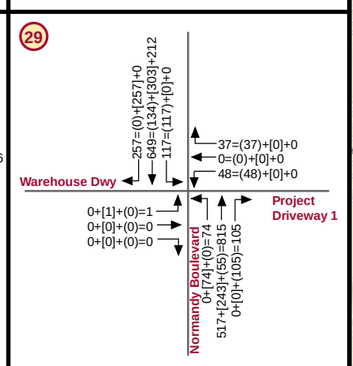


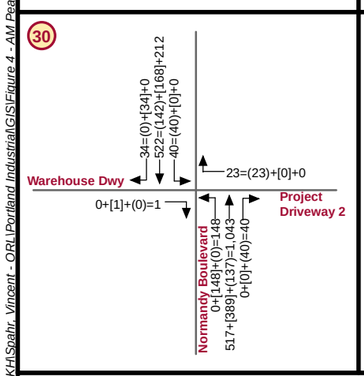


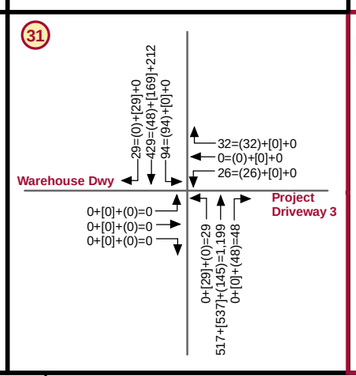






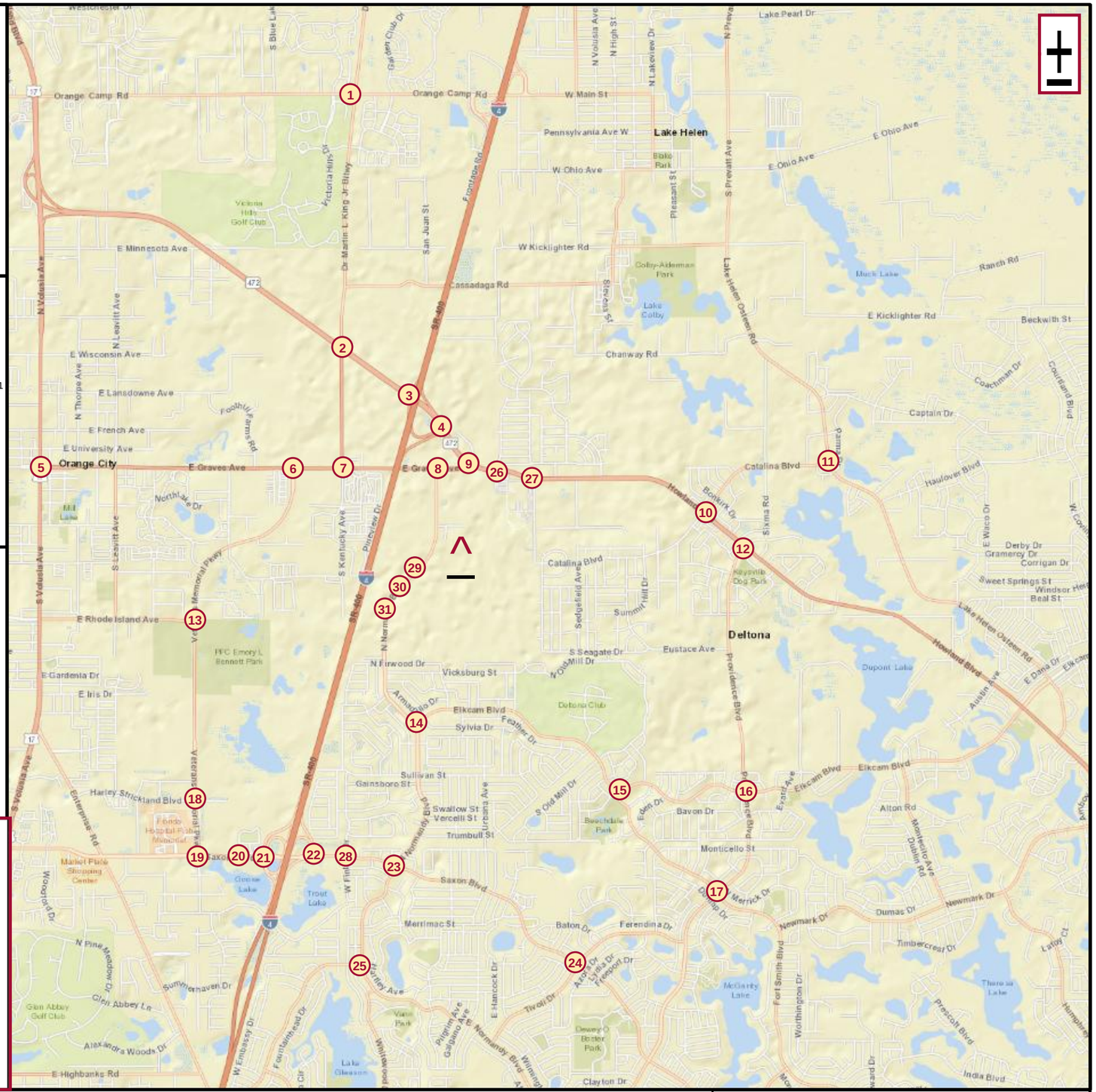


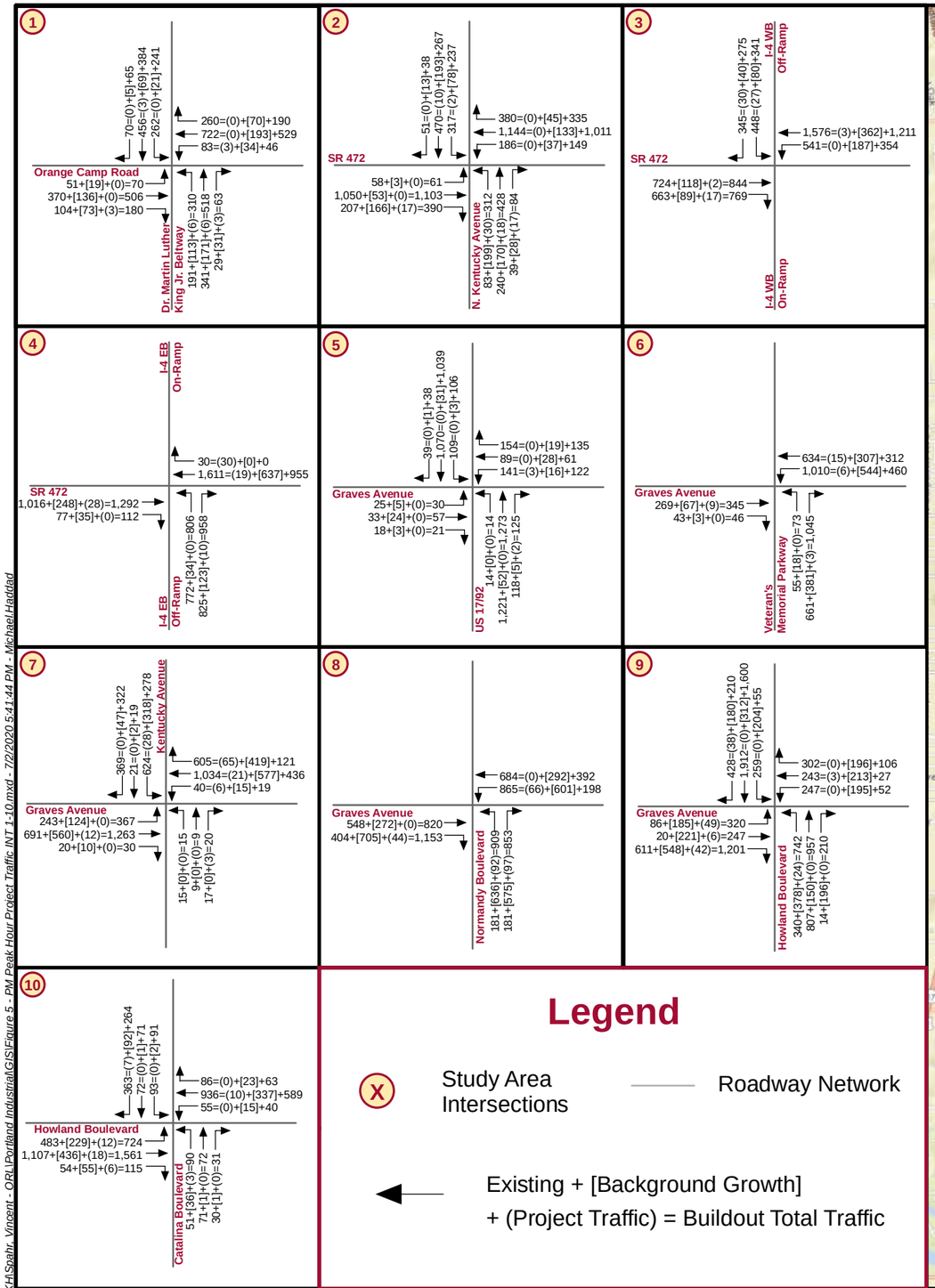


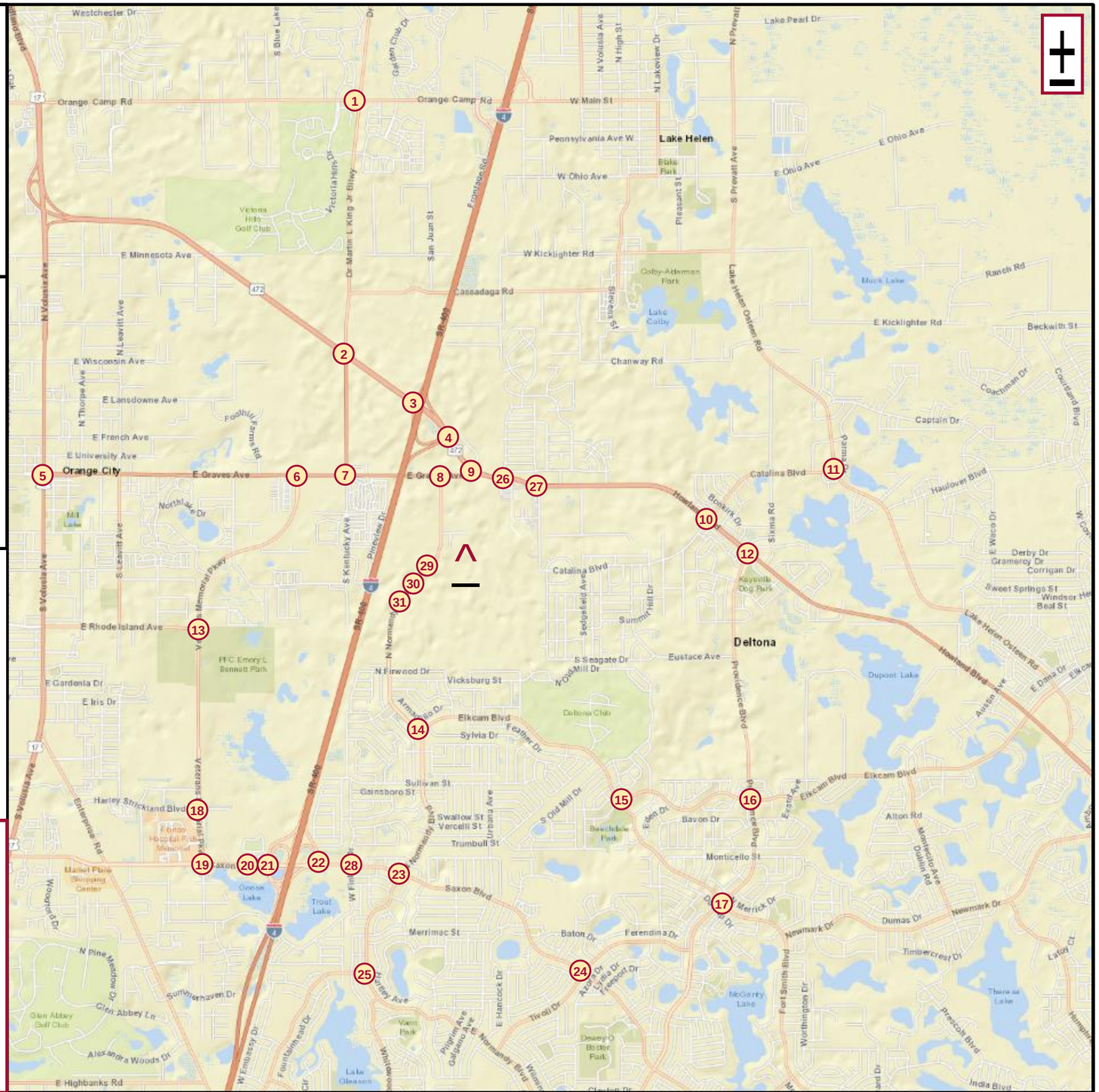


Legend

- (X) Study Area Intersections
- Roadway Network
- Existing + [Background Growth] + (Project Traffic) = Buildout Total Traffic


Orange Camp Rd
W Main St
Lake Helen
Pennsylvania Ave W
W Ohio Ave
E Ohio Ave
Victoria Hills Golf Club
Victoria Hills Dr
Dr Martin L King Jr Blvd
San Juan St
Frontage Rd
Pleasant St
S Prevatt Ave
E Minnesota Ave
W Kicklighter Rd
Cassadaga Rd
Colby-Alderman Park
Lake Colby
Lake Helen Osteen Rd
Muck Lake
Ranch Rd
E Kicklighter Rd
Beckwith St
Chanway Rd
Coachman Dr
Courtland Blvd
Captain Dr
N Volusia Ave
N Leavitt Ave
E Wisconsin Ave
N Thorpe Ave
E Lansdowne Ave
Foothill Farms Rd
E French Ave
E University Ave
Orange City
E Graves Ave
Catalina Blvd
Howland Blvd
Haulover Blvd
Bonbark Dr
Sixma Rd
E Waco Dr
Derby Dr
Gramercy Dr
Corrigan Dr
Sweet Springs St
Windsor Hel
Beal St
Northlake Dr
S Leavitt Ave
S Volusia Ave
S Kentucky Ave
Dunview Dr
Memorial Pkwy
SR 400
E Rhode Island Ave
FFC Emory L Bennett Park
Deltona
S Seagate Dr
Eustace Ave
Providence Blvd
Dupont Lake
Howland Blvd
E Dana Dr
Elkcam Blvd
Alton Rd
Dublin Rd
Monticello Ave
Monticello St
N Firwood Dr
Vicksburg St
Deltona Club
E Gardenia Dr
E Iris Dr
Sylvia Dr
Feather Dr
Veterans Memorial Pkwy
Sullivan St
Gainsboro St
Harley Strickland Blvd
Florida Hospital Fish Memorial
Enterprise Rd
Market Place Shopping Center
Swallow St
Vercelli St
Trumbull St
Bavon Dr
Eden Dr
Beechdale Park
S Old Mill Dr
Urbana Ave
Normandy Blvd
Saxon Blvd
Merrimac St
Baton Dr
Ferendina Dr
Newmark Dr
Dumas Dr
Timbercrest Dr
Lafay Ct
Merrick Dr
Glenn Dr
Glen Abbey Golf Club
Glen Abbey Ln
N Pine Meadow Dr
Summerhaven Dr
Alexandra Woods Dr
E Highbanks Rd
Lake Gleason
Trout Lake
Lake Monroe
Monroe Dr
Market Place Shopping Center
Courtney Ave
Tivoli Dr
E Hancock Dr
Austin Dr
Lynda Dr
Freeport Dr
Dewey O Boster Park
Vista Park
Palmetto Ave
Galbano Ave
E Normandy Blvd
Winnemissett Dr
Fountainhead Dr
W Emmassy Dr
Clayton Dr
India Blvd
McGarity Lake
Keysville Dog Park
Fort Smith Blvd
Worthington Dr
Theresa Lake
Prescott Blvd
Summit Hill Dr
Sedgefield Ave
Mill Dr
Vicksburg St
Armadale Dr
Elkcam Blvd
Sullivan St
Swallow St
Vercelli St
Trumbull St
Monticello St
Saxon Blvd
Merrimac St
Baton Dr
Ferendina Dr
Newmark Dr
Dumas Dr
Timbercrest Dr
Lafay Ct
Merrick Dr
Glenn Dr
Courtney Ave
Tivoli Dr
E Hancock Dr
Austin Dr
Lynda Dr
Freeport Dr
Dewey O Boster Park
Vista Park
Palmetto Ave
Galbano Ave
E Normandy Blvd
Winnemissett Dr
Fountainhead Dr
W Emmassy Dr
Clayton Dr
India Blvd
McGarity Lake
Keysville Dog Park
Fort Smith Blvd
Worthington Dr
Theresa Lake
Prescott Blvd
Summit Hill Dr
Sedgefield Ave
Mill Dr
Vicksburg St
Armadale Dr
Elkcam Blvd
Sullivan St
Gainsboro





Legend

X — Study Area Intersections

Roadway Network

Existing + [Background Growth]
+ (Project Traffic) = Buildout Total Traffic

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Phone: 407 898 1511
www.kimley-horn.com CA 000006966

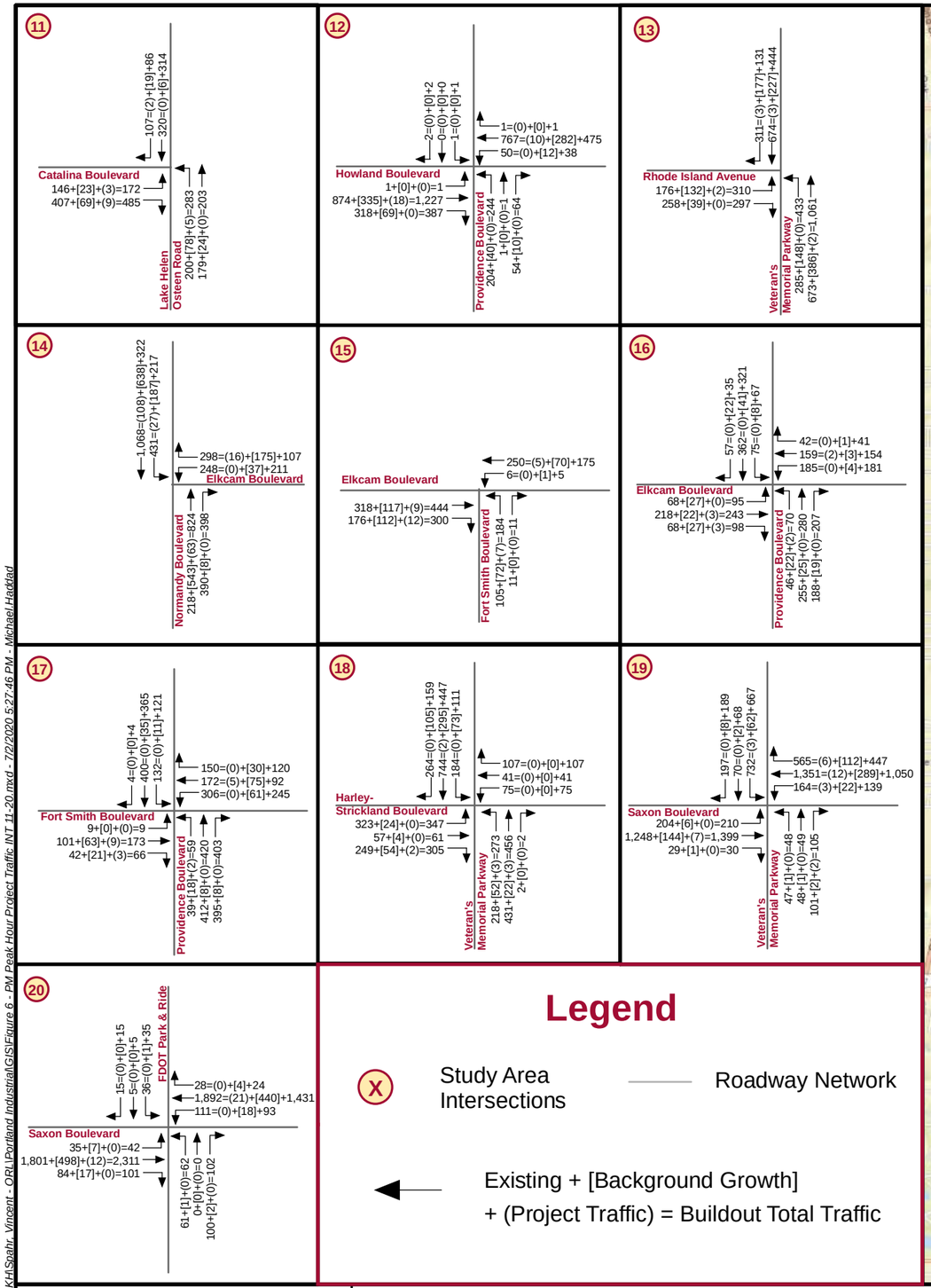
FIGURE 5 - PM PEAK HOUR BUILDOUT TOTAL TRAFFIC VOLUMES FOR LOCATIONS 1-10

PORTLAND INDUSTRIAL PARK
CITY OF DELTONA, VOLUSIA COUNTY, FLORIDA

Project No: 046448001

July 2020

C:\Users\michael.haddad\KHSaahr, Vincent - ORL\Portland Industrial\GIS\Figure 5 - PM Peak Hour Project Traffic INT 1-10.mxd - 7/2/2020 5:41:44 PM - Michael.Haddad



C:\Users\michael.haddad\KHSnahr, Vincent - ORL\Portland Industrial\GIS\Figure 6 - PM Peak Hour Project Traffic.MXT 11-20.mxd - 7/2/2020 5:27:46 PM - Michael Haddad

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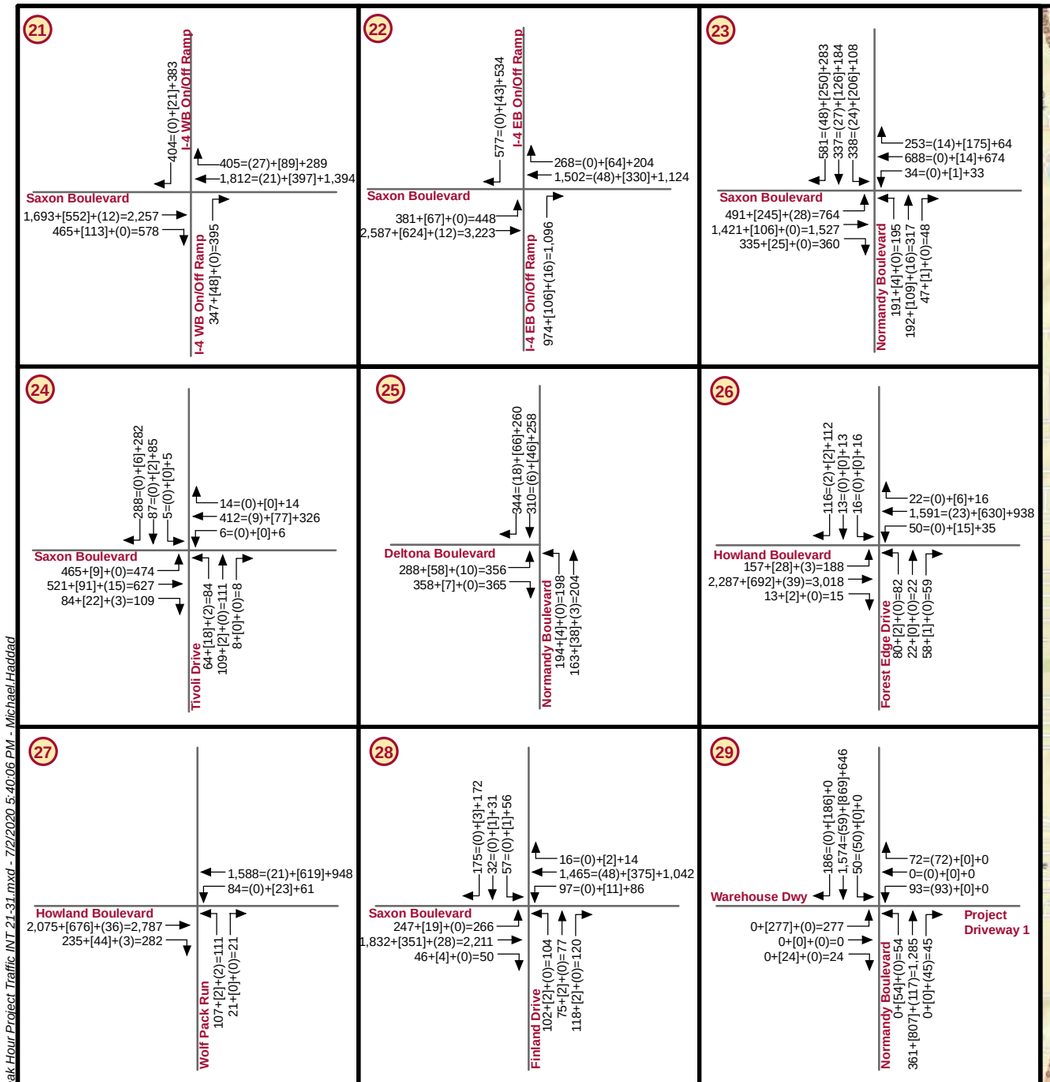
FIGURE 6 - PM PEAK HOUR BUILDOUT TOTAL TRAFFIC VOLUMES FOR LOCATIONS 11-20

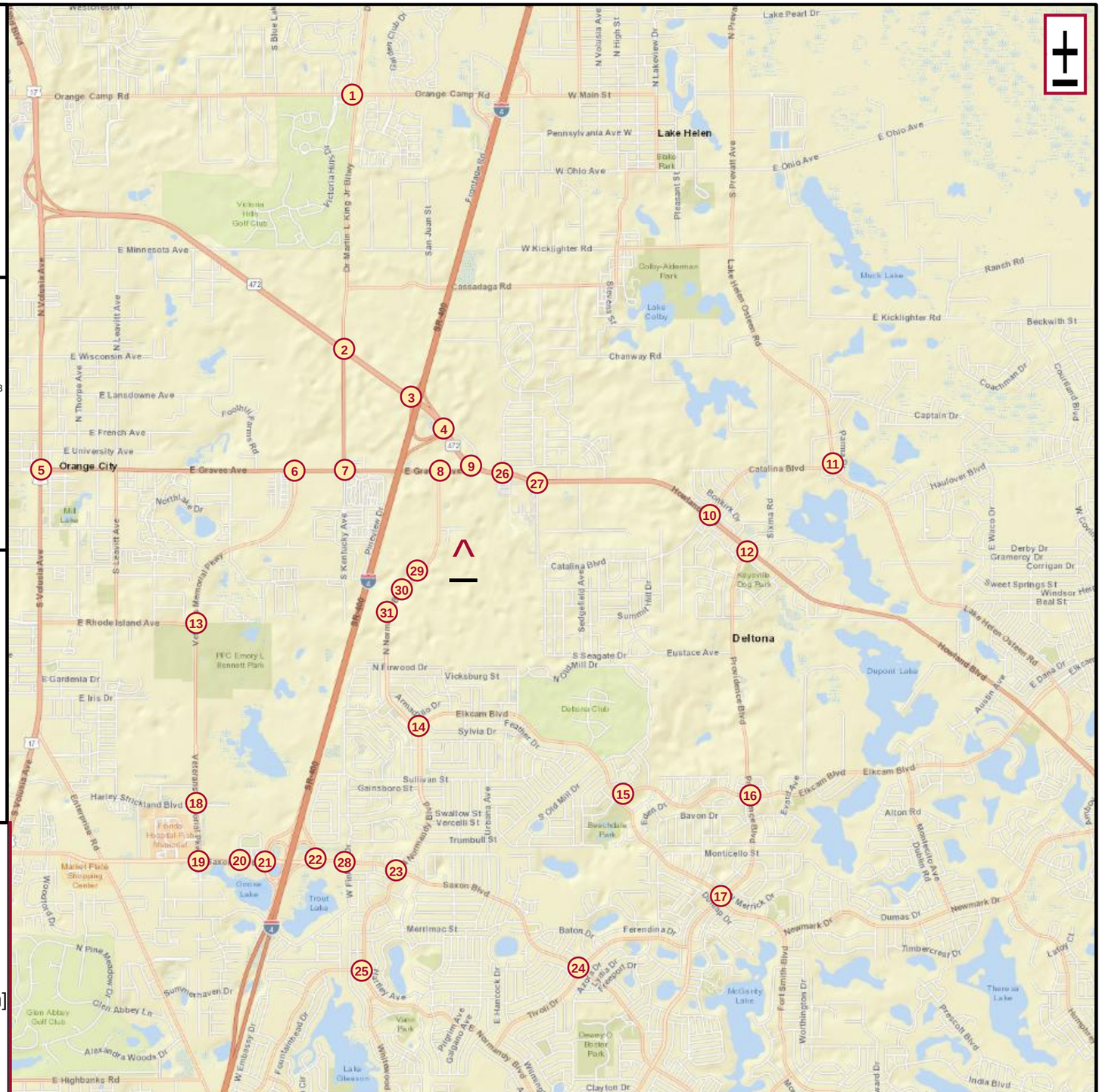
PORTLAND INDUSTRIAL PARK
CITY OF DELTONA, VOLUSIA COUNTY, FLORIDA

Project No: 046448001

July 2020

C:\Users\michael.haddad\KHSpahr, Vincent - ORL\Portland Industrial\GIS\Figure 7 - PM Peak Hour Project Traffic INT 21-31.mxd - 7/2/2020 5:40:06 PM - Michael.Haddad




Orange Camp Rd
W Main St
Lake Helen
Pennsylvania Ave W
W Ohio Ave
E Ohio Ave
E Minnesota Ave
W Kicklighter Rd
Cassadaga Rd
E Kicklighter Rd
Beckwith St
Chanway Rd
E Wisconsin Ave
E Lansdowne Ave
E French Ave
E University Ave
Orange City
E Graves Ave
Captain Dr
Catalina Blvd
E Rhode Island Ave
Deltona
Eustace Ave
Vicksburg St
Elkcam Blvd
Sylvia Dr
Gainsboro St
Sullivan St
Harley Strickland Blvd
Swallow St
Vercelli St
Trumbull St
Monticello St
Bavon Dr
Saxon Blvd
Mertimac St
Baton Dr
Ferendina Dr
Merrick Dr
Newmark Dr
Dumas Dr
Timbercrest Dr
Alton Rd
Elkcam Blvd
Catalina Blvd
Summit Hill Dr
Glen Abbey Ln
Alex Andra Woods Dr
E Highbanks Rd
Clayton Dr
India Blvd
Prescott Blvd
Derby Dr
Gramercy Dr
Corrigan Dr
Sweet Springs St
Windsor Hel
Beal St
Haulover Blvd
Howland Blvd
Lake Helen Osteen Rd
Ranch Rd
Muck Lake
Lake Pearl Dr
Dupont Lake
Lake Colby
Colby-Alderman Park
Victoria Hills Golf Club
Victoria Hills Dr
Dr Martin L King Jr Blvd
San Juan St
Frontage Rd
Pleasant St
S Prevatt Ave
N Volusia Ave
N High St
N Lakeview Dr
N Leavitt Ave
N Thorpe Ave
Foothill Farms Rd
S Leavitt Ave
S Volusia Ave
S Kentucky Ave
Dunview Dr
Veterans Memorial Pkwy
N Normandy Blvd
S Normandy Blvd
Laurena Ave
S Old Mill Dr
Edan Dr
Beechdale Park
Enterprise Rd
Market Place Shopping Center
Goose Lake
Trout Lake
Glen Abbey Golf Club
Lake Gleason
Vista Park
Pilgrim Ave
Galgano Ave
E Normandy Blvd
E Hancock Dr
Tivoli Dr
Alpha Dr
Lyrica Dr
Freeport Dr
Seminole Dog Park
McGarity Lake
Fort Smith Blvd
Worthington Dr
Theresa Lake
Dewey O Boler Park
Keysville Dog Park
Sixma Rd
Bonark Dr
Sedgefield Ave
Providence Blvd
Austin Ave
E Dana Dr
Elkcam Blvd
Ernest Ave
Mohawk Ave
Dublin Rd
Coachman Dr
Courtland Blvd
Pamela
W Waco Dr
Kathy Ct
Lake Helen Osteen Rd
Foothill Farms Rd
Northlake Dr
Summerhaven Dr
Glen Abbey Ln
Alex Andra Woods Dr
Fountainhead Dr
W Embassy Dr
Whistling Pines Cir
Lake Gleason
Pine Meadow Dr
Turley Ave
Tivoli Dr
Pilgrim Ave
Galgano Ave
E Normandy Blvd
Winnipeg Blvd
Dewey O Boler Park
Clayton Dr
India Blvd
Prescott Blvd
Theresa Lake
Fort Smith Blvd
Worthington Dr
McGarity Lake
Alpha Dr
Lyrica Dr
Freeport Dr
Tivoli Dr
Summit Hill Dr
Sedgefield Ave
Providence Blvd
Austin Ave
E Dana Dr
Elkcam Blvd
Ernest Ave
Mohawk Ave
Dublin Rd
Coachman Dr
Courtland Blvd
Pamela
W Waco Dr
Kathy Ct
Lake Helen Osteen Rd
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Howland Blvd
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Tivoli Dr
Alpha Dr
Lyrica Dr
Freeport Dr
Seminole Dog Park
McGarity Lake
Fort Smith Blvd
Worthington Dr
Theresa Lake
Dewey O Boler Park
Keysville Dog Park
Sixma Rd
Bonark

Future Background (2022) Roadway Segment Analysis

The roadway segments within the study area were evaluated for level of service under 2022 future background conditions (without project) traffic conditions during the AM and PM peak hour.

The service volumes for roadways within the study area were obtained utilizing functional classification and level of service information published by the Volusia County and FDOT. The following roadway segments, in addition to those that were shown to exceed their adopted level of service standards under existing conditions, are shown to exceed their adopted level of service standards under 2022 future background (non-project) traffic conditions during either the AM and/or PM peak hour:

- Graves Avenue – from Leavitt Avenue to Veterans Memorial Parkway
- Graves Avenue – from Kentucky Avenue to Howland Avenue
- W Volusia Beltway (Kentucky Avenue) – from SR 472 to Graves Avenue
- W Volusia Beltway (Dr. Martin Luther King Jr.) – from Orange Camp Road to SR 472
- Normandy Boulevard – from Graves Avenue to Rhode Island Avenue
- Elkcam Boulevard – from Normandy Boulevard to Fort Smith Boulevard
- Fort Smith Boulevard – from Providence Boulevard to Newmark Drive
- Saxon Boulevard – from the Veterans Memorial Parkway to the FDOT Park & Ride
- Saxon Boulevard – from Tivoli Drive to Providence Blvd
- Howland Boulevard – from I-4 to Catalina Boulevard
- Catalina Boulevard - from Sixma Road to Lake Helen-Osteen Road

The committed roadway improvements on Howland Boulevard from Providence Boulevard to Elkcam Boulevard, which was shown to exceed its adopted level of service standard under existing 2020 conditions, are shown to increase capacity sufficiently to accommodate 2022 background traffic volumes within the adopted level of service standard.

Future Buildout (2022) Roadway Segment Analysis

The roadway segments within the study area were evaluated for level of service under 2022 future buildout conditions during both the AM and PM peak hour. The service volumes utilized for the analysis are the same as those utilized for the future background conditions analysis.

No additional roadway segments beyond those identified under 2022 future background conditions are shown to exceed their adopted level of service standards under 2022 future buildout conditions with the addition of project traffic at full buildout.

The 2022 future background (without project) traffic and 2022 future buildout (with project) traffic roadway segment analyses are detailed in **Table 5** for the AM peak hour condition and **Table 6** for the PM peak hour condition.

Table 5 - Future Background (2022) and Buildout (2022) AM Peak Hour Roadway Segment Summary

Roadway		Adopted LOS [1]	Peak Hour Two-Way Maximum Service Volume [1]	Existing Peak Season Conditions	Applied Growth Rate [2]	Vested Trips		Future Background AM Peak Hour Conditions			AM Peak Hour Project Traffic						Future Buildout AM Peak Hour Conditions		
											Truck Traffic			Passenger Vehicle Traffic					
From	To			Two-Way Peak Hour Volume		NB / EB	SB / WB	Two-Way Peak Hour Volumes [3]	V/C Ratio	LOS	% Assign [4]	NB / EB	SB / WB	% Assign [4]	NB / EB	SB / WB	Two-Way Peak Hour Volumes [5]	V/C Ratio	LOS
Graves Avenue																			
US 17/92	Leavitt Avenue	E	1,330	404	5.60%	18	8	477	0.36	C				1.0%	4	2	483	0.36	C
Leavitt Avenue	Veteran's Memorial Parkway	E	1,020	470	1.00%	40	141	660	0.65	D				4.0%	16	6	682	0.67	D
Veteran's Memorial Parkway	Kentucky Avenue	E	1,620	1,164	2.81%	381	359	1,971	1.22	F				7.0%	28	11	2,010	1.24	F
Kentucky Avenue	Howland Boulevard	E	1,620	929	4.30%	488	486	1,984	1.22	F	100% IN, 50% OUT	6	41	25.0%	101	39	2,171	1.34	F
W Volusia Beltway (Kentucky Avenue)																			
SR 472	Graves Avenue	E	1,540	693	3.44%	168	210	1,120	0.73	D	50% OUT	6	0	16.0%	25	65	1,216	0.79	D
W Volusia Beltway (Dr. Martin Luther King Jr.)																			
Orange Camp Road	Cassadaga Road	E	1,540	774	3.46%	186	86	1,101	0.71	D				6.0%	9	24	1,134	0.74	D
Cassadaga Road	SR 472	E	1,540	782	4.55%	46	184	1,085	0.70	D				7.0%	11	28	1,124	0.73	D
Normandy Boulevard																			
Graves Avenue	Project Access Location	D	1,150	727	11.71%	253	315	1,475	1.28	F	100% IN, 100% OUT	12	41	50.0%	78	202	1,808	1.57	F
Project Access Location	Rhode Island Avenue	D	1,150	668	11.71%	408	105	1,347	1.17	F				46.0%	186	71	1,604	1.39	F
Rhode Island Avenue	Elkcam Boulevard	D	2,630	606	1.00%	378	93	1,089	0.41	C				46.0%	186	71	1,346	0.51	D
Elkcam Boulevard	Saxon Boulevard	D	2,630	812	1.00%	290	68	1,186	0.45	D				35.0%	141	54	1,381	0.53	D
Saxon Boulevard	Deltona Boulevard	D	960	571	1.00%	51	23	656	0.68	D				9.0%	36	14	706	0.74	D
Deltona Boulevard	Tivoli Drive	D	960	547	1.00%	18	5	581	0.61	D				2.0%	8	3	592	0.62	D
Elkcam Boulevard																			
Normandy Boulevard	Fort Smith Boulevard	D	960	619	8.42%	19	76	822	0.86	D				8.0%	12	32	866	0.90	D
Fort Smith Boulevard	Providence Boulevard	D	960	358	4.95%	11	4	409	0.43	C				3.0%	5	12	426	0.44	C
Fort Smith Boulevard																			
Elkcam Boulevard	Providence Boulevard	D	960	198	1.00%	39	9	250	0.26	C				4.0%	6	16	272	0.28	C
Providence Boulevard	Newmark Drive	D	1,260	723	11.72%	11	28	942	0.75	D				3.0%	5	12	959	0.76	D
Providence Boulevard																			
Elkcam Boulevard	Fort Smith Boulvard	E	1,020	656	1.00%	24	36	730	0.72	D				1.0%	4	2	736	0.72	D
Saxon Boulevard [6]																			
Veteran's Memorial Parkway	FDOT Park & Ride	E	4,280	2,571	1.00%	202	259	3,083	0.72	D				6.0%	24	9	3,116	0.73	D
FDOT Park & Ride	I-4	E	3,410	3,012	3.95%	317	199	3,771	1.11	F				7.0%	28	11	3,810	1.12	F
I-4	Finland Drive	E	4,280	2,995	1.00%	360	145	3,560	0.83	D				14.0%	57	22	3,639	0.85	D
Finland Drive	Normandy Boulevard	E	3,410	2,388	1.00%	235	27	2,698	0.79	C				15.0%	61	23	2,782	0.82	C
Normandy Boulevard	Tivoli Drive	E	3,410	1,500	1.00%	57	71	1,658	0.49	C				7.0%	11	28	1,697	0.50	C
Tivoli Drive	Providence Blvd	E	1,020	701	1.00%	9	38	763	0.75	D				6.0%	9	24	796	0.78	D
Finland Drive																			
Saxon Boulevard	Sullivan Street	E	1,270	612	1.00%	13	0	637	0.50	D				1.0%	2	4	643	0.51	D
Howland Boulevard [7]																			
I-4/SR 472	Wolf Pack Run	E	3,410	2,519	1.00%	356	467	3,392	0.99	D	100% IN, 50% OUT	41	6	14.0%	22	57	3,518	1.03	F
Wolf Pack Run	Catalina Boulevard	E	3,410	2,171	2.80%	362	356	3,013	0.88	C				13.0%	20	53	3,086	0.90	C
Catalina Boulevard	Providence Boulevard	E	3,410	1,476	1.00%	256	261	2,022	0.59	C				6.0%	9	24	2,055	0.60	C
Providence Boulevard	Elkcam Blvd	E	3,410	1,086	4.32%	161	188	1,531	0.45	C				5.0%	8	20	1,559	0.46	C
Catalina Boulevard																			
Howland Boulevard	Sixma Road	D	960	747	1.00%	82	48	892	0.93	D				4.0%	6	16	914	0.95	D
Sixma Road	Lake Helen-Osteen Road	D	960	677	1.00%	9	38	737	0.77	D				4.0%	6	16	759	0.79	D
Lake Helen-Osteen Road																			
Catalina Boulevard	Haulover Boulevard	E	1,020	848	6.38%	28	7	995	0.98	E				3.0%	5	12	1,012	0.99	E
Tivoli Drive																			
Saxon Boulevard	Providence Boulevard	E	960	627	1.00%	0	0	640	0.67	D				0.0%	0	0	640	0.67	D
Veteran's Memorial Parkway																			
Rhode Island Avenue	Harley Strickland Boulevard	E	1,540	987	5.33%	221	298	1,614	1.05	F				1.0%	4	2	1,620	1.05	F
Interstate 4																			
Seminole County	Dirksen Road	D	10,060	10,472	1.03%	210	210	11,109	1.10	F	50% IN, 50% OUT	21	6	9.0%	36	14	11,186	1.11	F
Dirksen Road	Saxon Boulevard	D	10,060	10,700	2.71%	210	210	11,708	1.16	F	50% IN, 50% OUT	21	6	9.0%	36	14	11,785	1.17	F
Saxon Boulevard	SR 472	D	10,060	8,637	1.04%	200	200	9,218	0.92	D	50% IN, 50% OUT	21	6	0.0%	0	0	9,245	0.92	D
SR 472	Orange Camp Road	D	10,060	7,076	3.07%	168	168	7,853	0.78	C	50% IN, 50% OUT	6	21	10.0%	16	40	7,936	0.79	C
Orange Camp Road	SR 44	D	10,060	7,817	4.85%	38	38	8,670	0.86	D	50% IN, 50% OUT	6	21	9.0%	14	36	8,747	0.87	D

Note:

1. Peak Hour Two-way Service Capacities and Adopted Level of Service are based on 2018 Volusia County Average Annual Daily Traffic & Historical Counts Report.
2. Applied Growth Rates were calculated based on historical annual average daily traffic volumes, in accordance with the approved methodology. A minimum growth rate of 1.00% was applied.
3. Future non-project traffic volumes are the summation of the existing peak season volumes, background growth, and committed/vested trips.
4. The percent project traffic is the average across the roadway segment
5. Buildout project traffic volumes are the summation of future non-project traffic and project traffic.
6. The roadway segment of Saxon Boulevard from Interstate 4 to Finland Drive is currently under construction to widen from a 4-lane facility to a 6-lane facility (FDOT Project Number 44410700-1). Therefore, the roadway capacity has been updated to reflect this roadway widening project.
7. The roadway segment of Howland Boulevard from Providence Boulevard to Elkcam Boulevard is planned to be widened from a 2-lane facility to a 4-lane facility (Volusia County Project Number IFZ3-1). There is currently construction funding for the project in 2019 and 2020. Therefore, the roadway capacity has been updated to reflect this roadway widening project.

Table 6 - Future Background (2022) and Buildout (2022) PM Peak Hour Roadway Segment Summary

Roadway		Adopted LOS [1]	Peak Hour Two-Way Maximum Service Volume [1]	Existing Peak Season Conditions	Applied Growth Rate [2]	Vested Trips		Future Background PM Peak Hour Conditions			PM Peak Hour Project Traffic						Future Buildout PM Peak Hour Conditions		
											Truck Traffic			Passenger Vehicle Traffic					
From	To			Two-Way Peak Hour Volume		NB / EB	SB / WB	Two-Way Peak Hour Volumes [3]	V/C Ratio	LOS	% Assign [4]	NB / EB	SB / WB	% Assign [4]	NB / EB	SB / WB	Two-Way Peak Hour Volumes [5]	V/C Ratio	LOS
Graves Avenue																			
US 17/92	Leavitt Avenue	E	1,330	575	5.60%	26	26	694	0.52	D				1.0%	2	3	699	0.53	D
Leavitt Avenue	Veteran's Memorial Parkway	E	1,020	679	1.00%	64	306	1,062	1.04	F				4.0%	7	12	1,081	1.06	F
Veteran's Memorial Parkway	Kentucky Avenue	E	1,620	1,715	2.81%	534	685	3,032	1.87	F				7.0%	12	21	3,065	1.89	F
Kentucky Avenue	Howland Boulevard	E	1,620	1,425	4.30%	840	848	3,238	2.00	F	100% IN, 50% OUT	16	19	25.0%	44	75	3,392	2.09	F
W Volusia Beltway (Kentucky Avenue)																			
SR 472	Graves Avenue	E	1,540	989	3.44%	444	339	1,841	1.20	F	50% OUT	17	0	16.0%	48	28	1,934	1.26	F
W Volusia Beltway (Dr. Martin Luther King Jr.)																			
Orange Camp Road	Cassadaga Road	E	1,540	1,095	3.46%	276	141	1,589	1.03	F				6.0%	18	10	1,617	1.05	F
Cassadaga Road	SR 472	E	1,540	1,175	4.55%	168	233	1,685	1.09	F				7.0%	21	12	1,718	1.12	F
Normandy Boulevard																			
Graves Avenue	Project Access Location	D	1,150	1,000	11.71%	886	929	3,062	2.66	F	100% IN, 100% OUT	33	19	50.0%	150	87	3,351	2.91	F
Project Access Location	Rhode Island Avenue	D	1,150	936	11.71%	770	899	2,837	2.47	F				46.0%	80	138	3,055	2.66	F
Rhode Island Avenue	Elkcam Boulevard	D	2,630	864	1.00%	695	815	2,392	0.91	D				46.0%	80	138	2,610	0.99	D
Elkcam Boulevard	Saxon Boulevard	D	2,630	1,235	1.00%	527	601	2,388	0.91	D				35.0%	61	105	2,554	0.97	D
Saxon Boulevard	Deltona Boulvard	D	960	976	1.00%	96	121	1,213	1.26	F				9.0%	16	27	1,256	1.31	F
Deltona Boulvard	Tivoli Drive	D	960	973	1.00%	35	41	1,068	1.11	F				2.0%	6	3	1,077	1.12	F
Elkcam Boulevard																			
Normandy Boulevard	Fort Smith Boulevard	D	960	850	8.42%	163	139	1,301	1.36	F				8.0%	24	14	1,339	1.39	F
Fort Smith Boulevard																			
Elkcam Boulevard	Providence Boulevard	D	960	293	1.00%	70	81	450	0.47	C				4.0%	12	7	469	0.49	C
Providence Boulevard	Newmark Drive	D	1,260	1,074	11.72%	70	52	1,462	1.16	F				3.0%	9	5	1,476	1.17	F
Providence Boulevard																			
Elkcam Boulevard	Fort Smith Boulvard	E	1,020	1,045	1.00%	28	46	1,140	1.12	F				1.0%	2	3	1,145	1.12	F
Saxon Boulevard [6]																			
Veteran's Memorial Parkway	FDOT Park & Ride	E	4,280	3,540	1.00%	268	401	4,281	1.00	F				6.0%	10	18	4,309	1.01	F
FDOT Park & Ride	I-4	E	3,410	3,714	3.95%	434	360	4,807	1.41	F				7.0%	12	21	4,840	1.42	F
I-4	Finland Drive	E	4,280	4,758	1.00%	628	344	5,826	1.36	F				14.0%	24	42	5,892	1.38	F
Finland Drive	Normandy Boulevard	E	3,410	3,395	1.00%	330	244	4,037	1.18	F				15.0%	26	45	4,108	1.20	F
Normandy Boulevard	Tivoli Drive	E	3,410	2,045	1.00%	191	131	2,409	0.71	C				7.0%	21	12	2,442	0.72	C
Tivoli Drive	Providence Blvd	E	1,020	880	1.00%	81	70	1,049	1.03	F				6.0%	18	10	1,077	1.06	F
Finland Drive																			
Saxon Boulevard	Sullivan Street	E	1,270	595	1.00%	16	0	623	0.49	D				1.0%	3	2	628	0.49	D
Howland Boulevard [7]																			
I-4/SR 472	Wolf Pack Run	E	3,410	3,028	1.00%	547	585	4,221	1.24	F	100% IN, 50% OUT	19	16	14.0%	42	24	4,322	1.27	F
Wolf Pack Run	Catalina Boulevard	E	3,410	2,548	2.80%	627	447	3,766	1.10	F				13.0%	39	23	3,828	1.12	F
Catalina Boulevard	Providence Boulevard	E	3,410	1,898	1.00%	376	318	2,630	0.77	C				6.0%	18	10	2,658	0.78	C
Providence Boulevard	Elkcam Blvd	E	3,410	1,443	4.32%	326	249	2,145	0.63	C				5.0%	15	9	2,169	0.64	C
Catalina Boulevard																			
Howland Boulevard	Sixma Road	D	960	1,043	1.00%	224	87	1,375	1.43	F				4.0%	12	7	1,394	1.45	F
Sixma Road	Lake Helen-Osteen Road	D	960	839	1.00%	81	69	1,006	1.05	E				4.0%	12	7	1,025	1.07	F
Lake Helen-Osteen Road																			
Catalina Boulevard	Haulover Boulevard	E	1,020	1,100	6.38%	52	61	1,358	1.33	F				3.0%	9	5	1,372	1.35	F
Tivoli Drive																			
Saxon Boulevard	Providence Boulevard	E	1,020	960	1.00%	0	0	979	0.96	E				0.0%	0	0	979	0.96	E
Veteran's Memorial Parkway																			
Rhode Island Avenue	Harley Strickland Boulevard	E	1,540	1,620	5.33%	230	324	2,352	1.53	F				1.0%	2	3	2,357	1.53	F
Interstate 4																			
Seminole County	Dirksen Road	D	10,060	10,466	1.00%	215	215	11,106	1.10	F	50% IN, 50% OUT	10	17	9.0%	16	27	11,176	1.11	F
Dirksen Road	Saxon Boulevard	D	10,060	10,700	2.71%	215	215	11,718	1.16	F	50% IN, 50% OUT	10	17	9.0%	16	27	11,788	1.17	F
Saxon Boulevard	SR 472	D	10,060	8,630	1.00%	207	207	9,218	0.92	D	50% IN, 50% OUT	10	17	0.0%	0	0	9,245	0.92	D
SR 472	Orange Camp Road	D	10,060	7,076	3.07%	176	176	7,869	0.78	C	50% IN, 50% OUT	16	9	10.0%	30	17	7,941	0.79	C
Orange Camp Road	SR 44	D	10,060	7,817	4.85%	43	43	8,680	0.86	D	50% IN, 50% OUT	16	9	9.0%	27	16	8,748	0.87	D

Note:

1. Peak Hour Two-way Service Capacities and Adopted Level of Service are based on 2018 Volusia County Average Annual Daily Traffic & Historical Counts Report.
2. Applied Growth Rates were calculated based on historical annual average daily traffic volumes, in accordance with the approved methodology. A minimum growth rate of 1.00% was applied.
3. Future non-project traffic volumes are the summation of the existing peak season volumes, background growth, and committed/vested trips.
4. The percent project traffic is the average across the roadway segment
5. Buildout project traffic volumes are the summation of future non-project traffic and project traffic.
6. The roadway segment of Saxon Boulevard from Interstate 4 to Finland Drive is currently under construction to widen from a 4-lane facility to a 6-lane facility (FDOT Project Number 44410700-1). Therefore, the roadway capacity has been updated to reflect this roadway widening project.
7. The roadway segment of Howland Boulevard from Providence Boulevard to Elkcam Boulevard is planned to be widened from a 2-lane facility to a 4-lane facility (Volusia County Project Number IFZ3-1). There is currently construction funding for the project in 2019 and 2020. Therefore, the roadway capacity has been updated to reflect this roadway widening project.

Future Background (2022) Conditions Intersections Analysis

The intersections within the study area were evaluated to determine improvement needs to provide an acceptable LOS and intersection operations with future background traffic conditions prior to addition of project traffic. The future background traffic volumes included existing peak season traffic, background traffic growth, and vested development traffic. Existing intersection geometry, signal timings (as obtained from Volusia County), peak hour factor, and percent heavy vehicles (as obtained from the traffic counts) were input into *Synchro 10* for analysis.

Table 7 and **Table 8** summarize the intersection LOS for 2022 future background conditions with existing intersection geometry and signal timings during the AM and PM peak hour, respectively. Several transportation deficiencies are anticipated under 2022 future background (non-project) traffic conditions. **Table 7** and **Table 8** identify intersection improvements needed under future background traffic conditions to provide intersection LOS E or better prior to the addition of project traffic.

Committed improvements illustrated previously were included in the future background with improvements analysis. Information about the committed improvements is provided in **Appendix F**.

The intersections within the study area are shown to operate with acceptable level of service, delay, and V/C ratios with the inclusion of the improvements identified under 2022 future background traffic conditions. The resultant intersection LOS and V/C ratio under PM peak hour future background traffic conditions with the identified transportation improvements are summarized within **Tables 7 and 8**. Additionally, an arterial analysis was performed for the following roadway segments during AM and PM peak hour 2022 future background (non-project) traffic conditions:

- *SR 472 from Martin Luther King Jr. Beltway to Wolf Pack Run*
  - AM Peak Hour (with improvements)
    - Eastbound - LOS D
    - Westbound - LOS D
  - PM Peak Hour (with improvements)
    - Eastbound - LOS E
    - Westbound - LOS E
- *Saxon Boulevard from Veterans Memorial Parkway to Normandy Boulevard*
  - AM Peak Hour (with improvements)
    - Eastbound - LOS C
    - Westbound - LOS C
  - PM Peak Hour (with improvements)
    - Eastbound – LOS D
    - Westbound – LOS D

The *Synchro 10* output reports and arterial analysis are provided in **Appendix E.**

Table 7 - Future Background (2022) AM Peak Hour Intersection Analysis

Intersection	2022 Future Background Conditions				2022 Future Background with Improvements Conditions				
	Inter-section LOS	Inter-section Delay (S)	Max Movement V/C	Movement Direction	Identified Improvements	Inter-section LOS	Inter-section Delay (S)	Max Movement V/C	Movement Direction
Unsignalized [1]									
15 Fort Smith Blvd & Elkcam Blvd	C	16.6	0.38	NBL/R					
21 I-4 WB Ramp & Saxon Blvd	C	24.5	0.76	SBR	Extension of westbound outside lane from FDOT Park & Ride to I-4 WB off-ramp as add lane for southbound I-4 off-ramp. Removal of stop-controlled approach	-	-	-	-
30 Normandy Blvd & Project Dwy 2	B	10.8	0.15	NBL	Additional northbound through lane, additional southbound through lane	A	9.6	0.15	NBL
31 Normandy Blvd & Project Dwy 3	A	0.0	0.03	NBL	Additional northbound through lane, additional southbound through lane	A	0.0	0.03	NBL
Signalized									
1 Dr MLK Jr Bltwy & Orange Camp Rd	F	91.8	1.17	EBT/R	Additional westbound through lane, exclusive westbound right-turn lane, additional eastbound through lane	D	36.9	0.87	NBT
2 Kentucky Ave/MLK Jr Bltwy & SR 472	F	124.3	1.28	NBL/T	Additional westbound left-turn lane, exclusive northbound left-turn lane, additional northbound through lane, additional southbound through lane, removal of north/south split phasing	E	57.0	0.89	WBT
3 I-4 WB Ramp & SR 472	D	43.3	1.11	WBL	Additional westbound left-turn lane	C	22.4	0.86	EBT
4 I-4 EB Ramp & SR 472	C	32.9	0.98	WBT					
5 US 17/92/Volusia Ave & Graves Ave	C	21.4	0.83	WBL					
6 Veterans Memorial Pkwy & Graves Ave	F	178.7	1.69	WBL	Additional westbound left-turn lane, additional northbound right-turn lane, modify northbound right-turn phasing to protected plus overlap	B	15.9	0.81	WBL
7 Kentucky Ave & Graves Ave	F	81.7	1.3	WBT	Additional westbound through lane, additional eastbound through lane, additional southbound left-turn lane, conversion of exclusive southbound right-turn lane to a shared through-right turn lane	C	27.5	0.87	EBL
8 Normandy Blvd & Graves Ave	D	48.0	1.21	NBL	Additional eastbound right-turn lane with permissive-overlap phasing, additional northbound left-turn lane	B	16.5	0.78	WBL
9 SR 472/Howland Blvd & Graves Ave	F	184.3	3.86	WBR	Modify westbound right-turn phasing to include overlap, addition of exclusive eastbound through lane, removal of eastbound/westbound split phasing, additional southbound through lane, additional northbound through lane	D	38.4	0.93	EBL
10 Catalina Blvd & Howland Blvd	D	51.0	0.96	WBT/WBR	Additional eastbound left-turn lane	D	47.3	0.93	SBR
11 Lake Helen-Osteen Rd & Catalina Blvd	B	12.3	0.75	NBL					
12 Providence Blvd & Howland Blvd	C	27.8	0.97	NBL	Additional eastbound through lane	C	27.3	0.97	NBL
13 Veterans Memorial Pkwy & Rhode Island Ave	F	92.9	1.61	NBL	Additional northbound left-turn lane, additional eastbound left-turn lane	C	34.2	0.96	SBT
14 Normandy Blvd & Elkcam Blvd	B	19.7	0.87	WBL					
16 Providence Blvd & Elkcam Blvd	C	23.1	0.73	NBT					
17 Providence Blvd & Fort Smith Blvd	C	21.3	0.83	WBL					
18 Veterans Memorial Pkwy & Harley Strickland Blvd	C	21.2	0.53	WBT/R					
19 Veterans Memorial Pkwy & Saxon Blvd	B	16.3	0.85	SBL	Removal of north-south split phasing, convert southbound lane configuration to dual left-turn and shared through/right-turn	B	16.3	0.82	SBL
20 FDOT Park and Ride & Saxon Blvd	A	6.0	0.55	WBT/WBR					
22 I-4 EB Ramp & Saxon Blvd [3]	C	29.2	1.31	EBL	Additional eastbound through lane and an additional northbound right-turn lane	C	22.8	0.97	EBL
23 Normandy Blvd & Saxon Blvd	E	62.6	1.24	EBL	Additional eastbound left-turn lane, additional westbound right-turn lane, additional northbound right-turn lane, additional southbound left-turn lane	D	47.9	0.91	SBR
24 Tivoli Dr & Saxon Blvd	C	23.8	0.89	WBT/R					
25 Normandy Blvd & Deltona Blvd	B	11.3	0.74	EBL					
26 Forest Edge Drive & Howland Boulevard	E	61.9	1.17	WBR	Additional eastbound through lane, additional westbound through lane	B	10.6	0.80	WBR
27 Wolf Pack Run & Howland Boulevard	D	40.1	1.09	WBT	Additional eastbound through lane, additional westbound through lane	B	11.4	0.87	NBR
28 Finland Drive & Saxon Boulevard	E	62.6	1.72	SBR	Additional westbound through lane	C	29.2	0.96	SBR
29 Normandy Blvd & Project Dwy 1	A	3.2	0.50	NBT	Additional northbound through lane, additional southbound through lane	A	2.3	0.26	NBT

Note:
1. Intersection LOS and delay at unsignalized intersections are reported for the stop-controlled approaches only.
2. Intersection improvements were performed in order to allow intersection approaches to operate at the appropriate level of service for the corresponding roadway segment.
3. HCM 2000 analysis output was used for this intersection as HCM 6 can not evaluate the intersection phasing settings.

Table 8 - Future Background (2022) PM Peak Hour Intersection Analysis

Intersection	2022 Future Background Conditions				2022 Future Background with Improvements Conditions				
	Inter-section LOS	Inter-section Delay (S)	Max Movement V/C	Movement Direction	Identified Improvements	Inter-section LOS	Inter-section Delay (S)	Max Movement V/C	Movement Direction
Unsignalized [1]									
15 Fort Smith Blvd & Elkcam Blvd	E	37.5	0.67	NB					
21 I-4 WB Ramp & Saxon Blvd	F	331.3	1.62	SBR	Extension of westbound outside lane from FDOT Park & Ride to I-4 WB off-ramp as add lane for southbound I-4 off-ramp. Removal of stop-controlled approach	-	-	-	-
30 Normandy Blvd & Directional Driveway	F	547.8	2.01	EBR	Additional northbound through lane, additional southbound through lane	E	46.5	0.76	EBR
31 Normandy Blvd & Project Dwy 3	F	Err [4]	Err [4]	EBL/R	Additional northbound through lane, additional southbound through lane	F	1631.0 [5]	3.91 [5]	EBL/R
Signalized									
1 Dr MLK Jr Bltwy & Orange Camp Rd	F	166.4	1.69	WBT/R	Additional westbound through lane, exclusive westbound right-turn lane, additional eastbound through lane	D	43.9	0.89	NBT
2 Kentucky Ave/MLK Jr Bltwy & SR 472	F	196.2	2.19	NBL	Additional westbound left-turn lane, exclusive northbound left-turn lane, additional northbound through lane, additional southbound through lane, removal of north/south split phasing	E	67.8	0.99	NBT
3 I-4 WB Ramp & SR 472	D	52.5	1.28	WBL	Additional westbound left-turn lane	C	31.4	0.89	WBL
4 I-4 EB Ramp & SR 472	C	27.2	0.89	NBL					
5 US 17/92/Volusia Ave & Graves Ave	C	28.4	0.89	WBT/R					
6 Veterans Memorial Pkwy & Graves Ave	F	387.4	2.36	NBR	Additional westbound left-turn lane, additional northbound right-turn lane, modify northbound right-turn phasing to protected plus overlap	C	26.0	0.94	WBL
7 Kentucky Ave & Graves Ave	F	255.7	1.84	WBT	Additional westbound through lane, additional eastbound through lane, additional southbound left-turn lane, conversion of exclusive southbound right-turn lane to a shared through-right turn lane	D	43.3	0.96	EBL
8 Normandy Blvd & Graves Ave	F	260.0	2.31	NBL	Additional eastbound right-turn lane with permissive-overlap phasing, additional northbound left-turn lane	D	40.0	0.93	WBL
9 SR 472/Howland Blvd & Graves Ave	F	229.5	4.30	WBR	Modify westbound right-turn phasing to include overlap, addition of exclusive eastbound through lane, removal of eastbound/westbound split phasing, additional southbound through lane, additional northbound through lane	E	58.9	0.99	EBT & WBT
10 Catalina Blvd & Howland Blvd	F	90.3	1.69	EBL	Additional eastbound left-turn lane	D	44.5	0.92	EBL
11 Lake Helen-Osteen Rd & Catalina Blvd	C	25.0	0.84	EBR					
12 Providence Blvd & Howland Blvd	C	28.9	1.07	EBT	Additional eastbound through lane	B	11.5	0.78	NBL
13 Veterans Memorial Pkwy & Rhode Island Ave	F	99.3	1.72	NBL	Additional northbound left-turn lane, additional eastbound left-turn lane	D	38.0	0.98	NBL
14 Normandy Blvd & Elkcam Blvd	C	28.1	1.06	SBL	Signal timing adjustments	C	27.1	0.95	SBL
16 Providence Blvd & Elkcam Blvd	C	30.1	0.85	EBR					
17 Providence Blvd & Fort Smith Blvd	C	27.2	0.92	WBL					
18 Veterans Memorial Pkwy & Harley Strickland Blvd	D	46.2	1.13	EBL	Signal timing adjustments	D	41.5	0.93	EBL
19 Veterans Memorial Pkwy & Saxon Blvd	E	73.6	1.41	SBL	Removal of north-south split phasing, convert southbound lane configuration to dual left-turn and shared through/right-turn	E	55.3	0.98	WBR
20 FDOT Park and Ride & Saxon Blvd	B	12.2	0.70	WBL					
22 I-4 EB Ramp & Saxon Blvd [3]	F	82.4	1.19	NBR	Additional eastbound through lane and an additional northbound right-turn lane	C	34.5	0.97	EBL
23 Normandy Blvd & Saxon Blvd	F	135.8	1.89	SBL	Additional eastbound left-turn lane, additional exclusive westbound right-turn lane, additional northbound right-turn lane, additional southbound left-turn lane	E	64.2	0.94	EBL
24 Tivoli Dr & Saxon Blvd	D	55.0	1.30	EBL	Signal timing adjustments	C	31.3	0.94	EBL
25 Normandy Blvd & Deltona Blvd	B	18.2	0.84	EBL					
26 Forest Edge Drive & Howland Boulevard	F	111.7	1.35	EBT	Additional eastbound through lane, additional westbound through lane	B	18.9	0.94	EBT
27 Wolf Pack Run & Howland Boulevard	E	62.6	1.22	EBR	Additional eastbound through lane, additional westbound through lane	A	4.4	0.85	EBR
28 Finland Drive & Saxon Boulevard	D	36.1	2.33	NBL	Additional westbound through lane	C	30.8	0.94	NBL
29 Normandy Blvd & Project Dwy 1	F	81.3	1.29	SBT	Additional northbound through lane, additional southbound through lane	B	13.2	0.83	EBL

Note:
1. Intersection LOS and delay at unsignalized intersections are reported for the stop-controlled approaches only.
2. Intersection improvements were performed in order to allow intersection approaches to operate at the appropriate level of service for the corresponding roadway segment.
3. HCM 2000 analysis output was used for this intersection as HCM 6 can not evaluate the intersection phasing settings.
4. Delay and V/C calculations resulted in errors because volumes significantly exceeded the available capacity.
5. Despite LOS F, 2022 future background turning movement volumes do not warrant the addition of a traffic signal.

Future Buildout (2022) Conditions Intersection Analysis

The intersection operating conditions were evaluated under buildout traffic conditions. The future buildout conditions analysis included future background non-project traffic and project traffic. The intersection geometry identified to be needed under future background traffic conditions was utilized in the buildout conditions analysis to identify any additional transportation improvements that are necessary to provide acceptable level of service and intersection operations due to the addition of project traffic.

Tables 9 and 10 detail the resultant intersection LOS and delay for AM and PM peak hour future buildout conditions with background improved geometry, respectively. The intersection capacity analysis shows that with the implementation of the necessary background improvements, only minor signal timing adjustments are needed to provide acceptable traffic operations at all off-site intersections upon project buildout.

All study area intersections (excluding project driveways) are shown to operate with acceptable LOS and V/C ratios under AM and PM peak hour buildout traffic conditions considering the backgrounds geometrical improvements and minor signal timing adjustments**.** Additionally, an arterial analysis was performed for the following roadway segments during AM and PM peak hour 2022 future buildout (with project) traffic conditions:

- *SR 472 from Martin Luther King Jr. Beltway to Wolf Pack Run*
  - AM Peak Hour (with improvements)
    - Eastbound - LOS E
    - Westbound - LOS D
  - PM Peak Hour (with improvements)
    - Eastbound - LOS E
    - Westbound - LOS E
- *Saxon Boulevard from Veterans Memorial Parkway to Normandy Boulevard*
  - AM Peak Hour (with improvements)
    - Eastbound - LOS C
    - Westbound - LOS C
  - PM Peak Hour (with improvements)
    - Eastbound – LOS D
    - Westbound – LOS D

Figure 8 and **Figure 9** illustrate the intersection geometries needed to provide acceptable traffic operations at the study area intersections under 2022 future background traffic conditions and 2022 future buildout traffic conditions. Additionally, **Table 11** summarizes the recommended storage lengths for turn lanes at each intersection with recommended improvements. The recommended turn lane storage lengths are the maximum of either (1) the sum of the required deceleration length and the anticipated 50th percentile queue length or (2) the 95th percentile queue length.

The *Synchro 10* output reports and arterial analysis are provided in **Appendix E.**

Table 9 – Buildout (2022) Conditions AM Peak Hour Intersection Analysis

Intersection	2022 Buildout Conditions				2022 Buildout with Improvements Conditions				
	Inter-section LOS	Inter-section Delay (S)	Max Movement V/C	Movement Direction	Identified Improvements	Inter-section LOS	Inter-section Delay (S)	Max Movement V/C	Movement Direction
Unsignalized [1]									
15 Fort Smith Blvd & Elkcam Blvd	C	18.0	0.43	NB					
21 I-4 WB Ramp & Saxon Blvd	-	-	-	-					
30 Normandy Blvd & Project Dwy 2	B / B	10.2 / 13.4	0.00 / 0.05	EB / WB					
31 Normandy Blvd & Project Dwy 3	F	102.7	0.71	WBL	Install traffic signal	A	4.3	0.46	WBL
Signalized									
1 Dr MLK Jr Bltwy & Orange Camp Rd	D	37.7	0.87	NBT & SBL					
2 Kentucky Ave/MLK Jr Bltwy & SR 472	E	57.8	0.89	WBT & SBT					
3 I-4 WB Ramp & SR 472	C	24.4	0.86	EBT					
4 I-4 EB Ramp & SR 472	D	35.2	0.98	WBT					
5 US 17/92/Volusia Ave & Graves Ave	C	21.6	0.84	WBL					
6 Veterans Memorial Pkwy & Graves Ave	B	16.1	0.82	WBL					
7 Kentucky Ave & Graves Ave	C	28.6	0.88	EBL					
8 Normandy Blvd & Graves Ave	C	23.1	0.96	WBL					
9 SR 472/Howland Blvd & Graves Ave	D	39.8	0.98	EBL					
10 Catalina Blvd & Howland Blvd	D	51.3	0.96	WBT/R					
11 Lake Helen-Osteen Rd & Catalina Blvd	B	13.1	0.77	NBL					
12 Providence Blvd & Howland Blvd	C	27.5	0.97	NBL					
13 Veterans Memorial Pkwy & Rhode Island Ave	D	35.0	0.97	SBT					
14 Normandy Blvd & Elkcam Blvd	C	22.4	0.90	WBL					
16 Providence Blvd & Elkcam Blvd	C	23.2	0.73	WBR & NBT					
17 Providence Blvd & Fort Smith Blvd	C	21.5	0.84	WBL					
18 Veterans Memorial Pkwy & Harley Strickland Blvd	C	21.3	0.53	WBR					
19 Veterans Memorial Pkwy & Saxon Blvd	B	16.5	0.83	SBL					
20 FDOT Park and Ride & Saxon Blvd	A	6.0	0.55	WBT/R					
22 I-4 EB Ramp & Saxon Blvd [3]	C	23.9	0.98	WBT					
23 Normandy Blvd & Saxon Blvd	E	58.6	1.13	EBL	Signal timing adjustments	D	35	0.97	SBT
24 Tivoli Dr & Saxon Blvd	C	25.5	0.92	WBR					
25 Normandy Blvd & Deltona Blvd	B	11.8	0.75	EBL					
26 Forest Edge Drive & Howland Boulevard	B	10.7	0.82	WBT/R					
27 Wolf Pack Run & Howland Boulevard	B	11.6	0.87	NBR					
28 Finland Drive & Saxon Boulevard	C	28.9	0.96	SBR					
29 Normandy Blvd & Project Dwy 1	A	8.6	0.65	WBR					

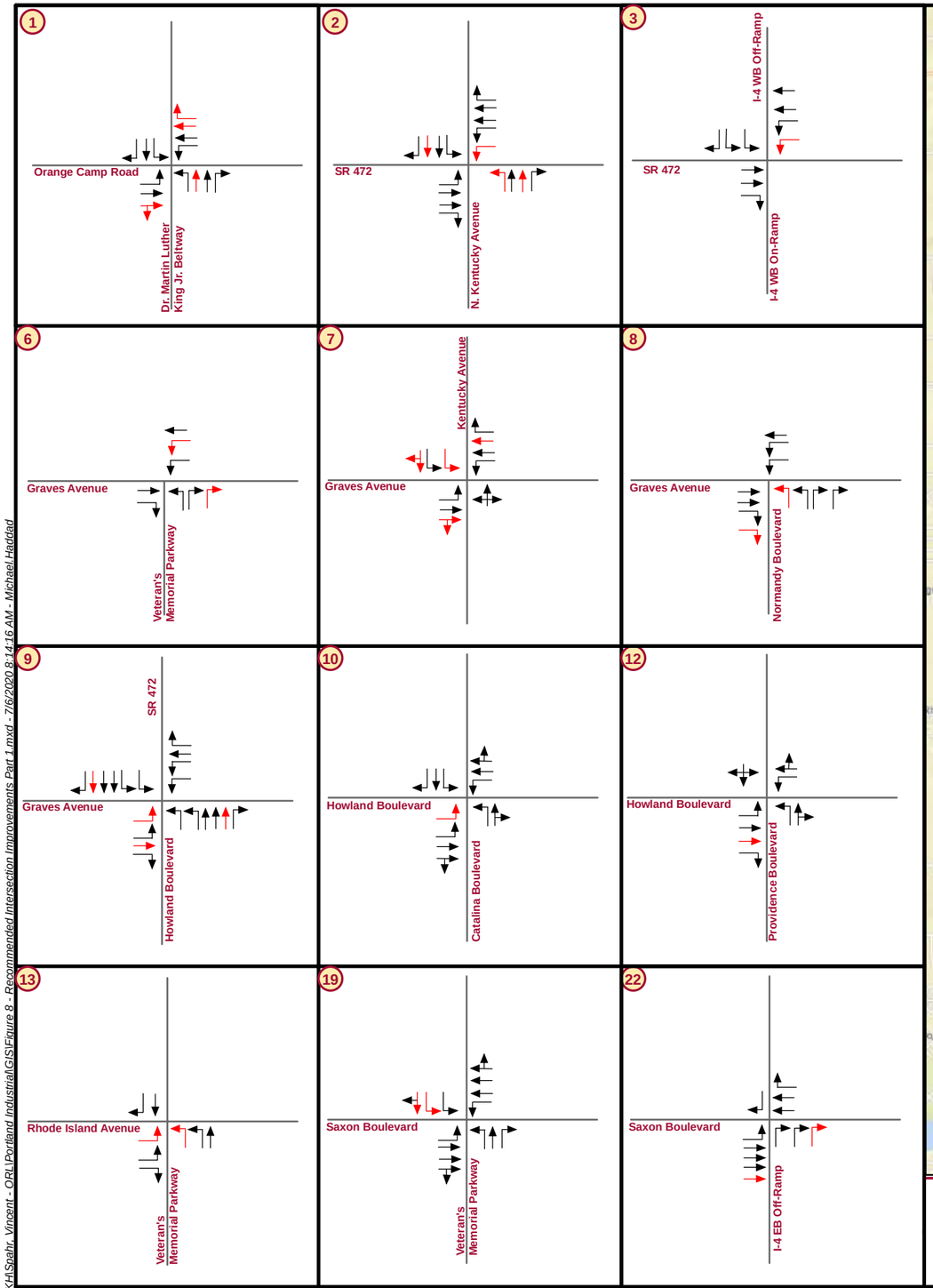
Note:

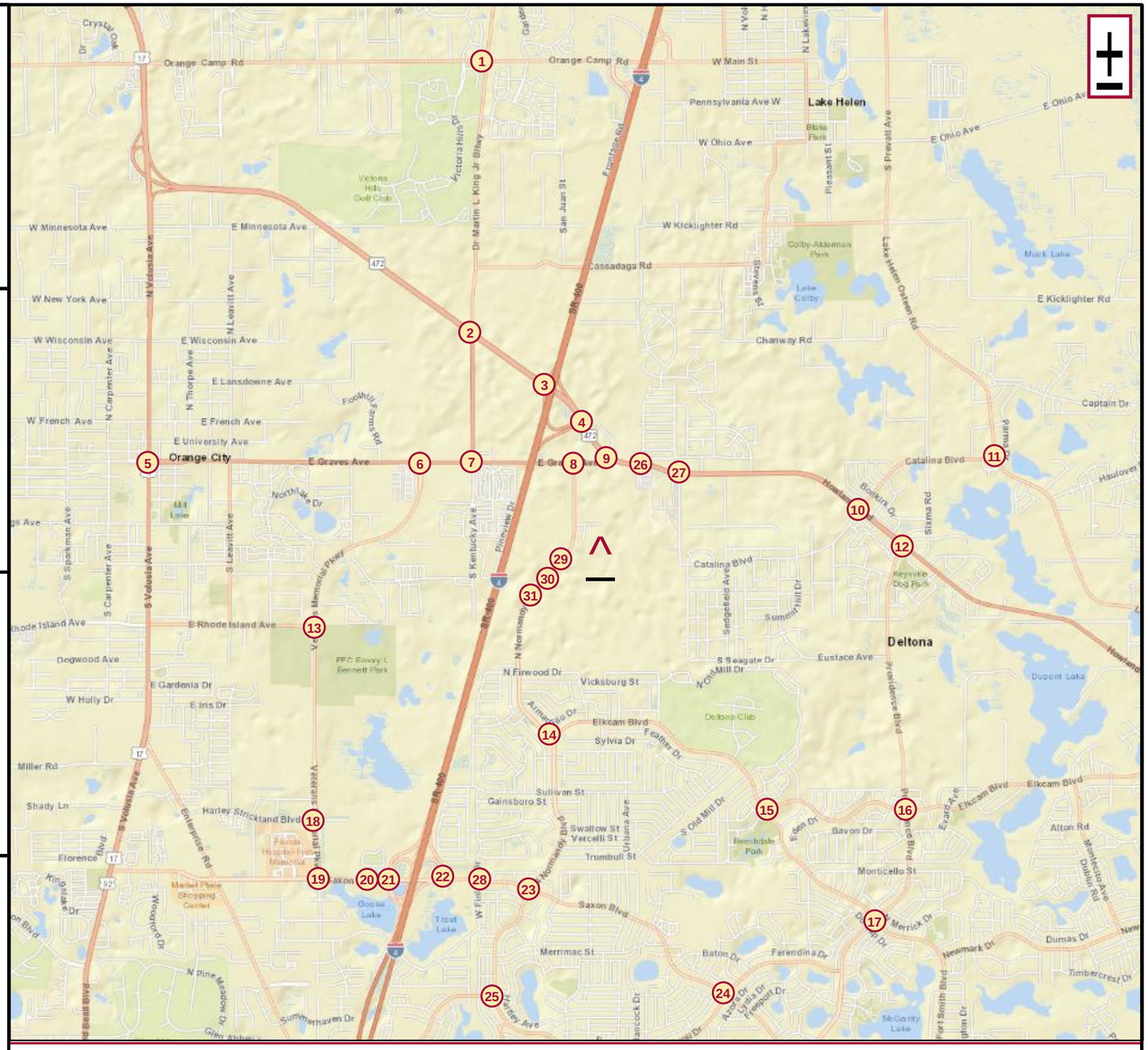
1. Intersection LOS and delay at unsignalized intersections are reported for the stop-controlled approaches only.
2. Intersection improvements were performed in order to allow intersection approaches to operate at the appropriate level of service for the corresponding roadway segment.
3. HCM 2000 analysis output was used for this intersection as HCM 6 can not evaluate the intersection phasing settings.

Table 10 – Buildout (2022) Conditions PM Peak Hour Intersection Analysis

Intersection	2022 Buildout Conditions				2022 Buildout with Improvements Conditions				
	Inter-section LOS	Intersection Delay (S)	Max Movement V/C	Movement Direction	Identified Improvements	Inter-section LOS	Inter-section Delay (S)	Max Movement V/C	Movement Direction
Unsignalized [1]									
15 Fort Smith Blvd & Elkcam Blvd	E	42.7	0.72	NB					
21 I-4 WB Ramp & Saxon Blvd	-	-	-	-					
30 Normandy Blvd & Project Dwy 2	F / C	63.5 / 15.9	0.85 / 0.13	EB / WB					
31 Normandy Blvd & Project Dwy 3	F / F	Err / Err [4]	Err / Err [4]	EB / WB	Install traffic signal	B	17.4	0.81	EBL/T/R
Signalized									
1 Dr MLK Jr Bltwy & Orange Camp Rd	D	43.9	0.90	NBT					
2 Kentucky Ave/MLK Jr Bltwy & SR 472	E	65.9	1.03	NBL & NBT	Signal timing adjustments	E	63.9	0.97	NBL
3 I-4 WB Ramp & SR 472	C	32.9	0.90	WBL					
4 I-4 EB Ramp & SR 472	C	27.7	0.90	NBL					
5 US 17/92/Volusia Ave & Graves Ave	C	28.5	0.89	WBT/R					
6 Veterans Memorial Pkwy & Graves Ave	C	26.8	0.94	WBL					
7 Kentucky Ave & Graves Ave	D	46.4	0.98	EBL & WBT					
8 Normandy Blvd & Graves Ave	D	45.9	0.98	WBL					
9 SR 472/Howland Blvd & Graves Ave	E	63.9	1.13	EBL	Signal timing adjustments	E	58.2	0.96	WBT
10 Catalina Blvd & Howland Blvd	D	45.4	0.93	EBL					
11 Lake Helen-Osteen Rd & Catalina Blvd	C	26.0	0.86	EBR					
12 Providence Blvd & Howland Blvd	B	11.5	0.78	NBL					
13 Veterans Memorial Pkwy & Rhode Island Ave	D	38.3	0.98	NBL & SBT					
14 Normandy Blvd & Elkcam Blvd	C	34.3	1.07	SBL	Signal timing adjustments	C	34.6	0.98	SBL
16 Providence Blvd & Elkcam Blvd	C	30.5	0.86	EBT/R					
17 Providence Blvd & Fort Smith Blvd	C	27.9	0.94	WBL					
18 Veterans Memorial Pkwy & Harley Strickland Blvd	D	41.6	0.93	EBL					
19 Veterans Memorial Pkwy & Saxon Blvd	E	57	1.00	WBR	Signal timing adjustments	E	59.2	0.98	WBR
20 FDOT Park and Ride & Saxon Blvd	B	12.2	0.71	WBL					
22 I-4 EB Ramp & Saxon Blvd [3]	D	35.1	0.97	EBL					
23 Normandy Blvd & Saxon Blvd	E	67.4	0.99	SBT					
24 Tivoli Dr & Saxon Blvd	C	32.9	0.95	EBL & WBT/R					
25 Normandy Blvd & Deltona Blvd	B	18.9	0.85	EBL					
26 Forest Edge Drive & Howland Boulevard	B	19.4	0.95	EBT					
27 Wolf Pack Run & Howland Boulevard	A	4.5	0.87	EBR					
28 Finland Drive & Saxon Boulevard	C	31.1	0.94	EBL & NBL					
29 Normandy Blvd & Project Dwy 1	C	23.1	0.80	WBL					

Note:
1. Intersection LOS and delay at unsignalized intersections are reported for the stop-controlled approaches only.
2. Intersection improvements were performed in order to allow intersection approaches to operate at the appropriate level of service for the corresponding roadway segment.
3. HCM 2000 analysis output was used for this intersection as HCM 6 can not evaluate the intersection phasing settings.
4. Delay and V/C calculations resulted in errors because volumes significantly exceeded the available capacity.





Legend

- 2020 Existing Lane Geometry
- Lane Geometry Needed to Support 2022 Future Background Traffic Volumes
- Lane Geometry Needed to Support 2022 Buildout Traffic Volumes

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Phone: 407 898 1511
www.kimley-horn.com CA 000006966

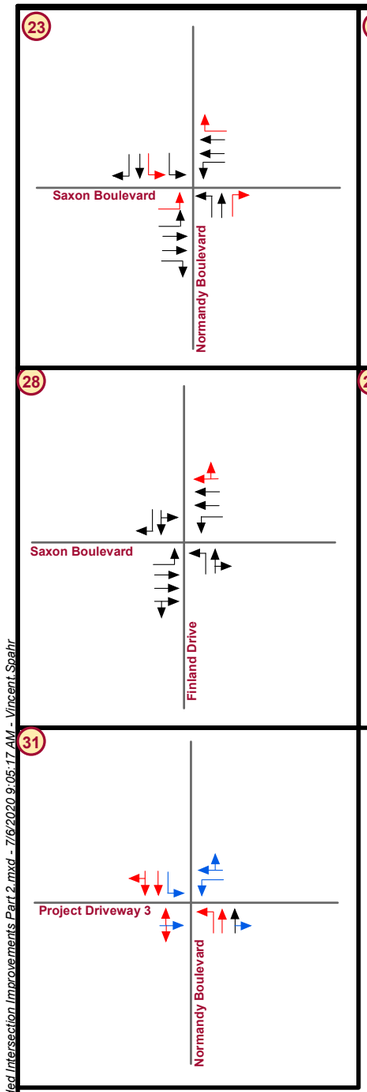
FIGURE 8 - RECOMMENDED INTERSECTION MITIGATION

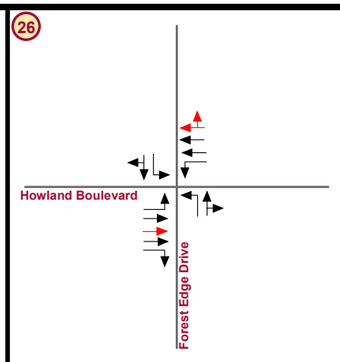
PORTLAND INDUSTRIAL PARK
CITY OF DELTONA, VOLUSIA COUNTY, FLORIDA

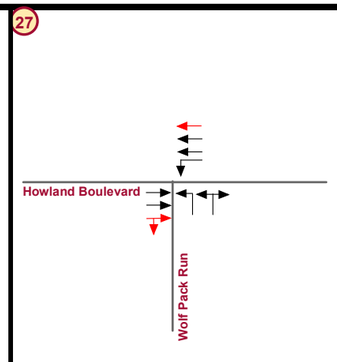
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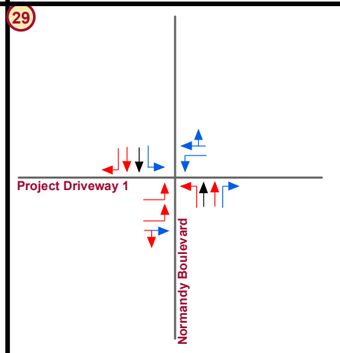
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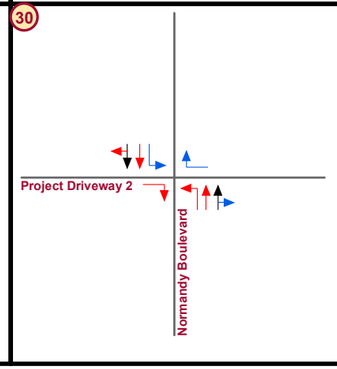
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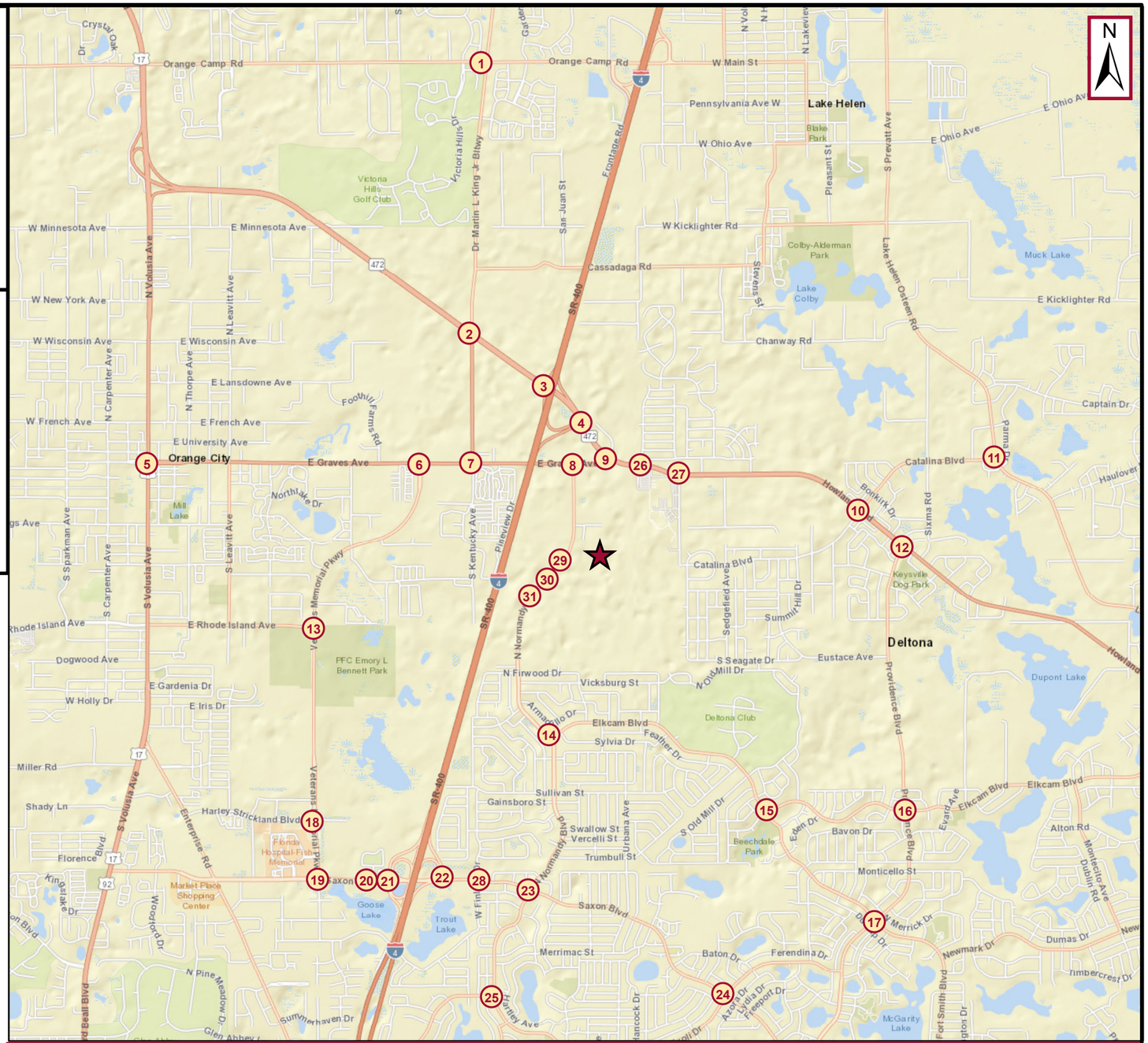












Legend

- Lane Geometry Needed to Support 2022 Future Background Traffic Volumes
- 2020 Existing Lane Geometry
- Lane Geometry Needed to Support 2022 Buildout Traffic Volumes

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189 Orange Avenue, Suite 1000, Orlando FL 32801
Phone: 407 898 1511
www.kimley-horn.com CA 000006966

FIGURE 9 - RECOMMENDED INTERSECTION MITIGATION (CONT.)

PORTLAND INDUSTRIAL PARK
CITY OF DELTONA, VOLUSIA COUNTY, FLORIDA

Project No: 046448001

July 2020

Table 11 - Recommended Intersection Storage Length Summary

Impacted Turn Lane and Location	Existing Total Turn Lane Length (Ft)	Recommended Queue Storage (Ft) [1]	Required Deceleration (Ft) [2]	Required Total Turn Lane Length (Ft) [3]	95th Percentile Queue Length (Ft) [4]	Recommended Turn Lane Length (Ft) [5]	Improvement Recommended?
Orange Camp Road & Dr. Martin Luther King Jr Beltway							
Existing Northbound Left-turn Lane	340	200	320	520	300	520	Extend Turn Lane by 180 ft
Existing Northbound Right-turn Lane	375	25	320	345	50	345	No
Existing Southbound Left-turn Lane	335	150	320	470	250	470	Extend Turn Lane by 135 ft
Existing Southbound Right-turn Lane	380	25	320	345	50	345	No
Existing Eastbound Left-turn Lane	385	50	320	370	75	370	No
Proposed Eastbound Shared Through/Right-turn Lane	0	250	320	570	375	570	Provide 570 ft Turn Lane
Existing Westbound Left-turn Lane	550	50	320	370	75	370	No
Proposed Westbound Right-turn Lane	0	175	320	495	275	495	Provide 495 ft Turn Lane
SR 472 & N. Kentucky Ave							
Proposed Northbound Left-turn Lane	0	375	320	695	500	695	Provide 695 ft Turn Lane
Existing Northbound Right-turn Lane	485	0	320	320	0	320	No
Existing Southbound Left-turn Lane	350	400	320	720	550	720	Extend Turn Lane by 370 ft
Existing Southbound Right-turn Lane	350	0	320	320	0	320	No
Existing Eastbound Left-turn Lane	400	100	350	450	150	450	Extend Turn Lane by 50 ft
Existing Eastbound Right-turn Lane	395	100	350	450	175	450	Extend Turn Lane by 55 ft
Proposed Additional Westbound Left-turn Lane	425	100	350	450	175	450	Extend Turn Lane by 25 ft
Existing Westbound Right-turn Lane	400	150	350	500	225	500	Extend Turn Lane by 100 ft
I-4 WB Ramp & SR 472							
Existing Eastbound Right-turn Lane	500	0	350	350	0	350	No
Existing Southbound Dual Left-turn Lane	550	225	350	575	375	575	Extend Turn Lane by 25 ft
Existing Southbound Right-turn Lane	-	200	350	550	325	550	No
Proposed Additional Westbound Left-turn Lane	600	275	350	625	400	625	Extend Turn Lane by 25 ft
Graves Ave & Veteran's Memorial Parkway							
Existing Northbound Left-turn Lane	1,000	25	240	265	50	265	No
Proposed Additional Northbound Right-turn Lane	0	125	240	365	225	365	Provide 365 ft Turn Lane
Existing Eastbound Right-turn Lane	400	0	240	240	25	240	No
Proposed Additional Westbound Left-turn Lane	300	250	240	490	400	490	Extend Turn Lane by 190 ft
Graves Ave & Kentucky Ave							
Proposed Additional Southbound Left-turn Lane	320	300	320	620	425	620	Extend Turn Lane by 300 ft
Lane	225	250	320	570	400	570	Extend Turn Lane by 345 ft
Existing Eastbound Left-turn Lane	200	300	320	620	425	620	Extend Turn Lane by 420 ft
Proposed Shared Eastbound Through and Right-turn Lane	0	350	320	670	500	670	Provide 670 ft Turn Lane
Existing Westbound Left-turn Lane	235	25	320	345	50	345	Extend Turn Lane by 110 ft
Existing Westbound Right-turn Lane	-	500	320	820	700	820	No
Graves Ave & Normandy Blvd							
Proposed Additional Northbound Left-turn Lane	200	400	185	585	550	585	Extend Turn Lane by 385 ft
Background Dual Northbound Right-turn Lanes	-	50	185	235	100	235	No
Proposed Additional Eastbound Right-turn Lane	545	425	320	745	600	745	Extend Turn Lane by 200 ft
Background Dual Westbound Left-turn Lanes	570	400	320	720	575	720	Extend Turn Lane by 150 ft
Graves Ave & Howland Blvd							
Background Dual Northbound Left-turn Lanes	525	450	240	690	600	690	Extend Turn Lane by 165 ft
Background Northbound Right-turn Lane	525	200	240	440	300	440	No
Background Dual Southbound Left-turn Lanes	300	75	240	315	100	315	Extend Turn Lane by 15 ft
Background Southbound Right-turn Lane	330	325	240	565	375	565	Extend Turn Lane by 235 ft
Proposed Exclusive Eastbound Left-turn Lane	330	200	240	440	300	440	Extend Turn Lane by 110 ft
Existing Eastbound Right-turn Lane	-	0	240	240	0	240	No
Background Additional Westbound Left-turn Lane	565	150	240	390	225	390	No
Existing Westbound Right-turn Lane	-	100	240	340	200	340	No
Catalina Blvd & Howland Blvd							
Existing Northbound Left-turn lane	400	75	145	220	150	220	No
Existing Southbound Left-turn Lane	225	100	145	245	150	245	Extend Turn Lane by 20 ft
Existing Southbound Right-turn Lane	400	200	145	345	300	345	No
Proposed Additional Eastbound Left-turn Lane	350	375	240	615	450	615	Extend Turn Lane by 265 ft
Existing Westbound Left-turn Lane	250	25	240	265	50	265	Extend Turn Lane by 15 ft
Providence Blvd & Howland Blvd							
Existing Northbound Left-turn Lane	250	275	155	430	400	430	Extend Turn Lane by 180 ft
Existing Eastbound Left-turn Lane	150	0	240	240	0	240	Extend Turn Lane by 90 ft
Existing Eastbound Right-turn Lane	-	0	240	240	0	240	No
Existing Westbound Left-turn Lane	150	25	240	265	25	265	Extend Turn Lane by 115 ft
Rhode Island Ave & Veteran's Memorial Parkway							
Proposed Additional Northbound Left-turn Lane	350	150	240	390	250	390	Extend Turn Lane by 40 ft
Existing Southbound Right-turn Lane	385	75	240	315	125	315	No
Proposed Additional Eastbound Left-turn Lane	450	75	155	230	150	230	No
Existing Eastbound Right-turn Lane	-	100	155	255	175	255	No
Saxon Boulevard & Veterans Memorial Parkway							
Existing Northbound Left-turn Lane	200	50	155	205	100	205	Extend Turn Lane by 5 ft
Existing Northbound Right-turn Lane	300	50	155	205	100	205	No
Proposed Southbound Dual Left-turn Lanes	275	400	240	640	525	640	Extend Turn Lane by 365 ft
Existing Eastbound Left-Turn Lane	425	300	240	540	425	540	Extend Turn Lane by 115 ft
Existing Westbound Left-turn Lane	400	150	240	390	225	390	No
Saxon Blvd & I-4 EB Off Ramp							
Existing Eastbound Left-turn Lane	500	450	240	690	675	690	Extend Turn Lane by 190 ft
Proposed Additional Northbound Right-turn Lane	1,000	450	475	925	575	925	No
Saxon Blvd & Normandy Blvd							
Existing Northbound Left-turn Lane	260	200	145	345	300	345	Extend Turn Lane by 85 ft
Proposed Northbound Right-turn Lane	0	25	145	170	50	170	Provide 170 ft Turn Lane
Proposed Additional Southbound Left-turn Lane	0	200	145	345	300	345	Provide 345 ft Turn Lane
Existing Southbound Right-turn Lane	385	350	145	495	500	500	Extend Turn Lane by 115 ft
Proposed Additional Eastbound Left-turn Lane	520	450	240	690	575	690	Extend Turn Lane by 170 ft
Existing Eastbound Right-turn Lane	220	300	240	540	400	540	Extend Turn Lane by 320 ft
Existing Westbound Left-turn Lane	470	25	240	265	50	265	No
Proposed Westbound Right-turn Lane	0	225	240	465	275	465	Provide 465 ft Turn Lane
Howland Boulevard & Forest Edge Drive							
Existing Northbound Left-turn Lane	200	75	145	220	150	220	Extend Turn Lane by 20 ft
Existing Southbound Left-turn Lane	175	25	145	170	25	170	No
Existing Eastbound Left-turn Lane	400	50	240	290	75	290	No
Existing Eastbound Right-turn Lane	-	0	240	240	0	240	No
Existing Westbound Left-turn Lane	750	25	240	265	50	265	No
Howland Boulevard & Wolf Pack Run							
Existing Northbound Left-turn Lane	420	75	145	220	125	220	No
Existing Westbound Left-turn Lane	230	50	240	290	100	290	Extend Turn Lane by 60 ft
Saxon Boulevard & Finland Drive							
Existing Northbound Left-turn Lane	320	175	145	320	275	320	No
Existing Southbound Right-turn Lane	140	150	145	295	275	295	Extend Turn Lane by 155 ft
Existing Eastbound Left-turn Lane	270	250	240	490	300	490	Extend Turn Lane by 220 ft
Existing Westbound Left-turn Lane	240	125	240	365	200	365	Extend Turn Lane by 125 ft

Notes:
1. Based on the PM peak hour 50th percentile back of queue length upon project buildout as reported in Synchro.
2. Based on the 2019 FDOT Design Manual, Index 212.6 or on Volusia county regulations
3. Sum of 50th percentile back of queue length and required deceleration length.
4. Based on the PM peak hour 95th percentile back of queue length upon project buildout as reported in Synchro.
5. The recommended turn lane length is the greater of the required deceleration length plus 50th percentile queue length and the 95th percentile queue length.

SITE ACCESS ANALYSIS

Access to the site will be provided via three (3) access connections to Normandy Boulevard and one cross-access with the Deltona Village development on the north side of the subject property. One of the access connections on Normandy Boulevard will be a directional access (left-in/right-in/right-out) and the other two will be full-access connections. The proposed site access locations were evaluated for required turn lane needs and intersection control to accommodate the traffic at project buildout.

Driveway Connections to Normandy Boulevard

The recommended turn lane length is the maximum of either (1) the sum of the required deceleration length and the anticipated average queue length or (2) the 95th percentile queue length. The posted speed limit on Normandy Boulevard is 45 mph, so an assumed design speed of 50 mph has been utilized for the turn lane recommendations. Based on the 50-mph design speed for an urban roadway, the required deceleration length from the FDOT Design Standards Index is 240 feet. Proposed storage lengths were calculated to accommodate the anticipated queue lengths at the project driveways.

Normandy Boulevard at Driveway 1

This northernmost proposed full-access connection to the Portland Industrial Park will align with the signalized intersection prescribed in the traffic study completed for the Industrial Warehouse project on the west side of Normandy Boulevard. A southbound left-turn lane is recommended based on projected ingress traffic at Driveway 1. The southbound left-turn lane should be at least 265 feet long to accommodate deceleration and an average queue of approximately one (1) vehicle during the AM and PM peak hours. A northbound right-turn lane is also recommended for projected ingress traffic at Driveway 1. The northbound right-turn lane should be at least 265 feet long to accommodate deceleration and an average queue of approximately one (1) vehicle during the AM and PM peak hours.

Normandy Boulevard at Driveway 2

This proposed directional access (left-in/right-in/right-out) connection to the Portland Industrial Park will align with the directional access connection prescribed in the traffic study completed for the Industrial Warehouse project on the west side of Normandy Boulevard. A southbound left-turn lane is recommended based on projected ingress traffic at Driveway 2. The southbound left-turn lane should be at least 265 feet long to accommodate deceleration and an average queue of approximately one (1) vehicle during the AM and PM peak hours. A northbound right-turn lane is not recommended based on projected ingress traffic volumes at Driveway 2.

Normandy Boulevard at Driveway 3

This southernmost proposed full-access connection to the Portland Industrial Park will align with the southernmost full-access connection to the Industrial Warehouse project on the west side of Normandy Boulevard. A southbound left-turn lane is recommended based on projected ingress traffic at Driveway 3. The southbound left-turn lane should be at least 265 feet long to accommodate deceleration and an average queue of approximately one (1) vehicle during the AM and PM peak hours. A northbound right-turn lane is not recommended based on projected ingress traffic volumes at Driveway 3.

Table 12 summarizes the storage length calculations for ingress turn lanes at each of the proposed access connections on Normandy Boulevard.

Table 12 - Recommended Driveway Storage Length Summary

Proposed Turn Lane and Location	Recommended Queue Storage (Ft) [1]	Required Deceleration (Ft) [2]	Required Total Turn Lane Length (Ft) [3]	95th Percentile Queue Length (Ft) [4]	Recommended Turn Lane Length (Ft) [5]
Normandy Boulevard & Driveway 1 (Background Traffic Signal)					
Background Northbound Left-turn Lane	25	240	265	50	265
Proposed Northbound Right-turn Lane	25	240	265	50	265
Proposed Southbound Left-turn Lane	25	240	265	50	265
Background Southbound Right-turn Lane	75	240	315	125	315
Normandy Boulevard & Driveway 2 (Directional Access)					
Background Northbound Left-turn Lane	50	240	290	50	290
Proposed Southbound Left-turn Lane	25	240	265	25	265
Normandy Boulevard & Driveway 3 (Proposed Traffic Signal)					
Background Northbound Left-turn Lane	25	240	265	50	265
Proposed Southbound Left-turn Lane	25	240	265	50	265

Notes:

1. Based on the PM peak hour 50th percentile back of queue length upon project buildout as reported in Synchro.
2. Based on the 2019 FDOT Design Manual, Index 212.6
3. Sum of 50th percentile back of queue length and required deceleration length.
4. Based on the PM peak hour 95th percentile back of queue length upon project buildout as reported in Synchro.
5. The recommended turn lane length is the greater of the required deceleration length plus 50th percentile queue length and the 95th percentile queue length.

PRELIMINARY SIGNAL WARRANT ANALYSIS – DRIVEWAY 3

Based on the operational deficiencies observed at the intersection of Normandy Boulevard and Driveway 3 under buildout conditions, a preliminary PM peak hour signal warrant analysis was conducted to determine the appropriate traffic control for the intersection. Guidelines established in the Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition for Warrant 3 (Peak Hour Vehicular Volumes) were used for the analysis.

The major street (Normandy Boulevard) was evaluated as a two-lane approach with a speed limit over 40 mph, therefore the 70% columns for Warrant 3 of the MUTCD were utilized in this analysis. The minor street (Driveway 3) was analyzed as a single-lane approach. According to this table, the highest minor street volume total must equal or exceed 75 vehicles per hour in order to meet warrant criteria.

The anticipated PM peak hour volumes exiting Driveway 3 significantly exceed the 75 vehicles per hour threshold; therefore, Driveway 3 does meet peak hour signal warrant criterion, and a traffic signal is proposed at the intersection of Normandy Boulevard and Driveway 3. The preliminary Signal Warrant 3 worksheet is provided in **Appendix I**.

ALTERNATIVE MODE ANALYSIS

There are currently no existing sidewalk or bicycle facilities along Normandy Boulevard. It is recommended that sidewalks and bicycle lanes be included in the proposed typical section for the widening of Normandy Boulevard from two lanes to four lanes. Given the evolving context of the Normandy Boulevard corridor, the presence of bicyclists and pedestrians can be expected to increase as new developments are constructed and the number of commuters traveling to the developments increases.

Votran Bus Route 25 currently operates with a stop at the Epic Theaters property on the east side of Normandy Boulevard, north of the proposed development. The developer will coordinate a transit connection to the Portland Industrial Park with Votran.

FUTURE RHODE ISLAND INTERCHANGE

During the methodology review process, it was requested that this TIA include an analysis of the planned future Interstate 4 and Rhode Island Avenue Interchange and its potential impact on the roadway network within the study area. A technical memorandum is provided in **Appendix J** that evaluates impacts to future travel demand patterns within the study area by utilizing the Central Florida Regional Planning Model, version 6.1 to assess the following four (4) alternatives:

- Rhode Island Avenue is never extended to connect its existing terminus at Veterans Memorial Parkway to Normandy Boulevard
- Rhode Island Avenue is extended to connect its existing terminus at Veterans Memorial Parkway to Normandy Boulevard via an overpass, but no access to Interstate 4 is provided
- Rhode Island Avenue is extended to connect its existing terminus at Veterans Memorial Parkway to Normandy Boulevard and a partial interchange is constructed, providing a northbound off-ramp and a southbound on-ramp with access to future express lanes on Interstate 4
- Rhode Island Avenue is extended to connect its existing terminus at Veterans Memorial Parkway to Normandy Boulevard and a full interchange is constructed, providing full access to the Interstate 4 mainline.

The memorandum summarized the results of the memorandum by comparing each of the alternatives in which Rhode Island Avenue was extended from Veterans Memorial Parkway to Normandy Boulevard to the first alternative, which served as a baseline condition.

The analysis indicates that the Rhode Island Avenue extension on its own would result in a 27% reduction in traffic along Normandy Boulevard south of the proposed connection. The Rhode Island extension would also result in a 6% reduction in traffic along Saxon Boulevard between Interstate 4 and Normandy Boulevard, which was identified in this TIA as exceeding its service capacity under existing conditions and worsening under background conditions.

The partial interchange, which is the preferred alternative include in the Interstate 4 Beyond the Ultimate PD&E Study, would also be expected to alleviate traffic on some of the study area roadways shown to exceed their service capacities under existing and future background conditions. The reduction in traffic along Normandy Boulevard south of the Rhode Island Avenue extension would be even greater, at 43%. Traffic would be reduced on Saxon Boulevard between Veterans Memorial Parkway and Interstate 4 by 6%, on SR 472 between Interstate 4 and Graves Avenue by 5%, and on Veterans Memorial Parkway between Saxon Boulevard and Rhode Island Avenue by 12%.

The full interchange, including all movements onto and off of the Interstate 4 mainline, was shown to alleviate the most traffic from study area roadways. Traffic would be reduced by 56% on Normandy Boulevard south of the Rhode Island Avenue extension, by 8% on Saxon Boulevard from Veterans Memorial Parkway to Interstate 4, by 15% on Saxon Boulevard from Interstate 4 to Normandy Boulevard, by 8% on SR 472 from the West Volusia Beltway to Interstate 4, by 10% on SR 472 from Interstate 4 to Graves Avenue, and by 22% on Veterans Memorial Parkway from Saxon Boulevard to Rhode Island Avenue.

Given the multitude of existing and background deficiencies on roadways and intersections throughout the study area in the vicinity of this potential future interchange, the construction of an interchange in conjunction with the Rhode Island Avenue extension and the resulting diversion of traffic volumes can be expected to have outsized positive impact mitigating traffic concerns within the City of Deltona and more broadly within Volusia County.

CONCLUSION

Kimley-Horn has performed a Traffic Impact Analysis (TIA) for a proposed industrial warehouse development generally located on the east side of Normandy Boulevard and south of Graves Avenue in the City of Deltona, Florida. The proposed development will consist of approximately 500,000 square feet of industrial warehouse space, a 1,000,000-square foot high-cube fulfillment center warehouse, a 500,0000-square foot industrial park, and approximately 15,000 square feet of ancillary retail space. The traffic analysis provided is consistent with the methodology document approved by City of Deltona and Volusia County staff.

Trip generation for the proposed development was calculated according to the ITE *Trip Generation Manual*, 10th Edition. The ITE trip generation estimate for the development is anticipated to be 5,407 daily trips, 612 AM peak hour trips (445 in/167 out), and 526 PM peak hour trips (193 in/333 out) upon buildout.

Truck trip generation rates published in the ITE *Trip Generation Manual, 10th Edition Supplement* (published February 2020) were utilized to estimate the number of heavy vehicle trips anticipated for the project site. Approximately 848 daily truck trips, 53 AM peak hour truck trips, and 52 PM peak hour truck trips are anticipated in association with the Portland Industrial Park.

The traffic analysis was performed considering a buildout timeframe of two years (2022) for the proposed development program. The operating conditions within the study area were evaluated for future background (without project traffic) conditions and buildout (with project traffic) conditions. Due to the multitude of vested trips associated with the many background developments that were included in background traffic calculations, a large number of transportation improvements were identified within the study area as being needed under future background traffic conditions prior to the addition to project traffic.

No off-site geometric improvements were identified to be needed at project buildout beyond those identified under future background traffic conditions.

The developer will work with the City of Deltona and Volusia County to determine which background improvements identified in future conditions are feasible and desired and calculate proportionate share mitigation costs per applicable Florida Statutes and local code.

In addition to proportionate share contribution towards off-site improvements, transportation improvements are needed to accommodate project traffic at the site access locations on Normandy Boulevard. The traffic analysis identifies the required turn lanes and intersection control for the site access locations. A preliminary signal warrant analysis shows that the projected traffic volumes at Driveway 3 on Normandy Boulevard will meet peak hour signal warrants at project buildout. Site access improvements are the responsibility of the developer.

APPENDICES

APPENDIX A: CONCEPTUAL SITE PLAN

OVERALL SITE DATA

1. CURRENT ZONING: INDUSTRIAL
2. CURRENT LAND USE: INDUSTRIAL/BUSINESS PARK (ACTIVITY CENTER)
3. SECTION 07 TWNSHP 18 RNG 31
4. IPUD PROJECT AREA CALCULATIONS:
   TOTAL IPUD AREA = 129.02 AC

   MAXIMUM IMPERVIOUS AREA (ISR) ALLOWED = 65%

   MAXIMUM FAR ALLOWED = 1.0

5. PARKING:

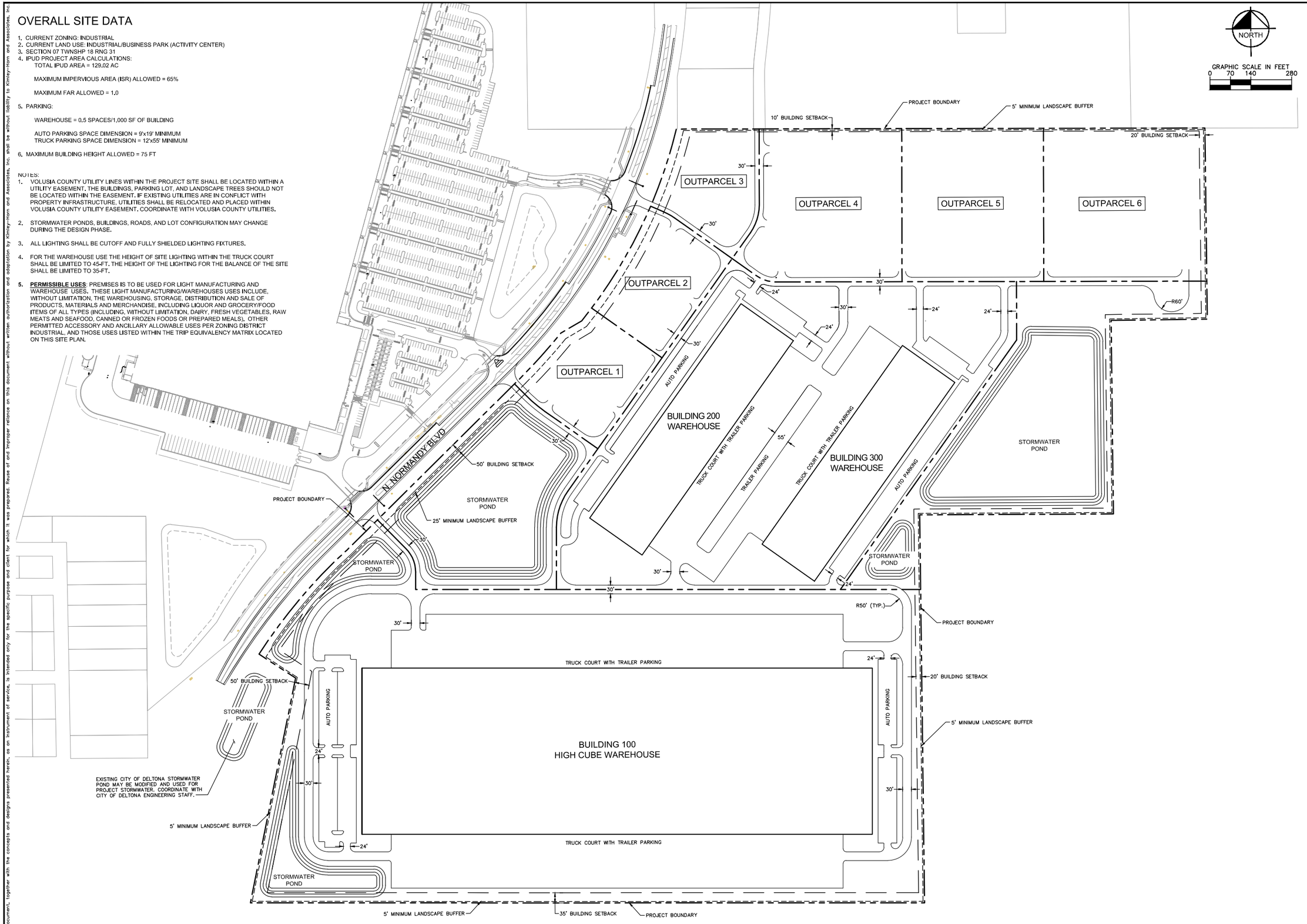
   WAREHOUSE = 0.5 SPACES/1,000 SF OF BUILDING

   AUTO PARKING SPACE DIMENSION = 9'x19' MINIMUM
   TRUCK PARKING SPACE DIMENSION = 12'x55' MINIMUM

6. MAXIMUM BUILDING HEIGHT ALLOWED = 75 FT

NOTES:

1. VOLUSIA COUNTY UTILITY LINES WITHIN THE PROJECT SITE SHALL BE LOCATED WITHIN A UTILITY EASEMENT, THE BUILDINGS, PARKING LOT, AND LANDSCAPE TREES SHOULD NOT BE LOCATED WITHIN THE EASEMENT. IF EXISTING UTILITIES ARE IN CONFLICT WITH PROPERTY INFRASTRUCTURE, UTILITIES SHALL BE RELOCATED AND PLACED WITHIN VOLUSIA COUNTY UTILITY EASEMENT. COORDINATE WITH VOLUSIA COUNTY UTILITIES.
2. STORMWATER PONDS, BUILDINGS, ROADS, AND LOT CONFIGURATION MAY CHANGE DURING THE DESIGN PHASE.
3. ALL LIGHTING SHALL BE CUTOFF AND FULLY SHIELDED LIGHTING FIXTURES.
4. FOR THE WAREHOUSE USE THE HEIGHT OF SITE LIGHTING WITHIN THE TRUCK COURT SHALL BE LIMITED TO 45-FT. THE HEIGHT OF THE LIGHTING FOR THE BALANCE OF THE SITE SHALL BE LIMITED TO 35-FT.
5. **PERMISSIBLE USES**: PREMISES IS TO BE USED FOR LIGHT MANUFACTURING AND WAREHOUSE USES. THESE LIGHT MANUFACTURING/WAREHOUSES USES INCLUDE, WITHOUT LIMITATION, THE WAREHOUSING, STORAGE, DISTRIBUTION AND SALE OF PRODUCTS, MATERIALS AND MERCHANDISE, INCLUDING LIQUOR AND GROCERY/FOOD ITEMS OF ALL TYPES (INCLUDING, WITHOUT LIMITATION, DAIRY, FRESH VEGETABLES, RAW MEATS AND SEAFOOD, CANNED OR FROZEN FOODS OR PREPARED MEALS), OTHER PERMITTED ACCESSORY AND ANCILLARY ALLOWABLE USES PER ZONING DISTRICT INDUSTRIAL, AND THOSE USES LISTED WITHIN THE TRIP EQUIVALENCY MATRIX LOCATED ON THIS SITE PLAN.



This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
116 S. KENTUCKY AVENUE, LAKELAND, FL 33801
PHONE: 863-701-8702
WWW.KIMLEY-HORN.COM
CA. 00006696

LICENSED PROFESSIONAL

DATE:

KHA PROJECT	
DATE	MAY 2020
SCALE	AS SHOWN
DESIGNED BY	
DRAWN BY	
CHECKED BY	

PORTLAND INDUSTRIAL PARK

INDUSTRIAL PLANNED UNIT DEVELOPMENT

SHEET NUMBER
IPUD - 1

APPENDIX B: APPROVED METHODOLOGY AND CORRESPONDENCE

Volusia County
Traffic Engineering

The following proposed development project has an *APPROVED TIA METHODOLOGY (valid for 6 months)*:

Project: Portland Industrial, Deltona

Date of Approval: May 22, 2020

Conditions: It has come to our attention that the applicant has not finalized his development plan and equivalency matrix, which could impact the validity of the TIA methodology. Therefore, the following conditions apply: 1) The applicant must confirm, with the city's approval, that the 2022 build out year is still appropriate.An build out year change will require the applicant to update the methodology and provide a copy to the county. 2) If the trip generation changes during work associated with finalizing the development agreement, it is the applicant's responsibility to update the methodology and provide a copy to the county for approval.

Approval Signature: M. Winsett

A TIA can now be accepted for review by the county. TIAs must be completed per the River-to-Sea TPO TIA Guidelines, which can be found on the R2CTPO.org website.

☐ **If submitting a Volusia County development application,** the following TIA-related items are required at project submission:

Completed TIA Checklis
Two (2) Hard Copies of the complete TIA
One (1) CD that includes a PDF copy of the complete TIA
All computer input files
Response to Comments (if resubmitted)

■ **City Development projects that need a TIA approval from the county must submit TIAs through the Volusia County Right-of-Way Use Permit application process.** Please see the following for more information: http://www.volusia.org/services/public-works/engineering-and-construction/development-engineering/use-permits.stml. The items below are required (Please coordinate this with the Project Engineer/Manager since a TIA is required with the Use Permit application. Not including the TIA limits our review and prolongs the review period.):

Completed TIA Checklist
Two (2) Hard Copies of the complete TIA
One (1) CD that includes a PDF copy of the complete TIA
All computer input files
Response to Comments (if resubmitted)

Applicants with large projects, complex projects, or projects with access concerns on county roads are highly suggested to meet with county reviewers earlier in the process. The applicant is responsible for setting up these meetings with the county. A city development review staff representative must also be in attendance for coordination purposes.

Questions about TIAs and TIA methodologies should be addressed to Melissa Winsett at mwinsett@volusia.org or Anthony Taylor at ataylor@volusia.org.

Kimley»Horn

June 2, 2020

Ron Paradise
Director
Planning and Development Services
2345 Providence Boulevard
City of Deltona, Florida 32725

RE: ***Portland Industrial Park - Proposed Traffic Methodology - Revised June 2, 2020***
Kimley-Horn Project No. 046448001

Introduction

The purpose of this memorandum is to document the site impact analysis methodology for a proposed development in the City of Deltona, Florida. The proposed Portland Industrial Park is to be located south of E Graves Avenue, on the east side of Normandy Boulevard. The proposed development will consist of approximately 500,000 square feet of industrial warehouse space, a 1,000,000-square foot high-cube fulfillment center warehouse, a 500,0000-square foot industrial park, and approximately 15,000 square feet of ancillary retail space.

Access to the site will be provided via three access connections to Normandy Boulevard and one cross-access with the Deltona Village development on the north side of the subject property. One of the access connections on Normandy Boulevard will be a directional access (left-in/right-in/right-out) and the other two will be full-access connections. Buildout for the development is anticipated by 2022. A conceptual site plan is included in **Appendix A**.

Project Trip Generation

Trip generation for the proposed development was calculated according to the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition* and *Trip Generation Handbook, 3rd Edition* and the relevant excerpts are provided in **Appendix B**.

ITE land use codes 130 (Industrial Park), 150 (Warehousing), 155 (High-Cube Fulfillment Center Warehouse), 932 (High-Turnover [Sit-Down] Restaurant), and 934 (Fast-Food Restaurant with Drive-Through) trip rates were applied to the proposed project. The ITE trip generation estimate for the development (provided in **Appendix B**) is anticipated to be 8,708 daily trips, 811 AM peak hour trips (544 in / 267 out), and 773 PM peak hour trips (302 in / 471 out) upon buildout.

The adjacent Deltona Village property is planned for approximately 900,000 square feet of commercial land uses. It was assumed for this analysis that most of the development (+/- 700,000 square feet) can be accessed via the cross-access connection. Internal capture was calculated for the Portland Industrial Park assuming that there would be interaction between the Industrial Park (ITE 130), the ancillary retail uses on-site, and the adjacent Deltona Village development. Based on the ITE methodology, internal capture could account for up to 30% of daily trips, 20% of AM peak hour trips, and 22% of PM peak hour trips. Internal capture will be limited to 15% during each period for this analysis.

Additionally, a pass-by reduction was applied for the ancillary retail uses on the project site, reducing the number of net new external trips accessing the development. Pass-by capture was limited to 10% of traffic on the adjacent segment of Normandy Boulevard. The resulting net new external trip calculations indicate that the Portland Industrial Park can be expected to generate **5,407 daily trips, 612 AM peak hour trips (445 in / 167 out), and 526 PM peak hour trips (193 in / 333 out)** upon buildout.

Truck trip generation rates published in the ITE *Trip Generation Manual, 10th Edition Supplement* (published February 2020) were utilized to estimate the number of heavy vehicle trips anticipated for the project site. Approximately **848 daily truck trips, 53 AM peak hour truck trips, and 52 PM peak hour truck trips** are anticipated in association with the Portland Industrial Park. Relevant excerpts from the *Trip Generation Manual, 10th Edition Supplement* are provided in **Appendix B**.

The trip generation potential of the proposed site will be utilized to assess future impacts from the site. Since end users are not yet known for the Portland Industrial Park, some flexibility is desired in the land uses proposed for the site. To allow for this flexibility, two trip equivalency matrices are included in **Appendix B** which outline the rate at which land uses can be exchanged to keep the overall traffic impacts of the site net neutral. The ancillary retail trip equivalency matrix is provided with the understanding that the ancillary retail uses may not exceed 20,000 square feet in gross floor area or 4,400 daily trips generated.

Alternative Mode Analysis

A multi-modal analysis will be conducted which will evaluate existing and programmed bike, pedestrian, and transit mobility options. This analysis will include locations of transit stops and connectivity to the proposed site.

Study Area

The study area roadway segments and intersections were defined in accordance with the River to Sea Transportation Planning Organization (R2CTPO) Transportation Impact Analysis (TIA) Guidelines and are as follows:

- Any major roadway segment on which the project traffic consumes three (3) percent or more of the peak-hour two-way service volume for the minimum acceptable level of service standard.
- Any roadways considered critical or near critical by Volusia County in the project vicinity.
- Intersection analysis shall be performed within study area roadway segments.

According to R2CTPO Guidelines, any segments within a three-mile radius of the project site considered critical or near critical by Volusia County should be considered in the analysis. Based on this criterion, the following roadway segments will be analyzed as part of this study:

- Graves Avenue from Veterans Memorial Parkway to Howland Boulevard
- Dr. Martin Luther King Jr Beltway from Orange Camp Road to SR 472
- Normandy Boulevard from Saxon Boulevard to Tivoli Drive
- Fort Smith Boulevard from Providence Boulevard to Newmark Drive
- Providence Boulevard from Elkcam Boulevard to Fort Smith Boulevard
- Saxon Boulevard from Veteran's Memorial Parkway to Normandy Boulevard
- Howland Boulevard from Interstate 4 to Elkcam Boulevard
- Catalina Boulevard from Howland Boulevard to Sixma Road
- Lake Helen-Osteen Road from Catalina Boulevard to Haulover Boulevard
- Tivoli Drive from Saxon Boulevard to Providence Boulevard
- Veteran's Memorial Parkway from E Rhode Island Avenue to Harley Strickland Boulevard
- Interstate 4 from Dirksen Drive to Saxon Boulevard

The following roadway segments will be analyzed as part of this study based upon the project traffic consuming three (3) percent or more of roadway segment peak-hour two-way service volumes (segments that meet this criterion, but are critical/near critical were included in the previous section):

- Kentucky Avenue from SR 472 to Graves Avenue
- Normandy Boulevard from Graves Avenue to Saxon Boulevard
- Elkcam Boulevard from Normandy Boulevard to Fort Smith Boulevard
- Fort Smith Boulevard from Elkcam Boulevard to Providence Boulevard
- Saxon Boulevard from Tivoli Drive to Providence Boulevard
- Catalina Boulevard from Sixma Road to Lake Helen-Osteen Road

The following roadway segments will be analyzed at the request of City of Deltona and Volusia County traffic staff:

- Graves Avenue from US 17/92 to Leavitt Avenue
- Elkcam Boulevard from Fort Smith Boulevard to Providence Boulevard
- Saxon Boulevard from Normandy Boulevard to Tivoli Drive
- Finland Drive from Saxon Boulevard to Sullivan Street
- Interstate 4 from Seminole County to Dirksen Drive
- Interstate 4 from Saxon Boulevard to SR 44

In addition to the impacted roadway segments shown above, the following intersections will be included in the analysis:

- Graves Avenue & US 17/92
- Graves Avenue & Veteran's Memorial Parkway
- Graves Avenue & W Volusia Avenue (Kentucky Avenue)
- Graves Avenue & Normandy Boulevard
- Graves Avenue & Howland Boulevard/SR 472
- SR 472 & W Volusia Beltway (Dr. Martin Luther King Jr)
- SR 472 & I-4 EB Ramps
- SR 472 & I-4 WB Ramps
- W Volusia Beltway (Dr. Martin Luther King Jr) & Orange Camp Road
- Normandy Boulevard & Project Access Locations (3)
- Normandy Boulevard & Elkcam Boulevard
- Normandy Boulevard & Saxon Boulevard
- Normandy Boulevard & Deltona Boulevard
- Elkcam Boulevard & Fort Smith Boulevard
- Elkcam Boulevard & Providence Boulevard
- Fort Smith Boulevard & Providence Boulevard
- Saxon Boulevard & Veteran's Memorial Parkway
- Saxon Boulevard & FDOT Park & Ride
- Saxon Boulevard & I-4 EB Ramps
- Saxon Boulevard & I-4 WB Ramps
- Saxon Boulevard & Finland Drive
- Saxon Boulevard & Tivoli Drive
- Howland Boulevard & Forest Edge Drive
- Howland Boulevard & Wolf Pack Run
- Howland Boulevard & Catalina Boulevard
- Howland Boulevard & Providence Boulevard
- Catalina Boulevard & Lake Helen-Osteen Road
- Veteran's Memorial Parkway & Rhode Island Avenue
- Veteran's Memorial Parkway & Harley Strickland Road

The study area determination and three-mile Volusia County critical/near critical roadway buffer map is included in **Appendix C.** A map illustrating the site location, trip distribution, and study area for the proposed development as in provided within **Appendix D**.

Data Collection

No new data will be collected for this TIA. The latest available turning movement data will be forecasted to existing year 2020 by applying background growth rates calculated based on historical annual average daily traffic (AADT) data on area roadways. For most intersections, turning movement data collected in June 2019 for the Normandy Industrial Warehouse TIA will be utilized. For intersections that were not included in that study, turning movement data from other recent studies in the area have been requested from the City and County and will serve as the basis for estimating existing year 2020 turning movement volumes. **Appendix H** includes a summary of the turning movement data source for each study area intersection as well as the raw turning movement counts that will be utilizes in the analyses. All turning movement counts will be adjusted to the existing year 2020 by applying peak season conversion factors and annual growth rates.

Historical Growth Rate

Historical growth rates have been calculated based upon AADT data provided in the 2018 Volusia County Average Annual Daily Traffic & Historical Counts. These historical growth rates were determined by utilizing the necessary amount of AADT data in order to achieve the required Trend R-squared percentage of at least 70%. If 70% is unobtainable from the historical AADT data, or if the data results in a negative growth rate, a 1.00% annual background growth rate will be applied. Growth rate calculations are provided in **Appendix F**.

Project Trip Distribution

The project traffic was assigned to the roadway network using the latest adopted Florida Standard Urban Transportation Model Structure (FSUTMS) Central Florida Regional Planning Model (CFRPM), Version 6.1. Socioeconomic data for the proposed project was coded into the appropriate transportation analysis zone (TAZ) within the Cost Feasible 2020 roadway network, and the resulting trip distribution to and from the subject TAZ was documented. The CFRPM model output is provided in **Appendix E**.

A separate truck trip distribution was determined based on the anticipated truck routes to and from the proposed warehousing and high-cube fulfillment center uses on the project site. It is assumed that all entering truck trips will exit Interstate 4 onto SR 472 eastbound, turn right onto Graves Avenue, and turn left on Normandy Boulevard. Exiting truck trips are expected to proceed northbound from the project site then split evenly between (1) turning left onto Graves Avenue westbound, turning right onto Dr. Martin Luther King Jr. Boulevard northbound, turning right onto SR 472 eastbound, and accessing the Interstate 4 westbound on-ramp; and (2) turning right onto Graves Avenue eastbound, turning left onto SR 472 westbound, and accessing the Interstate 4 eastbound on-ramp.

Analysis Scenarios

A traffic analysis will be conducted for 2020 existing conditions, 2022 future background conditions, and 2022 buildout year conditions during the AM and PM Peak Hour. These analyses will be conducted for the AM and PM Peak Hour under peak-season conditions using FDOT's most recent seasonal factor information.

Background Traffic

Background traffic will be developed based on growth rates and vested trips in the study area. Future conditions will be evaluated for the proposed 2022 opening year conditions with the proposed development. The following projects will be included as vested traffic volumes within the traffic study:

- 2020 Parc Hill
- Sparkman Ridge
- SWAC Phase IA
- WVRC 106 MF Units
- FL Hospital Tower Expansion
- Blue Springs Ridge
- Huntington Downs
- Victoria Park Phase 2
- Victoria Park Phase 3
- Halifax Crossings
- Osteen Pet and Feed
- Deltona Wawa
- Hawthorne Landing
- Canterwood ALF
- Fernanda Place
- Integra Dunes Apartments
- Florida Hospital ER Site
- Deltona Village
- Normandy Industrial Warehouse
- West Volusia Center
- Liberty Station
- StoreRight Self-Storage
- Center at Deltona

Additionally, the following roadway improvements funded for construction within three years of the City's Capital Improvements Element (CIE), Volusia County's Capital Improvement Program (CIP), the R2CTPO Transportation Improvement Program (TIP), and the FDOT 5-year work program will be included within the study:

- *Tivoli Drive & Saxon Boulevard (FDOT Project Number 4409201)* – Improvements include an exclusive southbound right-turn lane and an extended southbound left-turn lane
- *Tivoli Drive & Providence Boulevard (FDOT Project Number 4409201)* – Improvements include an exclusive eastbound left-turn lane
- *Howland Boulevard (Volusia County Project Number IFZ3-1)* – Widen from 2-lane facility to 4-lane facility from Providence Boulevard to Elkcam Boulevard
- *Orange Camp Road (Volusia County Project Number IFZ4-1)* – Widen from 2-lane facility to 4-lane facility from Dr. Martin Luther King Jr. Beltway to Interstate 4
- *Graves Avenue* – Widen from 2-lane facility to 3-lane facility from Veterans Memorial Parkway to Kentucky Avenue

Additionally, the following study area improvements established through Developer's Agreements will be included in the study:

- *Halifax Crossings* – Improvements include a northbound right-turn lane on Howland Boulevard at Graves Avenue, a second exclusive westbound left-turn lane on Graves Avenue at Howland Boulevard, and a second exclusive southbound left-turn lane on SR 472/Howland Boulevard at Graves Avenue
- *Deltona Village* – Improvements include a second exclusive northbound left-turn lane on Howland Boulevard at Graves Avenue and a second westbound travel lane on Graves Avenue from Howland Boulevard to 400 feet east of Interstate 4
- *Normandy Industrial Warehouse* – Improvements include widening Normandy Boulevard from two lanes to three lanes from Graves Avenue to south of the development, a second northbound right-turn lane on Normandy Boulevard at Graves Avenue, an exclusive eastbound right-turn lane on

Graves Avenue at Normandy Boulevard, and an exclusive southbound right-turn lane on SR 472/Howland Boulevard at Graves Avenue

- *Parc Hill* – Improvements include widening Veterans Memorial from two lanes to four lanes from Harley Strickland Boulevard to south of Rhode Island Avenue

The planned extension of Rhode Island Avenue to Normandy Boulevard, including a new Interstate 4 interchange, would significantly alter area traffic patterns and the anticipated project trip distribution. The ultimate completion year of this network improvement would likely be well beyond the buildout year of the Portland Industrial Park in 2022, so it is not included as a background condition. The TIA will assess the potential future improvement and note how it may significantly alleviate impacts to the surrounding intersections and roadways.

Traffic Analysis

Traffic analysis will be performed for the existing (2020), background (2022), and buildout (2022) conditions as follows:

- *Roadway Segment Analysis* – AM and PM peak hour roadway segment analyses will be conducted by comparing approach and departure volumes from study area intersections to the available roadway capacities. A signalized corridor analysis using *Synchro (v10)* will be performed for the following roadway segments:
    - SR 472/Howland Boulevard from Martin Luther King Jr Boulevard to Wolf Pack Run
    - Saxon Boulevard from Veterans Memorial Parkway to Normandy Avenue
- *Intersection Analysis*- Intersection analyses will be conducted using Trafficware's *Synchro* software (version 10), implementing methodologies from the *Highway Capacity Manual 6* for all study intersections under AM and PM Peak Hour conditions.
    - A queue analysis will be included for intersections and access driveways, which will compare existing deceleration and storage length to existing and future traffic conditions
    - Site access driveways will be analyzed for ingress turn lanes. A signal warrant analysis will also be performed at each of the site driveways, as appropriate.

Required Transportation Improvements

Transportation improvements, if warranted, will be based on roadway and intersection deficiencies and identified within 2020 existing conditions, 2022 future background conditions, and 2022 buildout year conditions during both the AM and PM Peak Hour. Additionally, proportionate share percentages will be included within the traffic study and calculated per Florida Statutes HB 319 adopted May 30, 2013. Construction costs approved by Volusia County will be used to calculate proportionate share payments, if any.

Documentation

The TIA checklist required by the R2CTPO guidelines is provided as **Appendix G**.

All analysis and findings of the TIA will be documented in a report. Two paper copies and an electronic copy will be signed and sealed by a registered professional engineer and submitted to the City of Deltona and Volusia County.

APPENDIX A:

Conceptual Site Plan

Trip Equivalency Matrix[1]

FROM: Land Use[2]	ITE LUC	PM Peak Hour Trip Rate	Equivalency Statement	TO: General Light Industrial (KSF)	Industrial Park (KSF)	Manufacturing (KSF)	Warehousing (KSF)	High-Cube Fulfillment Center Warehouse - Non-Sort (KSF)	High-Cube Parcel Hub Warehouse (KSF)	Data Center (KSF)	General Office (KSF)	Medical Office (KSF)	Office Park (KSF)	Retail/ Shopping Center (KSF)	High-Turnover Sit-Down Restaurant (KSF)	Fast-Food Restaurant w/o Drive-Through (KSF)	Fast-Food Restaurant with Drive-Through (KSF)
General Light Industrial (KSF)	110	0.63	1 KSF is equal to	1.000	1.575	0.940	3.316	3.316	0.984	7.000	0.548	0.182	0.589	0.165	0.064	0.022	0.019
Industrial Park (KSF)																0.014	0.012
Manufacturing (KSF)																0.024	0.021
Warehousing (KSF)																0.007	0.006
High-Cube Fulfillment Center Warehouse - Non-Sort (KSF)																0.007	0.006
High-Cube Parcel Hub Warehouse (KSF)																0.023	0.020
Data Center (KSF)																0.003	0.003
General Office (KSF)																0.041	0.035
Medical Office (KSF)																0.122	0.106
Office Park (KSF)																0.038	0.033
Retail/Shopping Center (KSF)	820	3.81	1 KSF is equal to	6.046	9.525	5.687	20.053	20.053	5.953	42.333	3.313	1.101	3.561	1.000	0.386	0.134	0.117
High-Turnover Sit-Down Restaurant (KSF)	932	9.77	1 KSF is equal to	15.508	24.425	14.582	51.421	51.421	15.266	108.556	8.496	2.824	9.131	2.564	1.000	0.345	0.299
Fast-Food Restaurant w/o Drive-Through (KSF)	933	28.34	1 KSF is equal to	44.984	70.850	42.299	149.158	149.158	44.281	314.889	24.643	8.191	26.486	7.438	2.901	1.000	0.867
Fast-Food Restaurant with Drive-Through (KSF)	934	32.67	1 KSF is equal to	51.857	81.675	48.761	171.947	171.947	51.047	363.000	28.409	9.442	30.533	8.575	3.344	1.153	1.000

See Appendix B for updated Trip Equivalency Matrices

Notes:
[1] Trip Equivalency Matrix was developed using average PM peak hour trip generation rates published in the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition.
[2] KSF = 1,000 square feet
Example: To convert 5,000 square feet of Office space (710) to Retail Space (820), 5 KSF of Office x 0.302 = 1,510 square feet Retail/Shopping Center

OVERALL SITE DATA

1. CURRENT ZONING: INDUSTRIAL
2. CURRENT LAND USE: INDUSTRIAL/BUSINESS PARK (ACTIVITY CENTER)
3. SECTION 07 TWNSHP 18 RNG 31
4. IPUD PROJECT AREA CALCULATIONS:
   TOTAL IPUD AREA = 129.02 AC

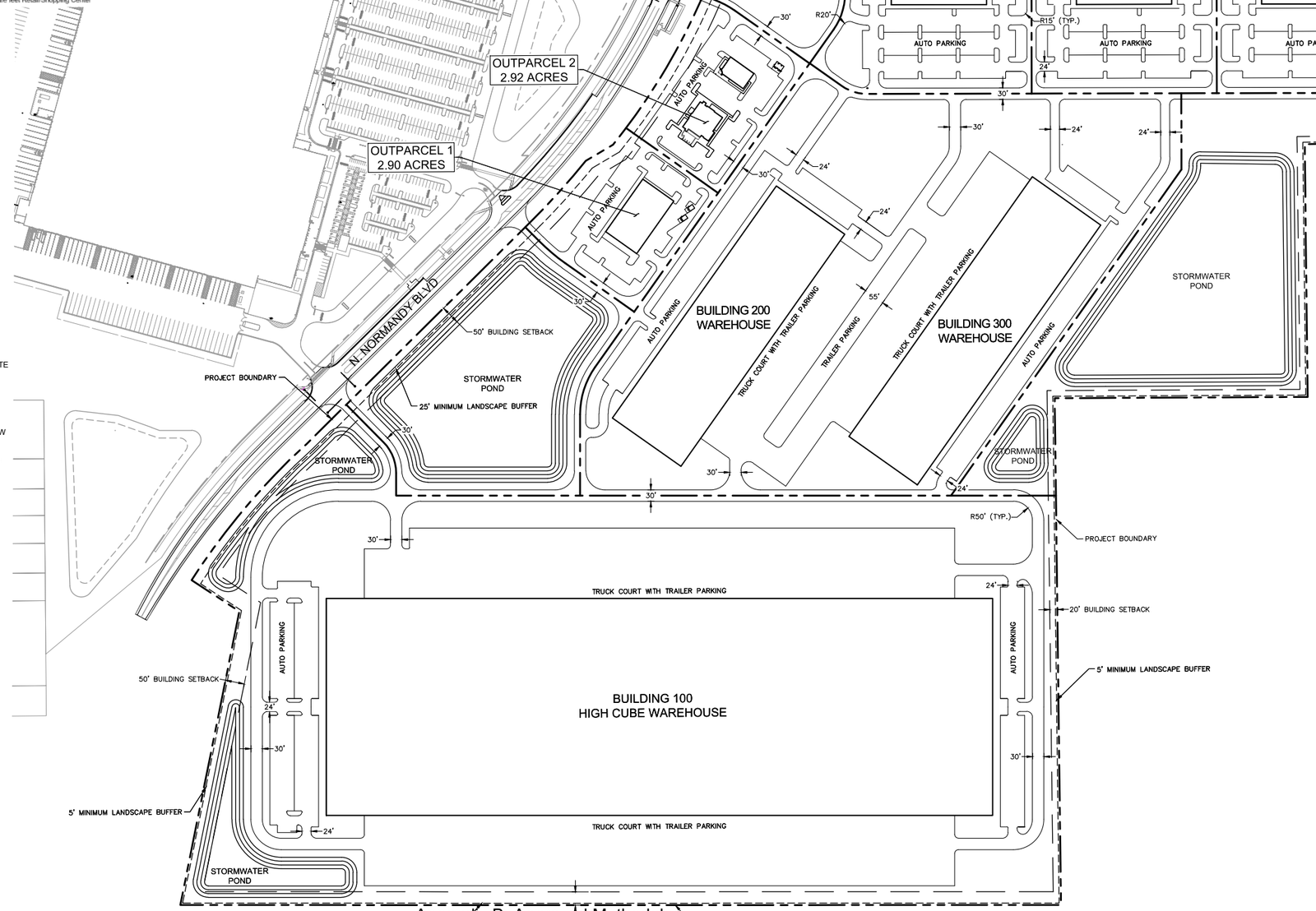
   MAXIMUM IMPERVIOUS AREA (ISR) ALLOWED = 65%

   MAXIMUM FAR ALLOWED = 1.0
5. PARKING:

   WAREHOUSE = 0.5 SPACES/1,000 SF OF BUILDING

   AUTO PARKING SPACE DIMENSION = 9'x19' MINIMUM
   TRUCK PARKING SPACE DIMENSION = 12'x55' MINIMUM
6. MAXIMUM BUILDING HEIGHT ALLOWED = 75 FT

NOTES:
1. UTILITY LINES WITHIN THE PROJECT SITE SHALL BE LOCATED WITHIN THE UTILITY EASEMENT. THE BUILDINGS, PARKING LOT, AND LANDSCAPE TREES SHOULD NOT BE LOCATED WITHIN THE EASEMENT.
2. STORMWATER PONDS, BUILDINGS, ROADS, AND LOT CONFIGURATION MAY CHANGE DURING THE DESIGN PHASE.
3. ALL LIGHTING SHALL BE CUTOFF AND FULLY SHIELDED LIGHTING FIXTURES.
4. FOR THE WAREHOUSE USE THE HEIGHT OF SITE LIGHTING WITHIN THE TRUCK COURT SHALL BE LIMITED TO 45-FT. THE HEIGHT OF THE LIGHTING FOR THE BALANCE OF THE SITE SHALL BE LIMITED TO 35-FT.
5. **PERMISSIBLE USES**: PREMISES IS TO BE USED FOR LIGHT MANUFACTURING AND WAREHOUSE USES. THESE LIGHT MANUFACTURING/WAREHOUSES USES INCLUDE, WITHOUT LIMITATION, THE WAREHOUSING, STORAGE, DISTRIBUTION AND SALE OF PRODUCTS, MATERIALS AND MERCHANDISE, INCLUDING LIQUOR AND GROCERY/FOOD ITEMS OF ALL TYPES (INCLUDING, WITHOUT LIMITATION, DAIRY, FRESH VEGETABLES, RAW MEATS AND SEAFOOD, CANNED OR FROZEN FOODS OR PREPARED MEALS). OTHER PERMITTED ACCESSORY AND ANCILLARY ALLOWABLE USES PER ZONING DISTRICT INDUSTRIAL, AND THOSE USES LISTED WITHIN THE TRIP EQUIVALENCY MATRIX LOCATED ON THIS SITE PLAN.



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Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
116 S. KENTUCKY AVENUE, LAKELAND, FL 33801
PHONE: 863-701-8702
WWW.KIMLEY-HORN.COM
CA. 00006696

No.	REVISIONS	DATE	BY

LICENSED PROFESSIONAL

DATE:

KHA PROJECT
DATE MAY 2020
SCALE AS SHOWN
DESIGNED BY
DRAWN BY
CHECKED BY

PORTLAND INDUSTRIAL PARK

INDUSTRIAL PLANNED UNIT DEVELOPMENT

SHEET NUMBER
IPUD

APPENDIX B:

Trip Generation Calculations and Supporting Information

ITE Land Use Code	Land Use	Size	Units	Daily Trips	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
130	Industrial Park	500	1,000 Sq Ft	1,686	200	162	38	200	42	158
150	Warehousing	500	1,000 Sq Ft	836	85	65	20	95	26	69
155	High-Cube Fulfillment Center Warehouse	1,000	1,000 Sq Ft	1,810	150	122	28	160	62	98
932	High-Turnover (Sit-Down) Restaurant	7.5	1,000 Sq Ft	842	75	41	34	73	45	28
934	Fast-Food Restaurant w/ Drive-Thru	7.5	1,000 Sq Ft	3,534	301	154	147	245	127	118
			Gross Project Trips	**8,708**	**811**	**544**	**267**	**773**	**302**	**471**
Internal Capture [1]				*15%*		*15%*			*15%*	
130	Industrial Park [2]			253	30	14	16	30	6	35
932	High-Turnover (Sit-Down) Restaurant			349	19	10	9	26	14	12
934	Fast-Food Restaurant w/ Drive-Thru			1,467	78	39	39	91	39	52
External Trips										
130	Industrial Park			1,433	170	148	22	170	36	134
150	Warehousing			836	85	65	20	95	26	69
155	High-Cube Fulfillment Center Warehouse			1,810	150	122	28	160	62	98
932	High-Turnover (Sit-Down) Restaurant			493	56	31	25	47	31	16
934	Fast-Food Restaurant w/ Drive-Thru			2,067	223	115	108	154	88	66
	Total Driveway Trips			**6,988**	**703**	**491**	**212**	**652**	**257**	**384**
Pass-by Capture		*Percentage*								
932	High-Turnover (Sit-Down) Restaurant	*43%*		242	28	14	14	24	12	12
934	Fast-Food Restaurant w/ Drive-Thru	*49%*		1,012	110	55	55	76	38	38
10% of Adjacent Street Traffic [3]				***990***	***72***	***36***	***36***	***96***	***48***	***48***
Net New External Trips										
130	Industrial Park			1,433	170	148	22	170	36	134
150	Warehousing			836	85	65	20	95	26	69
155	High-Cube Fulfillment Center Warehouse			1,810	150	122	28	160	62	98
932	High-Turnover (Sit-Down) Restaurant			251	41	24	17	23	19	4
934	Fast-Food Restaurant w/ Drive-Thru			1,077	166	86	80	78	50	28
	Net New External Project Trips			**5,407**	**612**	**445**	**167**	**526**	**193**	**333**
Truck Trips										
130	Industrial Park			215	20	18	2	17	4	13
150	Warehousing			226	11	8	3	14	4	10
155	High-Cube Fulfillment Center Warehouse			362	14	11	3	11	4	7
932	High-Turnover (Sit-Down) Restaurant			13	0	0	0	1	1	0
934	Fast-Food Restaurant w/ Drive-Thru			32	8	4	4	9	6	3
	Net New Truck Trips			**848**	**53**	**41**	**12**	**52**	**19**	**33**
	Net New (Non-Truck) Trips			**4,559**	**559**	**404**	**155**	**474**	**174**	**300**

Trip generation was calculated using data from the ITE Trip Generation Manual, 10th Edition

Industrial Park [ITE 130]

Daily	T = 3.37*(X), X is 1,000 Sq Ft Gross Floor Area; 15% truck trips
AM Peak Hour of Adjacent Street	T = 0.40*(X), X is 1,000 Sq Ft Gross Floor Area; (81% in / 19% out); 12% truck trips
PM Peak Hour of Adjacent Street	T = 0.40*(X), X is 1,000 Sq Ft Gross Floor Area; (21% in / 79% out); 10% truck trips

Warehousing [ITE 150]

Daily	T = 1.58*(X) + 45.54, X is 1,000 Sq Ft Gross Floor Area; 27% truck trips
AM Peak Hour of Adjacent Street	T = 0.17*(X), X is 1,000 Sq Ft Gross Floor Area; (77% in / 23% out); 13% truck trips
PM Peak Hour of Adjacent Street	T = 0.19*(X), X is 1,000 Sq Ft Gross Floor Area; (27% in / 73% out); 15% truck trips

High-Cube Fulfillment Center Warehouse [ITE 155]

Daily	T = 1.81*(X), X is 1,000 Sq Ft Gross Floor Area; 20% truck trips
AM Peak Hour of Adjacent Street	T = 0.15*(X), X is 1,000 Sq Ft Gross Floor Area; (81% in / 19% out); 9% truck trips
PM Peak Hour of Adjacent Street	T = 0.16*(X), X is 1,000 Sq Ft Gross Floor Area; (39% in / 61% out); 7% truck trips

High-Turnover (Sit-Down) Restaurant [ITE 932]

Daily	T = 112.18*(X), X is 1,000 Sq Ft Gross Floor Area; 5% truck trips
AM Peak Hour of Adjacent Street	T = 9.94*(X), X is 1,000 Sq Ft Gross Floor Area (55% in / 45% out); 1% truck trips
PM Peak Hour of Adjacent Street	T = 9.77*(X), X is 1,000 Sq Ft Gross Floor Area (62% in / 38% out); 3% truck trips

Fast Food Restaurant with Drive-Thru [ITE 934]

Daily	T = 470.95*(X), X is 1,000 Sq Ft Gross Floor Area; 3% truck trips
AM Peak Hour of Adjacent Street	T = 40.19*(X), X is 1,000 Sq Ft Gross Floor Area (60% in / 40% out); 5% truck trips
PM Peak Hour of Adjacent Street	T = 32.67*(X), X is 1,000 Sq Ft Gross Floor Area (50% in / 50% out); 11% truck trips

(1) Internal capture is calculated considering retail uses both on the Portland Industrial Park site and the adjacent Deltona Village site. A maximum of 15% is applied.
(2) Industrial Park trips are considered Office trips for Internal Capture calculations.
(3) Pass-by capture is limited to 10% of traffic on the adjacent segment of Normandy Blvd [9,900 daily, 715 AM, 964 PM]

Kimley»Horn

Land Use: 130
Industrial Park

Description

An industrial park contains a number of industrial or related facilities. It is characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities—some with a large number of small businesses and others with one or two dominant industries. General light industrial (Land Use 110) and manufacturing (Land Use 140) are related uses.

Additional Data

The sites were surveyed in the 1980s, the 2000s, and the 2010s in California, Georgia, New Jersey, New York, Ontario (CAN), and Pennsylvania.

Source Numbers

106, 162, 184, 251, 277, 422, 706, 747, 753, 937

Industrial Park
(130)

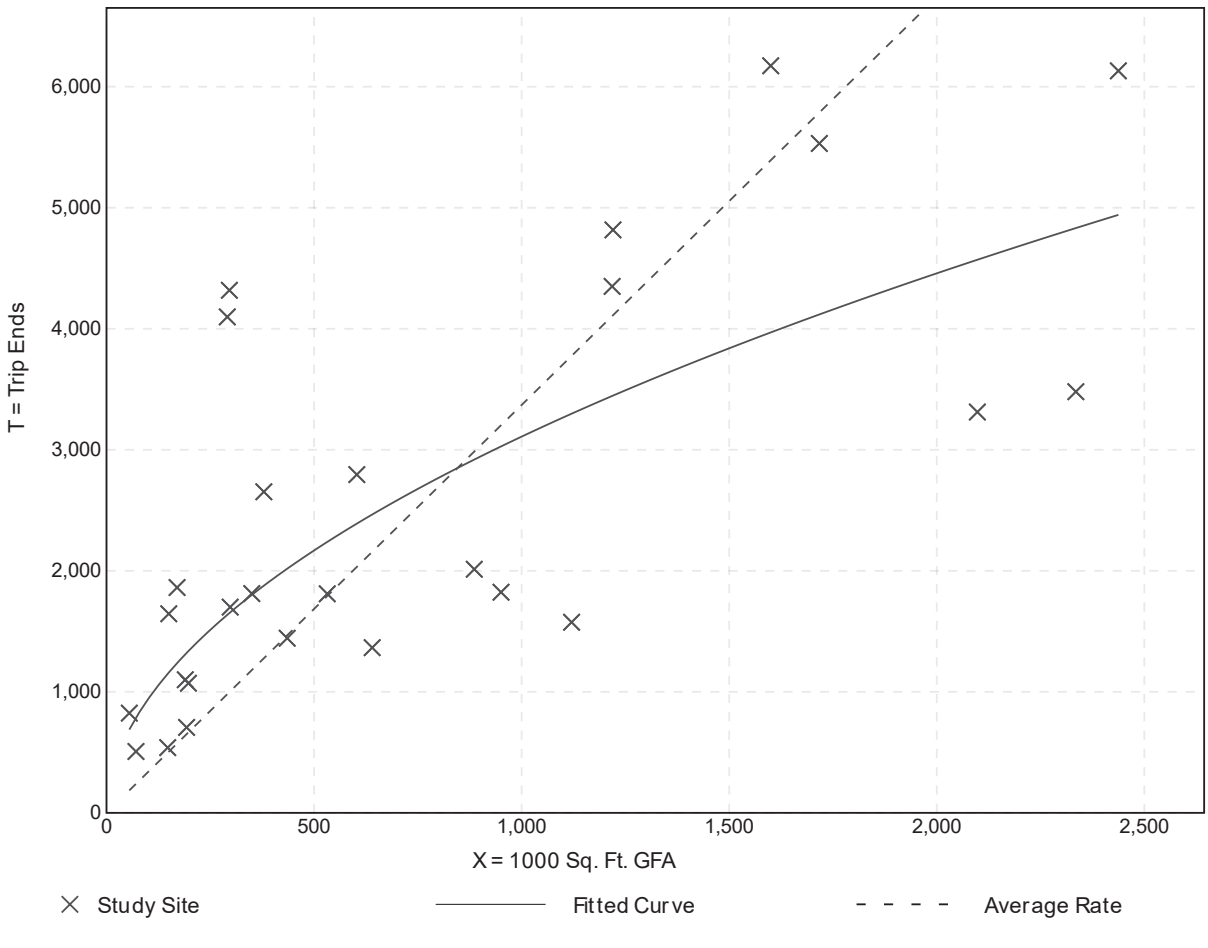
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
1000 Sq. Ft. GFA: 762
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.37	1.41 - 14.98	2.60

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.52 Ln(X) + 4.45

R^2= 0.58

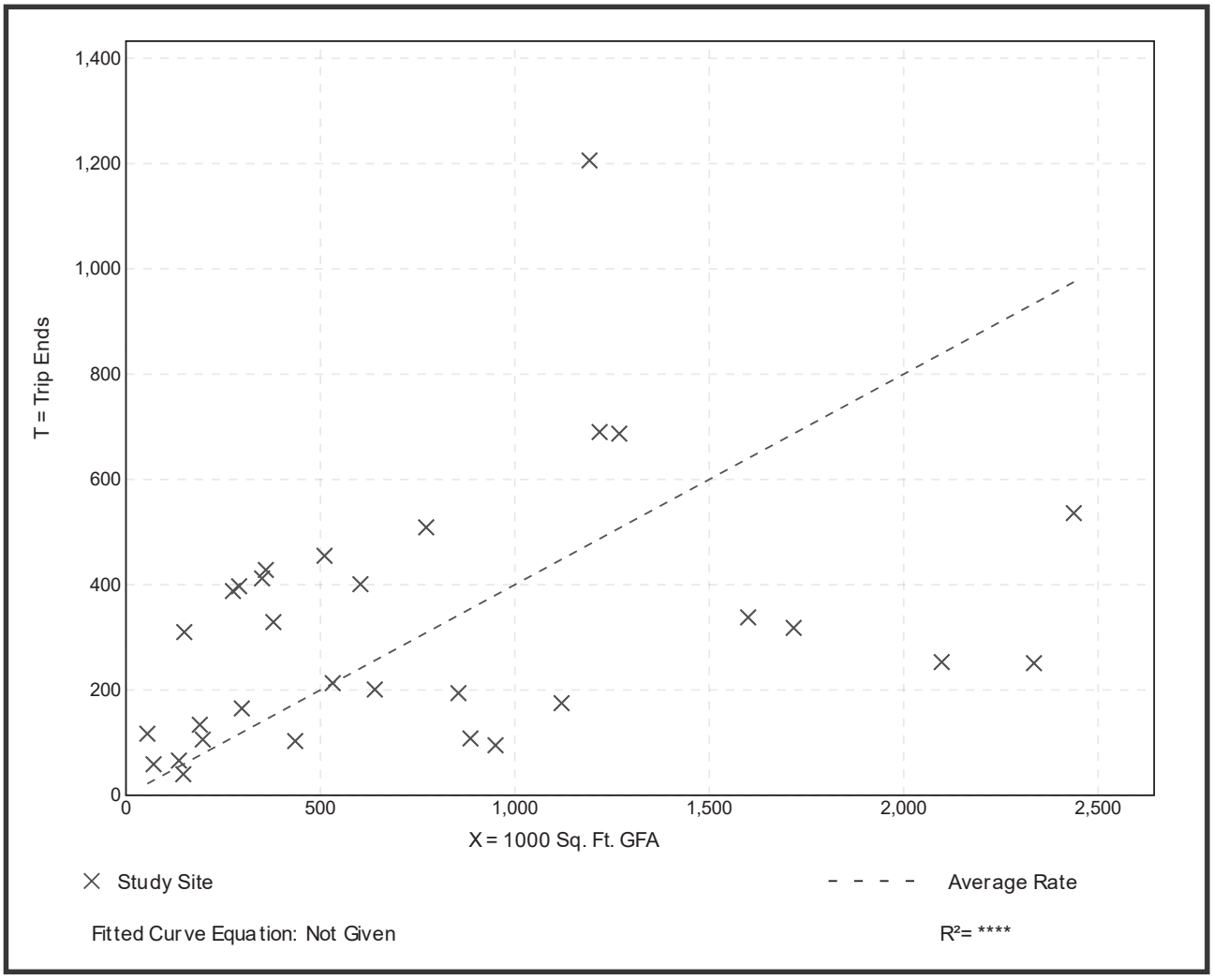
Industrial Park
(130)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	31
1000 Sq. Ft. GFA:	776
Directional Distribution:	81% entering, 19% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.40	0.10 - 2.13	0.37

Data Plot and Equation



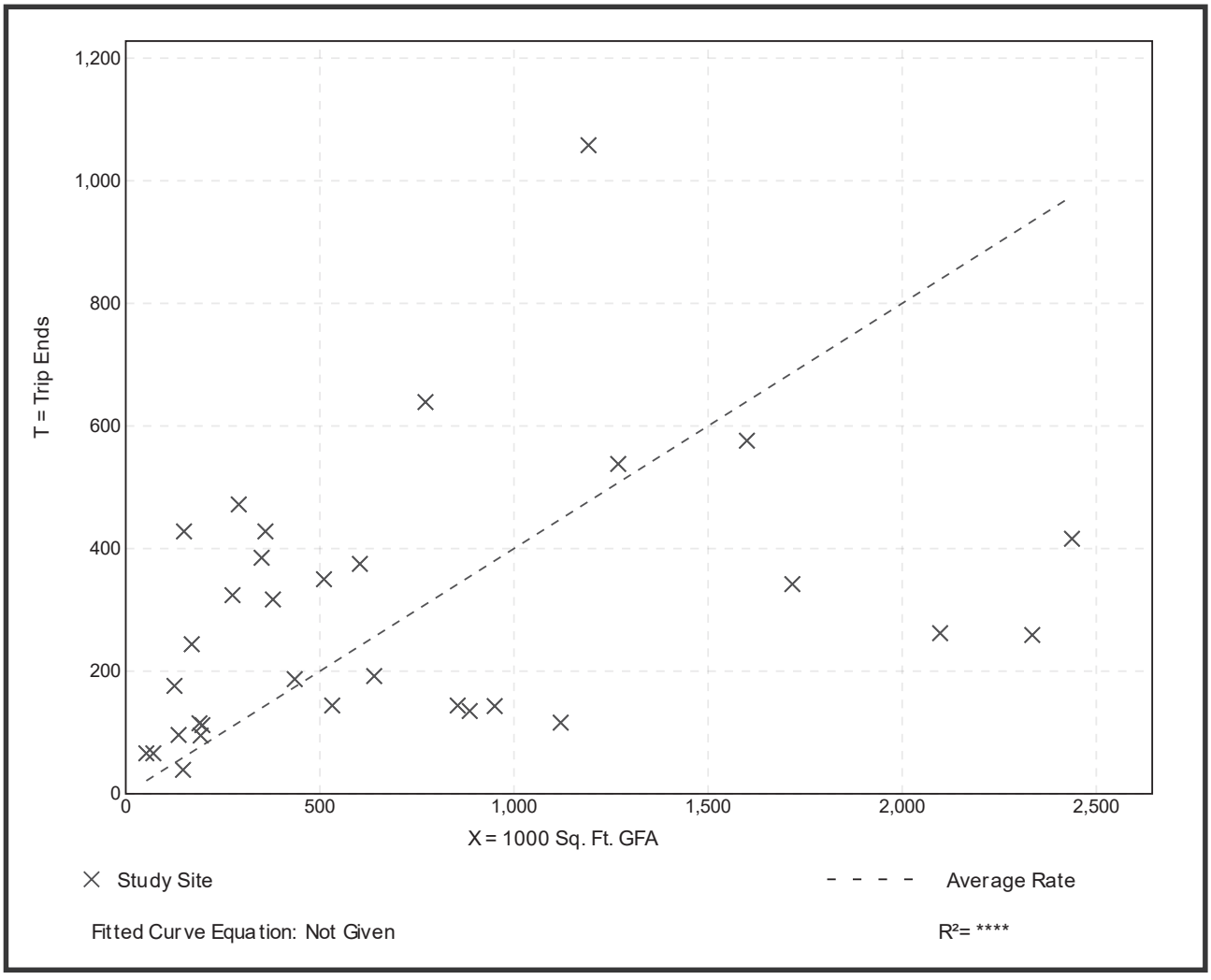
Industrial Park
(130)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	32
1000 Sq. Ft. GFA:	720
Directional Distribution:	21% entering, 79% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.40	0.10 - 2.85	0.41

Data Plot and Equation



Land Use: 150
Warehousing

Description

A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas. High-cube transload and short-term storage warehouse (Land Use 154), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the 13 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:30 a.m. and 12:30 p.m. and 3:00 and 4:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas.

Source Numbers

184, 331, 406, 411, 443, 579, 583, 596, 598, 611, 619, 642, 752, 869, 875, 876, 914, 940

Warehousing
(150)

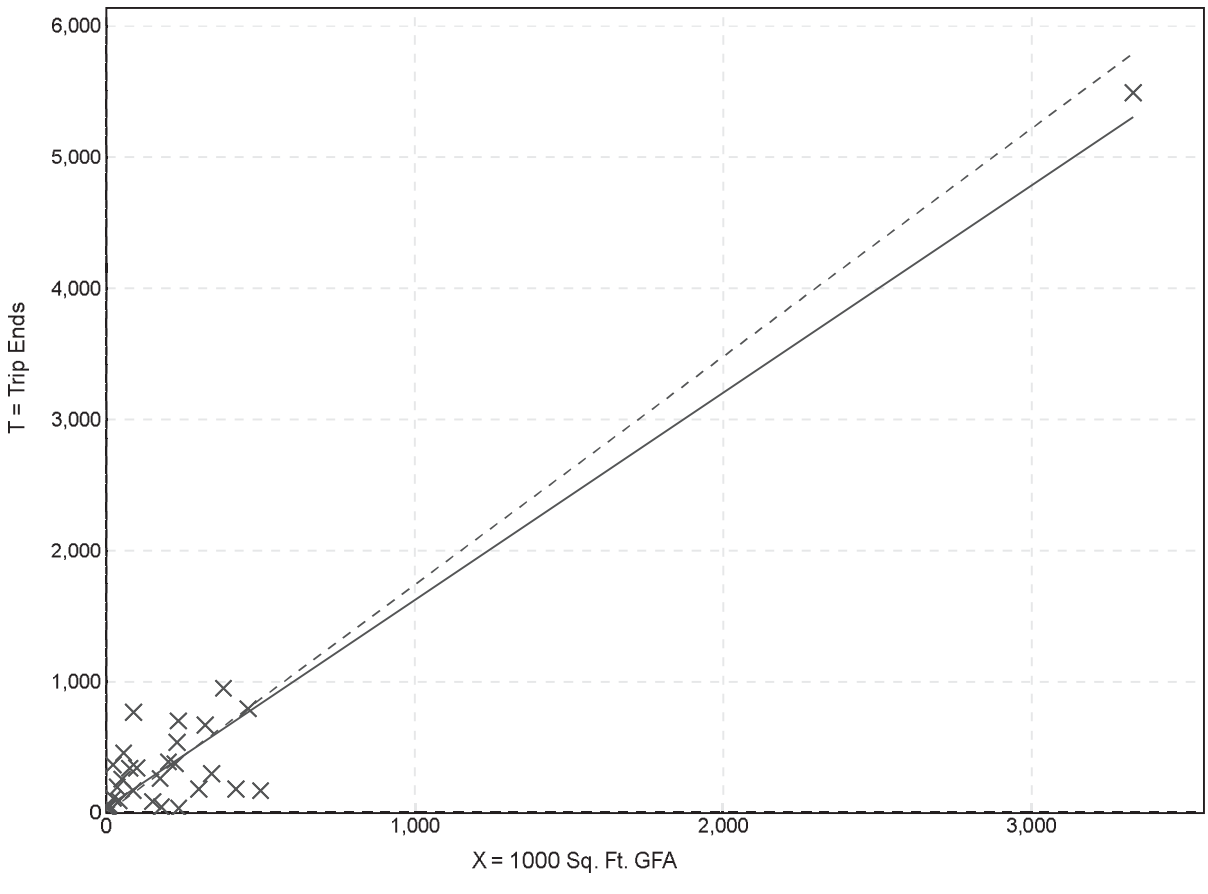
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 29
1000 Sq. Ft. GFA: 285
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.74	0.15 - 16.93	1.55

Data Plot and Equation



Fitted Curve Equation: T = 1.58(X) + 45.54

R^2= 0.93

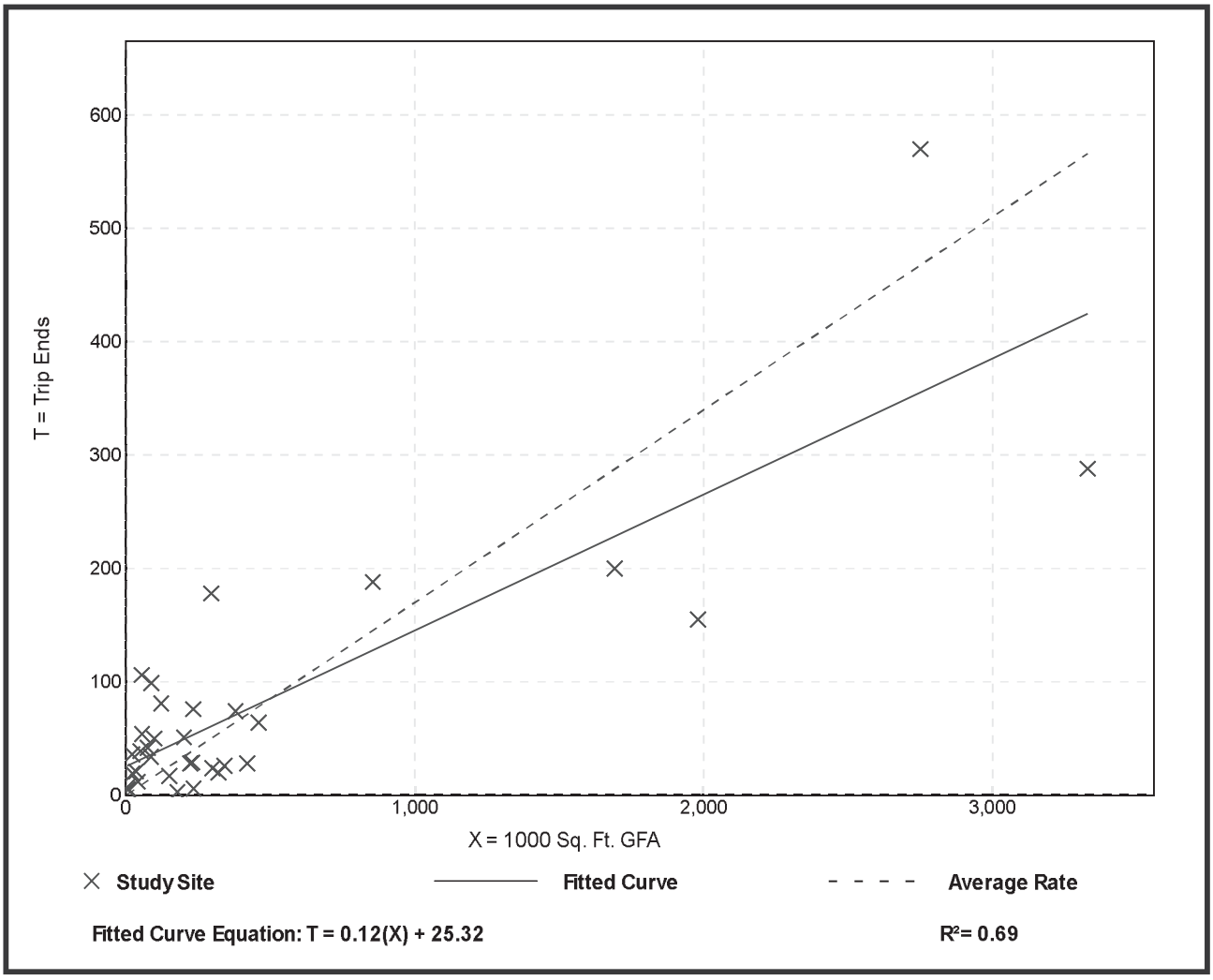
Warehousing
(150)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	34
1000 Sq. Ft. GFA:	451
Directional Distribution:	77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.20

Data Plot and Equation



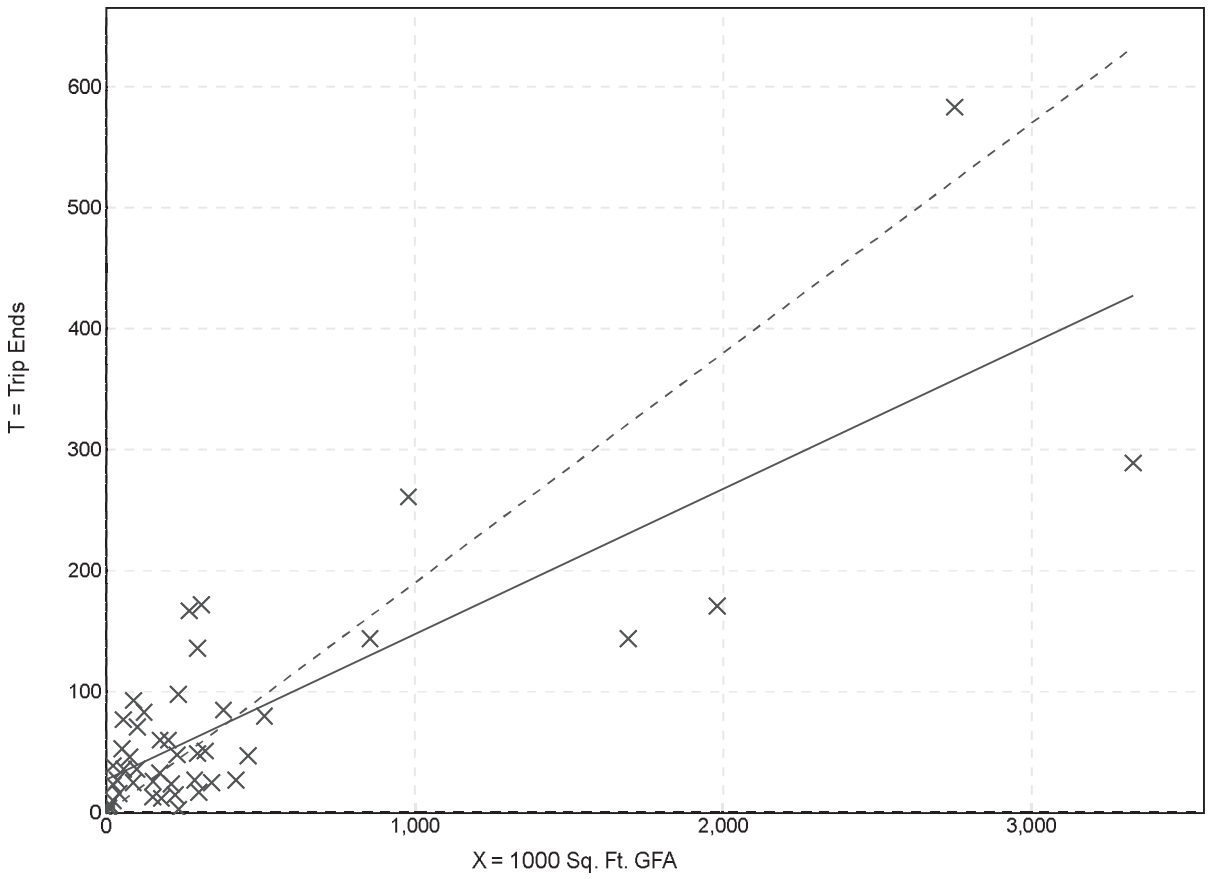
Warehousing
(150)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	47
1000 Sq. Ft. GFA:	400
Directional Distribution:	27% entering, 73% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.19	0.01 - 1.80	0.18

Data Plot and Equation



Fitted Curve Equation: T = 0.12(X) + 27.82

R^2= 0.65

Land Use: 155
High-Cube Fulfillment Center Warehouse

Description

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. High-cube fulfillment center warehouses include warehouses characterized by a significant storage function and direct distribution of ecommerce product to end users. These facilities typically handle smaller packages and quantities than other types of HCWs and often contain multiple mezzanine levels. Warehousing (Land Use 150), high-cube transload and short-term storage warehouse (Land Use 154), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related land uses.

Each fulfillment center in the ITE database has been categorized as either a sort or non-sort facility. A sort facility is a fulfillment center that ships out smaller items, requiring extensive sorting, typically by manual means. A non-sort facility is a fulfillment center that ships large box items that are processed primarily with automation rather than through manual means. Separate sets of data plots are presented for the sort and non-sort fulfillment centers.

Additional Data

The High-Cube Warehouse/Distribution Center-related land uses underwent specialized consideration through a commissioned study titled "High-Cube Warehouse Vehicle Trip Generation Analysis," published in October 2016. The results of this study have been incorporated into the 10th Edition *Trip Generation Manual* and are posted on the ITE website at http://library.ite.org/pub/a3e6679a-e3a8-bf38-7f29-2961becdd498.

The sites were surveyed in the 2000s and the 2010s in California, New Jersey, and Texas.

Source Numbers

752, 941, 1001, 1002, 1011

High-Cube Fulfillment Center Warehouse - Non-Sort (155)

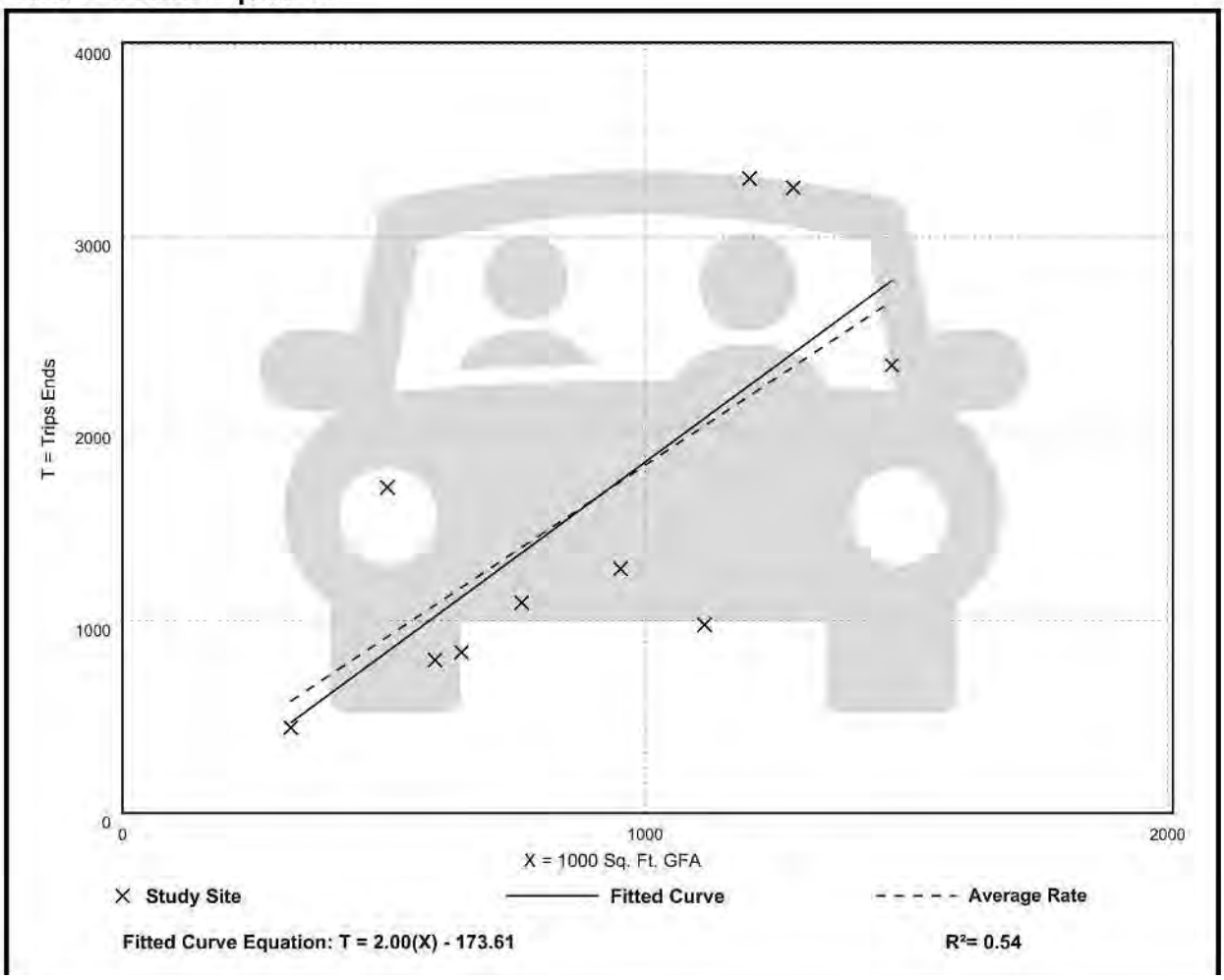
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 10
Avg. 1000 Sq. Ft. GFA: 886
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.81	0.88 - 3.34	0.76

Data Plot and Equation



Fitted Curve Equation: T = 2.00(X) - 173.61

R^2= 0.54

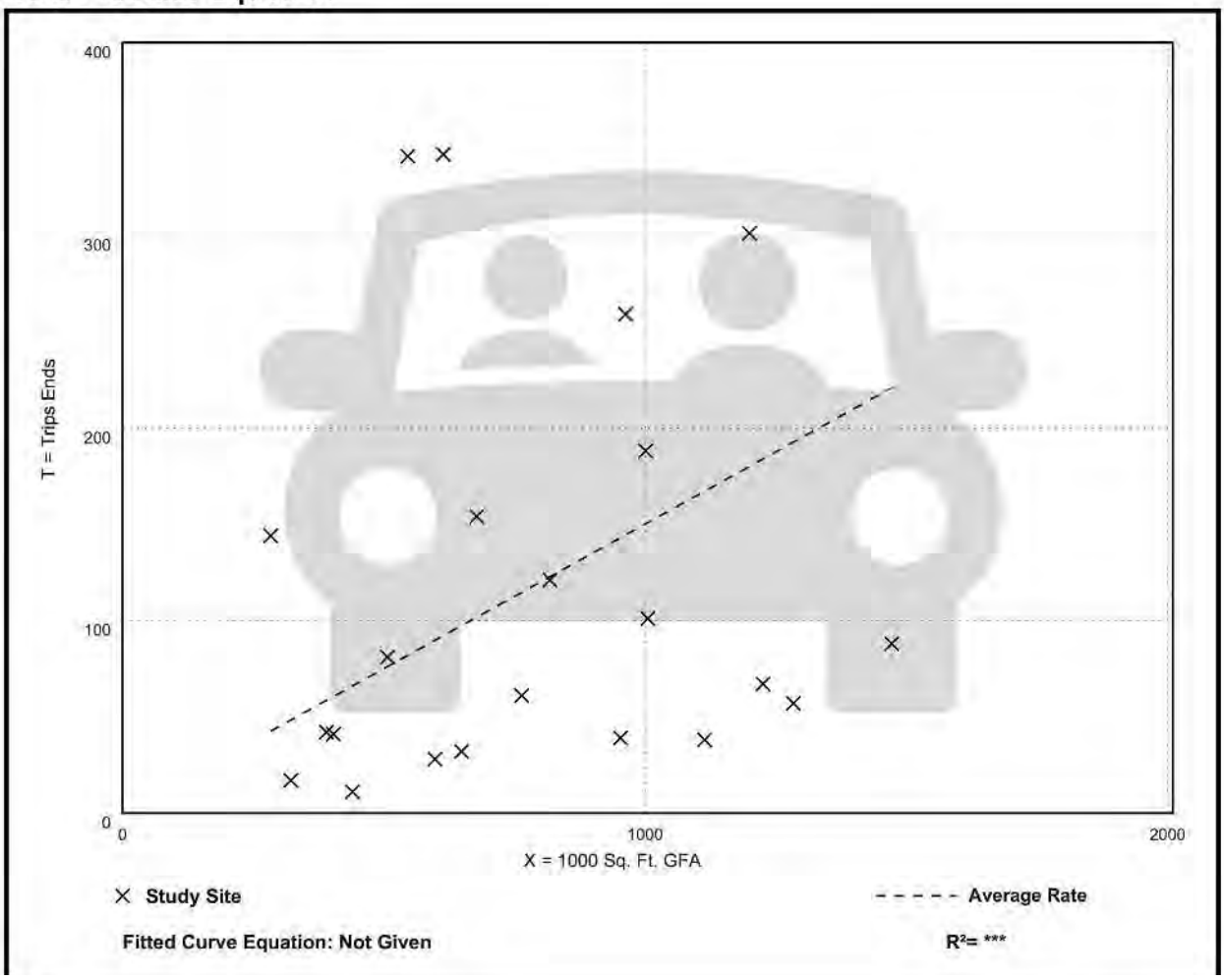
High-Cube Fulfillment Center Warehouse - Non-Sort (155)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 783
Directional Distribution: 81% entering, 19% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.03 - 0.62	0.15

Data Plot and Equation



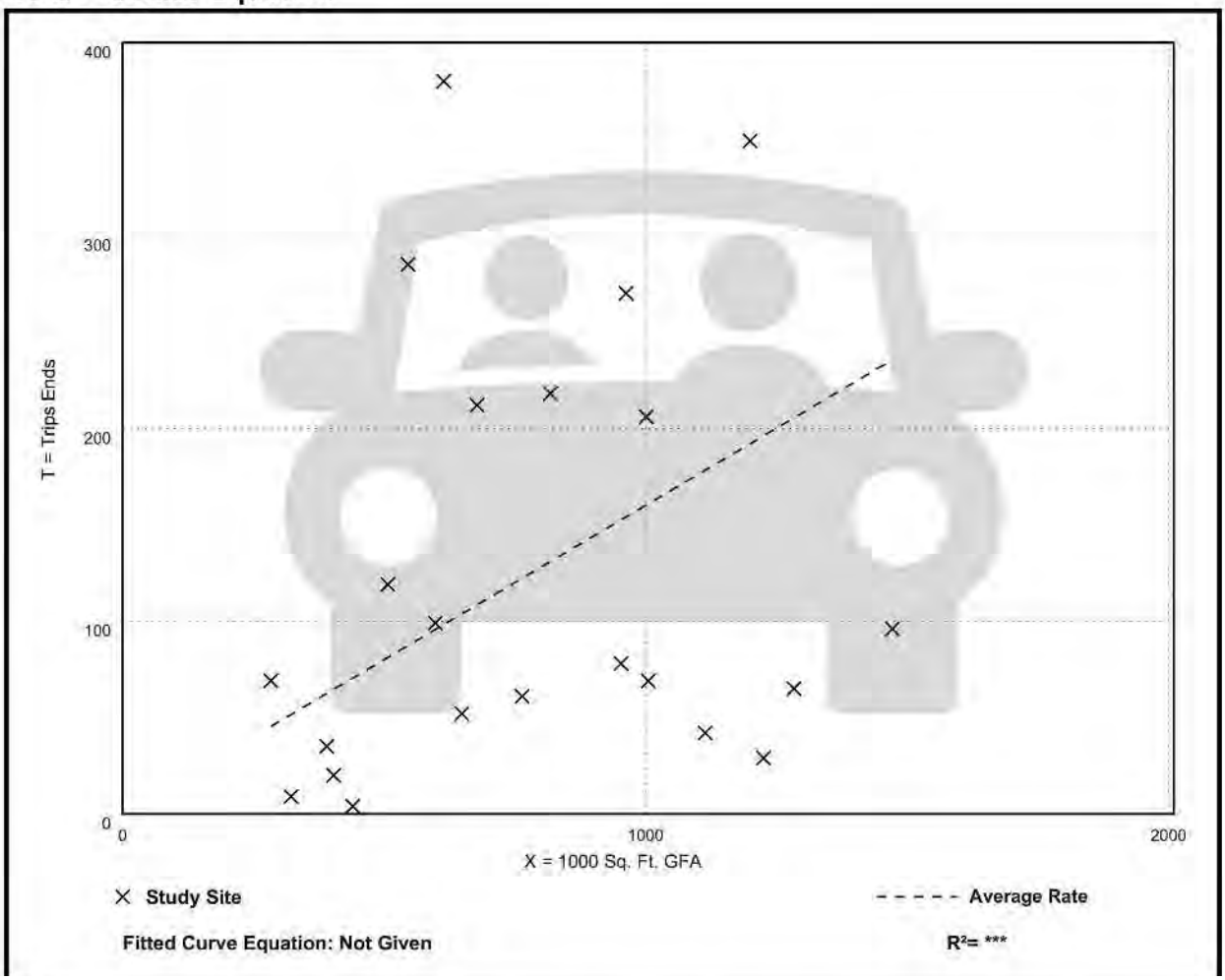
High-Cube Fulfillment Center Warehouse - Non-Sort (155)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 783
Directional Distribution: 39% entering, 61% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.16	0.01 - 0.62	0.15

Data Plot and Equation



Land Use: 932
High-Turnover (Sit-Down) Restaurant

Description

This land use consists of sit-down, full-service eating establishments with typical duration of stay of approximately one hour. This type of restaurant is usually moderately priced and frequently belongs to a restaurant chain. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours a day. These restaurants typically do not take reservations. Patrons commonly wait to be seated, are served by a waiter/waitress, order from menus and pay for their meal after they eat. Some facilities contained within this land use may also contain a bar area for serving food and alcoholic drinks. Fast casual restaurant (Land Use 930), quality restaurant (Land Use 931), fast-food restaurant without drive-through window (Land Use 933), fast-food restaurant with drive-through window (Land Use 934), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 38 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Georgia, Indiana, Kentucky, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Texas, Vermont, and Wisconsin.

Source Numbers

126, 269, 275, 280, 300, 301, 305, 338, 340, 341, 358, 384, 424, 432, 437, 438, 444, 507, 555, 577, 589, 617, 618, 728, 868, 884, 885, 903, 927, 944, 961, 962, 977

High-Turnover (Sit-Down) Restaurant
(932)

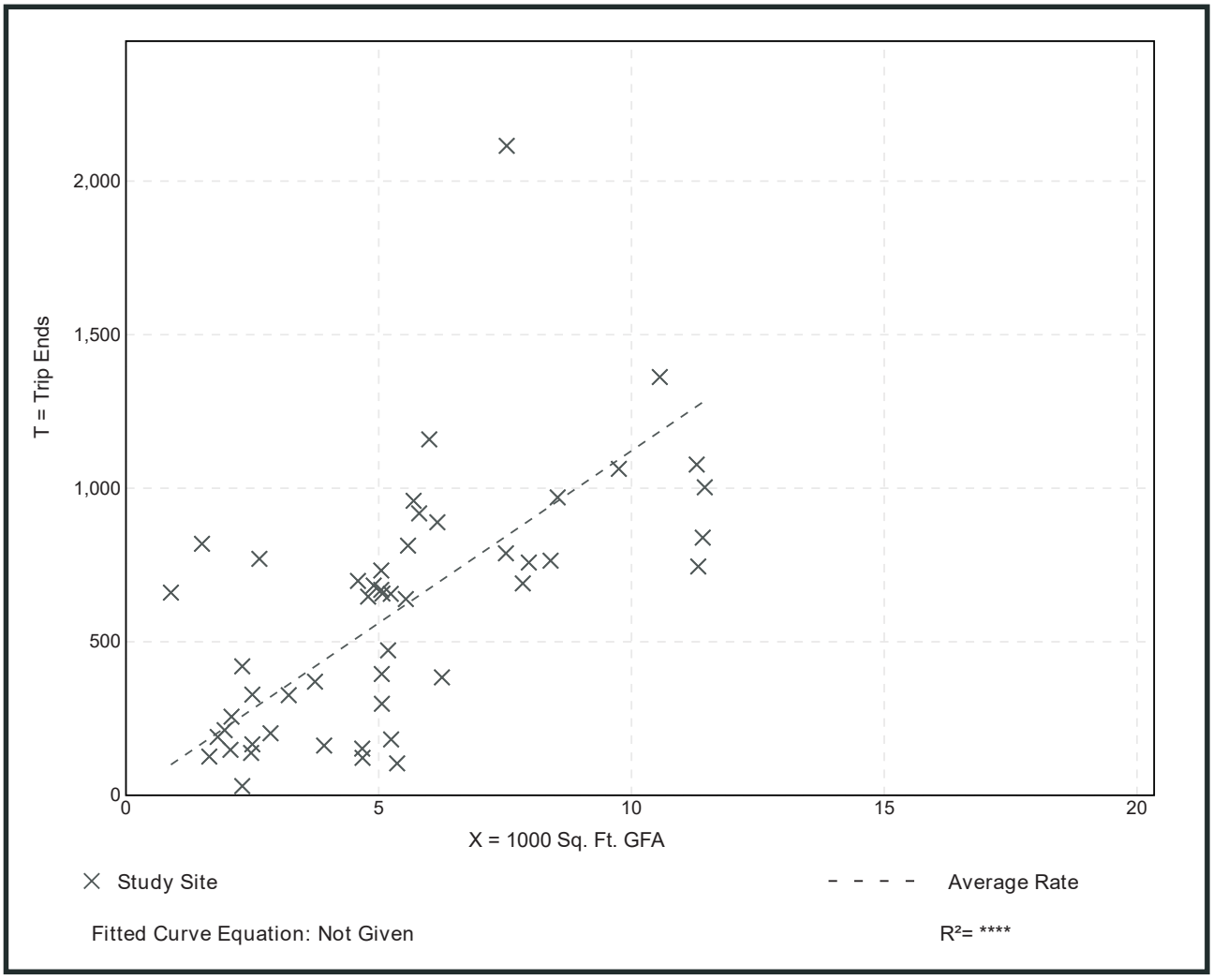
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 50
1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
112.18	13.04 - 742.41	72.51

Data Plot and Equation



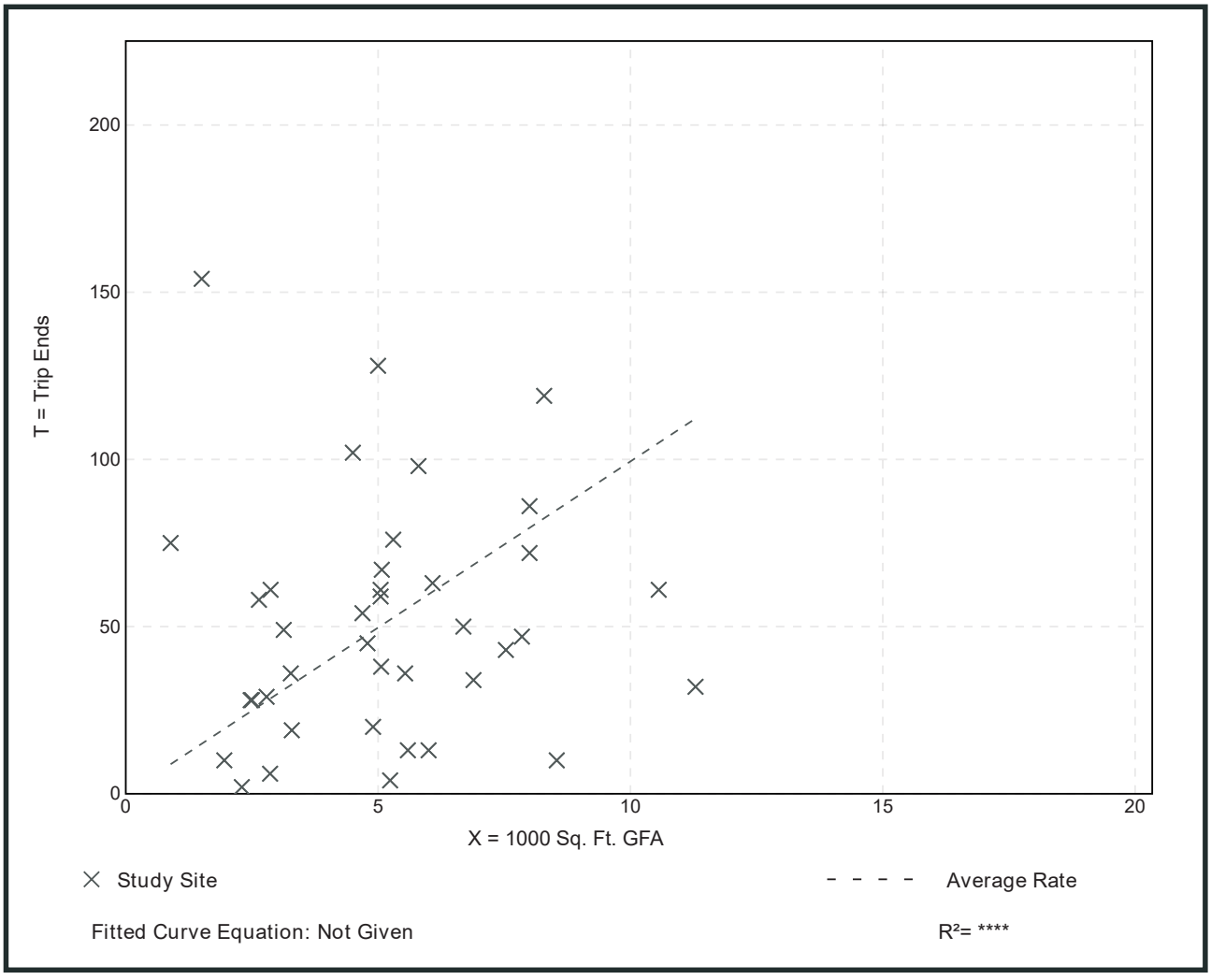
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	39
1000 Sq. Ft. GFA:	5
Directional Distribution:	55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.94	0.76 - 102.39	11.33

Data Plot and Equation



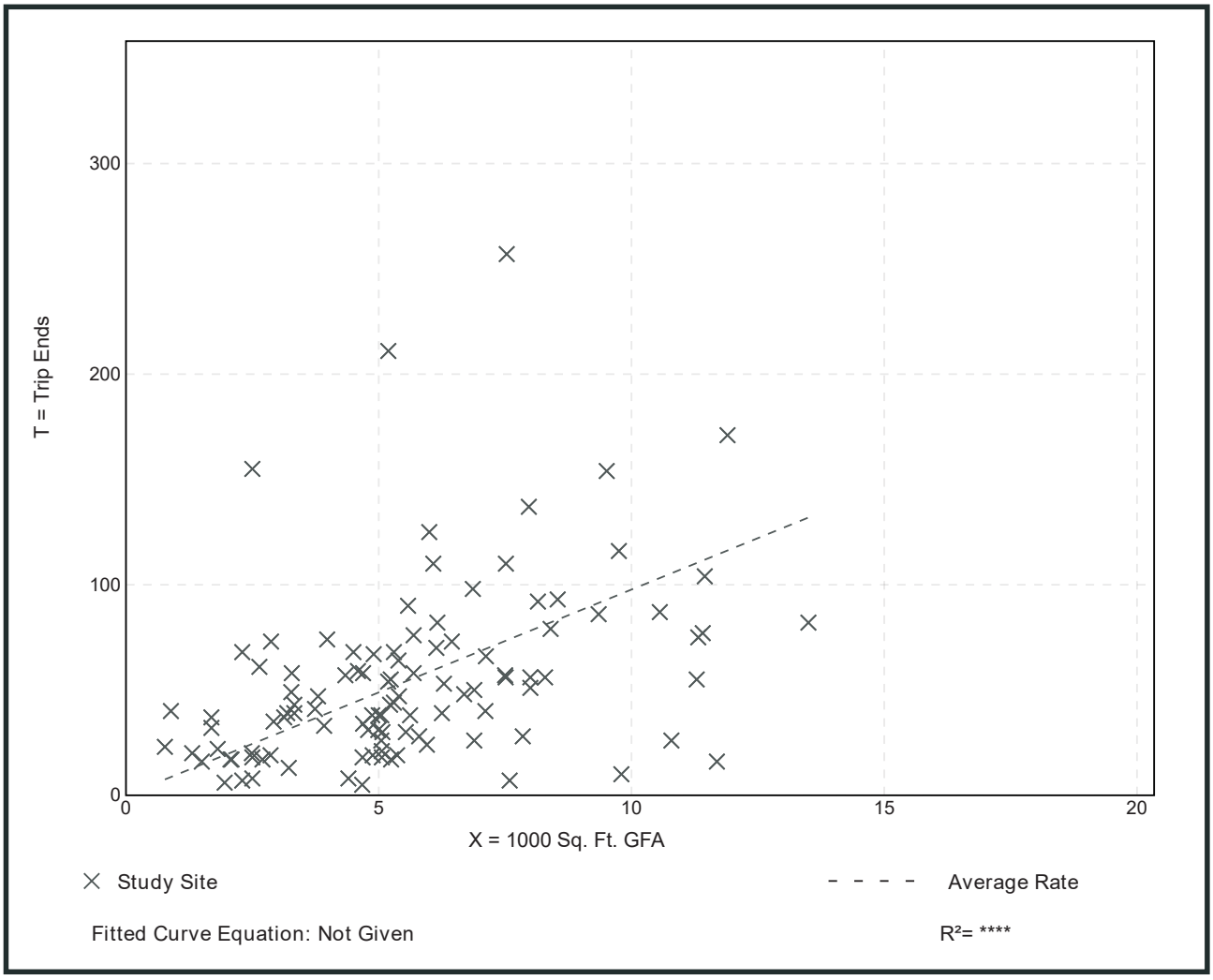
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	107
1000 Sq. Ft. GFA:	6
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.77	0.92 - 62.00	7.37

Data Plot and Equation



Land Use: 934
Fast-Food Restaurant with Drive-Through Window

Description

This category includes fast-food restaurants with drive-through windows. This type of restaurant is characterized by a large drive-through clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. These limited-service eating establishments do not provide table service. Non-drive-through patrons generally order at a cash register and pay before they eat. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 46 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively. For the one dense multi-use urban site with data, the same AM and PM peak hours were observed.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977

Fast-Food Restaurant with Drive-Through Window (934)

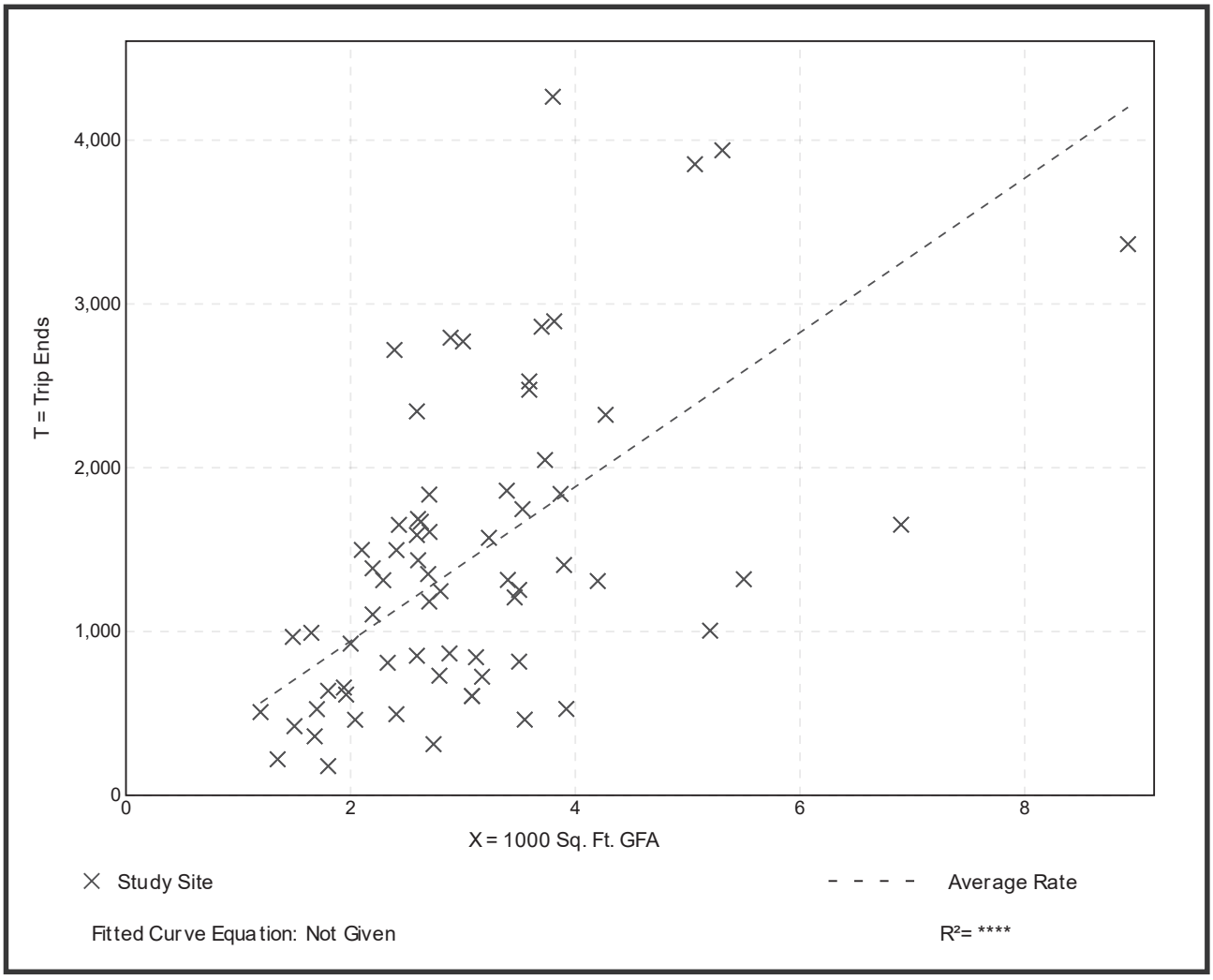
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 67
1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
470.95	98.89 - 1137.66	244.44

Data Plot and Equation



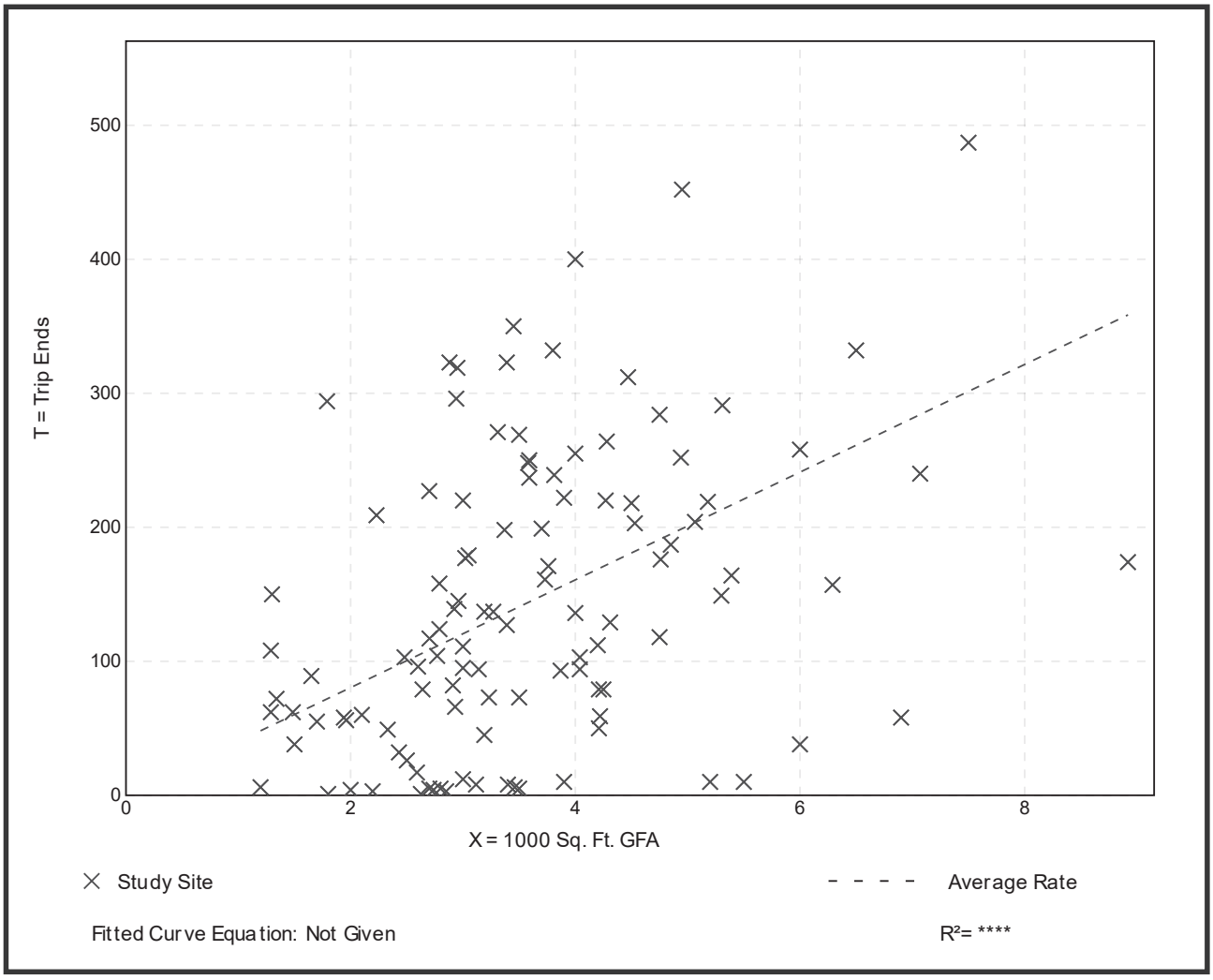
Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	111
1000 Sq. Ft. GFA:	4
Directional Distribution:	51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
40.19	0.38 - 164.25	28.78

Data Plot and Equation



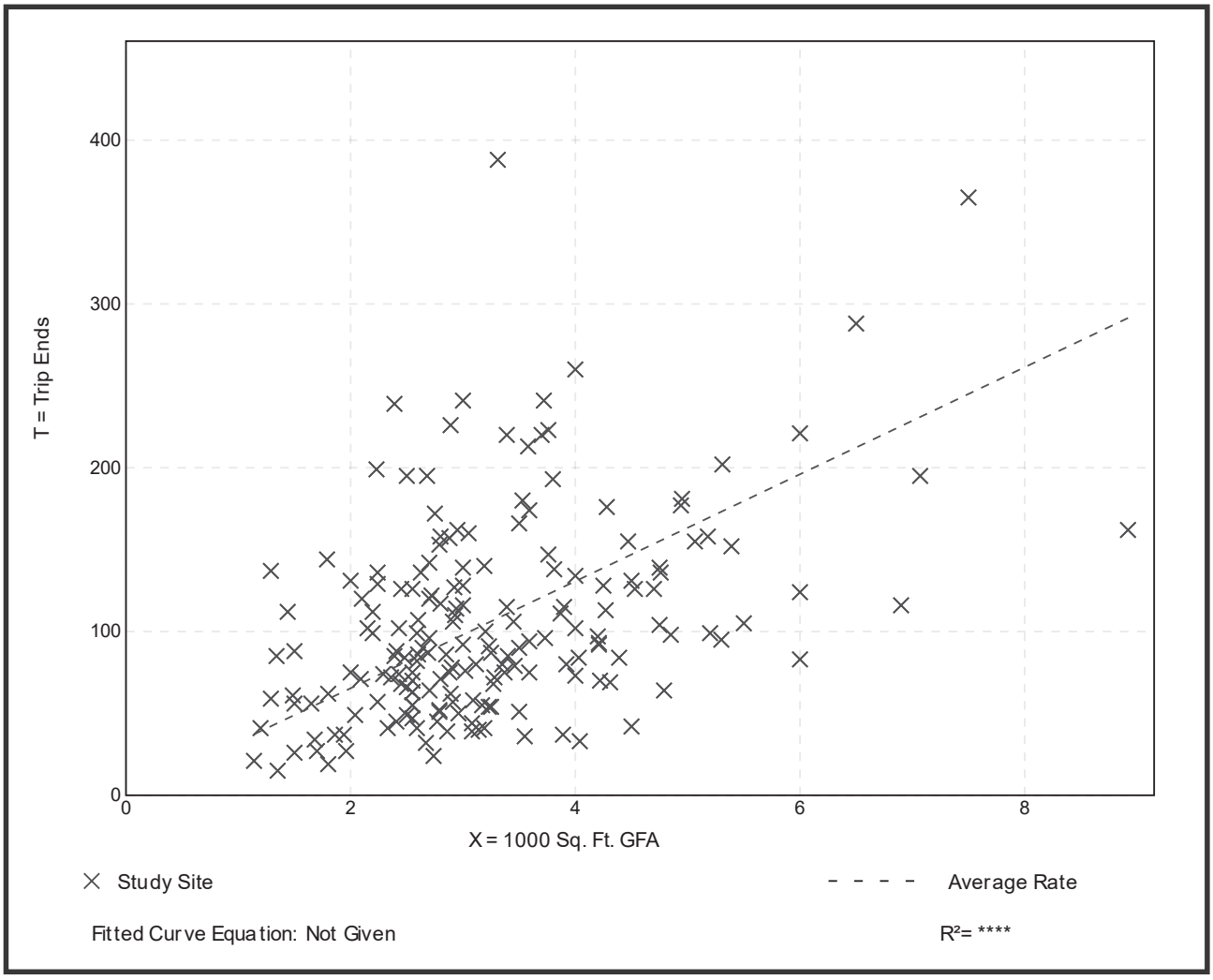
Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	185
1000 Sq. Ft. GFA:	3
Directional Distribution:	52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
32.67	8.17 - 117.22	17.87

Data Plot and Equation



Internal Capture Reduction Calculations

ITE Land Use Code	Land Use	Size	Units	Daily Trips	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
130	Portland Industrial Park 'Office'	130	1,000 Sq Ft	1,686	200	162	38	200	42	158
932	Portland Industrial Park High Turnover Restaurant	7.5	1,000 Sq Ft	842	75	41	34	73	45	28
820	Portland Industrial Park Fast-Food Restaurant	7.5	1,000 Sq Ft	3,534	301	154	147	245	127	118
820	Deltona Village Retail	700	1,000 Sq Ft	22,580	502	311	191	2,293	1,101	1,192

SUMMARY

GROSS TRIP GENERATION

INPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	843	843	162	38	42	158
Retail	11,290	11,290	311	191	1,101	1,192
Restaurant	2,188	2,188	195	181	172	146
Cinema/Entertainment						
Residential						
Hotel						
	14,321	14,321	668	410	1,315	1,496

INTERNAL TRIPS

OUTPUT

Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Office	333	476	29	35	17	35
Retail	804	1,012	36	31	92	63
Restaurant	1,138	787	49	48	53	64
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
	2,275	2,275	114	114	162	162

DAILY

GROSS TRIP GENERATION

DAILY

Land Use	Daily	
	Enter	Exit
Office	843	843
Retail	11,290	11,290
Restaurant	2,188	2,188
Cinema/Entertainment	0	0
Residential	0	0
Hotel	0	0
	14,321	14,321

Estimated Trip Origins within a Mixed-Use Development (Daily)
(Average of A.M. Peak Hour and P.M. Peak Hour)

DAILY

Origin Land Use	Destination Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		24%	34%	0%	2%	0%
Retail	16%		21%	2%	20%	3%
Restaurant	17%	28%		4%	11%	5%
Cinema/Entertainment	1%	11%	16%		4%	1%
Residential	3%	22%	21%	0%		2%
Hotel	38%	15%	39%	0%	1%	

Estimated Trip Destinations within a Mixed-Use Development (Daily)
(Average of A.M. Peak Hour and P.M. Peak Hour)

DAILY

Origin Land Use	Destination Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		20%	13%	1%	2%	0%
Retail	18%		40%	13%	24%	9%
Restaurant	22%	29%		16%	11%	38%
Cinema/Entertainment	3%	2%	2%		2%	1%
Residential	30%	14%	17%	0%		6%
Hotel	2%	3%	6%	0%	0%	

*** BASED ON EXIT ***

DAILY

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		202	282	0	13	0
Retail	1,750		2,371	226	2,258	282
Restaurant	372	602		88	241	109
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

*** BASED ON ENTER ***

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel

DAILY

Office		2,258	274	0	0	0
Retail	148		864	0	0	0
Restaurant	185	3,274		0	0	0
Cinema/Entertainment	25	226	33		0	0
Residential	253	1,524	372	0		0
Hotel	13	339	120	0	0	

*** MINIMUM ***

DAILY

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		202	274	0	0	0
Retail	148		864	0	0	0
Restaurant	185	602		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

INTERNAL TRIPS

DAILY

Land Use	Daily	
	Enter	Exit
Office	333	476
Retail	804	1,012
Restaurant	1,138	787
Cinema/Entertainment	0	0
Residential	0	0
Hotel	0	0
	2,275	2,275

A.M. PEAK HOUR

GROSS TRIP GENERATION

A.M. PEAK

Land Use	A.M. Peak Hour	
	Enter	Exit
Office	162	38
Retail	311	191
Restaurant	195	181
Cinema/Entertainment	0	0
Residential	0	0
Hotel	0	0
	668	410

Table 6.1 Unconstrained Internal Person Trip Capture Rates
for Trip Origins within a Mixed-Use Development (A.M. Peak Hour)

A.M. PEAK

Origin Land Use	Destination Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		28%	63%	0%	1%	0%
Retail	29%		13%	0%	14%	0%
Restaurant	31%	14%		0%	4%	3%
Cinema/Entertainment	0%	0%	0%		0%	0%
Residential	2%	1%	20%	0%		0%
Hotel	75%	14%	9%	0%	0%	

Table 6.2 Unconstrained Internal Person Trip Capture Rates
for Trip Destinations within a Mixed-Use Development (A.M. Peak Hour)

A.M. PEAK

Origin Land Use	Destination Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		32%	23%	0%	0%	0%
Retail	4%		50%	0%	2%	0%
Restaurant	14%	8%		0%	5%	4%
Cinema/Entertainment	0%	0%	0%		0%	0%
Residential	3%	17%	20%	0%		0%
Hotel	3%	4%	6%	0%	0%	

*** BASED ON EXIT ***

A.M. PEAK

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		11	24	0	0	0
Retail	55		25	0	27	0
Restaurant	56	25		0	7	5
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

*** BASED ON ENTER ***

AK

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel

A.M. PE

Office		100	45	0	0	0
Retail	6		98	0	0	0
Restaurant	23	25		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	5	53	39	0		0
Hotel	5	12	12	0	0	

*** MINIMUM ***

A.M. PEAK

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		11	24	0	0	0
Retail	6		25	0	0	0
Restaurant	23	25		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

INTERNAL TRIPS

A.M. PEAK

Land Use	A. M. Peak Hour	
	Enter	Exit
Office	29	35
Retail	36	31
Restaurant	49	48
Cinema/Entertainment	0	0
Residential	0	0
Hotel	0	0
	114	114

P.M. PEAK HOUR

GROSS TRIP GENERATION

P.M. PEAK

Land Use	P.M. Peak Hour	
	Enter	Exit
Office	42	158
Retail	1,101	1,192
Restaurant	172	146
Cinema/Entertainment	0	0
Residential	0	0
Hotel	0	0
	1,315	1,496

Table 6.1 Unconstrained Internal Person Trip Capture Rates
for Trip Origins within a Mixed-Use Development (P.M. Peak Hour)

P.M. PEAK

Origin Land Use	Destination Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		20%	4%	0%	2%	0%
Retail	2%		29%	4%	26%	5%
Restaurant	3%	41%		8%	18%	7%
Cinema/Entertainment	2%	21%	31%		8%	2%
Residential	4%	42%	21%	0%		3%
Hotel	0%	16%	68%	0%	2%	

Table 6.2 Unconstrained Internal Person Trip Capture Rates
for Trip Destinations within a Mixed-Use Development (P.M. Peak Hour)

P.M. PEAK

Origin Land Use	Destination Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		8%	2%	1%	4%	0%
Retail	31%		29%	26%	46%	17%
Restaurant	30%	50%		32%	16%	71%
Cinema/Entertainment	6%	4%	3%		4%	1%
Residential	57%	10%	14%	0%		12%
Hotel	0%	2%	5%	0%	0%	

*** BASED ON EXIT ***

P.M. PEAK

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		32	6	0	3	0
Retail	24		346	48	310	60
Restaurant	4	60		12	26	10
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

*** BASED ON ENTER ***

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel

P.M. PEA

Office		88	3	0	0	0
Retail	13		50	0	0	0
Restaurant	13	551		0	0	0
Cinema/Entertainment	3	44	5		0	0
Residential	24	110	24	0		0
Hotel	0	22	9	0	0	

*** MINIMUM ***

P.M. PEAK

(Exit) Land Use	(Enter) Land Use					
	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Office		32	3	0	0	0
Retail	13		50	0	0	0
Restaurant	4	60		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

INTERNAL TRIPS

P.M. PEAK

Land Use	P.M. Peak Hour	
	Enter	Exit
Office	17	35
Retail	92	63
Restaurant	53	64
Cinema/Entertainment	0	0
Residential	0	0
Hotel	0	0
	162	162

C Appendix: Truck Trips as Percent of Total Vehicle Trips

Land Use Code, Land Use Name, and Time Period	Truck Trips as Percentage of Total Vehicle Trips				
	# Sites	Wtd Avg	Lowest	Highest	Std Dev
110 General Light Industrial					
Weekday	28	8%	0%	29%	8%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	27	3%	0%	50%	12%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	27	2%	0%	20%	4%
Weekday, AM Peak Hour of Generator	28	4%	0%	100%	21%
Weekday, PM Peak Hour of Generator	27	7%	0%	29%	9%
130 Industrial Park					
Weekday	3	15%	10%	16%	3%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	3	12%	10%	13%	1%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	3	10%	3%	13%	5%
Weekday, AM Peak Hour of Generator	3	6%	4%	8%	2%
Weekday, PM Peak Hour of Generator	3	10%	7%	13%	3%
140 Manufacturing					
Weekday	17	10%	0%	35%	10%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	17	8%	0%	50%	17%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	16	7%	0%	80%	24%
Weekday, AM Peak Hour of Generator	17	2%	0%	37%	9%
Weekday, PM Peak Hour of Generator	17	6%	0%	42%	14%

Land Use Code, Land Use Name, and Time Period	Truck Trips as Percentage of Total Vehicle Trips				
	# Sites	Wtd Avg	Lowest	Highest	Std Dev
150 Warehousing					
Weekday	12	27%	0%	65%	21%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	21	13%	0%	71%	22%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	23	15%	0%	87%	20%
Weekday, AM Peak Hour of Generator	24	22%	0%	100%	26%
151 Mini-Warehouse					
Weekday	6	6%	0%	8%	3%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	5	0%	0%	0%	0%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	6	0%	0%	0%	0%
Weekday, AM Peak Hour of Generator	6	4%	0%	15%	6%
Weekday, PM Peak Hour of Generator	6	5%	0%	50%	20%
154 High-Cube Transload and Short-Term Storage Warehouse					
Weekday	57	16%	3%	52%	11%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	90	20%	0%	90%	21%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	91	16%	0%	65%	17%
Weekday, AM Peak Hour of Generator	12	12%	4%	39%	12%
Weekday, PM Peak Hour of Generator	13	14%	2%	25%	7%
155 High-Cube Fulfillment Center Warehouse (Non-Sort)					
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	11	9%	1%	49%	18%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	11	7%	2%	100%	31%

assume 20% daily, proportional with other warehouse land uses

Land Use Code, Land Use Name, and Time Period	Truck Trips as Percentage of Total Vehicle Trips				
	# Sites	Wtd Avg	Lowest	Highest	Std Dev
932 High-Turnover (Sit-Down) Restaurant					
Weekday	31	1%	0%	5%	1%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	11	0%	0%	1%	0%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	31	0%	0%	3%	1%
Weekday, AM Peak Hour of Generator	30	1%	0%	20%	4%
Weekday, PM Peak Hour of Generator	32	1%	0%	13%	
933 Fast-Food Restaurant without Drive-Through Window					
Weekday	4	1%	0%	2%	1%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	3	4%	0%	11%	6%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	2	1%	0%	2%	N.A.
Weekday, AM Peak Hour of Generator	4	0%	0%	0%	0%
Weekday, PM Peak Hour of Generator	4	0%	0%	0%	0%
934 Fast Food Restaurant with Drive Through Window					
Weekday	26	0%	0%	3%	1%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	13	1%	0%	5%	2%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	26	0%	0%	11%	2%
Weekday, AM Peak Hour of Generator	26	0%	0%	6%	
Weekday, PM Peak Hour of Generator	26	1%	0%	3%	

use maximum, average is negligible

use maximum, average is negligible

Industrial Park Trip Equivalency Matrix[1]

	Land Use[2]	ITE LUC	PM Peak Hour Trip Rate	Equivalency Statement	TO: General Light Industrial (KSF)	Industrial Park (KSF)	Manufacturing (KSF)	Warehousing (KSF)	High-Cube Fulfillment Center Warehouse - Non-Sort (KSF)	High-Cube Parcel Hub Warehouse (KSF)	Data Center (KSF)	General Office (KSF)	Medical Office (KSF)	Office Park (KSF)
FROM	General Light Industrial (KSF)	110	0.63	1 KSF is equal to	1.000	1.575	0.940	3.316	3.938	0.984	7.000	0.548	0.182	0.589
	Industrial Park (KSF)	130	0.40	1 KSF is equal to	0.635	1.000	0.597	2.105	2.500	0.625	4.444	0.348	0.116	0.374
	Manufacturing (KSF)	140	0.67	1 KSF is equal to	1.063	1.675	1.000	3.526	4.188	1.047	7.444	0.583	0.194	0.626
	Warehousing (KSF)	150	0.19	1 KSF is equal to	0.302	0.475	0.284	1.000	1.188	0.297	2.111	0.165	0.055	0.178
	High-Cube Fulfillment Center Warehouse - Non-Sort (KSF)	155	0.16	1 KSF is equal to	0.254	0.400	0.239	0.842	1.000	0.250	1.778	0.139	0.046	0.150
	High-Cube Parcel Hub Warehouse (KSF)	156	0.64	1 KSF is equal to	1.016	1.600	0.955	3.368	4.000	1.000	7.111	0.557	0.185	0.598
	Data Center (KSF)	160	0.09	1 KSF is equal to	0.143	0.225	0.134	0.474	0.563	0.141	1.000	0.078	0.026	0.084
	General Office (KSF)	710	1.15	1 KSF is equal to	1.825	2.875	1.716	6.053	7.188	1.797	12.778	1.000	0.332	1.075
	Medical Office (KSF)	720	3.46	1 KSF is equal to	5.492	8.650	5.164	18.211	21.625	5.406	38.444	3.009	1.000	3.234
	Office Park (KSF)	750	1.07	1 KSF is equal to	1.698	2.675	1.597	5.632	6.688	1.672	11.889	0.930	0.309	1.000

Notes:

[1] Trip Equivalency Matrix was developed using average PM peak hour trip generation rates published in the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition.

[2] KSF = 1,000 square feet

Example: To convert 5,000 square feet of Warehousing (150) to Data Center (160), 5 KSF of Warehousing x 2.111 = 10,555 square feet Data Center

Ancillary Retail Uses Trip Equivalency Matrix[1]

	Land Use[2,3]	ITE LUC	PM Peak Hour Trip Rate	Equivalency Statement	TO: General Office (KSF)	TO: Retail/ Shopping Center (KSF)	TO: High-Turnover Sit-Down Restaurant (KSF)	TO: Fast-Food Restaurant w/o Drive-Through (KSF)	TO: Fast-Food Restaurant with Drive-Through (KSF)
FROM	**General Office (KSF)**	710	1.15	1 KSF is equal to	1.000	0.302	0.118	0.041	0.035
	Retail/Shopping Center (KSF)	820	3.81	1 KSF is equal to	3.313	1.000	0.390	0.134	0.117
	High-Turnover Sit-Down Restaurant (KSF)	932	9.77	1 KSF is equal to	8.496	2.564	1.000	0.345	0.299
	Fast-Food Restaurant w/o Drive-Through (KSF)	933	28.34	1 KSF is equal to	24.643	7.438	2.901	1.000	0.867
	Fast-Food Restaurant with Drive-Through (KSF)	934	32.67	1 KSF is equal to	28.409	8.575	3.344	1.153	1.000

Notes:

[1] Trip Equivalency Matrix was developed using average PM peak hour trip generation rates published in the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition.

[2] KSF = 1,000 square feet

[3] Ancillary uses may not exceed 20,000 SF or 4,400 daily trips

Example: To convert 2,500 square feet of High-Turnover Sit-Down Restaurant (932) to Retail Space (820), 2.5 KSF of High-Turnover Sit-Down Restaurant x 2.564 = 6,410 square feet Retail/Shopping Center

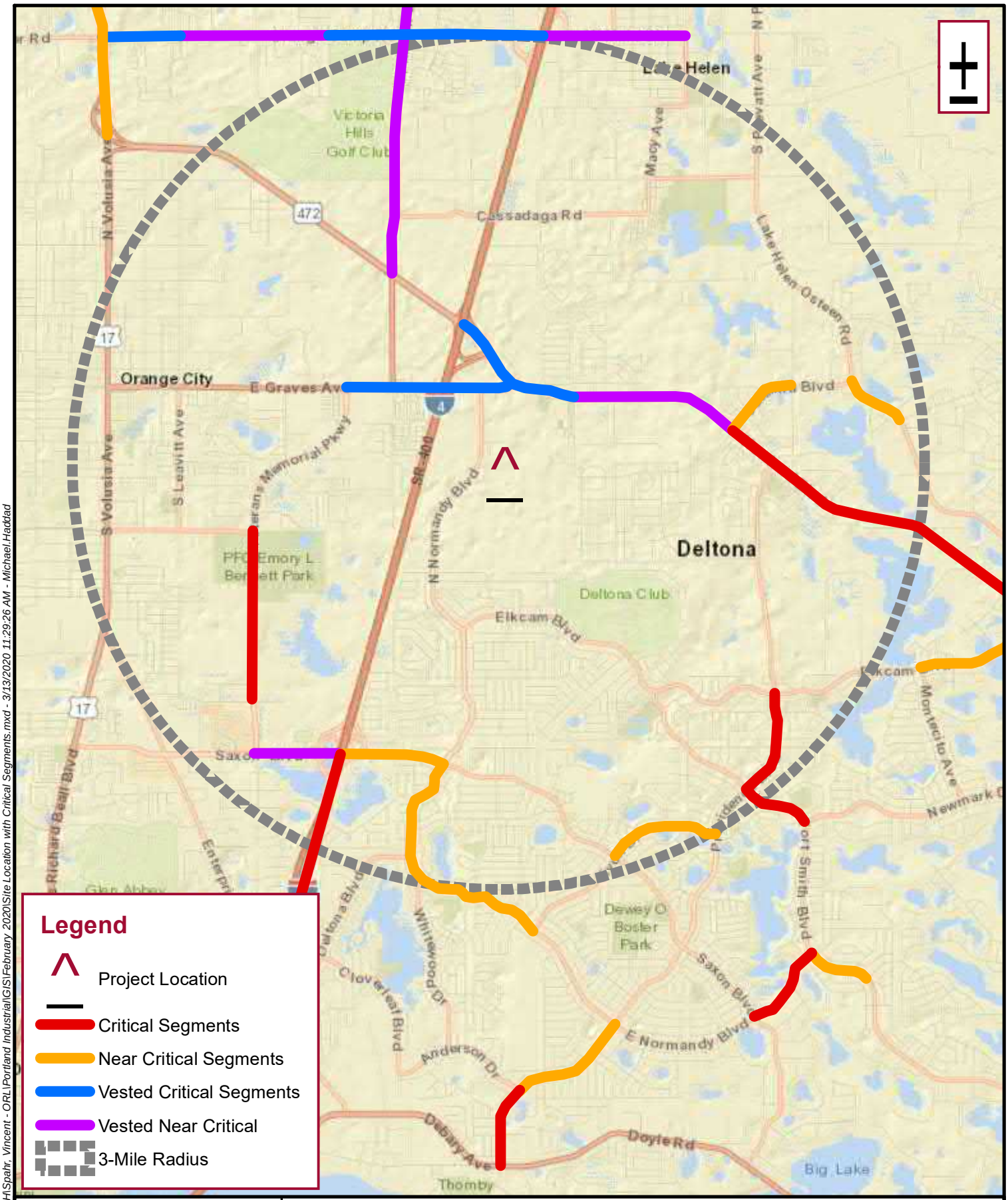
APPENDIX C:

Study Area Determination

Study Area Determination

Roadway		Roadway Attributes [1]				Peak Hour Two-Way Maximum Service Volume [2]	PM Peak Hour Project Traffic				Significant Impact? [5]	Include In Study Area?
From	To	Functional Classification	Area Type	Adopted LOS	Number of Lanes		% Assign [3]	NB / EB	SB / WB	% Impact [4]		
Graves Avenue/CR 4053												
US 17/92	Leavitt Avenue	Major Collector	U	E	2U	1,330	1.0%	2	3	0.38%	No	Yes[8]
Leavitt Avenue	Veteran's Memorial Parkway	Major Collector	U	E	2U	1,020	4.0%	8	13	2.06%	No	Yes[8]
Veteran's Memorial Parkway	Kentucky Avenue	Minor Arterial	U	E	2U	1,620	7.0%	14	23	2.28%	No	Yes[7]
Kentucky Avenue	Howland Boulevard	Minor Arterial	U	E	2U	1,620	25.0%	48	83	8.09%	Yes	Yes[7]
W Volusia Beltway (Kentucky Avenue)												
SR 472	Graves Avenue	Major Collector	U	E	2U	1,540	16.0%	53	31	5.45%	Yes	Yes
W Volusia Beltway (Dr. Martin Luther King Jr.)												
Taylor Road	Orange Camp Road	Minor Arterial	U	E	2U	1,540	2.0%	7	4	0.71%	No	No
Orange Camp Road	Cassadaga Road	Minor Arterial	U	E	2U	1,540	6.0%	20	12	2.08%	No	Yes[7]
Cassadaga Road	SR 472	Minor Arterial	U	E	2U	1,540	7.0%	23	14	2.40%	No	Yes[7]
Orange Camp Road												
Blue Lake Avenue	W Volusia Beltway (Dr. MLK Jr.)	Minor Arterial	U	E	2U	1,540	2.0%	4	7	0.71%	No	No
W Volusia Beltway (Dr. MLK Jr.)	I-4	Minor Arterial	U	E	2U	1,540	2.0%	4	7	0.71%	No	No
Main Street (Lake Helen)												
I-4	Lakeview Drive	Major Collector	U	E	2U	470	1.0%	3	2	1.06%	No	No
Normandy Boulevard												
Graves Avenue	Rhode Island Avenue	Major Collector	U	D	2U	1,150	50.0%	167	97	22.96%	Yes	Yes[6]
Rhode Island Avenue	Elkcam Boulevard	Major Collector	U	D	4D	2,630	46.0%	89	153	9.20%	Yes	Yes
Elkcam Boulevard	Saxson Boulevard	Major Collector	U	D	4D	2,630	35.0%	68	117	7.03%	Yes	Yes
Saxson Boulevard	Deltona Boulvard	Major Collector	U	D	2U	960	9.0%	17	30	4.90%	Yes	Yes[7]
Deltona Boulvard	Tivoli Drive	Major Collector	U	D	3U	960	2.0%	4	7	1.15%	No	Yes[7]
Deltona Boulevard												
Normandy Boulevard	Cloverleaf Boulevard/Anderson Drive	Major Collector	U	D	4D	2,630	6.0%	12	20	1.22%	No	No
Elkcam Boulevard												
Normandy Boulevard	Fort Smith Boulevard	Major Collector	U	D	2U	960	8.0%	27	15	4.38%	Yes	Yes
Fort Smith Boulevard	Providence Boulevard	Major Collector	U	D	2U	960	3.0%	10	6	1.67%	No	Yes[8]
Providence Boulevard	Montecito Avenue	Major Collector	U	D	2U	960	0.0%	0	0	0.00%	No	No
Fort Smith Boulevard												
Elkcam Boulevard	Providence Boulevard	Major Collector	U	D	2U	960	4.0%	13	8	2.19%	No	Yes[9]
Providence Boulevard	Newmark Drive	Major Collector	U	D	2U	1,260	3.0%	10	6	1.27%	No	Yes[7]
Providence Boulevard												
Elkcam Boulevard	Fort Smith Boulvard	Minor Arterial	U	E	2U	1,020	1.0%	2	3	0.49%	No	Yes[7]
Fort Smith Boulvard	Tivoli Drive	Minor Arterial	U	E	4D	2,740	1.0%	2	3	0.18%	No	No
Saxon Boulevard												
Enterprise Road	Veteran's Memorial Parkway	Minor Arterial	U	E	6D	4,280	4.0%	8	13	0.49%	No	No
Veteran's Memorial Parkway	FDOT Park & Ride	Minor Arterial	U	E	6D	4,280	6.0%	12	20	0.75%	No	Yes[7]
FDOT Park & Ride	I-4	Minor Arterial	U	E	6D	3,410	7.0%	14	23	1.09%	No	Yes[7]
I-4	Finland Drive	Minor Arterial	U	E	4D	3,410	14.0%	27	47	2.17%	No	Yes[7]
Finland Drive	Normandy Boulevard	Minor Arterial	U	E	4D	3,410	15.0%	29	50	2.32%	No	Yes[9]
Normandy Boulevard	Tivoli Drive	Minor Arterial	U	E	4D	3,410	7.0%	14	23	1.09%	No	Yes[8]
Tivoli Drive	Providence Blvd	Minor Arterial	U	E	2U	1,020	6.0%	20	12	3.14%	Yes	Yes
Providence Blvd	Normandy Boulevard	Minor Arterial	U	E	2U	1,020	2.0%	7	4	1.08%	No	No
SR 472												
US 17/92	CR 4101/MLK Boulevard	Principal Arterial	U	D	4D	5,900	10.0%	19	33	0.88%	No	No
CR 4101/MLK Boulevard	I-4	Principal Arterial	U	D	4D	3,580	11.0%	21	37	1.62%	No	No
Howland Boulevard [10]												
I-4/SR 472	Wolf Pack Run	Minor Arterial	U	E	4D	3,410	14.0%	47	27	2.17%	No	Yes[7]
Wolf Pack Run	Catalina Boulevard	Minor Arterial	U	E	4D	3,410	13.0%	43	25	1.99%	No	Yes[7]
Catalina Boulevard	Providence Boulevard	Minor Arterial	U	E	4D	3,410	6.0%	20	12	0.94%	No	Yes[7]
Providence Boulevard	Elkcam Blvd	Minor Arterial	U	E	2U	1,230	5.0%	17	10	2.20%	No	Yes[7]
Elkcam Blvd	Lake Helen-Osteen Road	Minor Arterial	U	E	2U	3,410	3.0%	10	6	0.47%	No	No
Catalina Boulevard												
Wolf Pack Run	Howland Boulevard	Major Collector	U	D	2U	960	1.0%	2	3	0.52%	No	No
Howland Boulevard	Sixma Road	Major Collector	U	D	2U	960	4.0%	13	8	2.19%	No	Yes[7]
Sixma Road	Lake Helen-Osteen Road	Major Collector	U	D	2U	960	4.0%	13	8	2.19%	No	Yes[9]
Lake Helen-Osteen Road												
Captain Drive	Catalina Boulevard	Minor Arterial	U	E	2U	1,020	1.0%	2	3	0.49%	No	No
Catalina Boulevard	Haulover Boulevard	Minor Arterial	U	E	2U	1,020	3.0%	10	6	1.57%	No	Yes[7]
Haulover Boulevard	Elkcam Boulevard	Minor Arterial	U	E	2U	1,020	0.0%	0	0	0.00%	No	No
Tivoli Drive												
Saxon Boulevard	Providence Boulevard	Major Collector	U	E	2U	960	0.0%	0	0	0.00%	No	Yes[7]
Veteran's Memorial Parkway												
Graves Avenue	Rhode Island Avenue	Minor Arterial	U	E	2U	1,620	2.0%	4	7	0.68%	No	No
Rhode Island Avenue	Harley Strickland Boulevard	Minor Arterial	U	E	2U	1,540	1.0%	2	3	0.32%	No	Yes[7]
Harley Strickland Boulevard	Saxon Boulevard	Minor Arterial	U	E	4D	3,410	2.0%	4	7	0.32%	No	No
Rhode Island Avenue												
US 17/92	Veteran's Memorial Parkway	Major Collector	U	E	2U	1,230	1.0%	2	3	0.41%	No	No
Finland Drive												
Saxon Boulevard	Sullivan Street	Minor Collector	U	D	2U	960	1.0%	2	3	0.52%	No	Yes [8]
Sullivan Street												
Finland Drive	Normandy Boulevard	Minor Collector	U	D	2U	960	2.0%	4	7	1.15%	No	Yes [8]
US 17/92												
Graves Avenue	Rhode Island Avenue	Principal Arterial	U	D	4D	3,580	1.0%	2	3	0.14%	No	No
Rhode Island Avenue	Enterprise Road	Principal Arterial	U	D	4D	3,580	0.0%	0	0	0.00%	No	No
Interstate 4												
Seminole County	Dirksen Drive	Principal Arterial	U	D	6D	10,060	9.0%	17	30	0.47%	No	Yes [8]
Dirksen Drive	Saxon Boulevard	Principal Arterial	U	D	6D	10,060	9.0%	17	30	0.47%	No	Yes [7]
Saxon Boulevard	SR 472	Principal Arterial	U	D	6D	10,060	0.0%	0	0	0.00%	No	Yes [8]
SR 472	Orange Camp Road	Principal Arterial	U	D	6D	10,060	10.0%	33	19	0.52%	No	Yes [8]
Orange Camp Road	SR 44	Principal Arterial	U	D	6D	10,060	9.0%	30	17	0.47%	No	Yes [8]

Notes:
1. The roadway attributes were obtained from the latest the 2017 Volusia County Average Annual Daily Traffic & Historical Counts Report.
2. Peak Hour Two-Way Service Volumes were determined using the sources listed in Note 1.
3. Percent project traffic assignment was calculated as the average across the segment.
4. Percent impact was calculated as the PM peak hour two-way project traffic divided by the two-way service volume.
5. In accordance with River To Sea TPO TIA Guidelines, the minimum threshold for significance was at least 3% impact of two-way peak hour trips.
6. In accordance with River To Sea TPO TIA Guidelines, the study area includes all impacted segments and directly adjacent segments.
7. In accordance with River To Sea TPO TIA Guidelines, the study area includes all critical or near critical segments.
8. The study area includes these roadway segments based on input from City of Deltona and Volusia County Traffic staff.
9. The study area includes all roadway segments from previously submitted methodologies. No segments were removed from the study area in response to updated trip generation calculations.
10. The roadway segment of Howland Boulevard from Providence Boulevard to Elkcam Boulevard is planned to be widened from a 2-lane facility to a 4-lane facility (Volusia County Project Number IFZ3-1). There is currently construction funding for the project in 2020. Therefore, the roadway capacity has been updated to reflect this roadway widening project.



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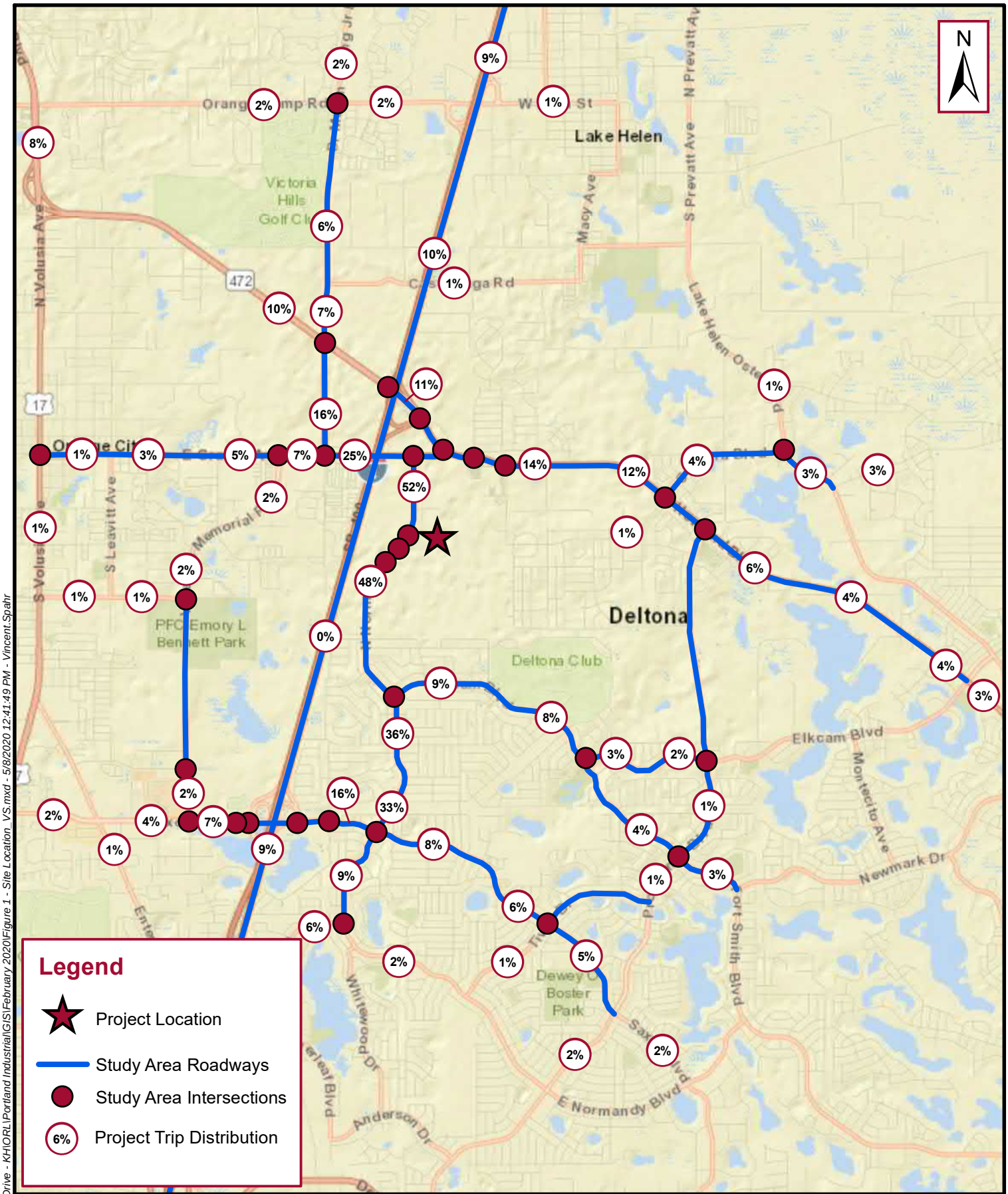
CRITICAL / NEAR CRITICAL SEGMENTS WITHIN 3-MILE RADIUS OF PROJECT LOCATION

INDUSTRIAL WAREHOUSE
CITY OF DELTONA, FLORIDA

Project No. 068148001	Not To Scale	March 2020	Appendix C

APPENDIX D:

Site Location, Trip Distribution, and Study Area



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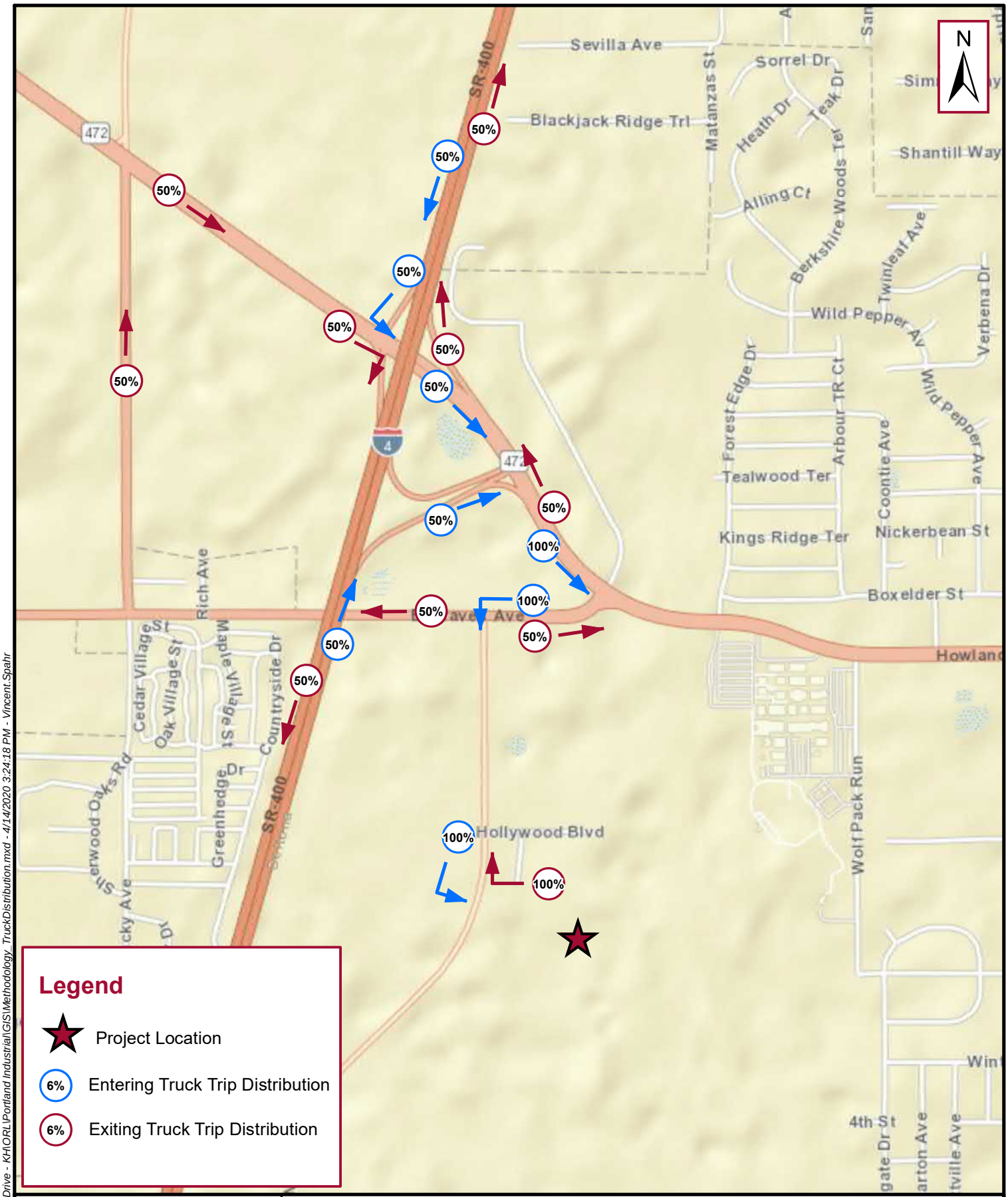
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SITE LOCATION, TRIP DISTRIBUTION, AND STUDY AREA

PORTLAND INDUSTRIAL
CITY OF DELTONA, FLORIDA

Project No. 064148001	Not To Scale	April 2020	Appendix D



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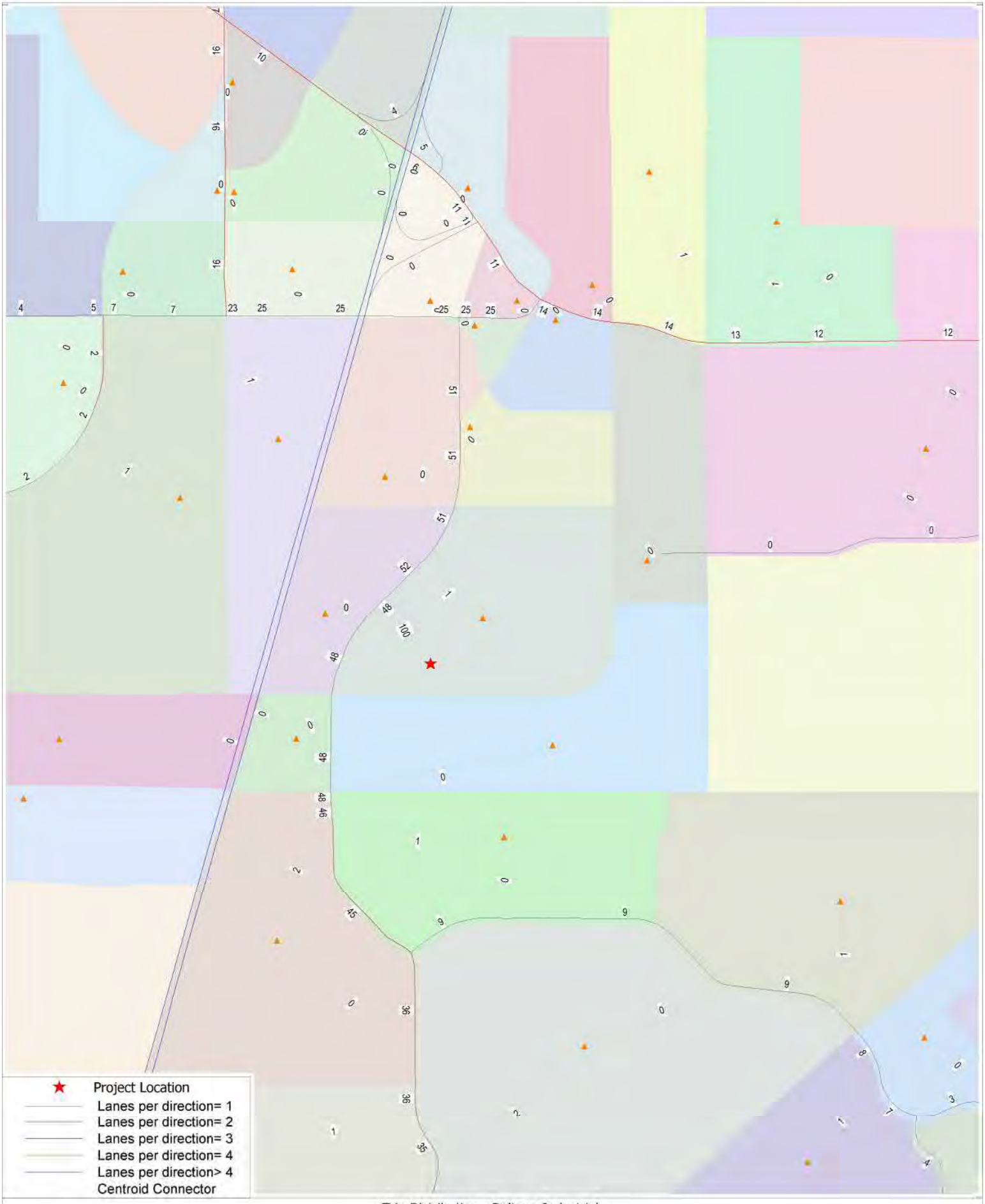
TRUCK TRIP DISTRIBUTION

PORTLAND INDUSTRIAL
CITY OF DELTONA, FLORIDA

Project No. 064148001	Not To Scale	April 2020	Appendix D

APPENDIX E:

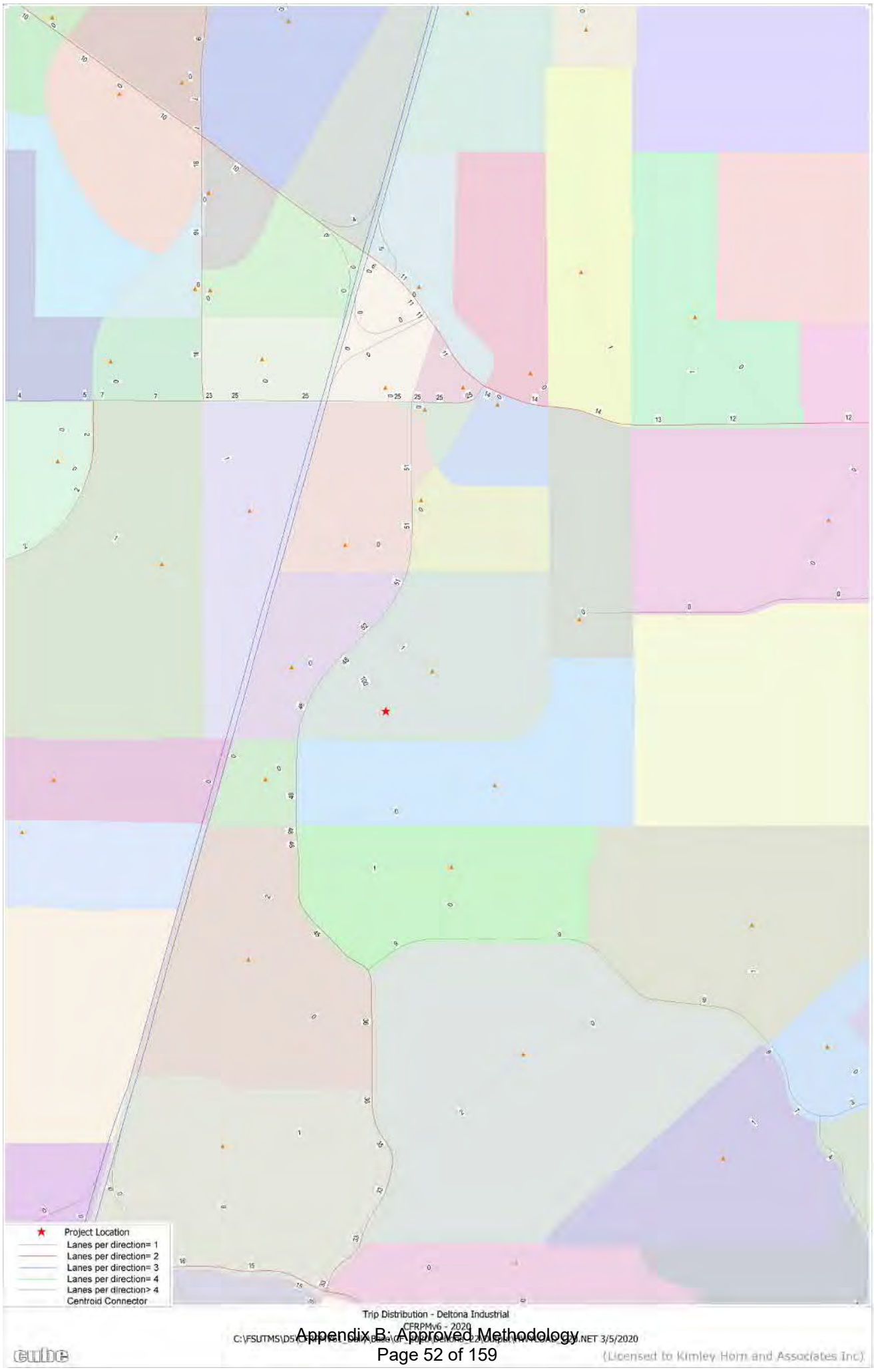
CFRPM Model Plot

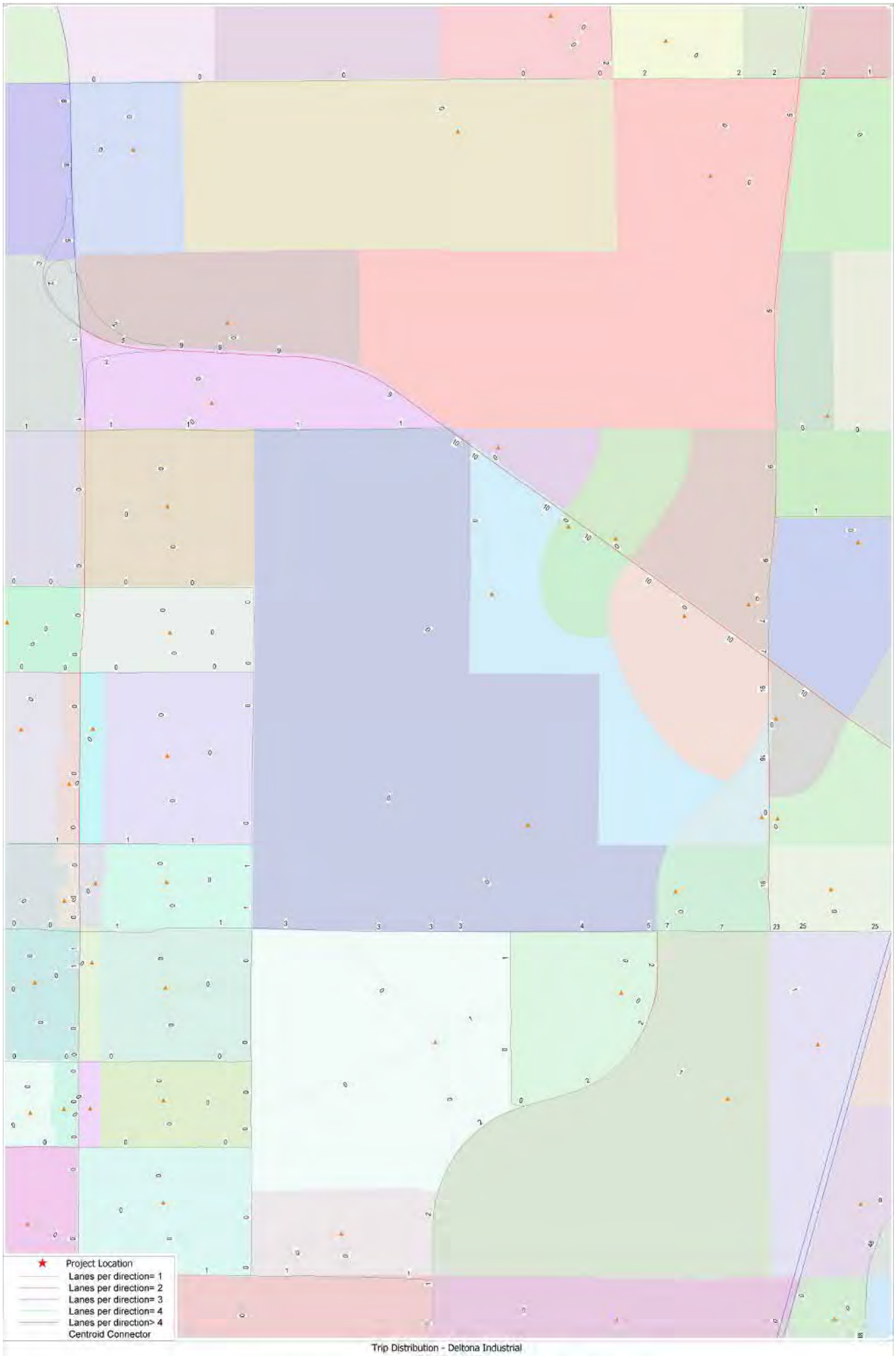


Trip Distribution - Deltona Industrial
CFRPMv6 - 2020
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cube

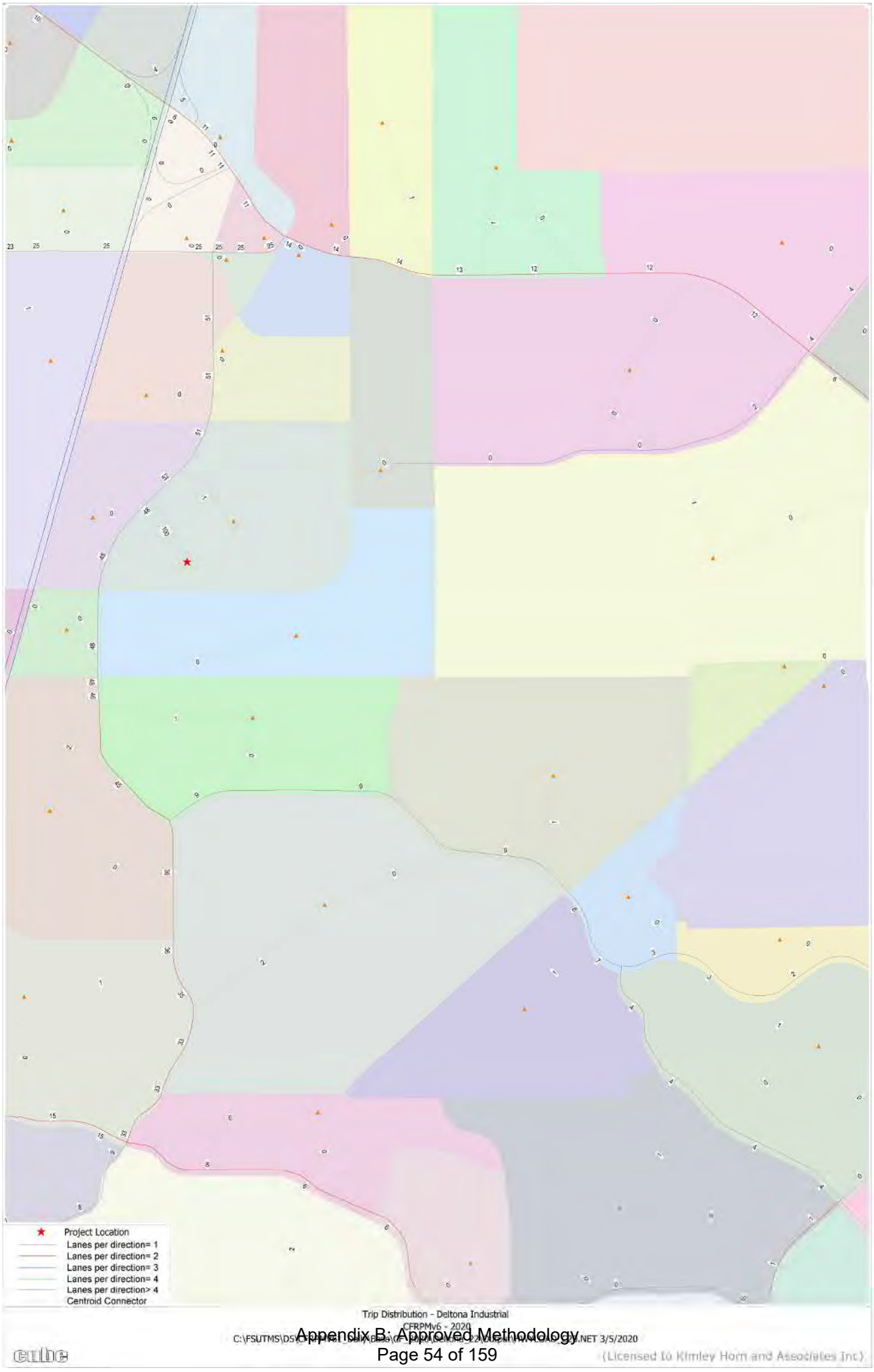
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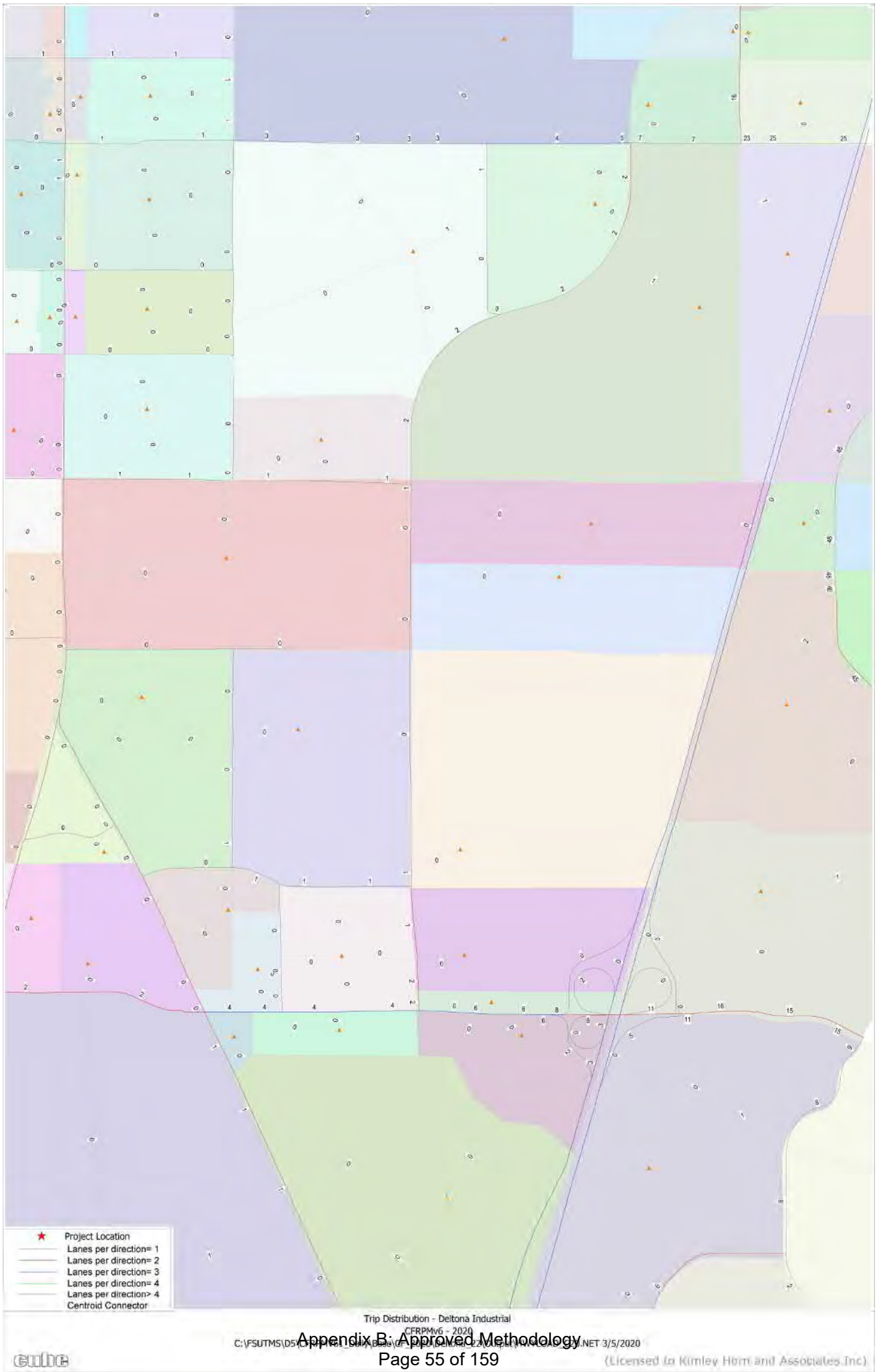

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Lanes per direction= 4
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Centroid Connector
Trip Distribution - Deltona Industrial
CFRPMv6 - 2020
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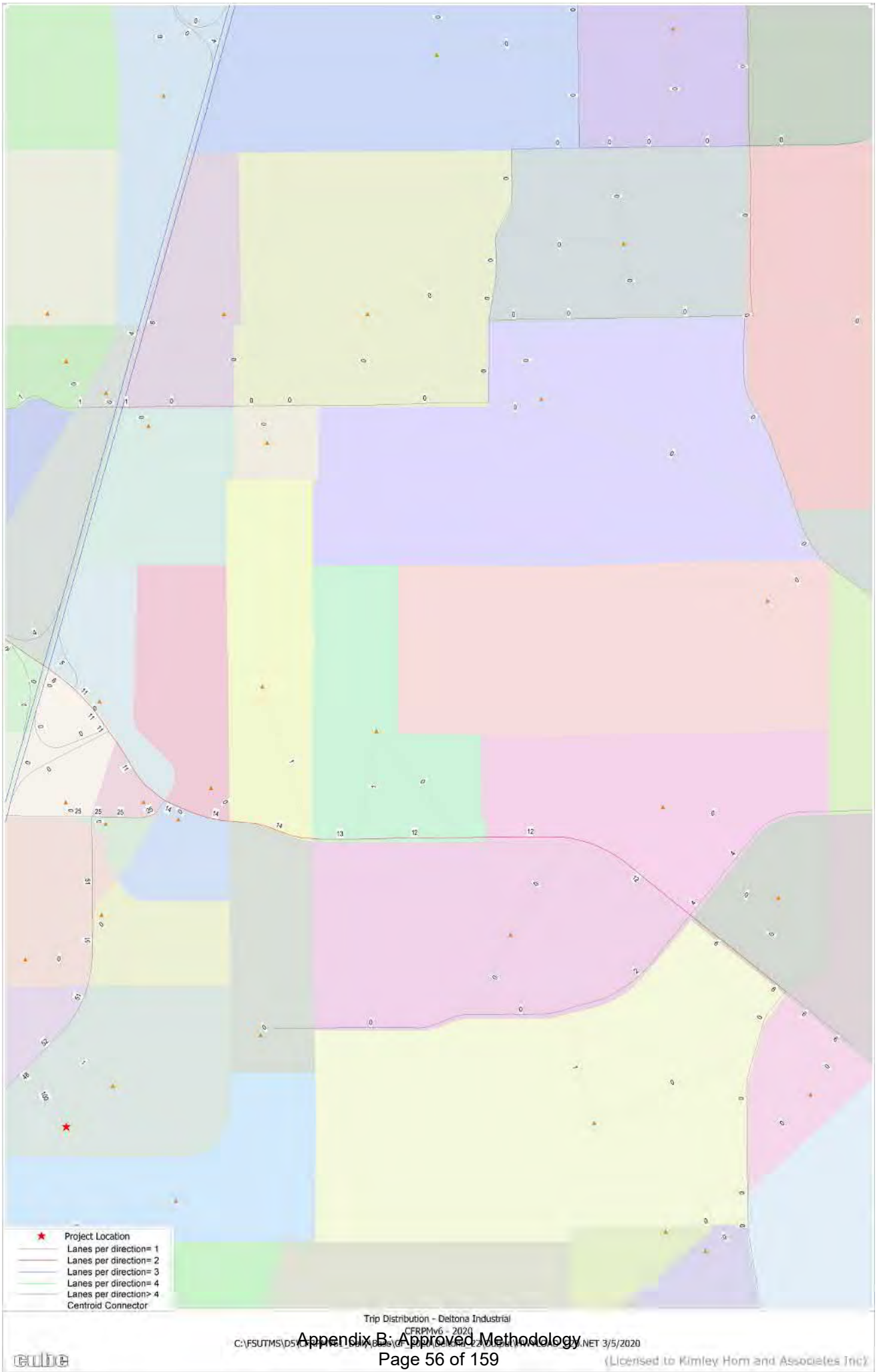


Trip Distribution - Deltona Industrial
CFRPMv6 - 2020
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Centroid Connector
Trip Distribution - Deltona Industrial
CFRPMv6 - 2020
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Project Location
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Lanes per direction= 3
Lanes per direction= 4
Lanes per direction> 4
Centroid Connector
Trip Distribution - Deltona Industrial
CFRPMv6 - 2020
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Project Location
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Lanes per direction= 3
Lanes per direction= 4
Lanes per direction> 4
Centroid Connector
Trip Distribution - Deltona Industrial
CFRPMv6 - 2020
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APPENDIX F:

Historical Growth Rate Calculations

Table 1: Historical Growth Rate Determination

Roadway		Station Number	Trend R-Squared	Trend Annual Historical Growth Rate	Is Trend R-Squared > 70% & Trend Annual Historical Growth Rate > 2% [2]	Proposed Historical Growth Rate [2]
From	To					
Graves Avenue/CR 4053						
US 17/92	Leavitt Avenue	770	75.96%	5.60%	Yes	5.60%
Leavitt Avenue	Veteran's Memorial Parkway	772	65.79%	3.33%	No	1.00%
Veteran's Memorial Parkway	Kentucky Avenue	775	76.82%	2.81%	Yes	2.81%
Kentucky Avenue	Howland Boulevard	900	78.83%	4.30%	Yes	4.30%
W Volusia Beltway (Kentucky Avenue)						
SR 472	Graves Avenue	1030	72.48%	3.44%	Yes	3.44%
W Volusia Beltway (Dr. Martin Luther King Jr.)						
Orange Camp Road	Cassadaga Road	1942	76.50%	3.46%	Yes	3.46%
Cassadaga Road	SR 472	1940	73.83%	4.55%	Yes	4.55%
Normandy Boulevard						
Graves Avenue	Rhode Island Avenue	105.000	70.82%	11.71%	Yes	11.71%
Rhode Island Avenue	Elkcam Boulevard	105.000	69.82%	6.96%	No	1.00%
Elkcam Boulevard	Saxson Boulevard	105.030	59.30%	-2.33%	No	1.00%
Saxson Boulevard	Deltona Boulvard	105.050	71.39%	-1.81%	No	1.00%
Deltona Boulvard	Tivoli Drive	105.070	70.65%	-2.26%	No	1.00%
Elkcam Boulevard						
Normandy Boulevard	Fort Smith Boulevard	45.000	73.19%	8.42%	Yes	8.42%
Fort Smith Boulevard						
Elkcam Boulevard	Providence Boulevard	60.000	66.50%	6.92%	No	1.00%
Providence Boulevard	Newmark Drive	60.020	92.66%	11.72%	Yes	11.72%
Providence Boulevard						
Elkcam Boulevard	Fort Smith Boulvard	1541	53.89%	-1.66%	No	1.00%
Saxon Boulevard						
Veteran's Memorial Parkway	FDOT Park & Ride	1674	55.27%	-1.48%	No	1.00%
FDOT Park & Ride	I-4	1685	78.80%	3.95%	Yes	3.95%
I-4	Finland Drive	1675	54.51%	-1.47%	No	1.00%
Finland Drive	Normandy Boulevard	1676	42.52%	3.65%	No	1.00%
Normandy Boulevard	Tivoli Drive	1677	58.54%	4.47%	No	1.00%
Tivoli Drive	Providence Blvd	1679	50.65%	2.86%	No	1.00%
Howland Boulevard						
I-4/SR 472	Wolf Pack Run	901	69.41%	6.55%	No	1.00%
Wolf Pack Run	Catalina Boulevard	903	70.03%	2.80%	Yes	2.80%
Catalina Boulevard	Providence Boulevard	905	69.00%	2.56%	No	1.00%
Providence Boulevard	Elkcam Blvd	906	91.28%	4.32%	Yes	4.32%
Catalina Boulevard						
Howland Boulevard	Sixma Road	20.020	50.00%	-2.88%	No	1.00%
Sixma Road	Lake Helen-Osteen Road	20.030	54.52%	2.13%	No	1.00%
Lake Helen-Osteen Road						
Catalina Boulevard	Haulover Boulevard	1072	93.94%	6.38%	Yes	6.38%
Veteran's Memorial Parkway						
Rhode Island Avenue	Harley Strickland Boulevard	1901	78.44%	5.33%	Yes	5.33%
Interstate 4						
Seminole County	Dirksen Drive	484	76.38%	1.03%	No	1.03%
Dirksen Drive	Saxon Boulevard	9906	86.08%	2.71%	Yes	2.71%
Saxon Boulevard	SR 472	1003	77.78%	1.04%	No	1.04%
SR 472	Orange Camp Road	485	73.79%	3.07%	Yes	3.07%
Orange Camp Road	SR 44	497	94.73%	4.85%	Yes	4.85%

Notes:

1. Station numbers and historical AADT information were taken from the 2018 Volusia County Average Annual Daily Traffic & Historical Counts Report.

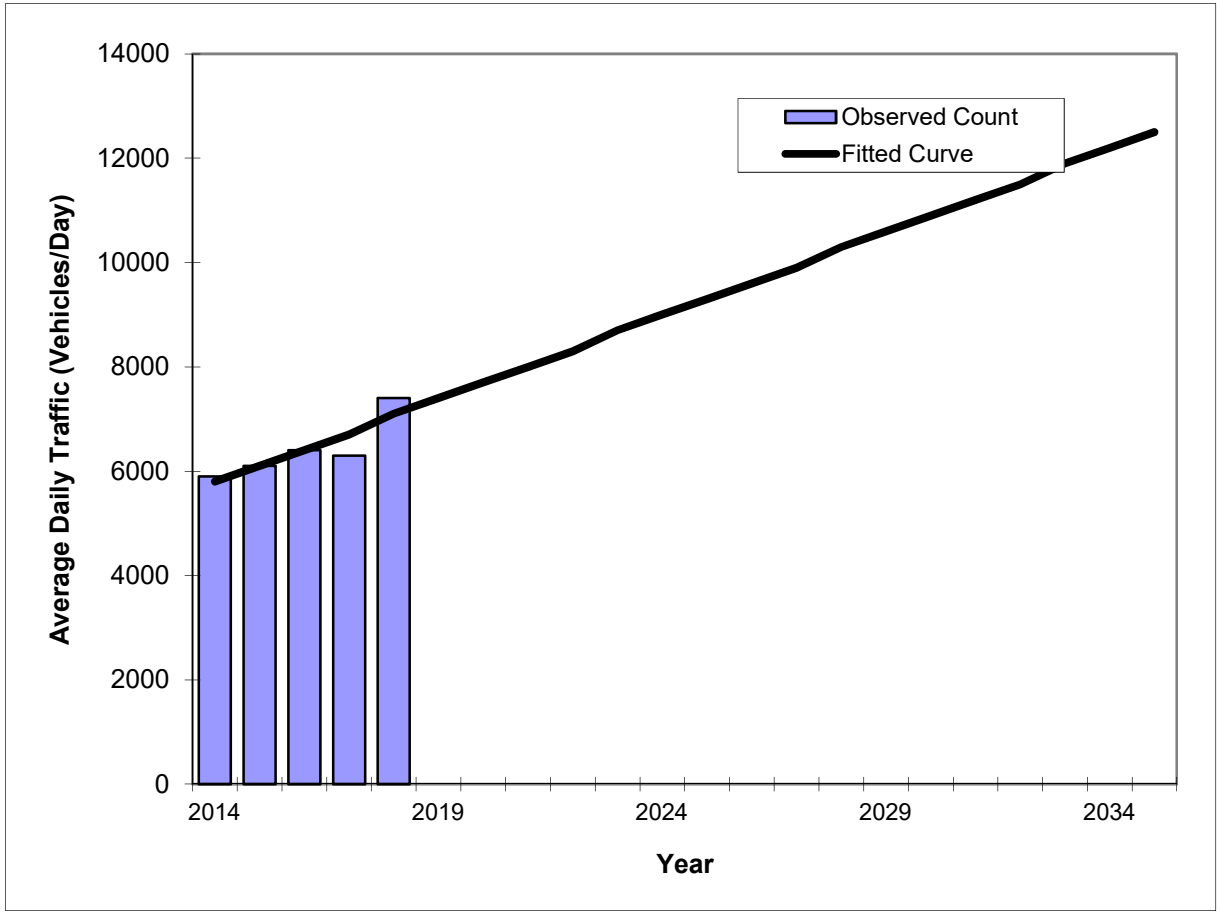
2. The necessary amount of AADT data was used in order to achieve the required Trend R-squared percentage of at least 70%. If a Trend R-squared of 70% was unobtainable from the AADT data, or if the data resulted in a growth rate less than 1.00 %, a 1.00% annual background growth rate was applied per the approved methodology.

Traffic Trends - V03.a

GRAVES AVE -- US17/92 to Leavitt Ave

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	770
Highway:	GRAVES AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2014	5900	5800
2015	6100	6100
2016	6400	6400
2017	6300	6700
2018	7400	7100
2020 Opening Year Trend		
2020	N/A	7700
2025 Mid-Year Trend		
2025	N/A	9300
2030 Design Year Trend		
2030	N/A	10900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	320
Trend R-squared:	75.96%
Trend Annual Historic Growth Rate:	5.60%
Trend Growth Rate (2018 to Design Year):	4.46%
Printed:	30-Jul-19

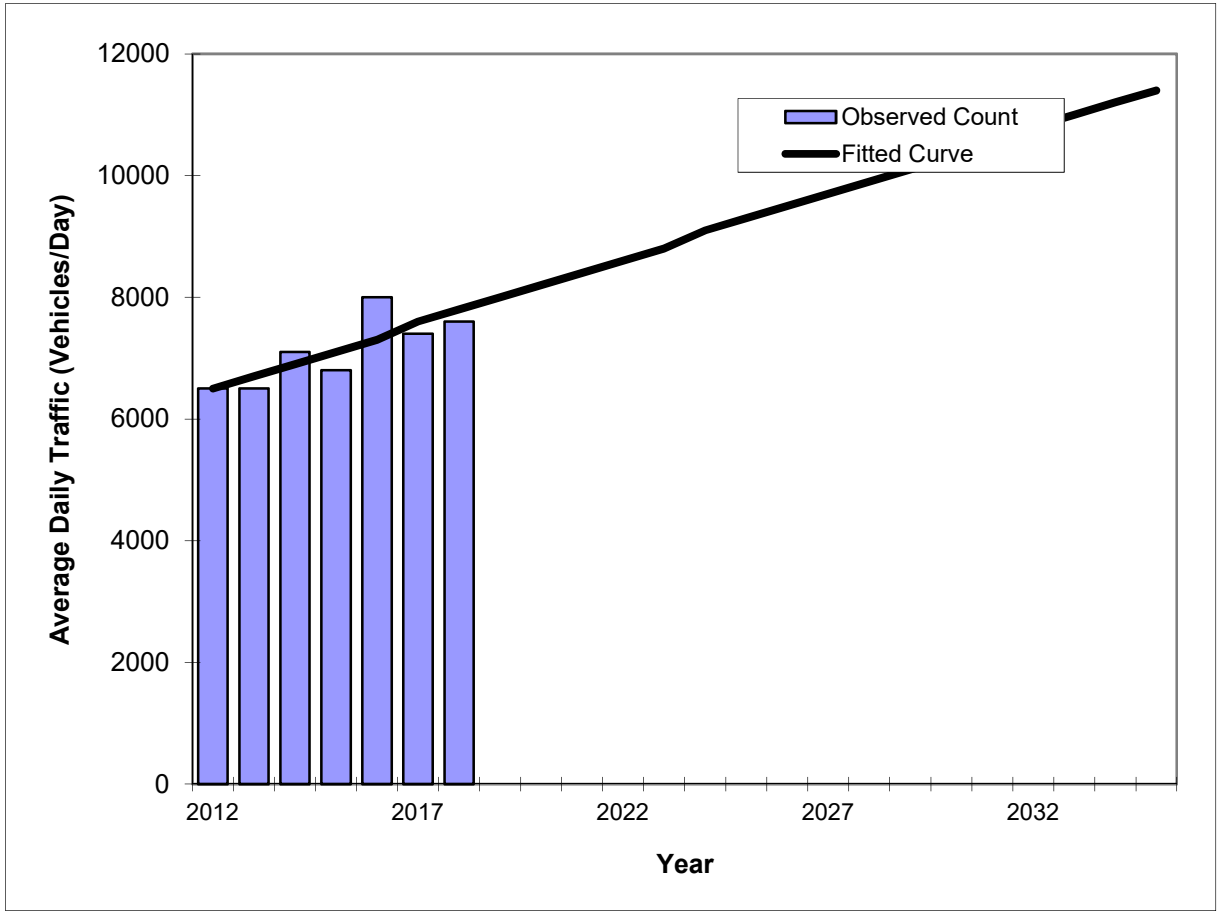
Straight Line Growth Option

Traffic Trends - V03.a

GRAVES AVE -- Leavitt Ave to Veterans Memorial Pkwy

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	772
Highway:	GRAVES AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2012	6500	6500
2013	6500	6700
2014	7100	6900
2015	6800	7100
2016	8000	7300
2017	7400	7600
2018	7600	7800
2020 Opening Year Trend		
2020	N/A	8200
2025 Mid-Year Trend		
2025	N/A	9300
2030 Design Year Trend		
2030	N/A	10300
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	214
Trend R-squared:	65.79%
Trend Annual Historic Growth Rate:	3.33%
Trend Growth Rate (2018 to Design Year):	2.67%
Printed:	30-Jul-19

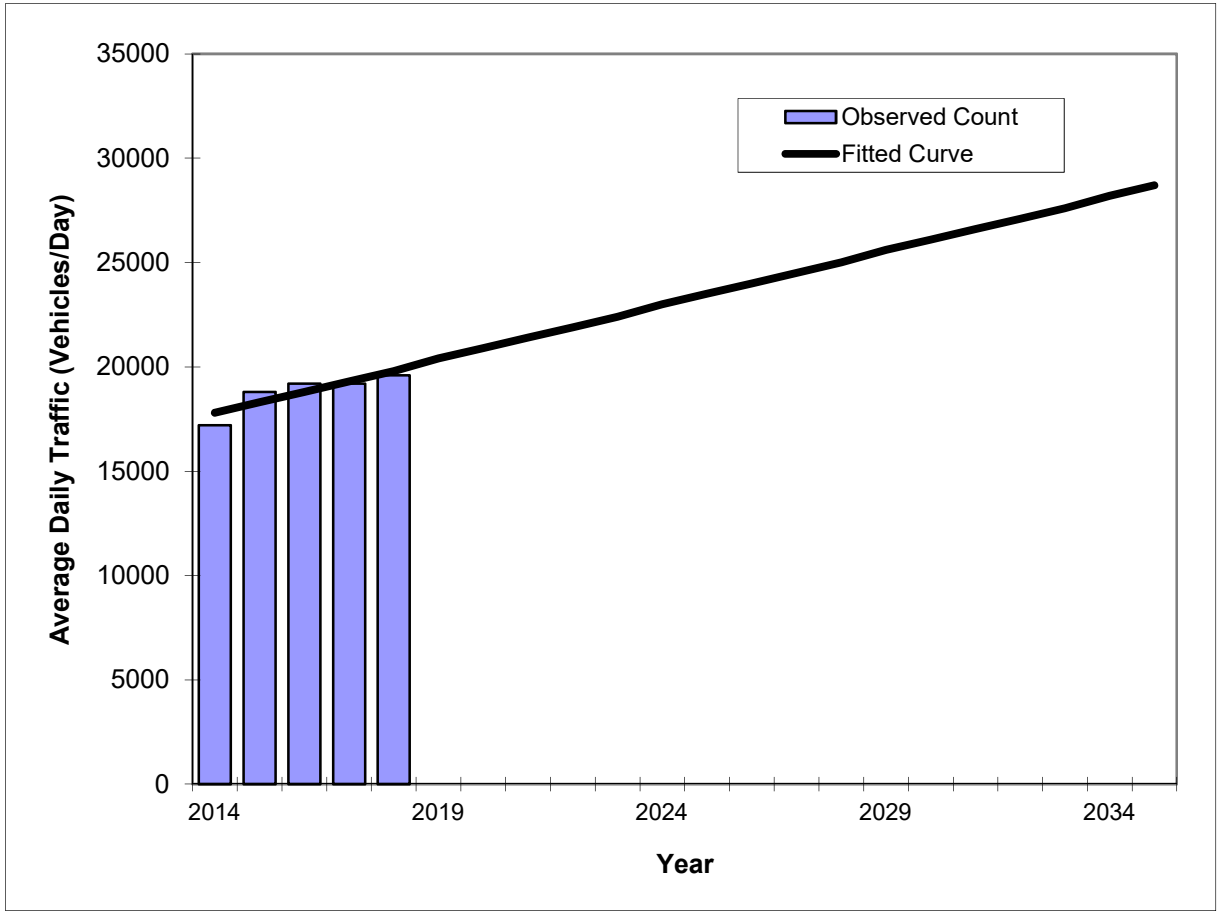
Straight Line Growth Option

Traffic Trends - V03.a

GRAVES AVE -- Veterans Memorial Pkwy to Kentucky Ave

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	775
Highway:	GRAVES AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2014	17200	17800
2015	18800	18300
2016	19200	18800
2017	19200	19300
2018	19600	19800
2020 Opening Year Trend		
2020	N/A	20900
2025 Mid-Year Trend		
2025	N/A	23500
2030 Design Year Trend		
2030	N/A	26100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	520
Trend R-squared:	76.82%
Trend Annual Historic Growth Rate:	2.81%
Trend Growth Rate (2018 to Design Year):	2.65%
Printed:	30-Jul-19

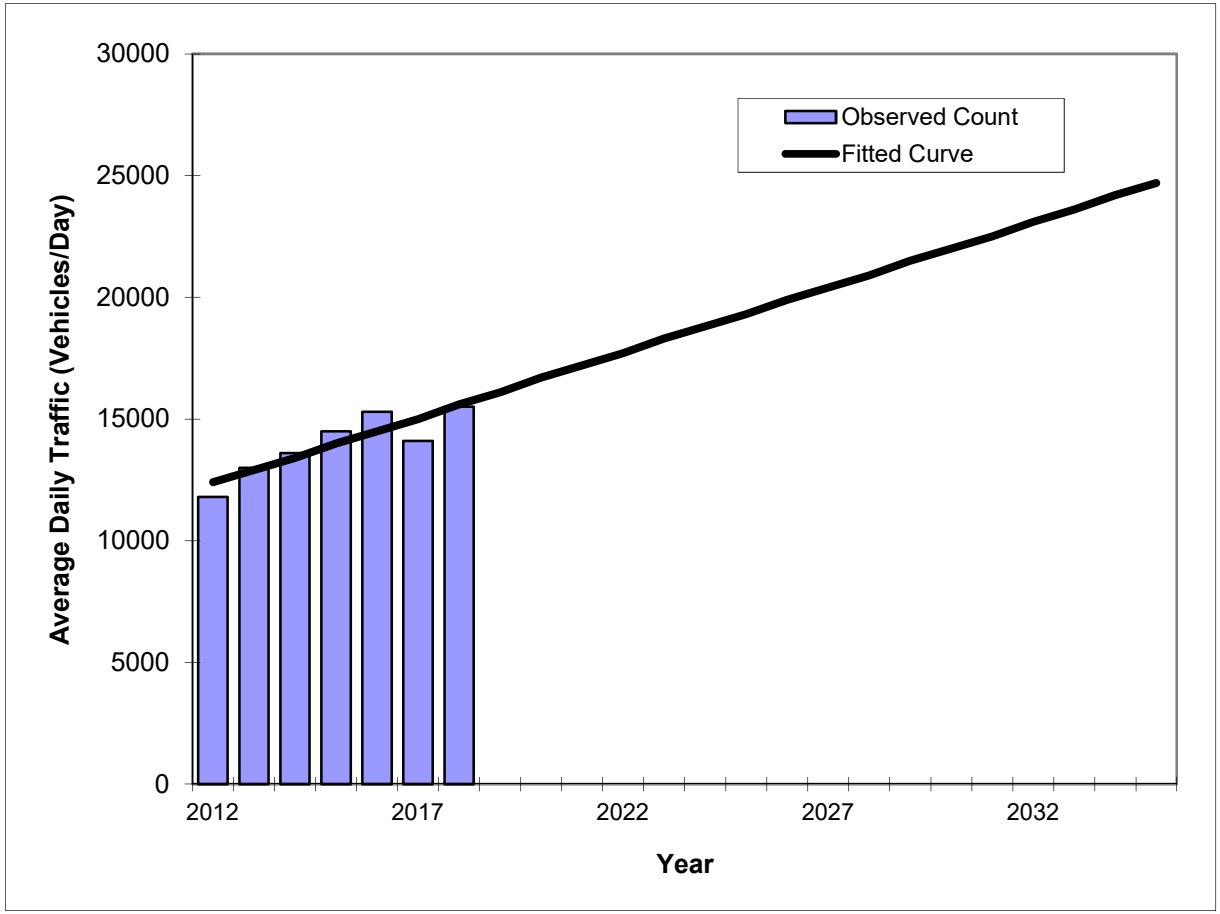
Straight Line Growth Option

Traffic Trends - V03.a

GRAVES AVE -- Kentucky Ave to Howland Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	900
Highway:	GRAVES AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2012	11800	12400
2013	13000	12900
2014	13600	13400
2015	14500	14000
2016	15300	14500
2017	14100	15000
2018	15500	15600
2020 Opening Year Trend		
2020	N/A	16700
2025 Mid-Year Trend		
2025	N/A	19300
2030 Design Year Trend		
2030	N/A	22000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	536
Trend R-squared:	78.83%
Trend Annual Historic Growth Rate:	4.30%
Trend Growth Rate (2018 to Design Year):	3.42%
Printed:	30-Jul-19

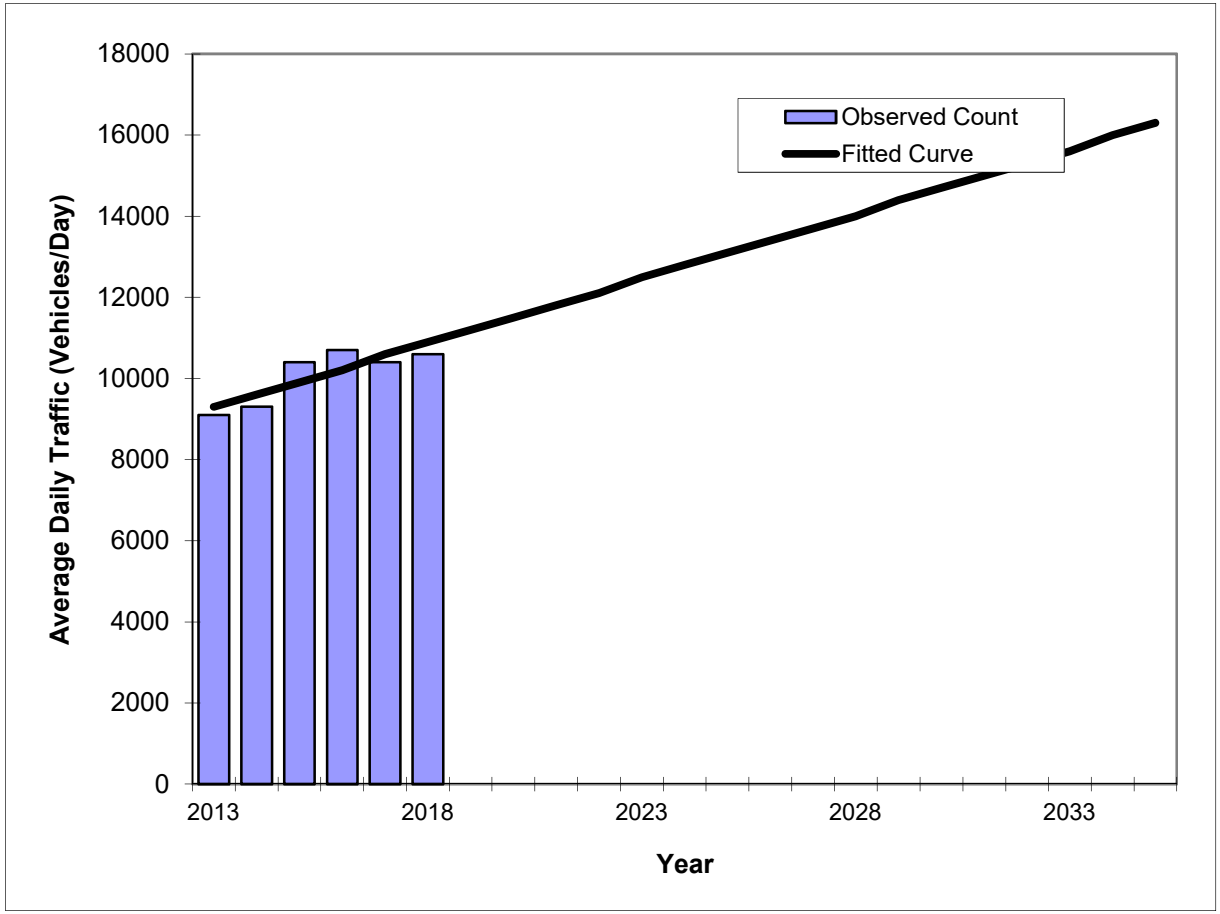
Straight Line Growth Option

Traffic Trends - V03.a

KENTUCKY AVE -- SR 472 to Graves Ave

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1030
Highway:	KENTUCKY AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2013	9100	9300
2014	9300	9600
2015	10400	9900
2016	10700	10200
2017	10400	10600
2018	10600	10900
2020 Opening Year Trend		
2020	N/A	11500
2025 Mid-Year Trend		
2025	N/A	13100
2030 Design Year Trend		
2030	N/A	14700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	317
Trend R-squared:	72.48%
Trend Annual Historic Growth Rate:	3.44%
Trend Growth Rate (2018 to Design Year):	2.91%
Printed:	30-Jul-19

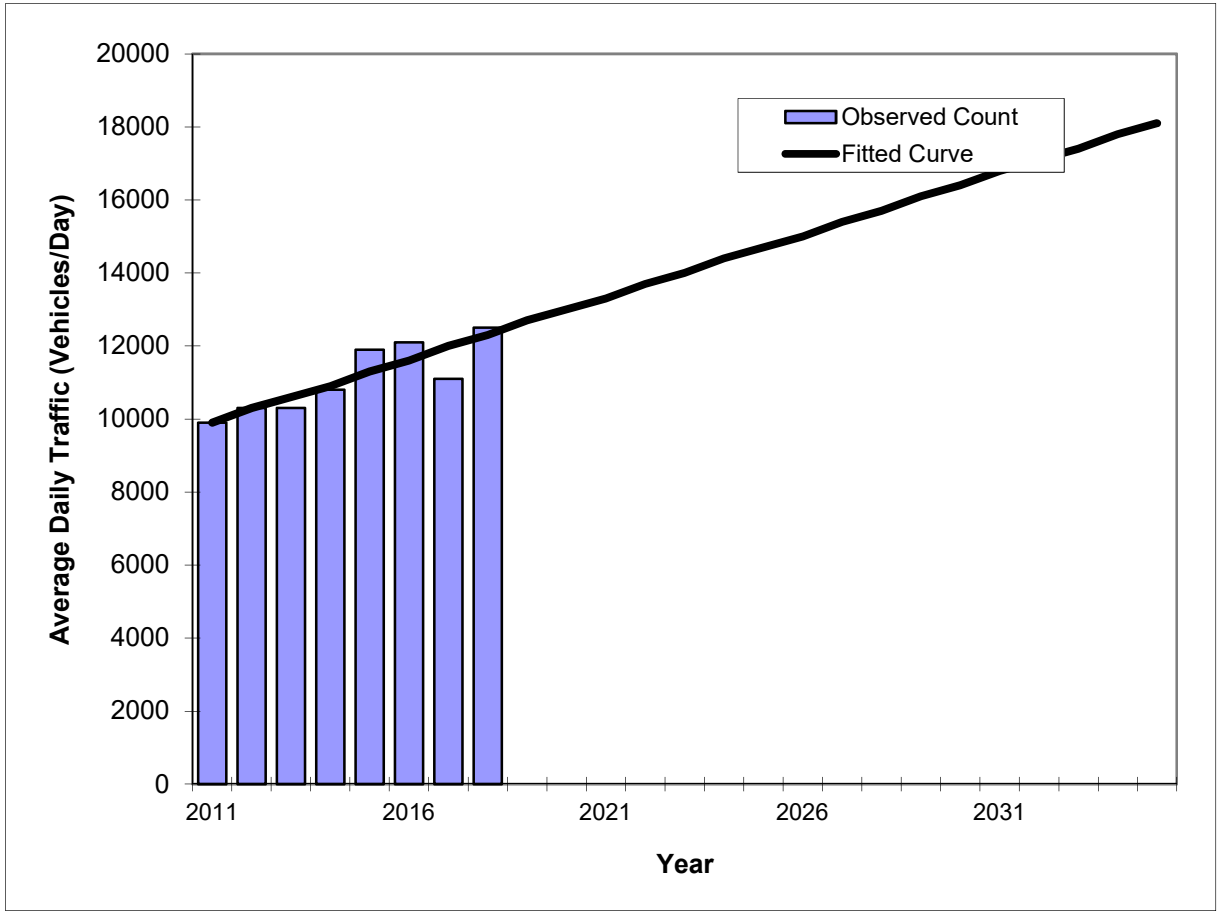
Straight Line Growth Option

Traffic Trends - V03.a

MARTIN L KING BLTWY -- Orange Camp Rd to Cassadaga Rd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1942
Highway:	MARTIN L KING BLTWY



Year	Traffic (ADT/AADT) Count*	Trend**
2011	9900	9900
2012	10300	10300
2013	10300	10600
2014	10800	10900
2015	11900	11300
2016	12100	11600
2017	11100	12000
2018	12500	12300
2020 Opening Year Trend		
2020	N/A	13000
2025 Mid-Year Trend		
2025	N/A	14700
2030 Design Year Trend		
2030	N/A	16400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	342
Trend R-squared:	76.50%
Trend Annual Historic Growth Rate:	3.46%
Trend Growth Rate (2018 to Design Year):	2.78%
Printed:	30-Jul-19

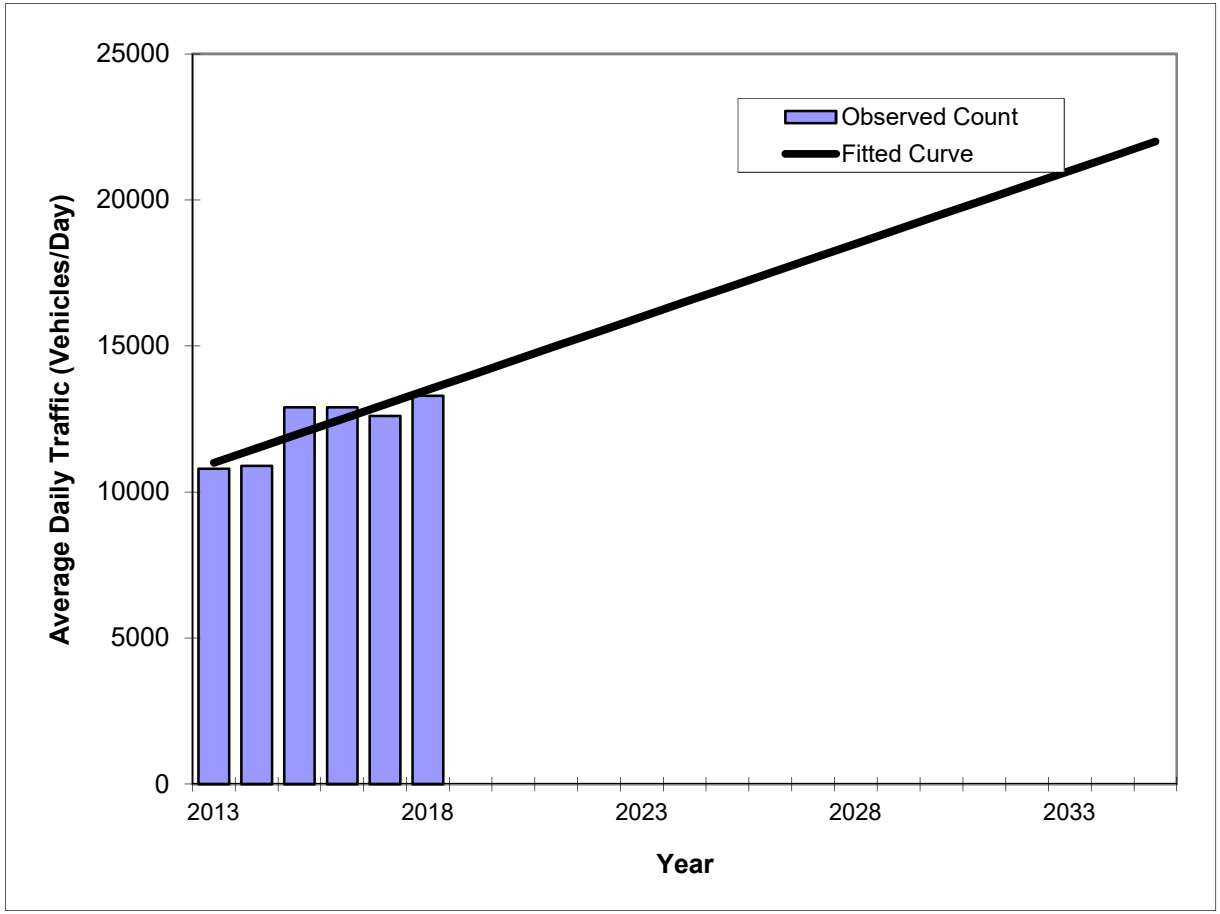
Straight Line Growth Option

Traffic Trends - V03.a

MARTIN L KING BLTWY -- Cassadaga Rd to SR 472

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1940
Highway:	MARTIN L KING BLTWY



Year	Traffic (ADT/AADT) Count*	Trend**
2013	10800	11000
2014	10900	11500
2015	12900	12000
2016	12900	12500
2017	12600	13000
2018	13300	13500
2020 Opening Year Trend		
2020	N/A	14500
2025 Mid-Year Trend		
2025	N/A	17000
2030 Design Year Trend		
2030	N/A	19500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	503
Trend R-squared:	73.83%
Trend Annual Historic Growth Rate:	4.55%
Trend Growth Rate (2018 to Design Year):	3.70%
Printed:	30-Jul-19

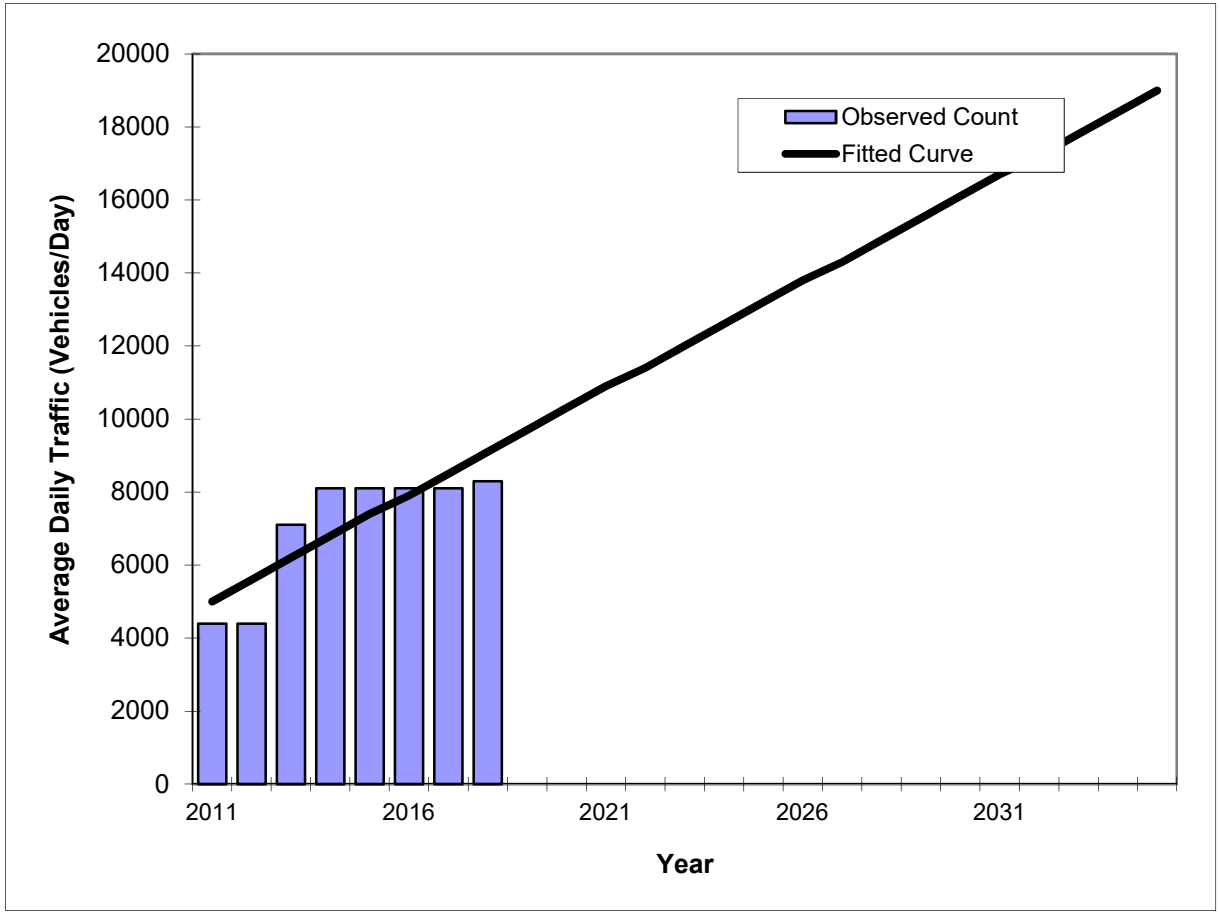
Straight Line Growth Option

Traffic Trends - V03.a

NORMANDY BLVD -- Graves Ave to Rhode Island Ave

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-105.000
Highway:	NORMANDY BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2011	4400	5000
2012	4400	5600
2013	7100	6200
2014	8100	6800
2015	8100	7400
2016	8100	7900
2017	8100	8500
2018	8300	9100
2020 Opening Year Trend		
2020	N/A	10300
2025 Mid-Year Trend		
2025	N/A	13200
2030 Design Year Trend		
2030	N/A	16100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	581
Trend R-squared:	70.82%
Trend Annual Historic Growth Rate:	11.71%
Trend Growth Rate (2018 to Design Year):	6.41%
Printed:	30-Jul-19

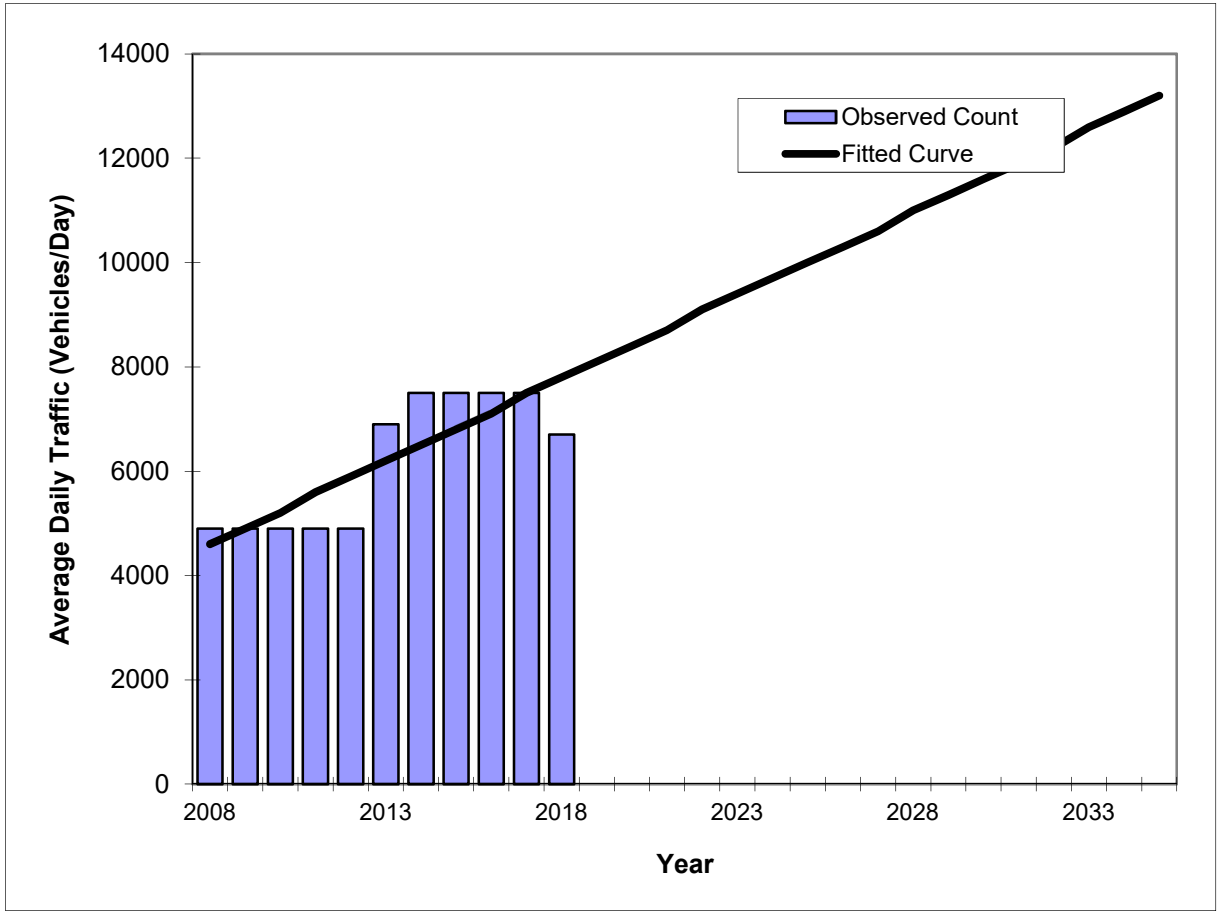
Straight Line Growth Option

Traffic Trends - V03.a

NORMANDY BLVD -- Rhode Island Ave Elkcam Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-105.000
Highway:	NORMANDY BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2008	4900	4600
2009	4900	4900
2010	4900	5200
2011	4900	5600
2012	4900	5900
2013	6900	6200
2014	7500	6500
2015	7500	6800
2016	7500	7100
2017	7500	7500
2018	6700	7800
2020 Opening Year Trend		
2020	N/A	8400
2025 Mid-Year Trend		
2025	N/A	10000
2030 Design Year Trend		
2030	N/A	11600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	318
Trend R-squared:	69.82%
Trend Annual Historic Growth Rate:	6.96%
Trend Growth Rate (2018 to Design Year):	4.06%
Printed:	30-Jul-19

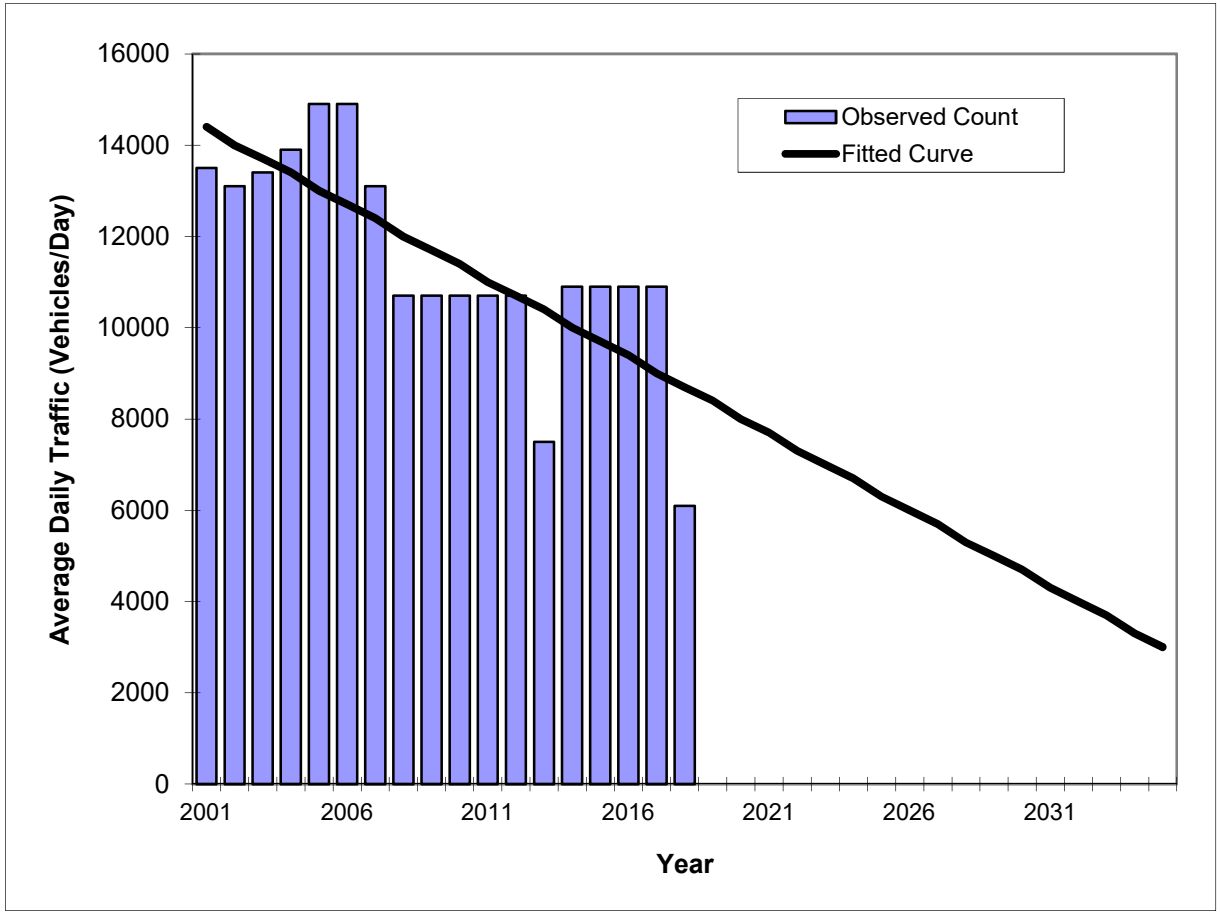
Straight Line Growth Option

Traffic Trends - V03.a

NORMANDY BLVD -- Elkcam Blvd to Saxon Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-105.030
Highway:	NORMANDY BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2001	13500	14400
2002	13100	14000
2003	13400	13700
2004	13900	13400
2005	14900	13000
2006	14900	12700
2007	13100	12400
2008	10700	12000
2009	10700	11700
2010	10700	11400
2011	10700	11000
2012	10700	10700
2013	7500	10400
2014	10900	10000
2015	10900	9700
2016	10900	9400
2017	10900	9000
2018	6100	8700
2020 Opening Year Trend		
2020	N/A	8000
2025 Mid-Year Trend		
2025	N/A	6300
2030 Design Year Trend		
2030	N/A	4700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-334
Trend R-squared:	59.30%
Trend Annual Historic Growth Rate:	-2.33%
Trend Growth Rate (2018 to Design Year):	-3.83%
Printed:	30-Jul-19

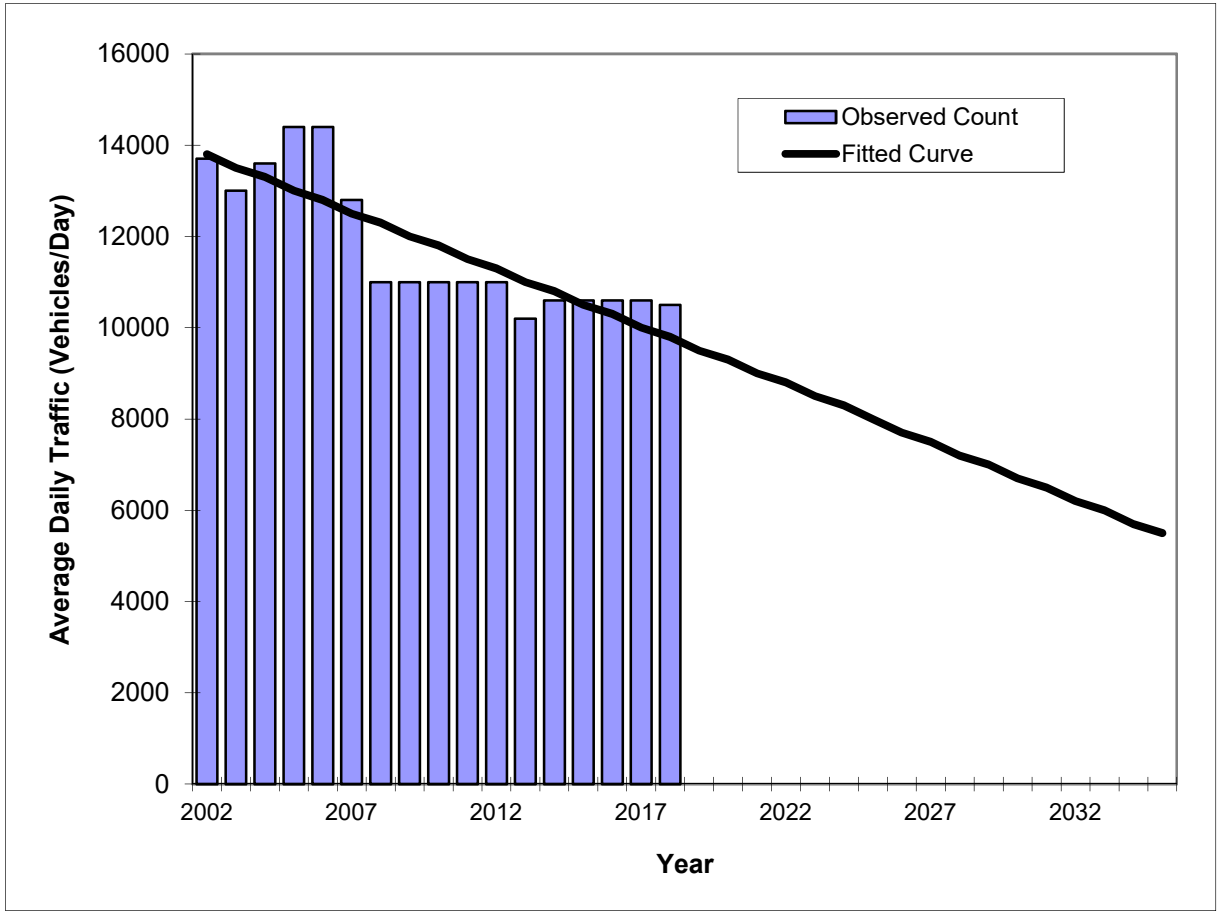
Straight Line Growth Option

Traffic Trends - V03.a

NORMANDY BLVD -- Saxon Blvd to Deltona Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-105.050
Highway:	NORMANDY BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2002	13700	13800
2003	13000	13500
2004	13600	13300
2005	14400	13000
2006	14400	12800
2007	12800	12500
2008	11000	12300
2009	11000	12000
2010	11000	11800
2011	11000	11500
2012	11000	11300
2013	10200	11000
2014	10600	10800
2015	10600	10500
2016	10600	10300
2017	10600	10000
2018	10500	9800
2020 Opening Year Trend		
2020	N/A	9300
2025 Mid-Year Trend		
2025	N/A	8000
2030 Design Year Trend		
2030	N/A	6700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-251
Trend R-squared:	71.39%
Trend Annual Historic Growth Rate:	-1.81%
Trend Growth Rate (2018 to Design Year):	-2.64%
Printed:	30-Jul-19

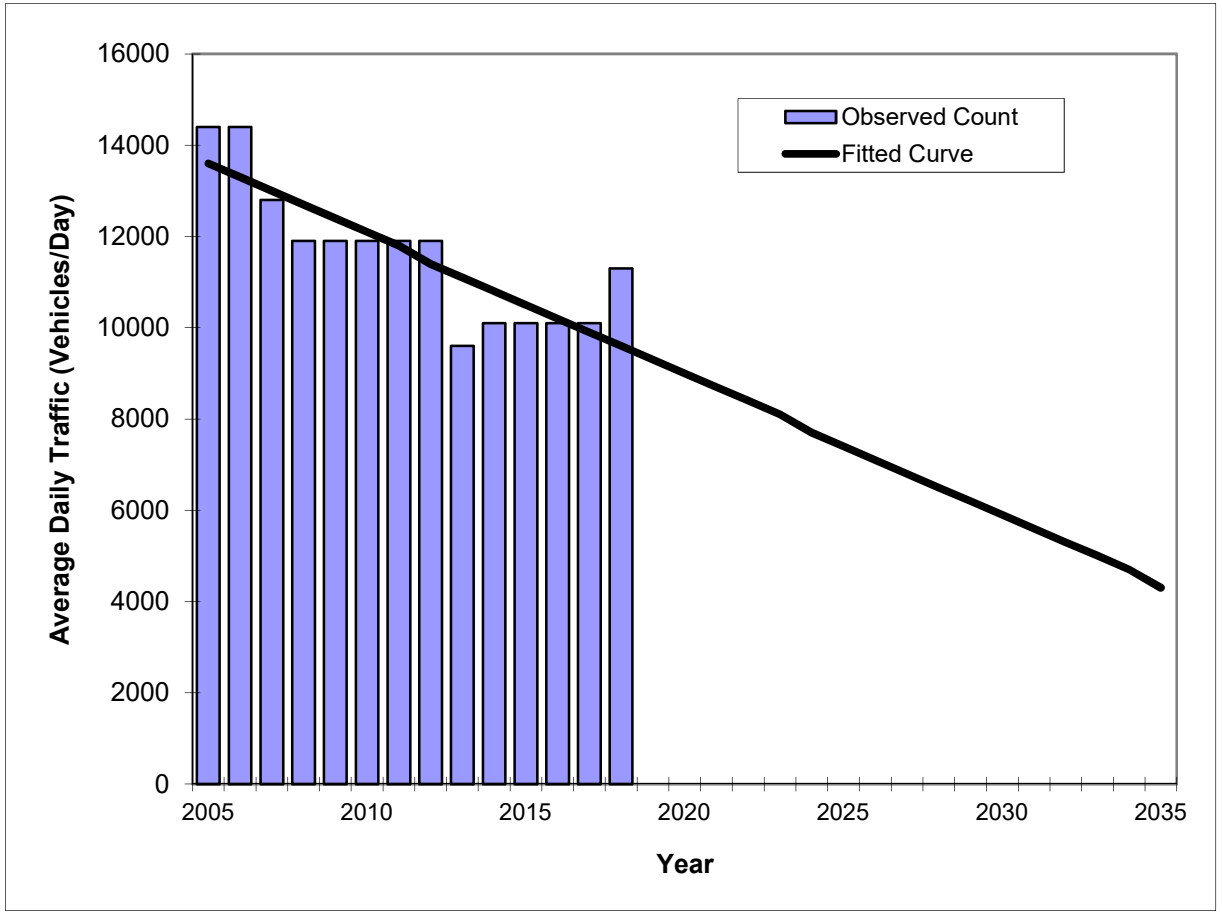
Straight Line Growth Option

Traffic Trends - V03.a

NORMANDY BLVD -- Deltona Blvd to Tivoli Dr

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-105.070
Highway:	NORMANDY BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2005	14400	13600
2006	14400	13300
2007	12800	13000
2008	11900	12700
2009	11900	12400
2010	11900	12100
2011	11900	11800
2012	11900	11400
2013	9600	11100
2014	10100	10800
2015	10100	10500
2016	10100	10200
2017	10100	9900
2018	11300	9600
2020 Opening Year Trend		
2020	N/A	9000
2025 Mid-Year Trend		
2025	N/A	7400
2030 Design Year Trend		
2030	N/A	5900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-309
Trend R-squared:	70.65%
Trend Annual Historic Growth Rate:	-2.26%
Trend Growth Rate (2018 to Design Year):	-3.21%
Printed:	30-Jul-19

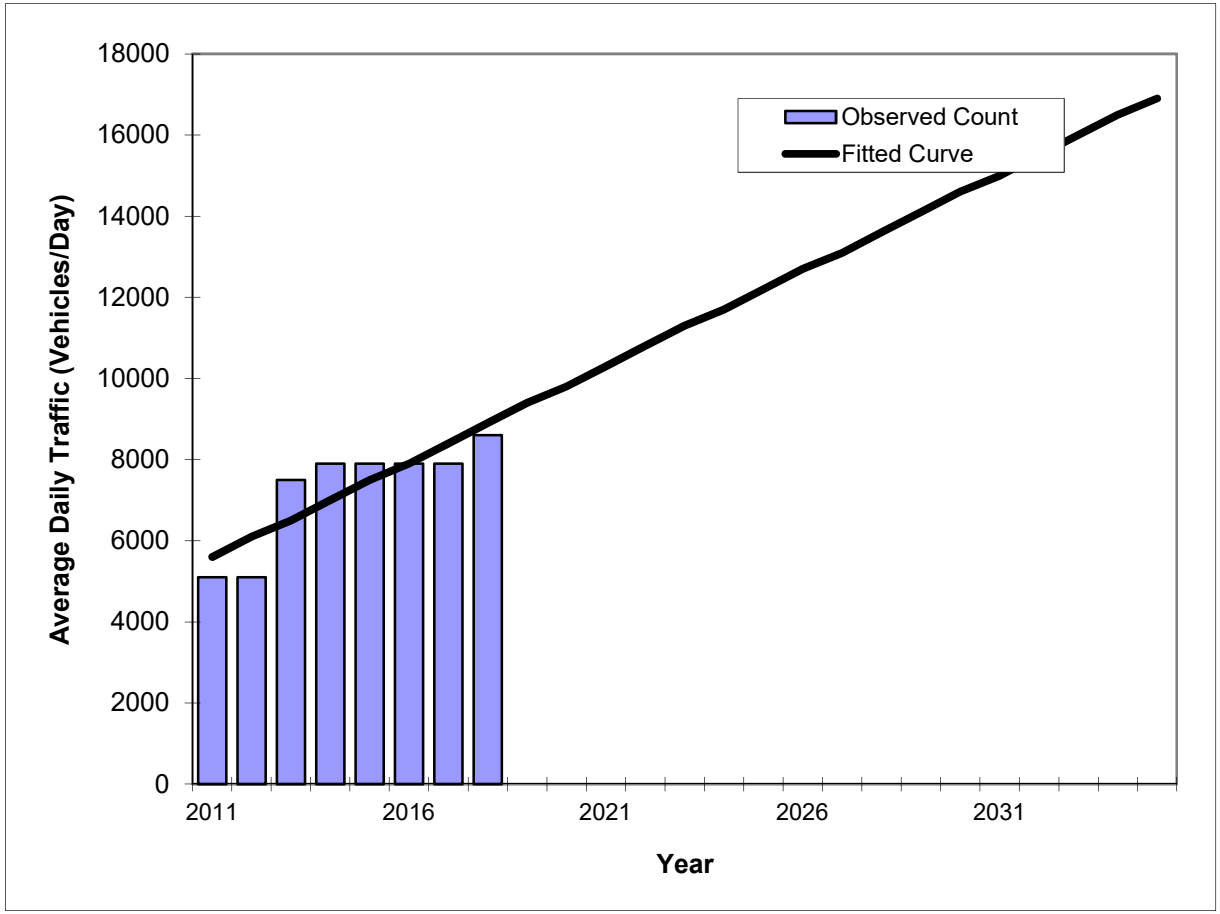
Straight Line Growth Option

Traffic Trends - V03.a

ELKCAM BLVD -- Normandy Blvd to Ft Smith Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-45.000
Highway:	ELKCAM BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2011	5100	5600
2012	5100	6100
2013	7500	6500
2014	7900	7000
2015	7900	7500
2016	7900	7900
2017	7900	8400
2018	8600	8900
2020 Opening Year Trend		
2020	N/A	9800
2025 Mid-Year Trend		
2025	N/A	12200
2030 Design Year Trend		
2030	N/A	14600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	473
Trend R-squared:	73.19%
Trend Annual Historic Growth Rate:	8.42%
Trend Growth Rate (2018 to Design Year):	5.34%
Printed:	30-Jul-19

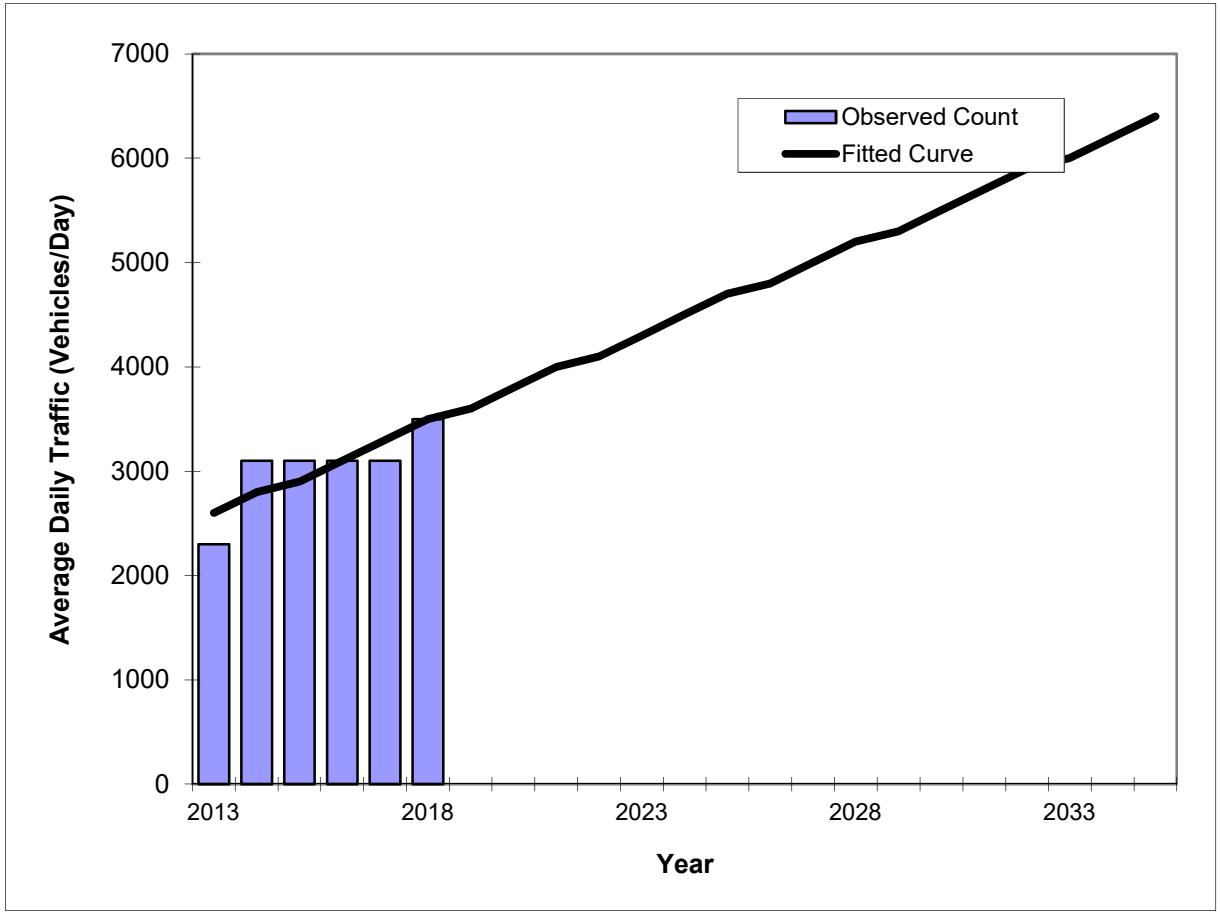
Straight Line Growth Option

Traffic Trends - V03.a

FORT SMITH BLVD -- Elkcam Blvd to Providence Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-60.000
Highway:	FORT SMITH BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2013	2300	2600
2014	3100	2800
2015	3100	2900
2016	3100	3100
2017	3100	3300
2018	3500	3500
2020 Opening Year Trend		
2020	N/A	3800
2025 Mid-Year Trend		
2025	N/A	4700
2030 Design Year Trend		
2030	N/A	5500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	171
Trend R-squared:	66.50%
Trend Annual Historic Growth Rate:	6.92%
Trend Growth Rate (2018 to Design Year):	4.76%
Printed:	30-Jul-19

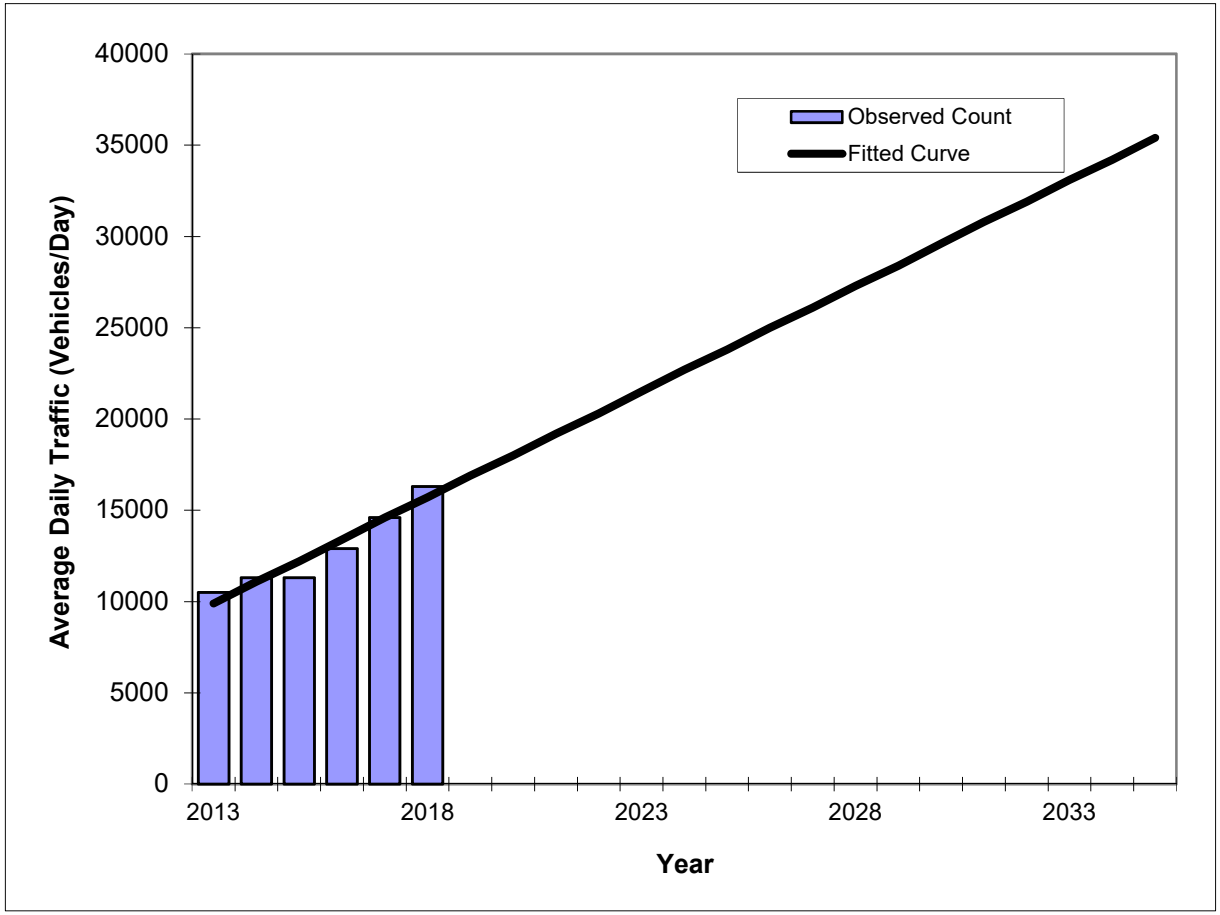
Straight Line Growth Option

Traffic Trends - V03.a

FORT SMITH BLVD -- Providence Blvd to Newmark Dr

FIN#	0
Location	1

County:	Volusia (79)
Station #:	DLT-60.020
Highway:	FORT SMITH BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2013	10500	9900
2014	11300	11100
2015	11300	12200
2016	12900	13400
2017	14600	14600
2018	16300	15700
2020 Opening Year Trend		
2020	N/A	18000
2025 Mid-Year Trend		
2025	N/A	23800
2030 Design Year Trend		
2030	N/A	29600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	1,157
Trend R-squared:	92.66%
Trend Annual Historic Growth Rate:	11.72%
Trend Growth Rate (2018 to Design Year):	7.38%
Printed:	16-Mar-20

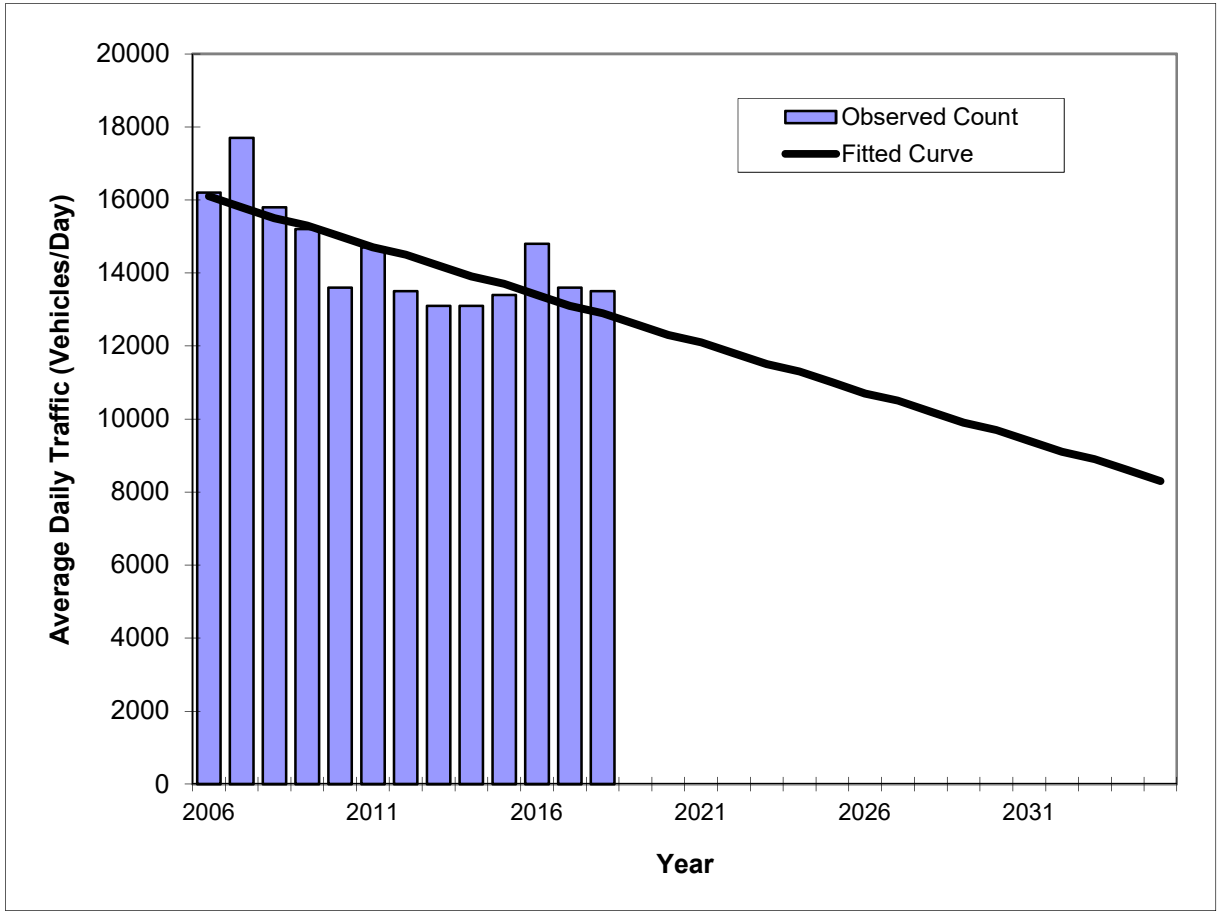
Straight Line Growth Option

Traffic Trends - V03.a

PROVIDENCE BLVD -- Elkcam Blvd to Ft Smith Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1541
Highway:	PROVIDENCE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2006	16200	16100
2007	17700	15800
2008	15800	15500
2009	15200	15300
2010	13600	15000
2011	14700	14700
2012	13500	14500
2013	13100	14200
2014	13100	13900
2015	13400	13700
2016	14800	13400
2017	13600	13100
2018	13500	12900
2020 Opening Year Trend		
2020	N/A	12300
2025 Mid-Year Trend		
2025	N/A	11000
2030 Design Year Trend		
2030	N/A	9700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-268
Trend R-squared:	53.89%
Trend Annual Historic Growth Rate:	-1.66%
Trend Growth Rate (2018 to Design Year):	-2.07%
Printed:	30-Jul-19

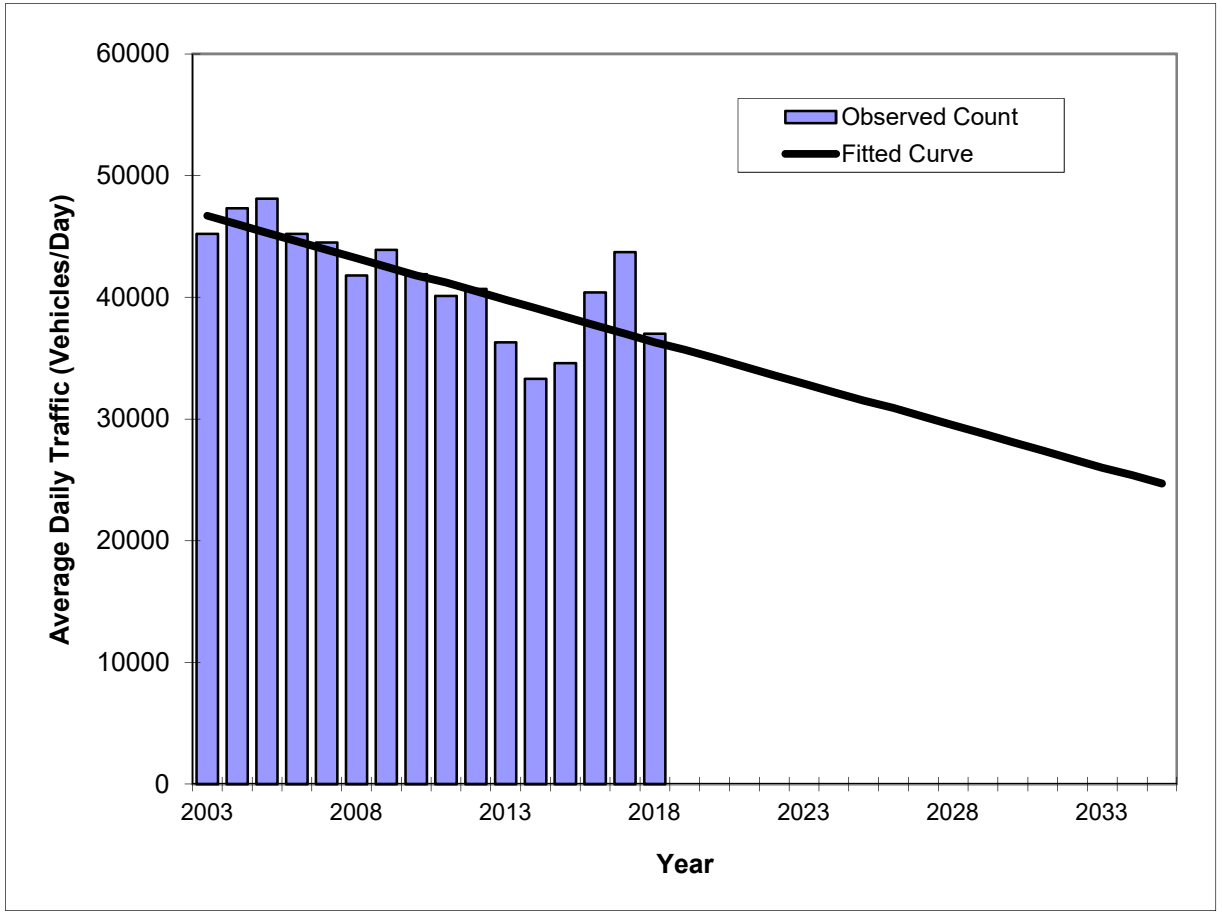
Straight Line Growth Option

Traffic Trends - V03.a

SAXON BLVD -- Veterans Memorial Pkwy to FDOT Park & Ride

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1674
Highway:	SAXON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2003	45200	46700
2004	47300	46000
2005	48100	45300
2006	45200	44600
2007	44500	43900
2008	41800	43200
2009	43900	42500
2010	41900	41800
2011	40100	41200
2012	40700	40500
2013	36300	39800
2014	33300	39100
2015	34600	38400
2016	40400	37700
2017	43700	37000
2018	37000	36300
2020 Opening Year Trend		
2020	N/A	35000
2025 Mid-Year Trend		
2025	N/A	31500
2030 Design Year Trend		
2030	N/A	28100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-687
Trend R-squared:	55.27%
Trend Annual Historic Growth Rate:	-1.48%
Trend Growth Rate (2018 to Design Year):	-1.88%
Printed:	30-Jul-19

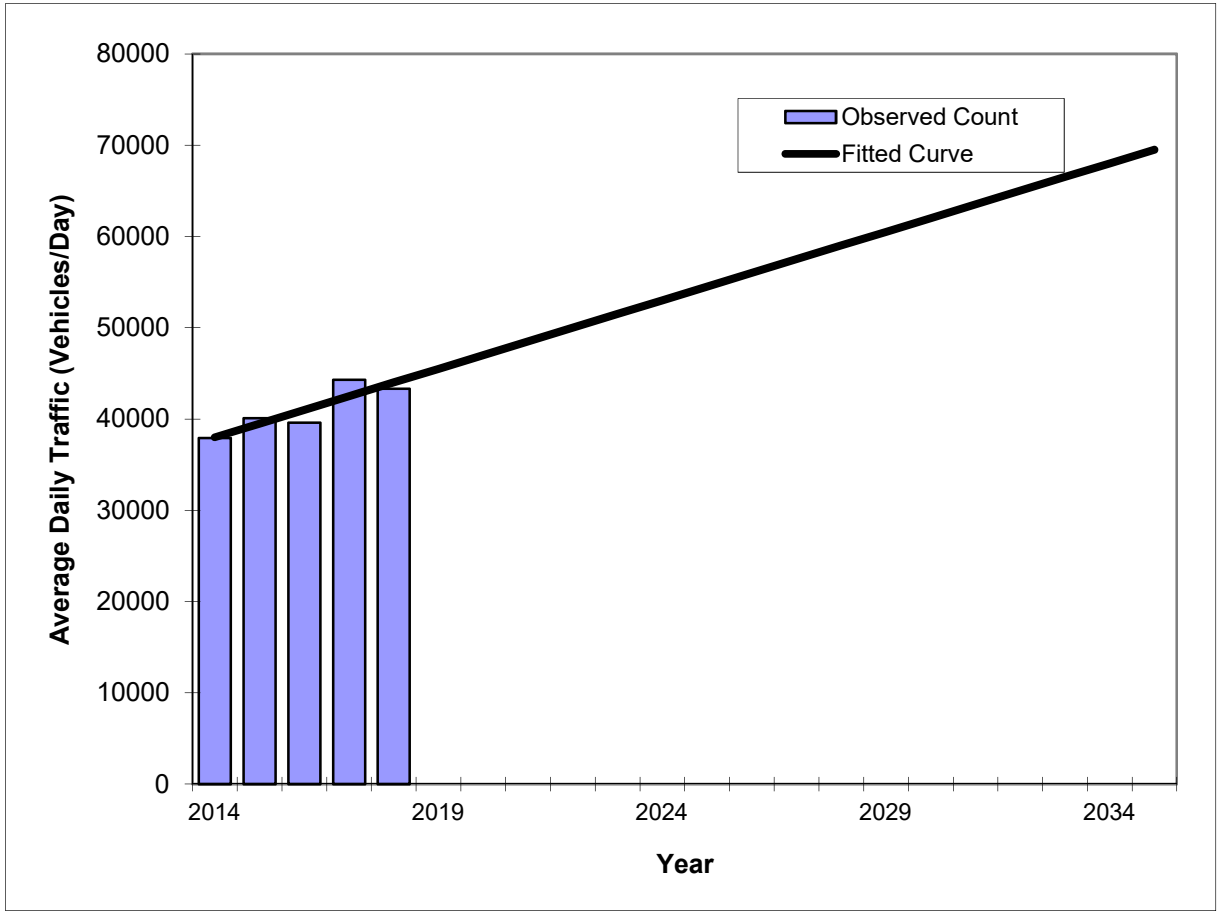
Straight Line Growth Option

Traffic Trends - V03.a

SAXON BLVD -- FDOT Park & Ride to I-4

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1685
Highway:	SAXON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2014	37900	38000
2015	40100	39500
2016	39600	41000
2017	44300	42500
2018	43300	44000
2020 Opening Year Trend		
2020	N/A	47000
2025 Mid-Year Trend		
2025	N/A	54500
2030 Design Year Trend		
2030	N/A	62000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	1,500
Trend R-squared:	78.80%
Trend Annual Historic Growth Rate:	3.95%
Trend Growth Rate (2018 to Design Year):	3.41%
Printed:	30-Jul-19

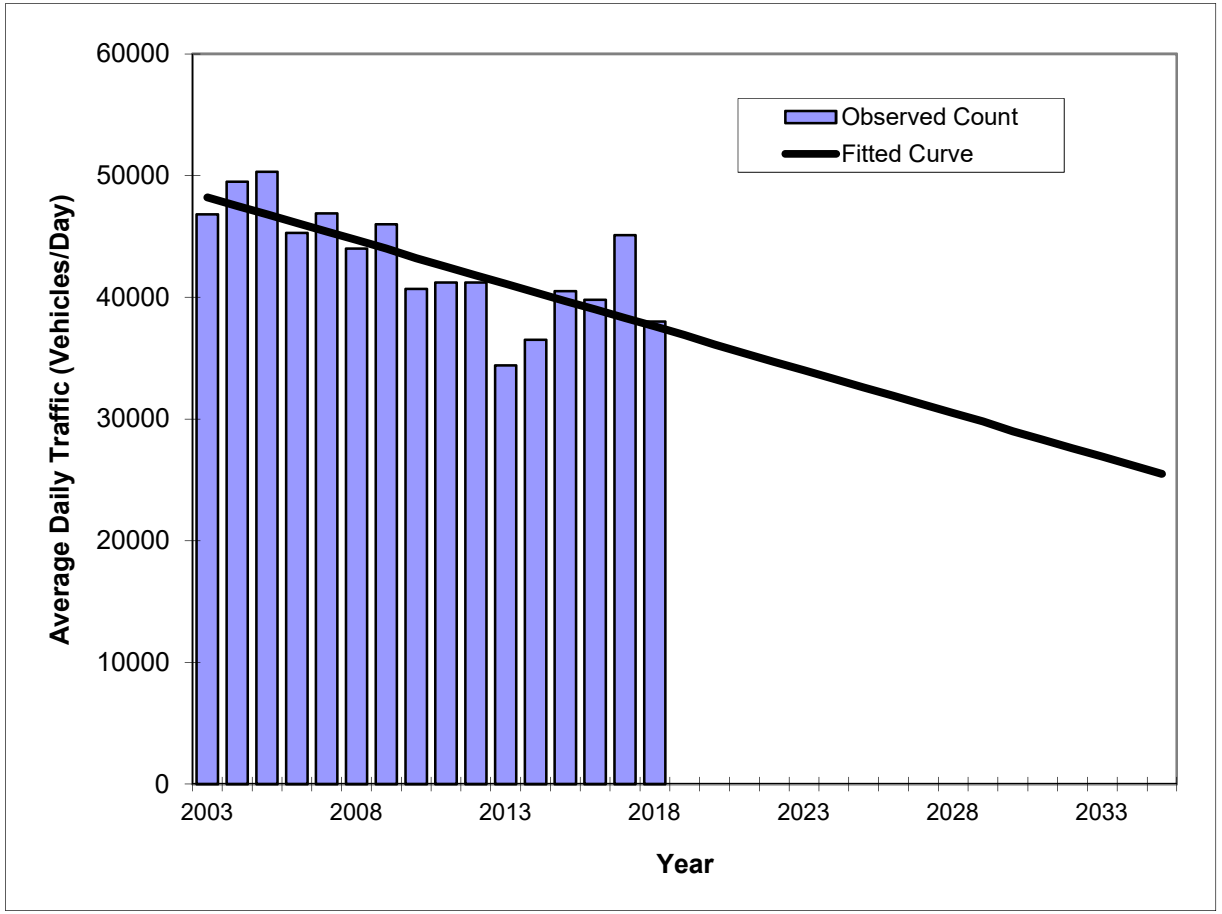
Straight Line Growth Option

Traffic Trends - V03.a

SAXON BLVD -- I-4 to Finland Dr

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1675
Highway:	SAXON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2003	46800	48200
2004	49500	47500
2005	50300	46800
2006	45300	46100
2007	46900	45400
2008	44000	44700
2009	46000	44000
2010	40700	43200
2011	41200	42500
2012	41200	41800
2013	34400	41100
2014	36500	40400
2015	40500	39700
2016	39800	39000
2017	45100	38300
2018	38000	37600
2020 Opening Year Trend		
2020	N/A	36100
2025 Mid-Year Trend		
2025	N/A	32600
2030 Design Year Trend		
2030	N/A	29000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-710
Trend R-squared:	54.51%
Trend Annual Historic Growth Rate:	-1.47%
Trend Growth Rate (2018 to Design Year):	-1.91%
Printed:	30-Jul-19

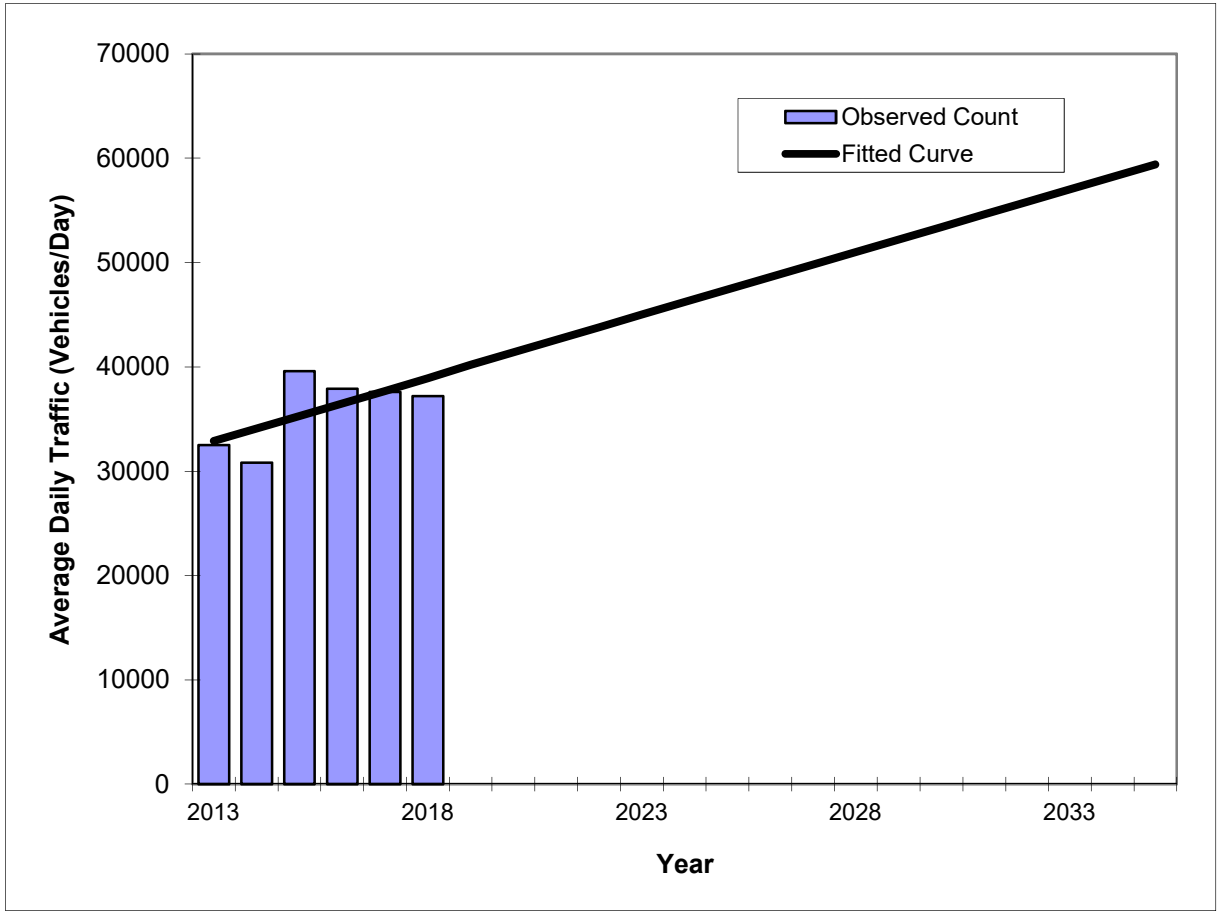
Straight Line Growth Option

Traffic Trends - V03.a

SAXON BLVD -- Finland Dr to Normandy Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1676
Highway:	SAXON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2013	32500	32900
2014	30800	34100
2015	39600	35300
2016	37900	36500
2017	37600	37700
2018	37200	38900
2020 Opening Year Trend		
2020	N/A	41400
2025 Mid-Year Trend		
2025	N/A	47400
2030 Design Year Trend		
2030	N/A	53400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,206
Trend R-squared:	42.52%
Trend Annual Historic Growth Rate:	3.65%
Trend Growth Rate (2018 to Design Year):	3.11%
Printed:	30-Jul-19

Straight Line Growth Option

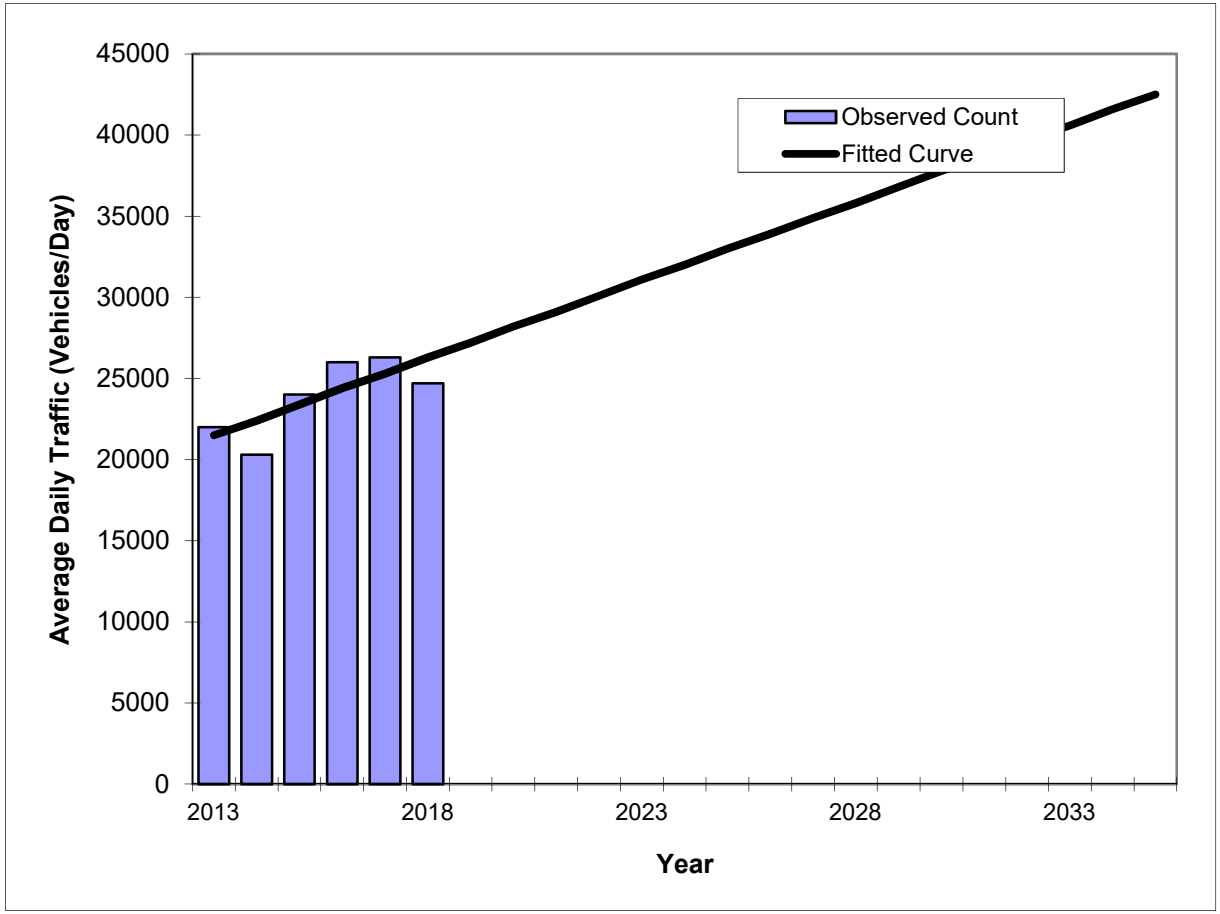
*Axle-Adjusted

Traffic Trends - V03.a

SAXON BLVD -- Normandy Blvd to Tivoli Dr

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1677
Highway:	SAXON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2013	22000	21500
2014	20300	22400
2015	24000	23400
2016	26000	24400
2017	26300	25300
2018	24700	26300
2020 Opening Year Trend		
2020	N/A	28200
2025 Mid-Year Trend		
2025	N/A	33000
2030 Design Year Trend		
2030	N/A	37800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	957
Trend R-squared:	58.54%
Trend Annual Historic Growth Rate:	4.47%
Trend Growth Rate (2018 to Design Year):	3.64%
Printed:	30-Jul-19

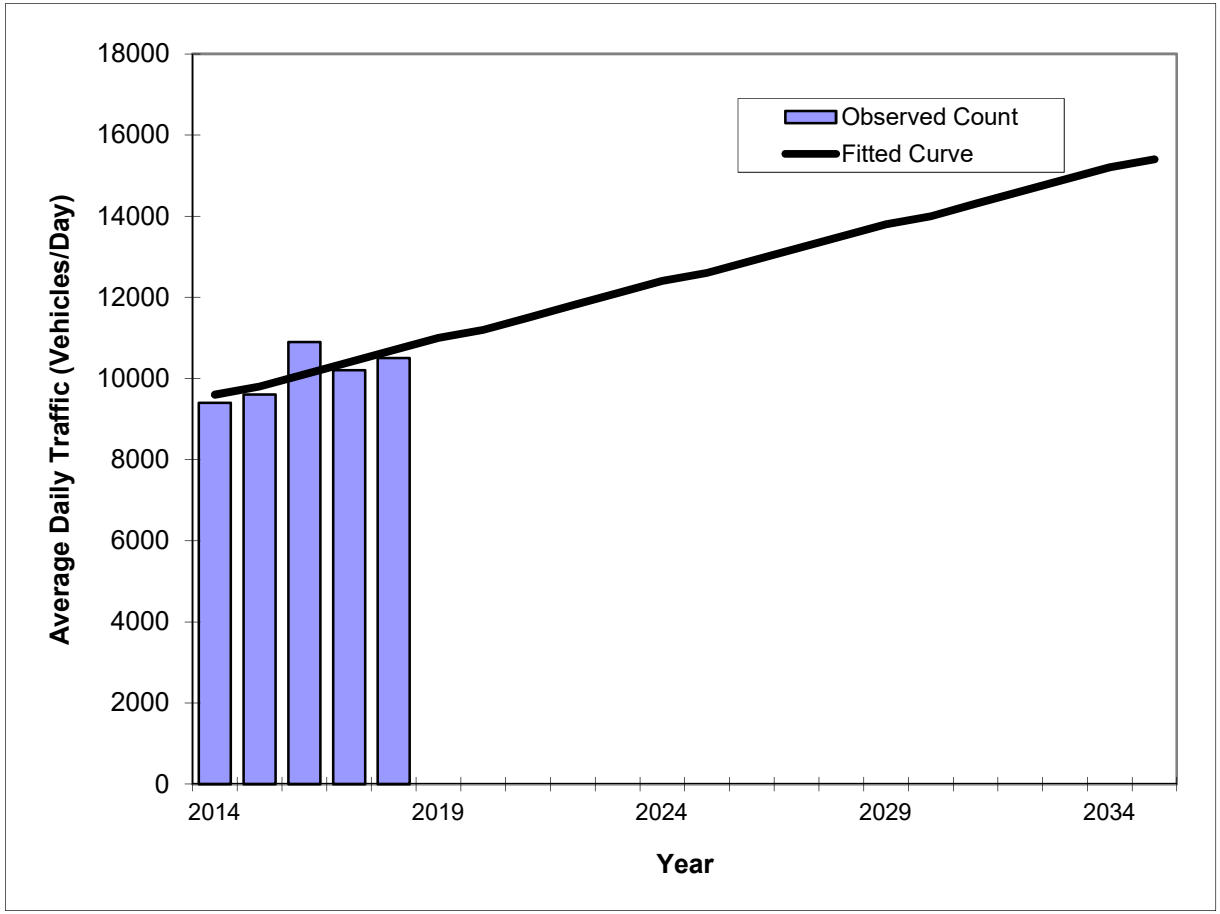
Straight Line Growth Option

Traffic Trends - V03.a

SAXON BLVD -- Tivoli Dr to Providence Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1679
Highway:	SAXON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2014	9400	9600
2015	9600	9800
2016	10900	10100
2017	10200	10400
2018	10500	10700
2020 Opening Year Trend		
2020	N/A	11200
2025 Mid-Year Trend		
2025	N/A	12600
2030 Design Year Trend		
2030	N/A	14000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	280
Trend R-squared:	50.65%
Trend Annual Historic Growth Rate:	2.86%
Trend Growth Rate (2018 to Design Year):	2.57%
Printed:	30-Jul-19

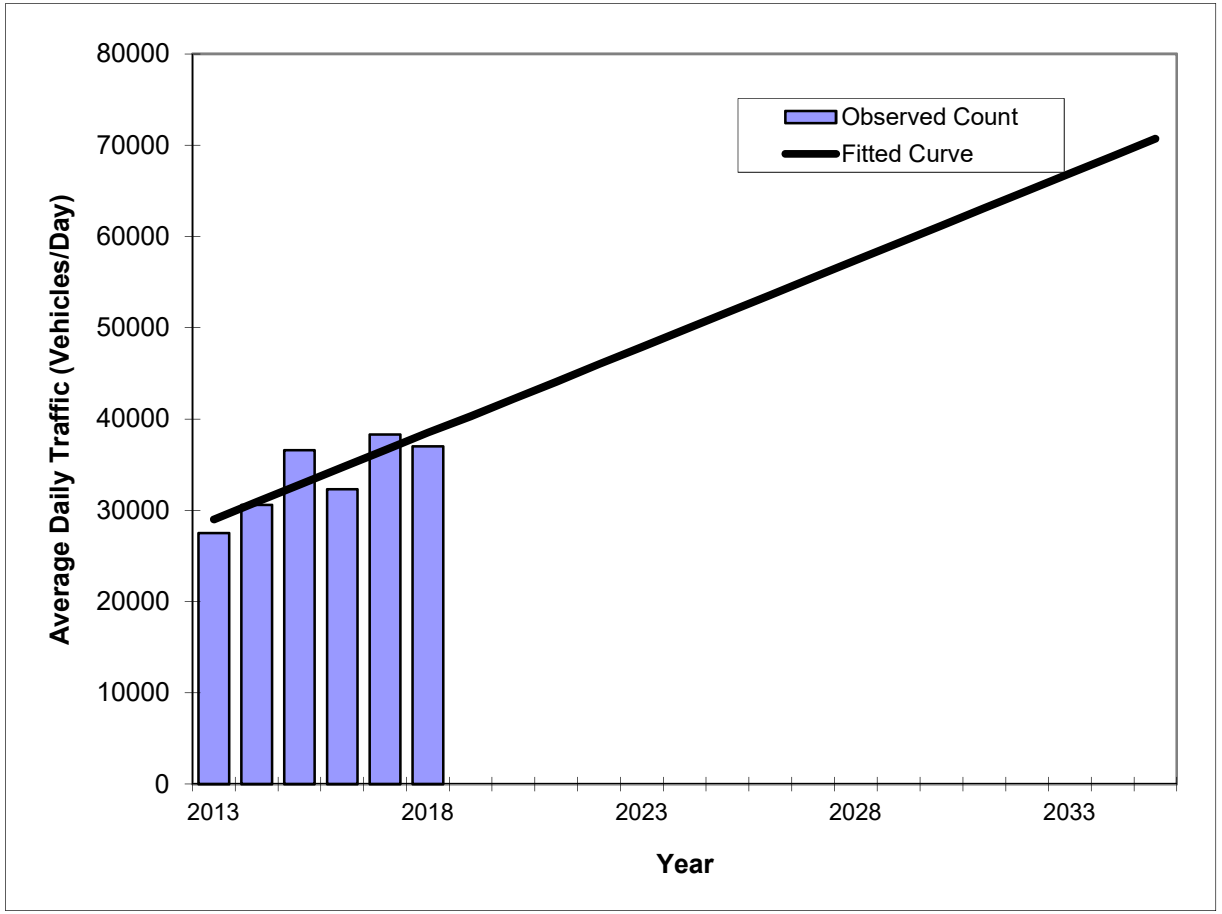
Straight Line Growth Option

Traffic Trends - V03.a

HOWLAND BOULEVARD -- I4 to Wolf Pack Run

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	901
Highway:	HOWLAND BOULEVARD



Year	Traffic (ADT/AADT) Count*	Trend**
2013	27500	29000
2014	30600	30900
2015	36600	32800
2016	32300	34700
2017	38300	36600
2018	37000	38500
2020 Opening Year Trend		
2020	N/A	42200
2025 Mid-Year Trend		
2025	N/A	51700
2030 Design Year Trend		
2030	N/A	61200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	1,894
Trend R-squared:	69.41%
Trend Annual Historic Growth Rate:	6.55%
Trend Growth Rate (2018 to Design Year):	4.91%
Printed:	30-Jul-19

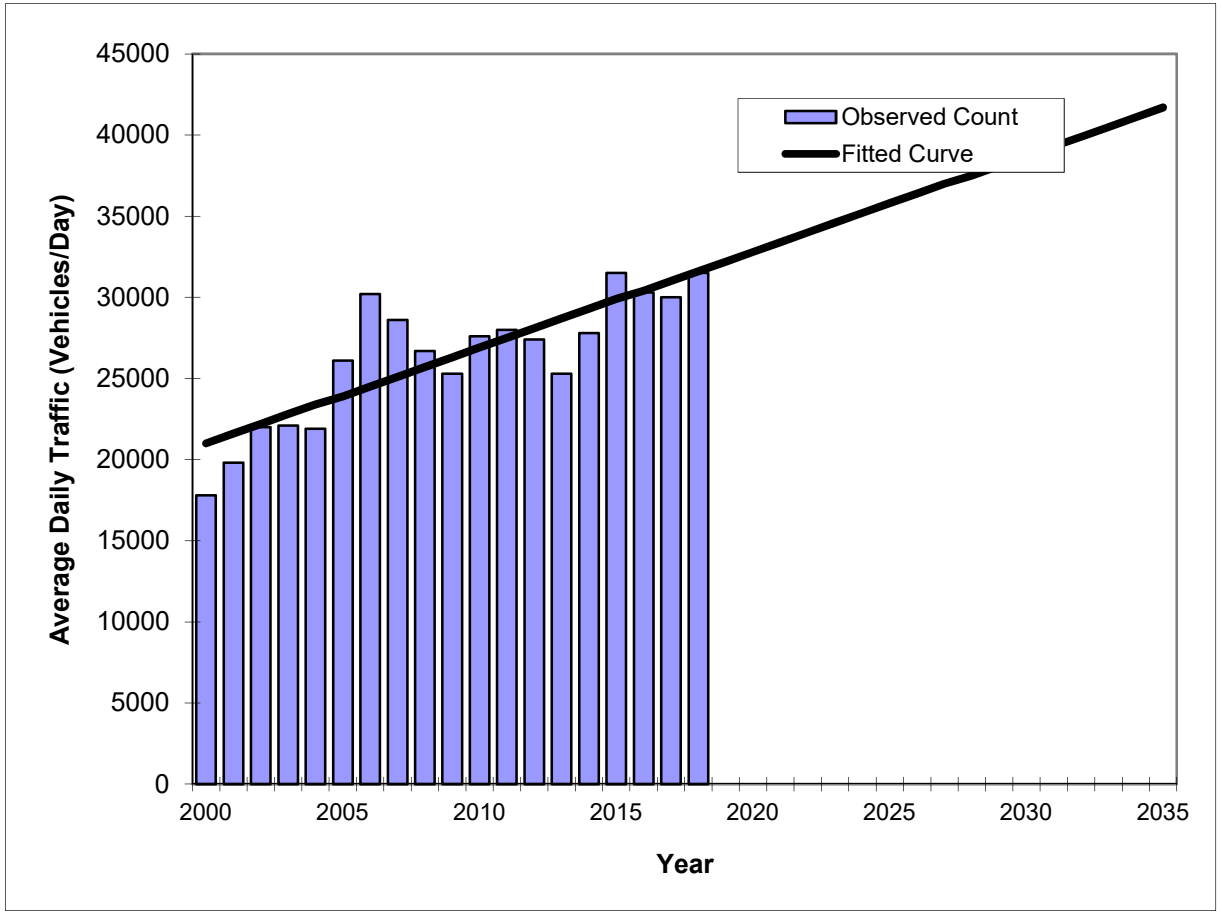
Straight Line Growth Option

Traffic Trends - V03.a

HOWLAND BOULEVARD -- Wolf Pack Run to Catalina Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	903
Highway:	HOWLAND BOULEVARD



Year	Traffic (ADT/AADT) Count*	Trend**
2000	17800	21000
2001	19800	21600
2002	22000	22200
2003	22100	22800
2004	21900	23400
2005	26100	23900
2006	30200	24500
2007	28600	25100
2008	26700	25700
2009	25300	26300
2010	27600	26900
2011	28000	27500
2012	27400	28100
2013	25300	28700
2014	27800	29300
2015	31500	29900
2016	30300	30400
2017	30000	31000
2018	31500	31600
2020 Opening Year Trend		
2020	N/A	32800
2025 Mid-Year Trend		
2025	N/A	35800
2030 Design Year Trend		
2030	N/A	38700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	591
Trend R-squared:	70.03%
Trend Annual Historic Growth Rate:	2.80%
Trend Growth Rate (2018 to Design Year):	1.87%
Printed:	30-Jul-19

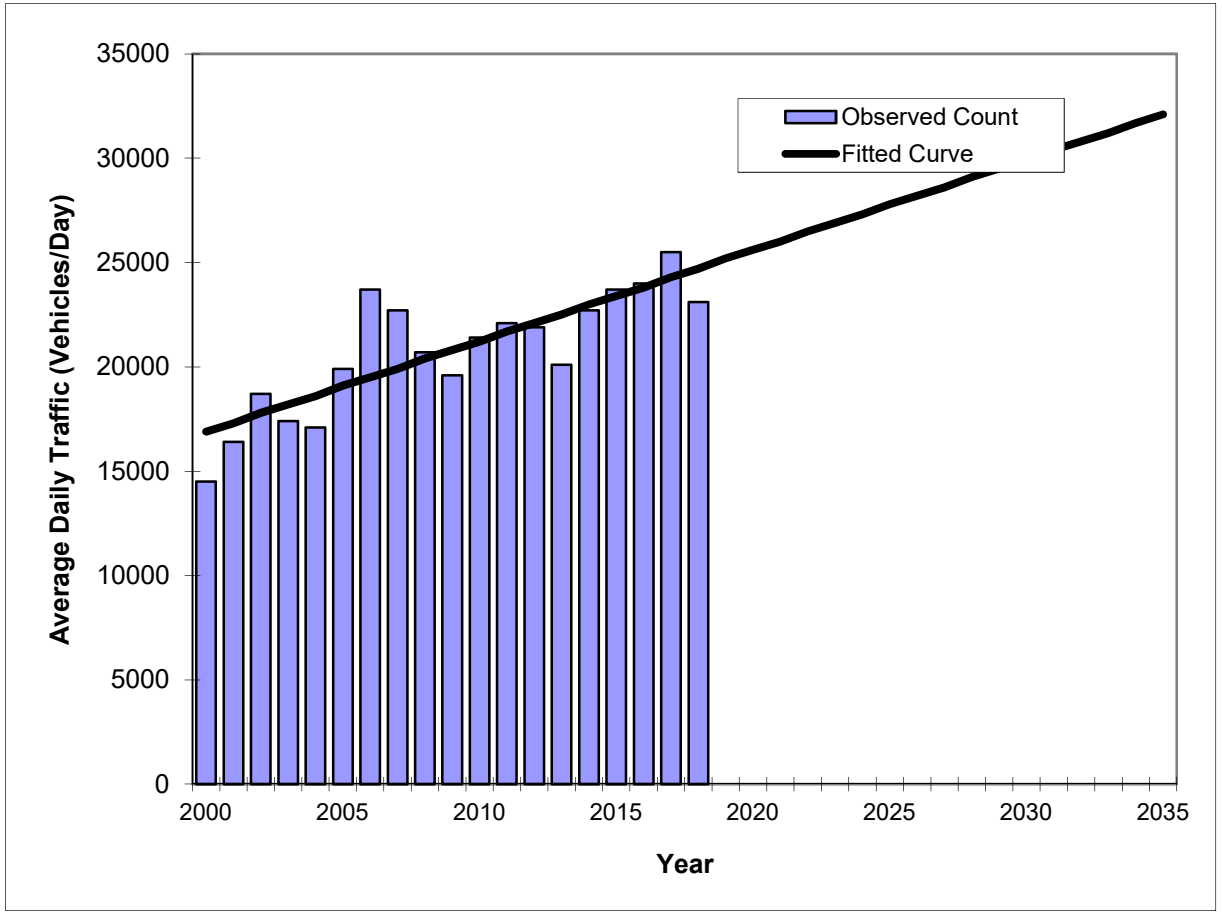
Straight Line Growth Option

Traffic Trends - V03.a

HOWLAND BOULEVARD -- Catalina Blvd to Providence Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	905
Highway:	HOWLAND BOULEVARD



Year	Traffic (ADT/AADT) Count*	Trend**
2000	14500	16900
2001	16400	17300
2002	18700	17800
2003	17400	18200
2004	17100	18600
2005	19900	19100
2006	23700	19500
2007	22700	19900
2008	20700	20400
2009	19600	20800
2010	21400	21200
2011	22100	21700
2012	21900	22100
2013	20100	22500
2014	22700	23000
2015	23700	23400
2016	24000	23800
2017	25500	24300
2018	23100	24700
2020 Opening Year Trend		
2020	N/A	25600
2025 Mid-Year Trend		
2025	N/A	27800
2030 Design Year Trend		
2030	N/A	29900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	435
Trend R-squared:	69.00%
Trend Annual Historic Growth Rate:	2.56%
Trend Growth Rate (2018 to Design Year):	1.75%
Printed:	30-Jul-19

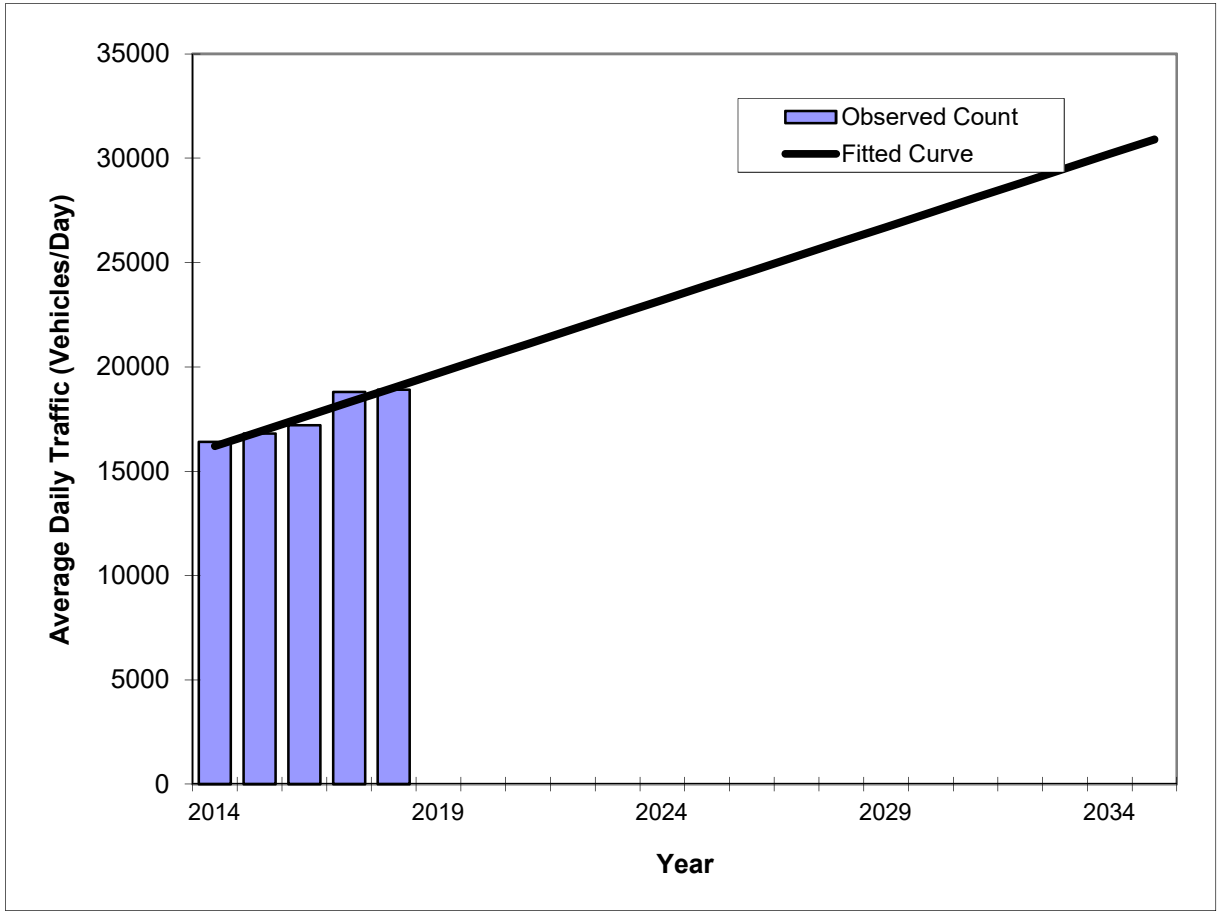
Straight Line Growth Option

Traffic Trends - V03.a

HOWLAND BOULEVARD -- Providence Blvd to Elkcam Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	906
Highway:	HOWLAND BOULEVARD



Year	Traffic (ADT/AADT) Count*	Trend**
2014	16400	16200
2015	16800	16900
2016	17200	17600
2017	18800	18300
2018	18900	19000
2020 Opening Year Trend		
2020	N/A	20400
2025 Mid-Year Trend		
2025	N/A	23900
2030 Design Year Trend		
2030	N/A	27400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	700
Trend R-squared:	91.28%
Trend Annual Historic Growth Rate:	4.32%
Trend Growth Rate (2018 to Design Year):	3.68%
Printed:	30-Jul-19

Straight Line Growth Option

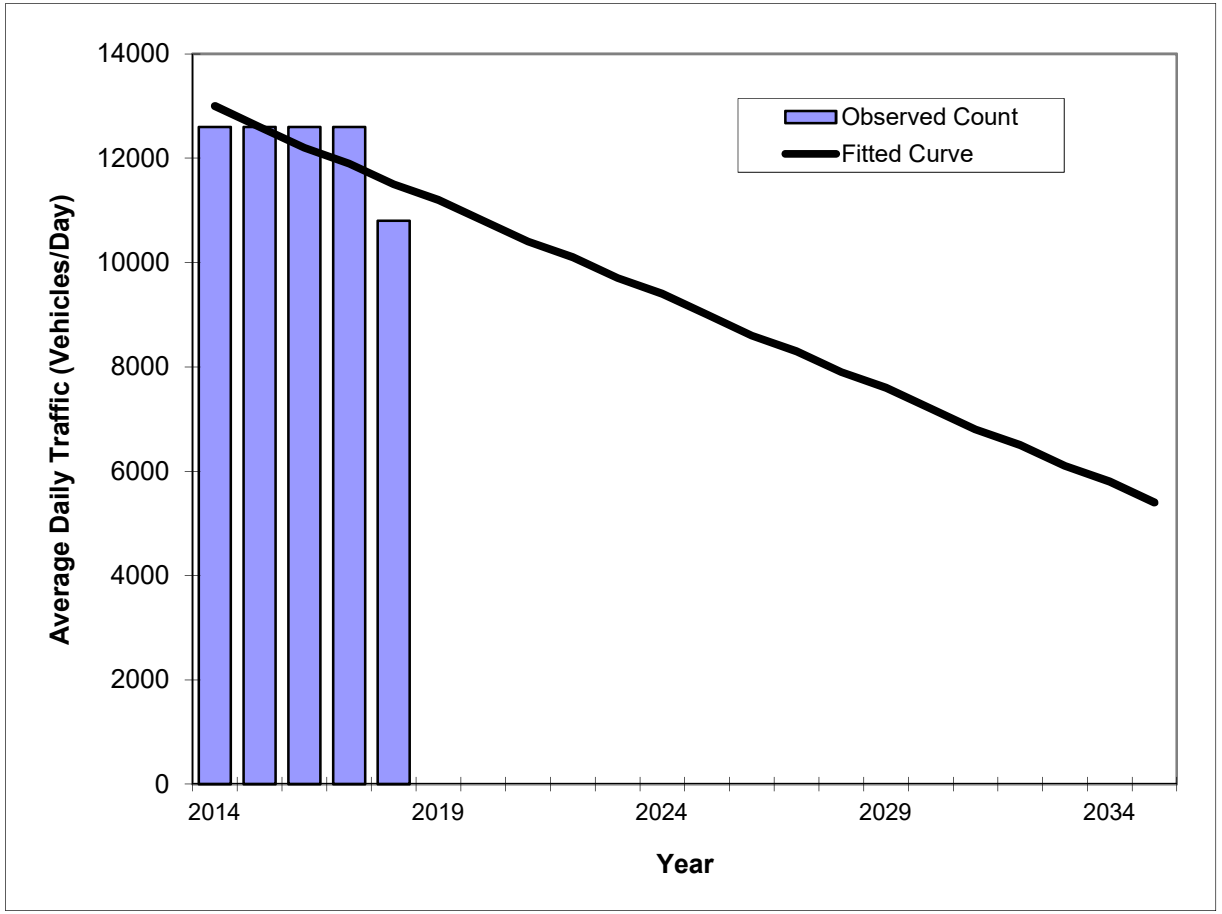
*Axle-Adjusted

Traffic Trends - V03.a

CATALINA BLVD -- Howland Blvd Sixma Rd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-20.020
Highway:	CATALINA BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2014	12600	13000
2015	12600	12600
2016	12600	12200
2017	12600	11900
2018	10800	11500
2020 Opening Year Trend		
2020	N/A	10800
2025 Mid-Year Trend		
2025	N/A	9000
2030 Design Year Trend		
2030	N/A	7200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-360
Trend R-squared:	50.00%
Trend Annual Historic Growth Rate:	-2.88%
Trend Growth Rate (2018 to Design Year):	-3.12%
Printed:	30-Jul-19

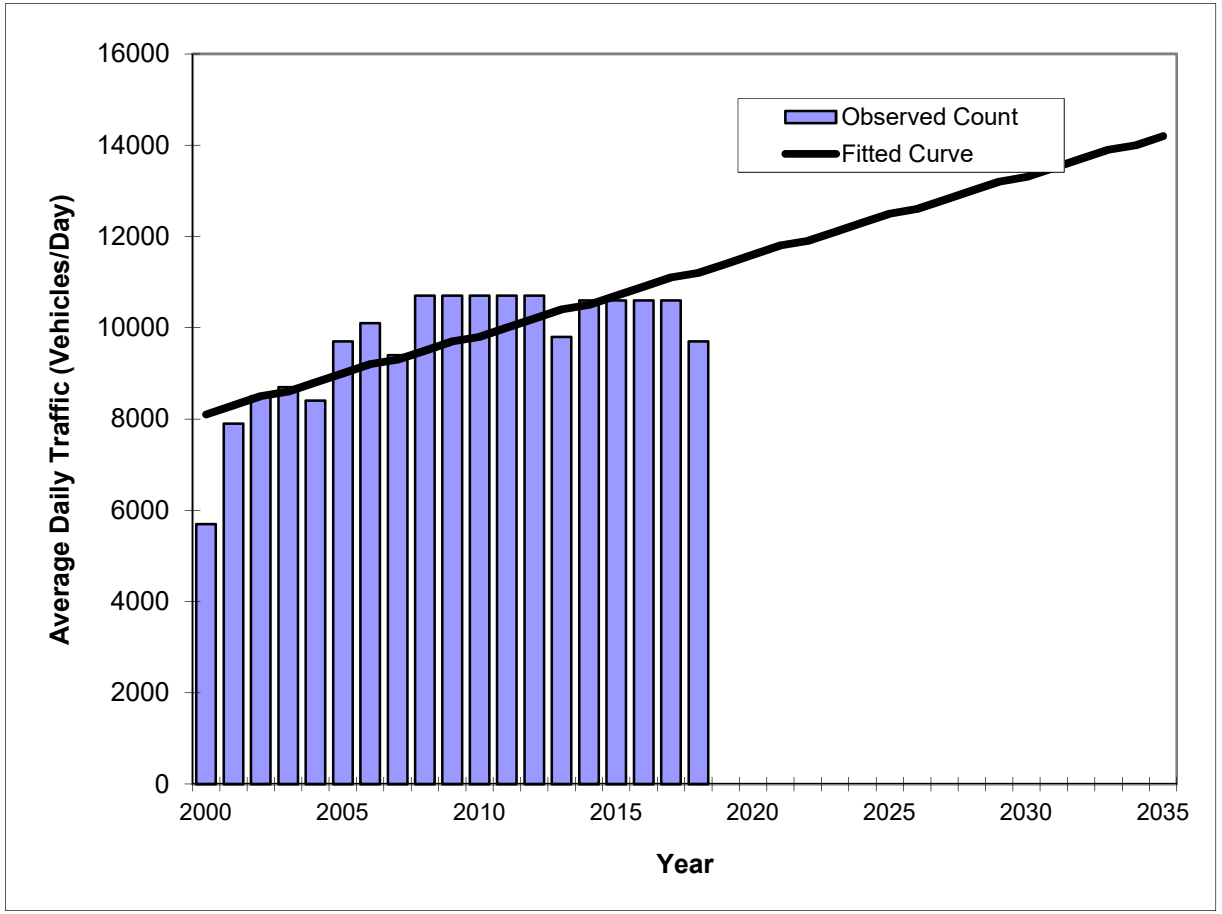
Straight Line Growth Option

Traffic Trends - V03.a

CATALINA BLVD -- Sixma Rd to Lake Helen-Osteen Rd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	DLT-20.030
Highway:	CATALINA BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2000	5700	8100
2001	7900	8300
2002	8500	8500
2003	8700	8600
2004	8400	8800
2005	9700	9000
2006	10100	9200
2007	9400	9300
2008	10700	9500
2009	10700	9700
2010	10700	9800
2011	10700	10000
2012	10700	10200
2013	9800	10400
2014	10600	10500
2015	10600	10700
2016	10600	10900
2017	10600	11100
2018	9700	11200
2020 Opening Year Trend		
2020	N/A	11600
2025 Mid-Year Trend		
2025	N/A	12500
2030 Design Year Trend		
2030	N/A	13300
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	175
Trend R-squared:	54.52%
Trend Annual Historic Growth Rate:	2.13%
Trend Growth Rate (2018 to Design Year):	1.56%
Printed:	30-Jul-19

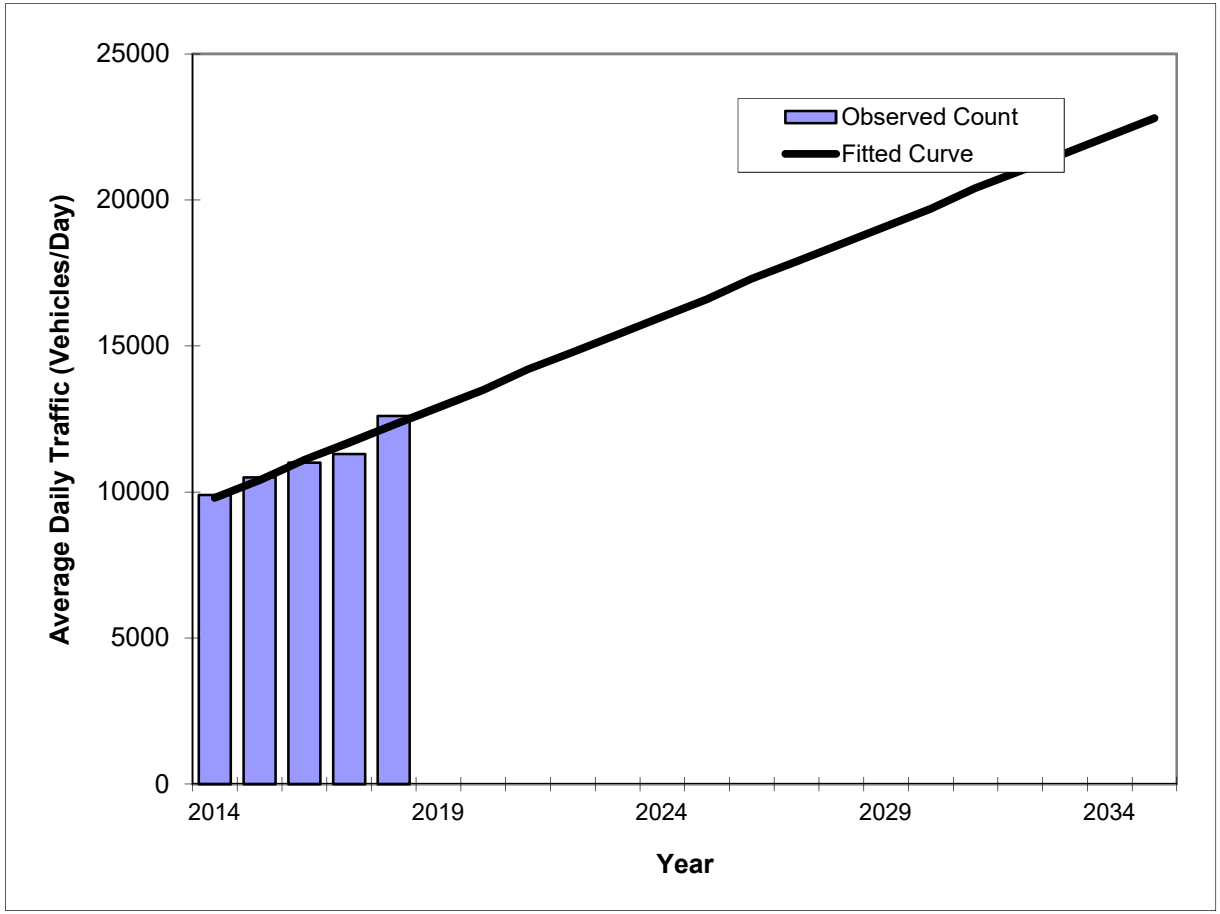
Straight Line Growth Option

Traffic Trends - V03.a

LAKE HELEN/OSTEEN RD -- Catalina Blvd to Haulover Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1072
Highway:	LAKE HELEN/OSTEEN RD



Year	Traffic (ADT/AADT) Count*	Trend**
2014	9900	9800
2015	10500	10400
2016	11000	11100
2017	11300	11700
2018	12600	12300
2020 Opening Year Trend		
2020	N/A	13500
2025 Mid-Year Trend		
2025	N/A	16600
2030 Design Year Trend		
2030	N/A	19700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	620
Trend R-squared:	93.94%
Trend Annual Historic Growth Rate:	6.38%
Trend Growth Rate (2018 to Design Year):	5.01%
Printed:	30-Jul-19

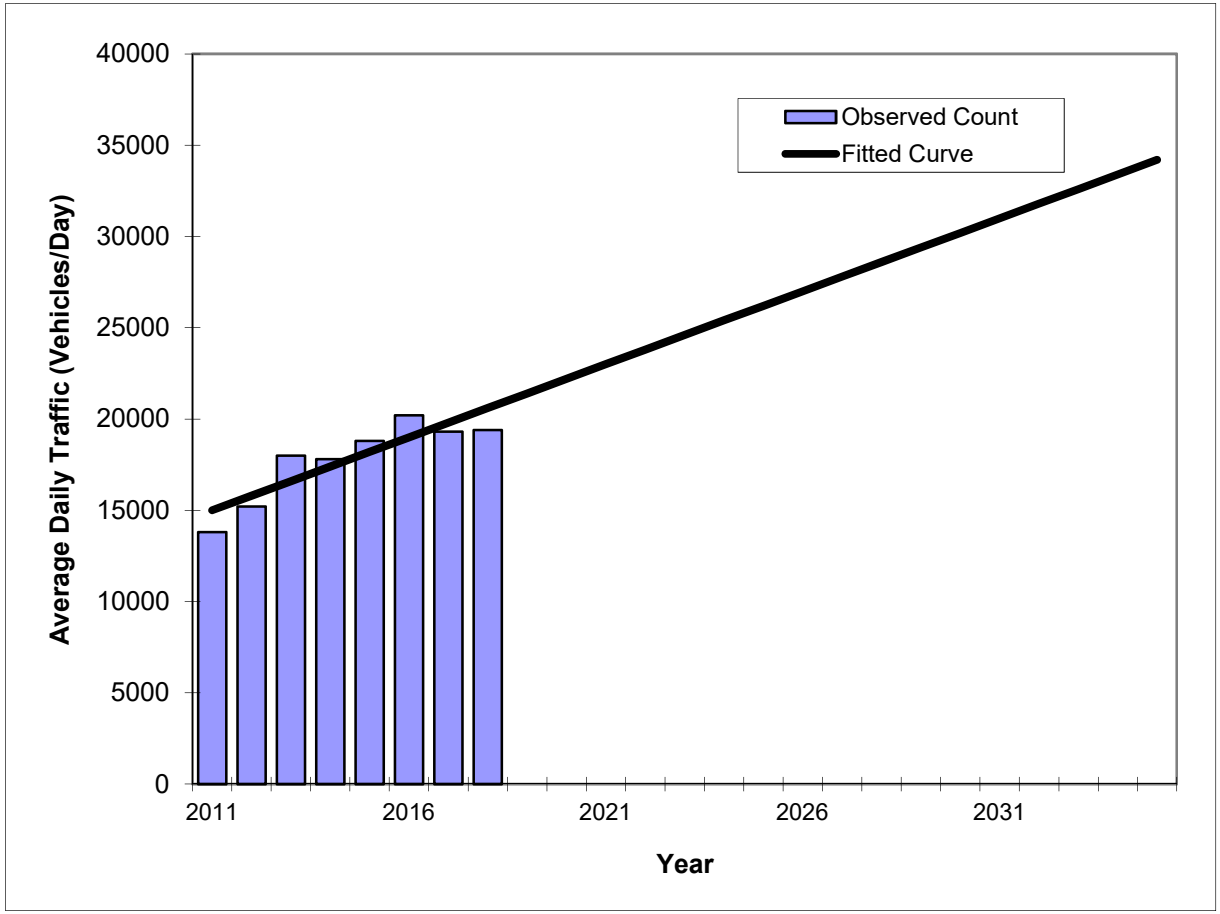
Straight Line Growth Option

Traffic Trends - V03.a

VETERANS MEM PRKWY -- Rhode Island Ave to Harley Strickland Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1901
Highway:	VETERANS MEM PRKWY



Year	Traffic (ADT/AADT) Count*	Trend**
2011	13800	15000
2012	15200	15800
2013	18000	16600
2014	17800	17400
2015	18800	18200
2016	20200	19000
2017	19300	19800
2018	19400	20600
2020 Opening Year Trend		
2020	N/A	22200
2025 Mid-Year Trend		
2025	N/A	26200
2030 Design Year Trend		
2030	N/A	30200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	801
Trend R-squared:	78.44%
Trend Annual Historic Growth Rate:	5.33%
Trend Growth Rate (2018 to Design Year):	3.88%
Printed:	30-Jul-19

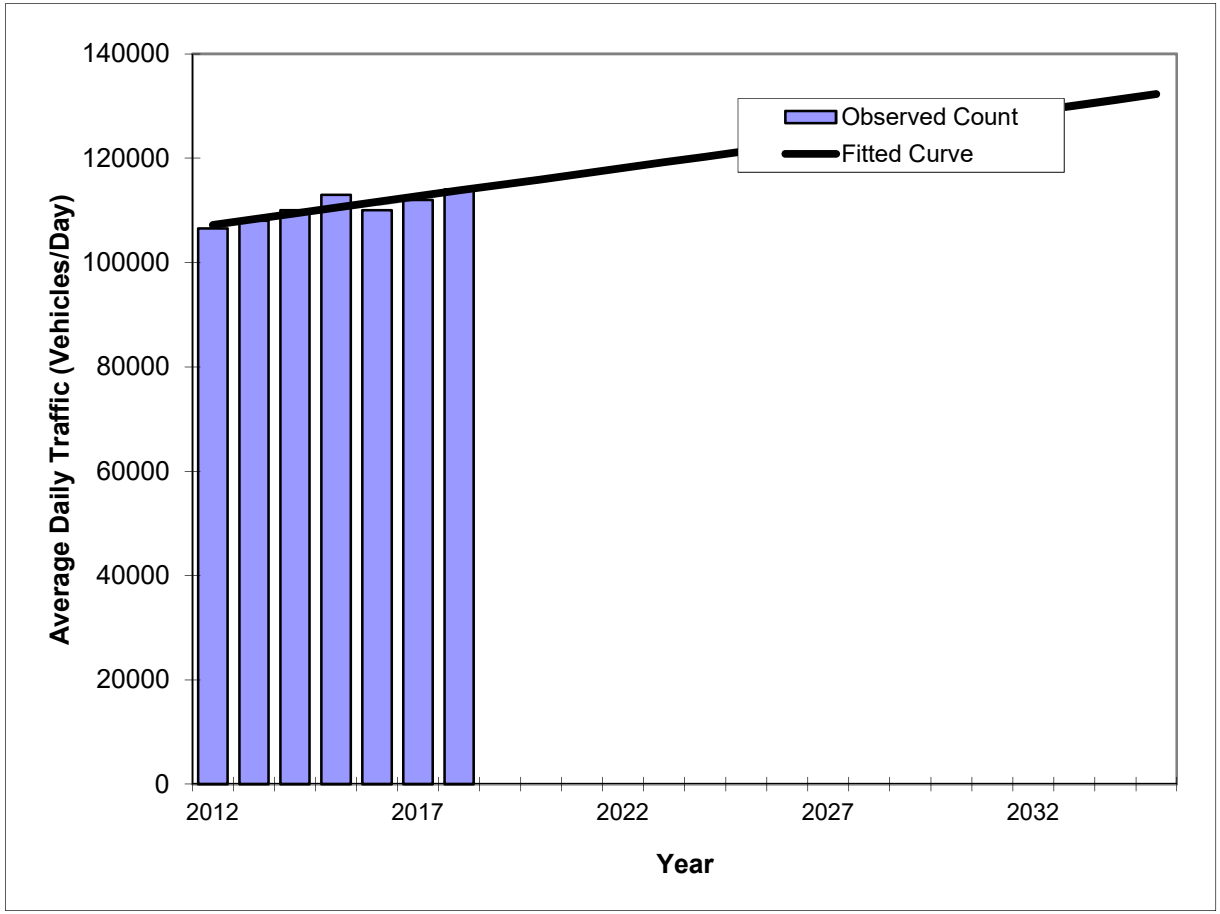
Straight Line Growth Option

Traffic Trends - V03.a

I-4 -- Seminole County to Dirksen Rd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	484
Highway:	I-4



Year	Traffic (ADT/AADT) Count*	Trend**
2012	106500	107200
2013	108000	108300
2014	110000	109400
2015	113000	110500
2016	110000	111600
2017	112000	112700
2018	114000	113800
2020 Opening Year Trend		
2020	N/A	115900
2025 Mid-Year Trend		
2025	N/A	121400
2030 Design Year Trend		
2030	N/A	126800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	1,089
Trend R-squared:	76.38%
Trend Annual Historic Growth Rate:	1.03%
Trend Growth Rate (2018 to Design Year):	0.95%
Printed:	30-Jul-19

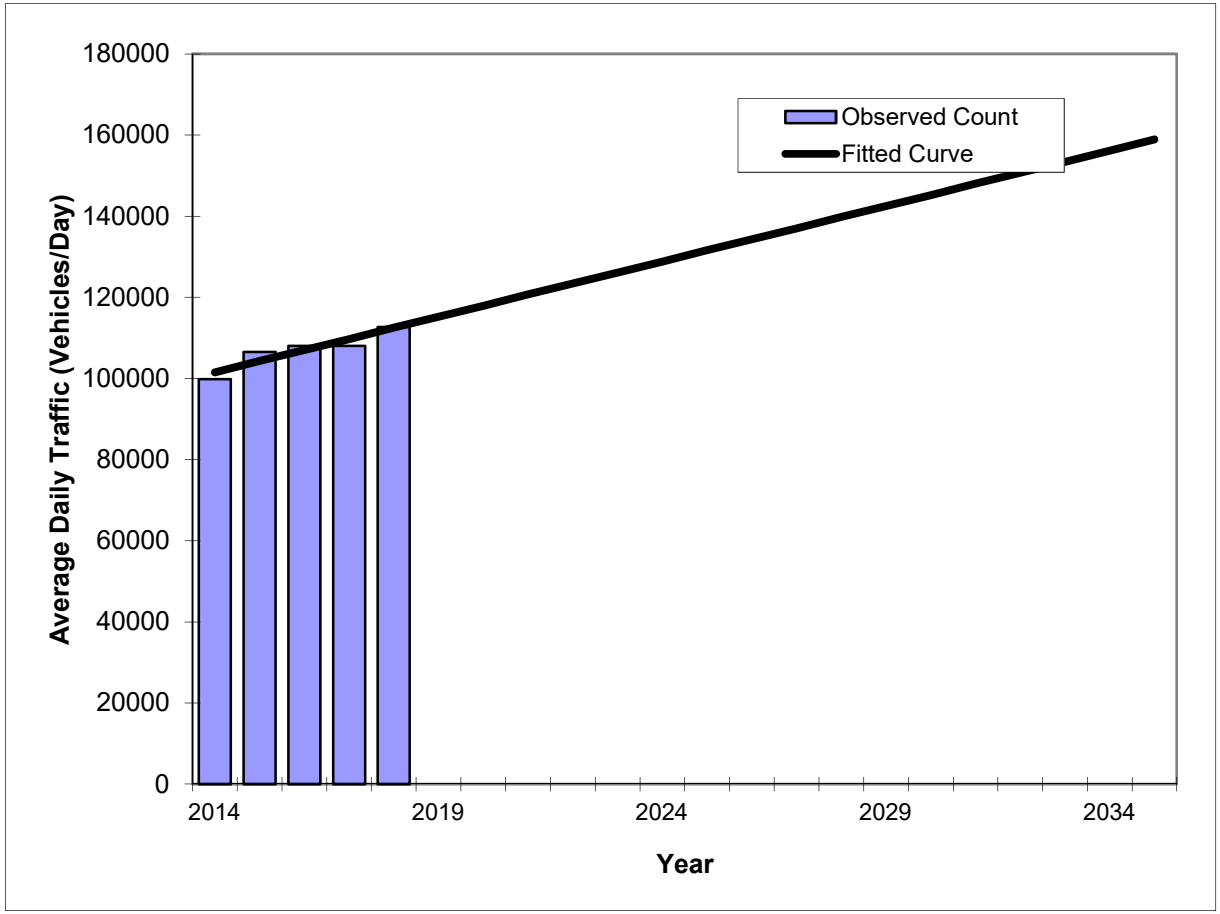
Straight Line Growth Option

Traffic Trends - V03.a

I-4 -- Dirksen Dr to Saxon Blvd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	9906
Highway:	I-4



Year	Traffic (ADT/AADT) Count*	Trend**
2014	99800	101500
2015	106500	104300
2016	108000	107000
2017	108000	109700
2018	112700	112500
2020 Opening Year Trend		
2020	N/A	117900
2025 Mid-Year Trend		
2025	N/A	131600
2030 Design Year Trend		
2030	N/A	145200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	2,730
Trend R-squared:	86.08%
Trend Annual Historic Growth Rate:	2.71%
Trend Growth Rate (2018 to Design Year):	2.42%
Printed:	30-Jul-19

Straight Line Growth Option

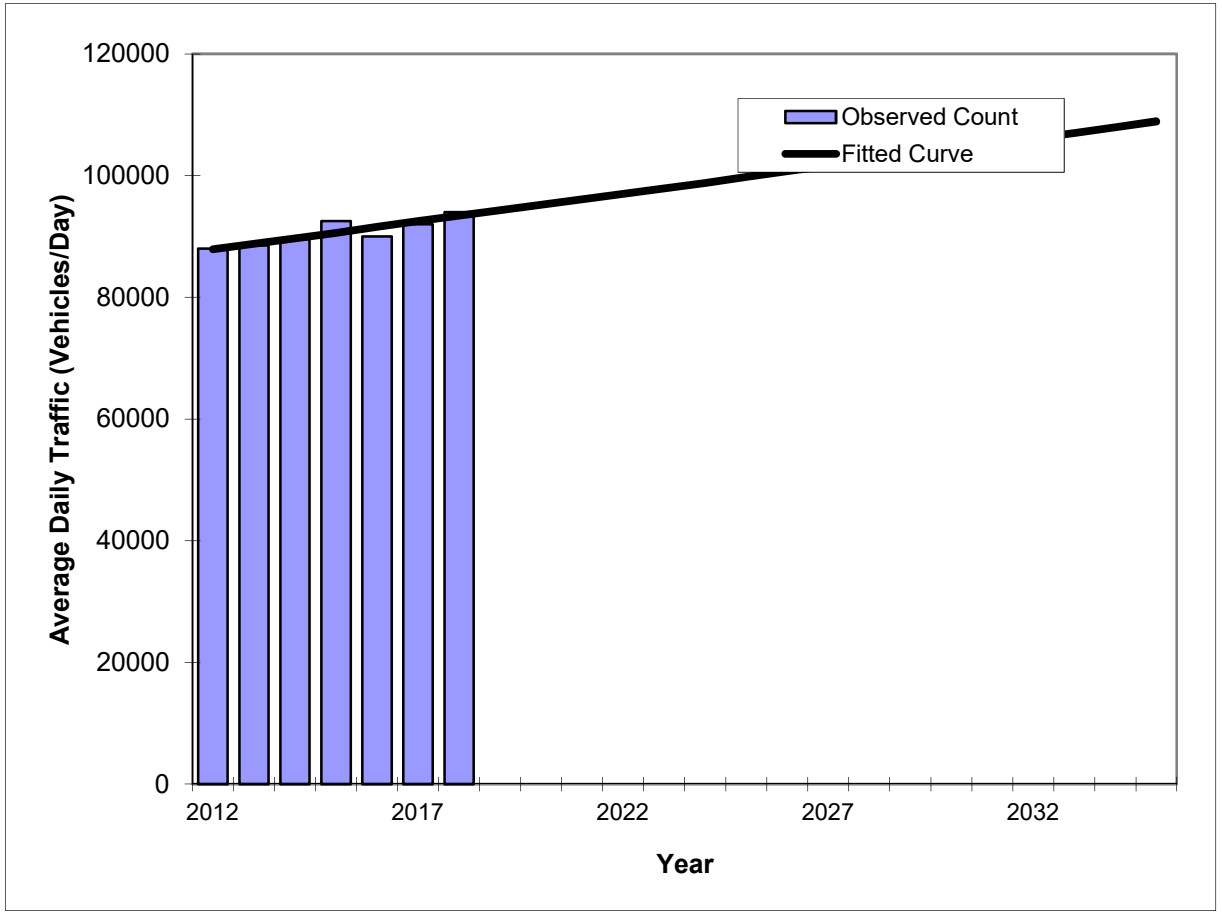
*Axle-Adjusted

Traffic Trends - V03.a

I-4 -- Saxon Blvd to SR 472

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	1003
Highway:	I-4



Year	Traffic (ADT/AADT) Count*	Trend**
2012	88000	87900
2013	88500	88800
2014	89500	89700
2015	92500	90600
2016	90000	91600
2017	92000	92500
2018	94000	93400
2020 Opening Year Trend		
2020	N/A	95200
2025 Mid-Year Trend		
2025	N/A	99800
2030 Design Year Trend		
2030	N/A	104300
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	911
Trend R-squared:	77.78%
Trend Annual Historic Growth Rate:	1.04%
Trend Growth Rate (2018 to Design Year):	0.97%
Printed:	30-Jul-19

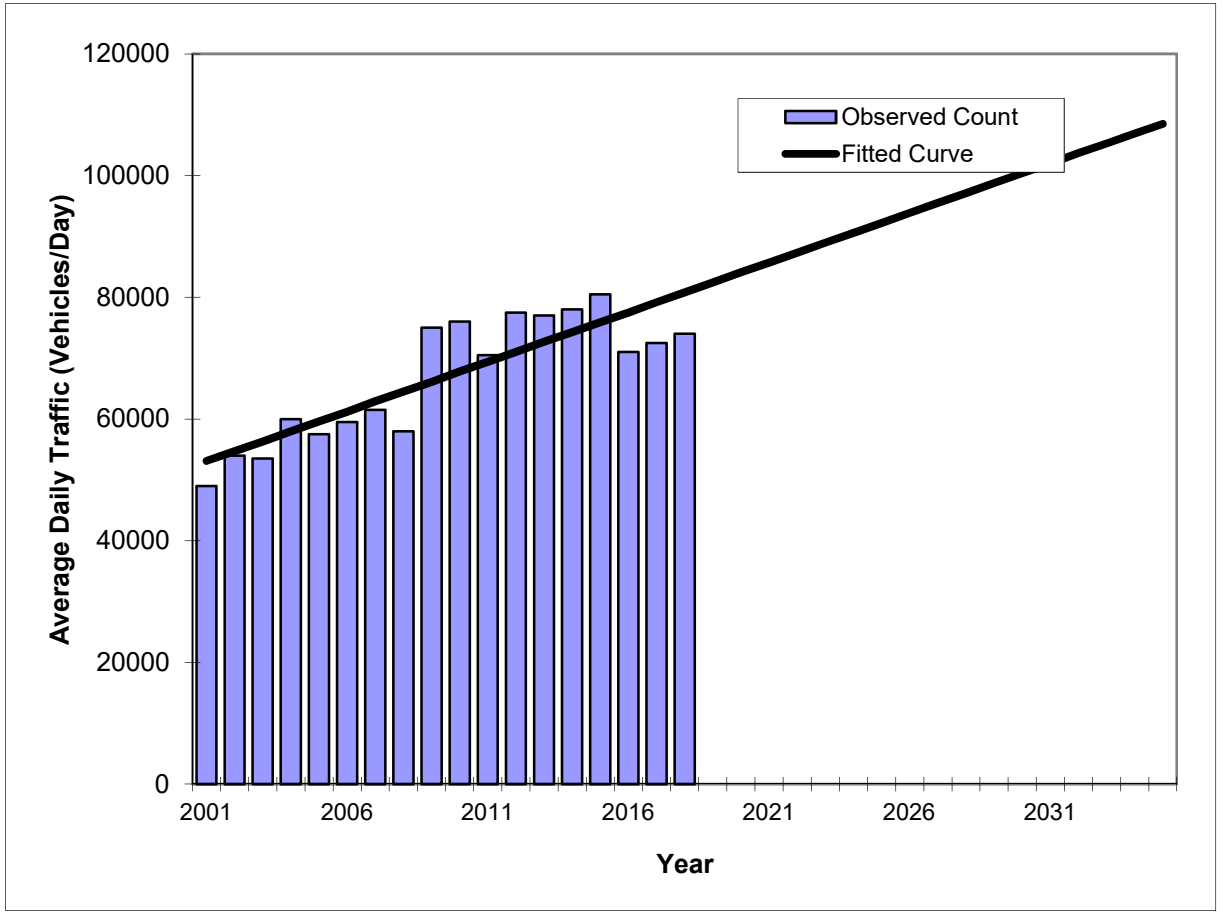
Straight Line Growth Option

Traffic Trends - V03.a

I-4 -- SR 472 Orange Camp Rd

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	485
Highway:	I-4



Year	Traffic (ADT/AADT) Count*	Trend**
2001	49000	53100
2002	54000	54700
2003	53500	56300
2004	60000	58000
2005	57500	59600
2006	59500	61200
2007	61500	62900
2008	58000	64500
2009	75000	66100
2010	76000	67800
2011	70500	69400
2012	77500	71000
2013	77000	72700
2014	78000	74300
2015	80500	75900
2016	71000	77500
2017	72500	79200
2018	74000	80800
2020 Opening Year Trend		
2020	N/A	84100
2025 Mid-Year Trend		
2025	N/A	92200
2030 Design Year Trend		
2030	N/A	100400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	1,632
Trend R-squared:	73.79%
Trend Annual Historic Growth Rate:	3.07%
Trend Growth Rate (2018 to Design Year):	2.02%
Printed:	30-Jul-19

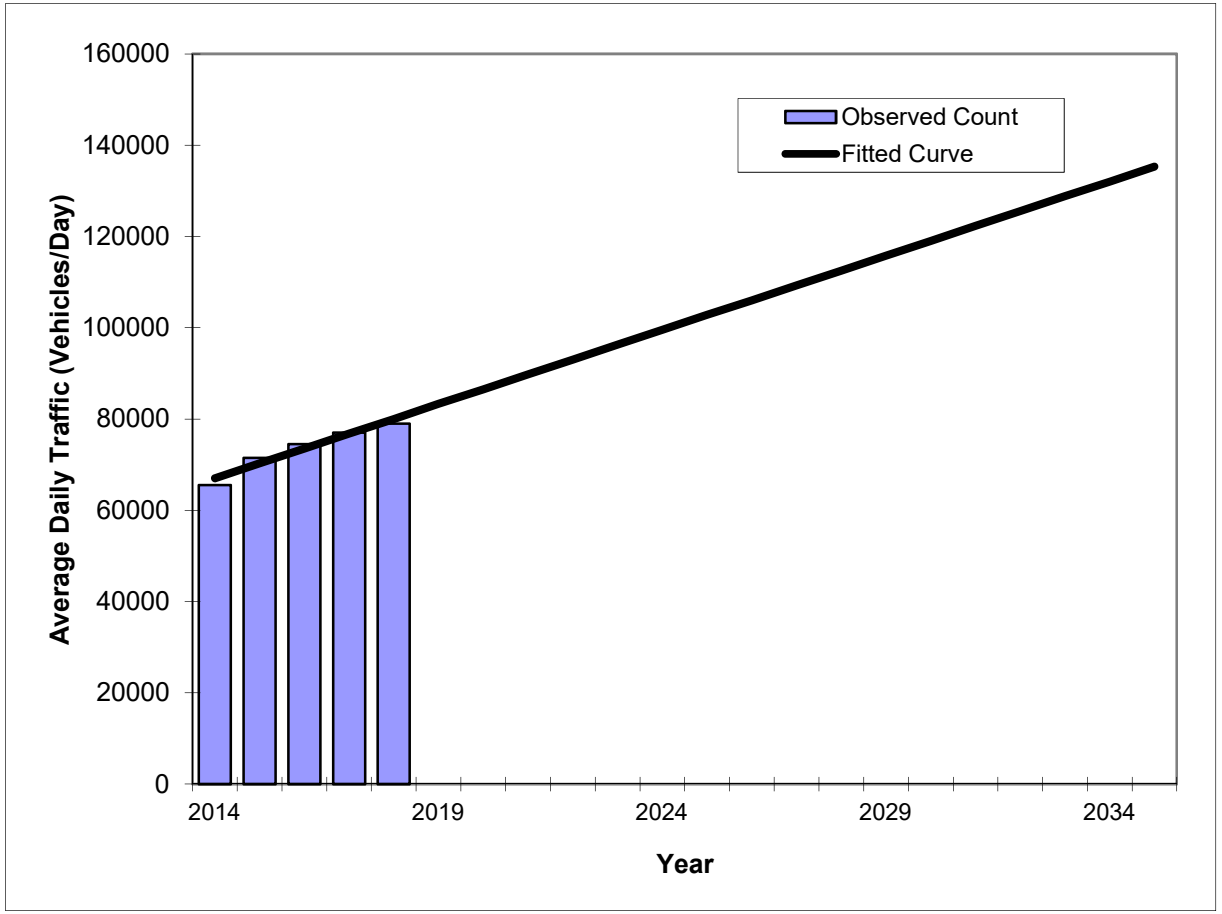
Straight Line Growth Option

Traffic Trends - V03.a

I-4 -- Orange Camp Rd to SR 44

FIN#	429193-1
Location	1

County:	Volusia (79)
Station #:	497
Highway:	I-4



Year	Traffic (ADT/AADT) Count*	Trend**
2014	65500	67000
2015	71500	70300
2016	74500	73500
2017	77000	76800
2018	79000	80000
2020 Opening Year Trend		
2020	N/A	86500
2025 Mid-Year Trend		
2025	N/A	102800
2030 Design Year Trend		
2030	N/A	119000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	3,250
Trend R-squared:	94.73%
Trend Annual Historic Growth Rate:	4.85%
Trend Growth Rate (2018 to Design Year):	4.06%
Printed:	30-Jul-19

Straight Line Growth Option

APPENDIX G:

R2CTPO Traffic Impact Analysis Checklist

TIA METHODOLOGY SUBMISSION CHECKLIST

Project Name: Portland Industrial Park (Deltona, FL) TIA Methodology

Location: East of Normandy Boulevard, 0.5-mi south of E Graves Avenue

TRANSPORTATION IMPACT ANALYSIS METHODOLOGY	DESCRIPTION	INFORMATION INCLUDED		
		YES	NO	Remarks [1]
	Type of TIA Methodology: □ COMP PLAN □ REZONING X SITE PLAN	X		
	LAND USES being analyzed (# of units, sq. feet, etc.)	X		Warehouse & Office
	BUILD-OUT SCHEDULE proposed (state year(s))	X		2022
	Conceptual Site Plan or Proposed Access description	X		Appendix A
	SITE LOCATION MAP relative to surrounding roadway network	X		Appendix D
	Analysis Period(s): X AM □ Mid-Day X PM □ Weekend	X		
	Traffic Volume Counts (Day & Time)	X		Collected from previous studies
	Vested Trip Information (verify with nearby local government(s))	X		Info requested from City and County
	Proposed Project trip generation (check all that apply): X Daily X 2-Way Peak Hour ☐ Internal Capture ☐ Pass By Capture (<14% Adjacent Road)	X		
	Proposed project trip distribution and assignment (include map) X CFRPM ☐ by Engineering Judgment	X		Appendix D (incl. Truck Distribution)
	ROADWAY SIGNIFICANCE TEST TABLE - (includes all 3-mile radius roadway segments, Number of Lanes, Adopted LOS Capacity (cite source), Project Distribution percentages, Project Trips, Project Trips/adopted capacity ratio, 3% significance test check) ALONG WITH all Critical & Near-Critical map road segments within the appropriate radius (3-mile radius for all uses except Parks/Recreational uses (1.5 mile radius) & Convenience Stores (1-mile radius}	X		Updated per City & County comments
	ANALYSIS MAP - 3-mile study area boundary including all Critical & Near-Critical map road segments and intersections within the appropriate radius	X		Updated per City & County comments
	Proposed roadway segment to be analyzed (list)	X		Updated per City & County comments
	Proposed intersections to be analyzed (list)	X		Updated per City & County comments
	Proposed Critical & Near-Critical segments to be analyzed (list)	X		
	Background Traffic/Build-Out Traffic: □ CFRPM X Historical Growth Rate (state & justify proposed minimum	X		1% minimum, per County comment
	Segment Analysis X Signalized Corridor Analysis Required if Part of Signal System	X		SR 472/Howland Blvd Saxon Blvd
	Intersection Analysis □ HCS X Synchro □ Other	X		Utilizing HCM Methodologies
	List Programmed Improvements within first three years: X FDOT Work Program X County CIP X City CIP	X		Developer-funded improvements included, per County comments
	Proposed Alternative Modes Study (commit to studying project's alternative mode needs associated with transit connection, pedestrian & bicycle facilities, school student access needs, etc.) □ Study to Include TPO's Transit Development Guidelines	X		
	Transportation Improvements (commit to identifying roadway & intersection improvements in TIA if deficiencies are identified)	X		
	Concurrency mitigation strategy (commit to including this in TIA)	X		

1 - Remarks: Justify "NO"

Submitted By: James Taylor, PE - Kimley-Horn **Date:** 04/17/2020

APPENDIX H:

Turning Movement Data

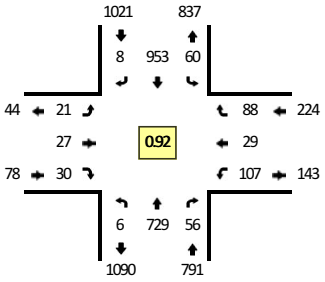
Turning Movement Data Summary, Portland Industrial Park TIA Methodology

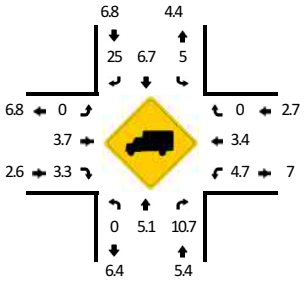
Intersection	TMC Source	TMC Date
Graves Avenue & US 17/92	Normandy Industrial Warehouse TIA	June 2019
Graves Avenue & Veteran's Memorial Parkway	Normandy Industrial Warehouse TIA	June 2019
Graves Avenue & W Volusia Avenue (Kentucky Avenue)	Normandy Industrial Warehouse TIA	June 2019
Graves Avenue & Normandy Boulevard	Normandy Industrial Warehouse TIA	June 2019
Graves Avenue & Howland Boulevard/SR 472	Normandy Industrial Warehouse TIA	June 2019
SR 472 & W Volusia Beltway (Dr. Martin Luther King Jr)	Normandy Industrial Warehouse TIA	June 2019
SR 472 & I-4 EB Ramps	Normandy Industrial Warehouse TIA	June 2019
SR 472 & I-4 WB Ramps	Normandy Industrial Warehouse TIA	June 2019
W Volusia Beltway (Dr. Martin Luther King Jr) & Orange Camp Road	Normandy Industrial Warehouse TIA	June 2019
Normandy Boulevard & Elkcam Boulevard	Normandy Industrial Warehouse TIA	June 2019
Normandy Boulevard & Saxon Boulevard	Normandy Industrial Warehouse TIA	June 2019
Normandy Boulevard & Deltona Boulevard	Normandy Industrial Warehouse TIA	June 2019
Elkcam Boulevard & Fort Smith Boulevard	Normandy Industrial Warehouse TIA	June 2019
Elkcam Boulevard & Providence Boulevard	Normandy Industrial Warehouse TIA	June 2019
Fort Smith Boulevard & Providence Boulevard	Normandy Industrial Warehouse TIA	June 2019
Saxon Boulevard & Veteran's Memorial Parkway	Normandy Industrial Warehouse TIA	June 2019
Saxon Boulevard & FDOT Park & Ride	Normandy Industrial Warehouse TIA	June 2019
Saxon Boulevard & I-4 EB Ramps	Normandy Industrial Warehouse TIA	June 2019
Saxon Boulevard & I-4 WB Ramps	Normandy Industrial Warehouse TIA	June 2019
Saxon Boulevard & Finland Drive	Saxon Boulevard Timing Report (2018)	May 2018
Saxon Boulevard & Tivoli Drive	Normandy Industrial Warehouse TIA	June 2019
Howland Boulevard & Forest Edge Drive	Deltona Wawa TIA (2018)	December 2017
Howland Boulevard & Wolf Pack Run	Deltona Wawa TIA (2018)	December 2017
Howland Boulevard & Catalina Boulevard	Normandy Industrial Warehouse TIA	June 2019
Howland Boulevard & Providence Boulevard	Normandy Industrial Warehouse TIA	June 2019
Catalina Boulevard & Lake Helen-Osteen Road	Normandy Industrial Warehouse TIA	June 2019
Veteran's Memorial Parkway & Rhode Island Avenue	Normandy Industrial Warehouse TIA	June 2019
Veteran's Memorial Parkway & Harley Strickland Road	Normandy Industrial Warehouse TIA	June 2019

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

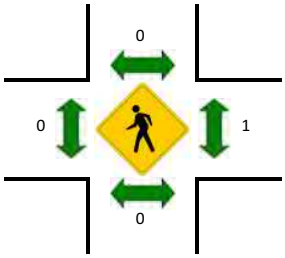
LOCATION: US 17/92 -- Graves Ave | **QC JOB #:** 15012207
CITY/STATE: Volusia, FL | **DATE:** Wed, Jun 19 2019

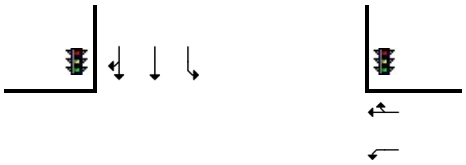
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

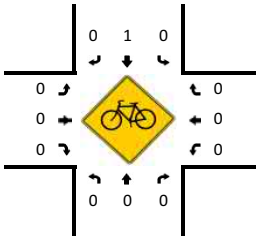


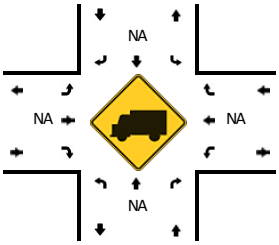


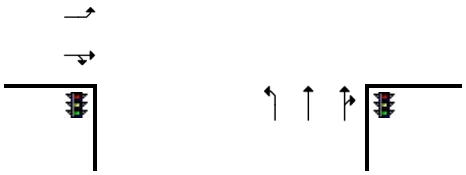
Quality Counts
DATA THAT DRIVES COMMUNITIES

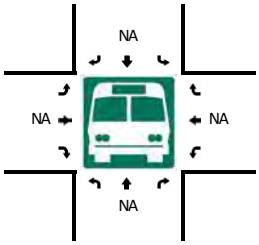












R* = RTOR

15-Min Count Period Beginning At	US 17/92 (Northbound)					US 17/92 (Southbound)					Graves Ave (Eastbound)					Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	1	121	8	0	1	11	171	1	0	0	5	8	4	0	4	16	2	8	0	10	371	
7:15 AM	0	160	17	0	0	16	218	1	0	0	6	10	9	0	0	18	1	16	1	6	479	
7:30 AM	1	210	13	0	1	14	255	2	0	0	5	6	6	1	2	29	8	19	0	2	574	
7:45 AM	1	181	13	0	2	12	275	1	0	1	5	8	7	0	5	34	4	8	0	14	571	1995
8:00 AM	2	158	11	0	1	21	212	0	0	0	5	7	2	0	2	20	12	13	0	13	479	2103
8:15 AM	2	180	12	0	3	13	211	4	0	0	5	6	2	0	4	24	5	8	0	11	490	2114
8:30 AM	0	168	17	0	3	18	226	1	0	0	3	3	1	0	6	12	3	4	0	10	475	2015
8:45 AM	1	181	18	0	1	17	230	2	0	0	4	6	1	0	3	35	0	2	0	13	514	1958

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	4	840	56	0	4	56	1020	8	0	0	20	24	32	4	8	116	32	84	0	8	2316
Heavy Trucks	0	52	0			4	24	0			0	0	0			8	0	0			88
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	1	0			0	0	0			0	0	0			1
Railroad																					
Stopped Buses																					

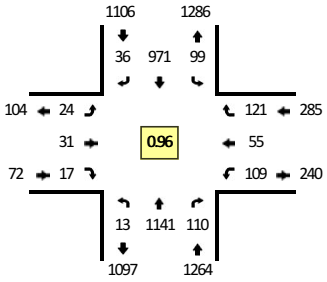
Comments:

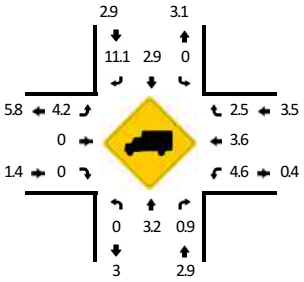
Report generated on 6/21/2019 1:29 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

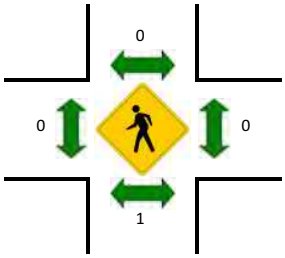
LOCATION: US 17/92 -- Graves Ave | **QC JOB #:** 15012208
CITY/STATE: Volusia, FL | **DATE:** Wed, Jun 19 2019

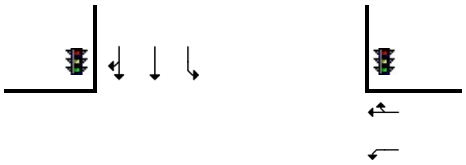
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

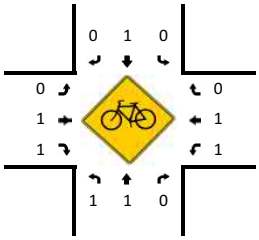


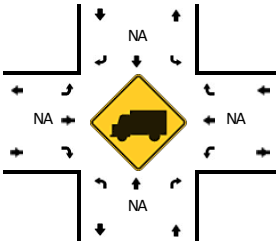


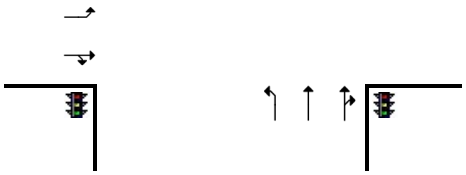
Quality Counts
DATA THAT DRIVES COMMUNITIES

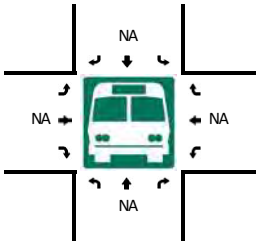












R* = RTOR

15-Min Count Period Beginning At	US 17/92 (Northbound)					US 17/92 (Southbound)					Graves Ave (Eastbound)					Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	3	287	21	0	2	25	226	2	0	0	4	6	0	0	3	16	10	14	0	11	630	
4:15 PM	4	271	19	0	0	25	223	3	0	0	6	3	2	0	1	26	15	21	0	7	626	
4:30 PM	2	262	26	0	1	23	246	7	0	0	2	6	2	0	4	13	8	15	0	8	625	
4:45 PM	5	256	33	0	2	27	229	8	0	1	7	6	1	0	4	31	13	16	0	7	646	2527
5:00 PM	1	262	35	0	0	33	248	8	0	2	4	6	4	0	0	25	11	20	0	16	675	2572
5:15 PM	0	309	18	0	2	19	238	9	0	0	7	10	1	0	3	34	17	29	0	11	707	2653
5:30 PM	7	314	20	0	0	20	256	8	0	0	6	9	2	0	2	19	14	16	0	6	699	2727
5:45 PM	7	193	22	0	3	24	186	3	0	2	5	4	3	0	1	21	16	17	0	13	520	2601

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	1236	80	0	8	76	952	36	0	0	28	40	16	0	12	136	68	160	0	44	2892
Heavy Trucks	0	24	0			0	32	8			0	0	0			8	0	0			72
Pedestrians		0					0					0					0				0
Bicycles	0	1	0			0	0	0			0	1	1			0	0	0			3
Railroad																					
Stopped Buses																					

Comments:

Report generated on 6/21/2019 1:29 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

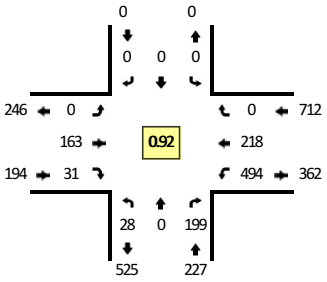
Type of peak hour being reported: Intersection Peak

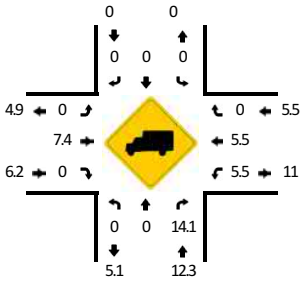
Method for determining peak hour: Total Entering Volume

LOCATION: Veterans Memorial Pkwy -- E Graves Ave
CITY/STATE: Orange City, FL

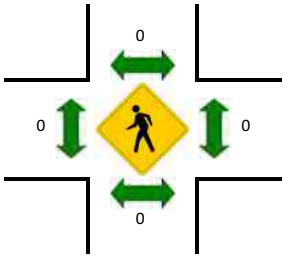
QC JOB #: 15005923
DATE: Thu, Jun 6 2019

Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

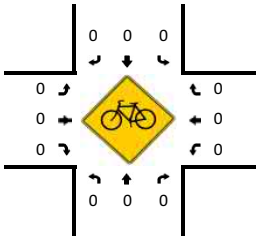


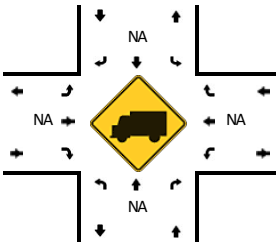


Quality Counts
DATA THAT DRIVES COMMUNITIES

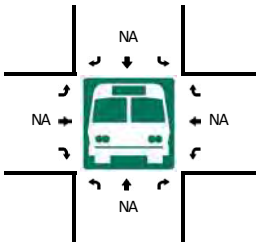












R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					E Graves Ave (Eastbound)					E Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	1	0	29	0	21	0	0	0	0	0	0	37	2	0	5	87	35	0	0	0	217	
7:15 AM	6	0	36	0	14	0	0	0	0	0	0	49	3	0	2	86	53	0	0	0	249	
7:30 AM	3	0	37	0	14	0	0	0	0	0	0	37	5	0	3	108	53	0	0	0	260	
7:45 AM	5	0	39	0	15	0	0	0	0	0	0	42	2	0	7	138	59	0	0	0	307	1033
8:00 AM	8	0	40	0	12	0	0	0	0	0	0	43	1	0	4	114	46	0	0	0	268	1084
8:15 AM	7	0	30	0	6	0	0	0	0	0	0	32	3	0	6	139	62	0	0	0	285	1120
8:30 AM	8	0	40	0	17	0	0	0	0	0	0	46	6	0	2	103	51	0	0	0	273	1133
8:45 AM	4	0	28	0	11	0	0	0	0	0	0	28	3	0	4	131	47	0	0	0	256	1082

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	20	0	216	0	60	0	0	0	0	0	0	168	36	0	28	552	236	0	0	0	1316
Heavy Trucks	0	0	28			0	0	0			0	12	0			40	16	0			96
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

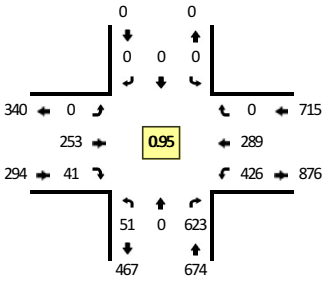
Report generated on 6/14/2019 4:04 PM

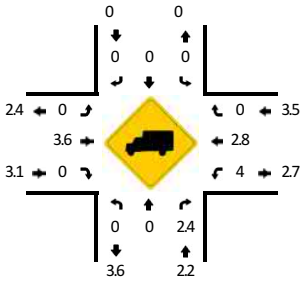
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

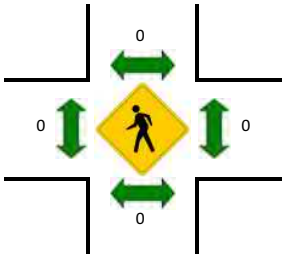
LOCATION: Veterans Memorial Pkwy -- E Graves Ave | **QC JOB #:** 15005924
CITY/STATE: Orange City, FL | **DATE:** Thu, Jun 6 2019

Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

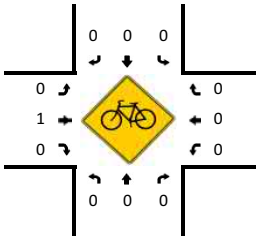


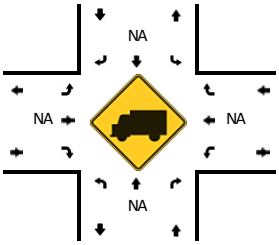


Quality Counts
DATA THAT DRIVES COMMUNITIES

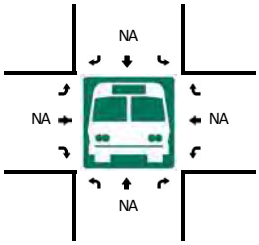












R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					E Graves Ave (Eastbound)					E Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	14	0	114	0	19	0	0	0	0	0	0	65	1	0	3	90	61	0	0	0	367	
4:15 PM	8	0	118	0	25	0	0	0	0	0	0	51	2	0	5	103	60	0	0	0	372	
4:30 PM	12	0	113	0	19	0	0	0	0	0	0	64	4	0	5	96	55	0	0	0	368	
4:45 PM	10	0	117	0	24	0	0	0	0	0	0	48	4	0	7	109	62	0	0	0	381	1488
5:00 PM	12	0	165	0	24	0	0	0	0	0	0	64	2	0	7	90	81	0	0	0	445	1566
5:15 PM	14	0	122	0	31	0	0	0	0	0	0	78	5	0	8	102	79	0	0	0	439	1633
5:30 PM	15	0	121	0	19	0	0	0	0	0	0	63	4	0	4	125	67	0	0	0	418	1683
5:45 PM	11	0	101	0	22	0	0	0	0	0	0	73	5	0	3	101	61	0	0	0	377	1679

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	48	0	756	0	96	0	0	0	0	0	0	256	36	0	28	360	324	0	0	0	1904
Heavy Trucks	0	0	16			0	0	0			0	8	0			12	16	0			52
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	1	0			0	0	0			1
Railroad																					
Stopped Buses																					

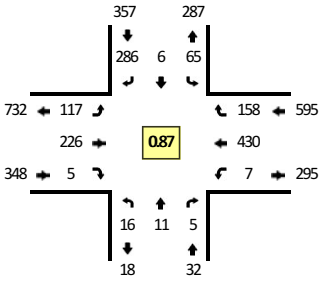
Comments:

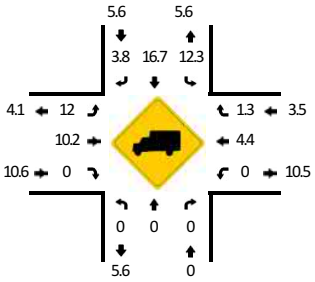
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

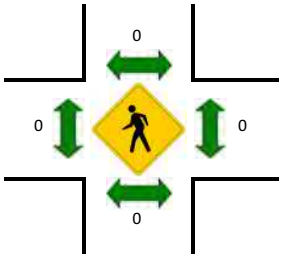
LOCATION: N Kentucky Ave -- E Graves Ave | **QC JOB #:** 15005921
CITY/STATE: Orange City, FL | **DATE:** Thu, Jun 6 2019

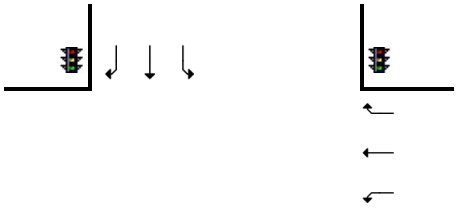
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

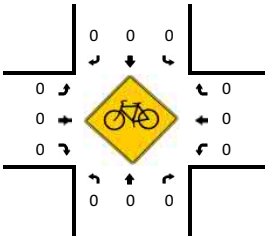


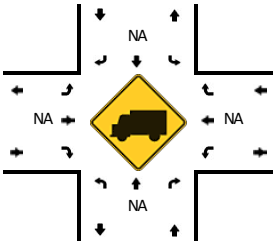


Quality Counts
DATA THAT DRIVES COMMUNITIES

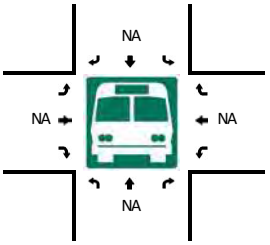












R* = RTOR

15-Min Count Period Beginning At	N Kentucky Ave (Northbound)					N Kentucky Ave (Southbound)					E Graves Ave (Eastbound)					E Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	3	4	3	0	0	16	0	14	2	29	29	52	0	0	0	2	83	34	0	9	280	
7:15 AM	0	4	1	0	3	18	0	10	1	32	35	66	0	0	0	4	88	36	0	8	306	
7:30 AM	6	3	1	0	0	15	2	36	0	30	30	55	0	0	0	0	95	31	0	12	316	
7:45 AM	3	1	0	0	0	16	1	47	0	24	40	66	0	0	0	2	132	33	0	16	381	1283
8:00 AM	4	2	0	0	1	18	1	31	1	37	21	67	3	0	0	1	76	25	0	7	295	1298
8:15 AM	3	5	2	0	1	15	2	57	0	24	26	38	2	0	0	4	127	30	0	4	340	1332
8:30 AM	4	2	0	0	4	20	1	25	0	24	32	64	1	0	1	2	94	36	0	3	313	1329
8:45 AM	6	6	2	0	1	20	0	41	0	27	24	53	1	0	0	5	105	20	0	12	323	1271

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	12	4	0	0	0	64	4	284	0	96	160	264	0	0	0	8	528	196	0	64	1684
Heavy Trucks	0	0	0			4	4	24			24	24	0			0	20	4			104
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

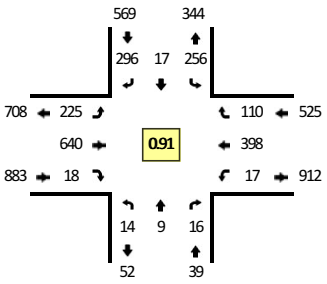
Comments:

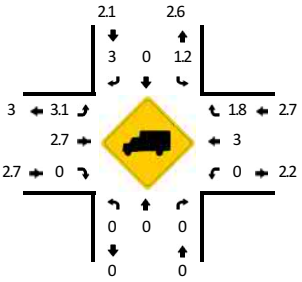
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

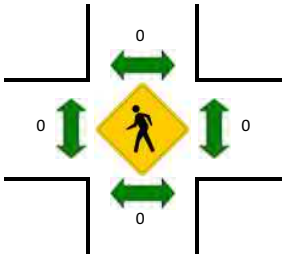
LOCATION: N Kentucky Ave -- E Graves Ave | **QC JOB #:** 15005922
CITY/STATE: Orange City, FL | **DATE:** Thu, Jun 6 2019

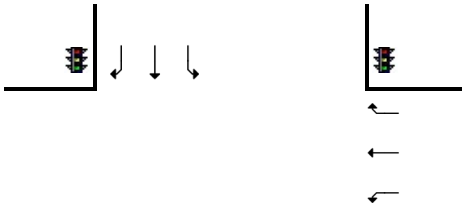
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

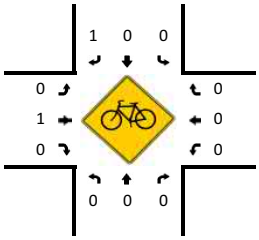


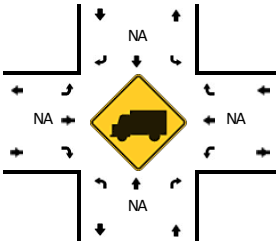


Quality Counts
DATA THAT DRIVES COMMUNITIES

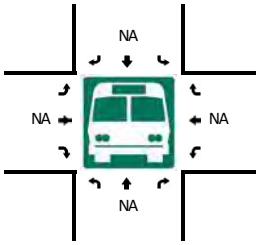












R* = RTOR

15-Min Count Period Beginning At	N Kentucky Ave (Northbound)					N Kentucky Ave (Southbound)					E Graves Ave (Eastbound)					E Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	5	1	2	0	2	47	4	47	0	19	60	145	5	0	0	4	82	26	0	4	453	
4:15 PM	1	3	1	0	5	62	4	33	0	33	58	129	1	0	1	6	93	18	0	7	455	
4:30 PM	2	3	2	0	3	53	2	24	0	37	52	139	3	0	0	4	75	20	0	2	421	
4:45 PM	4	2	0	0	0	61	4	50	0	25	45	137	2	0	0	4	98	21	0	1	454	1783
5:00 PM	3	4	3	0	5	46	3	59	0	24	63	174	3	0	1	3	104	13	0	9	517	1847
5:15 PM	5	3	0	0	1	73	6	49	0	33	70	175	7	0	0	5	93	24	0	8	552	1944
5:30 PM	4	1	2	0	2	79	5	49	0	26	48	156	1	0	0	3	95	13	0	7	491	2014
5:45 PM	2	1	0	0	3	58	3	39	0	17	44	135	6	0	0	6	106	29	0	7	456	2016

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	20	12	4	0	4	292	24	328	0	132	280	700	28	0	0	20	372	128	0	32	2376
Heavy Trucks	0	0	0			4	0	12			8	16	0			0	24	4			68
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

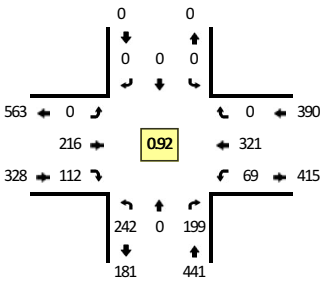
Comments:

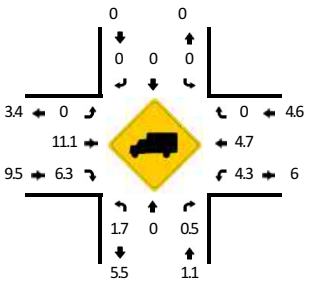
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

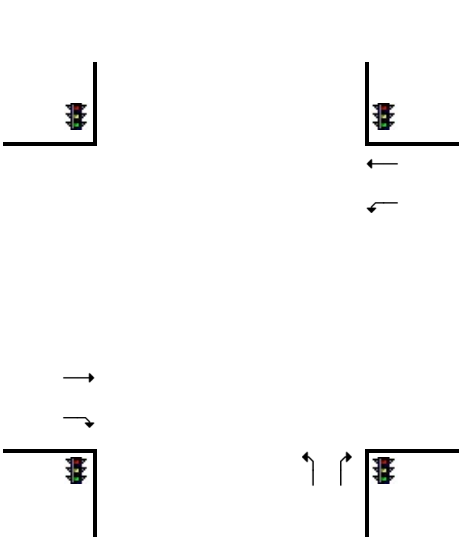
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

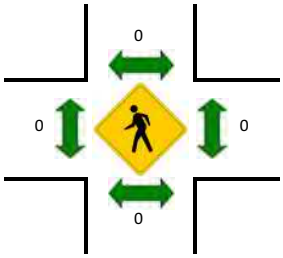
LOCATION: N Normandy Blvd -- E Graves Ave | **QC JOB #:** 15005919
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

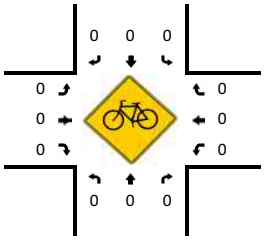
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

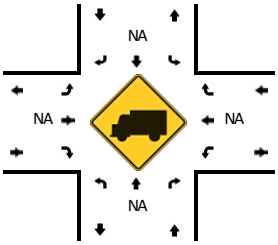


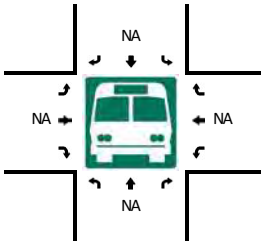












R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					E Graves Ave (Eastbound)					E Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	54	0	17	0	23	0	0	0	0	0	0	52	12	0	5	10	63	0	0	0	236	
7:15 AM	64	0	24	0	37	0	0	0	0	0	0	61	23	0	11	16	69	0	0	0	305	
7:30 AM	66	0	28	0	36	0	0	0	0	0	0	51	13	0	2	14	85	0	0	0	295	
7:45 AM	71	0	17	0	32	0	0	0	0	0	0	50	27	0	8	22	89	0	0	0	316	1152
8:00 AM	41	0	4	0	21	0	0	0	0	0	0	54	21	0	7	17	78	0	0	0	243	1159
8:15 AM	49	0	9	0	28	0	0	0	0	0	0	40	8	0	3	20	95	0	0	0	252	1106
8:30 AM	50	0	10	0	22	0	0	0	0	0	0	67	23	0	7	18	71	0	0	0	268	1079
8:45 AM	56	0	13	0	18	0	0	0	0	0	0	52	19	0	10	25	82	0	0	0	275	1038

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	284	0	196	0	128	0	0	0	0	0	0	200	140	0	32	88	356	0	0	0	1424
Heavy Trucks	12	0	0			0	0	0			0	20	4			0	20	0			56
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

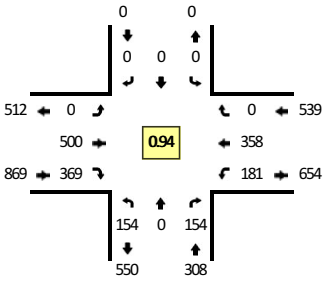
Type of peak hour being reported: Intersection Peak

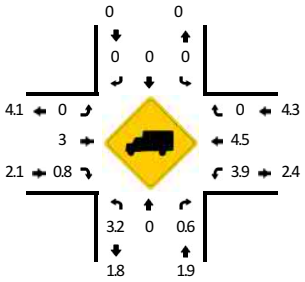
Method for determining peak hour: Total Entering Volume

LOCATION: N Normandy Blvd -- E Graves Ave
CITY/STATE: Deltona, FL

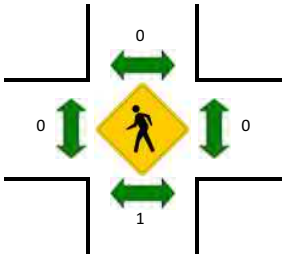
QC JOB #: 15005920
DATE: Thu, Jun 6 2019

Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

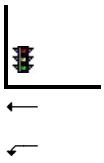


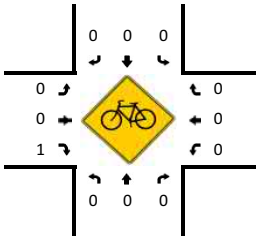


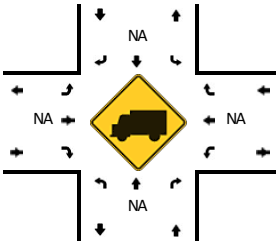
Quality Counts
DATA THAT DRIVES COMMUNITIES

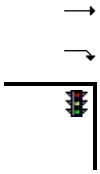


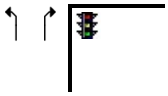


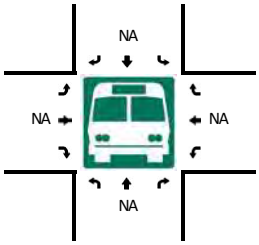












R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					E Graves Ave (Eastbound)					E Graves Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	47	0	7	0	22	0	0	0	0	0	0	130	51	0	7	43	72	0	0	0	379	
4:15 PM	33	0	7	0	18	0	0	0	0	0	0	127	56	0	8	39	103	0	0	0	391	
4:30 PM	33	0	8	0	22	0	0	0	0	0	0	126	52	0	18	48	64	0	0	0	371	
4:45 PM	39	0	5	0	23	0	0	0	0	0	0	111	62	0	19	45	80	0	0	0	384	1525
5:00 PM	31	0	10	0	23	0	0	0	0	0	0	150	54	0	8	30	98	0	0	0	404	1550
5:15 PM	37	0	13	0	25	0	0	0	0	0	0	120	102	0	13	57	89	0	0	0	456	1615
5:30 PM	31	0	9	0	25	0	0	0	0	0	0	128	88	0	9	50	82	0	0	0	422	1666
5:45 PM	55	0	18	0	31	0	0	0	0	0	0	102	87	0	8	44	89	0	0	0	434	1716

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	148	0	152	0	100	0	0	0	0	0	0	480	460	0	52	228	356	0	0	0	1976
Heavy Trucks	8	0	4			0	0	0			0	12	4			12	24	0			64
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

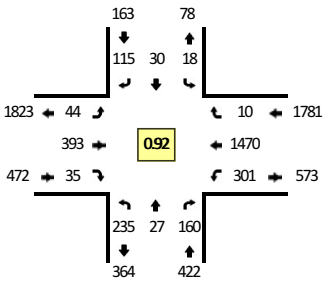
Report generated on 6/14/2019 4:04 PM

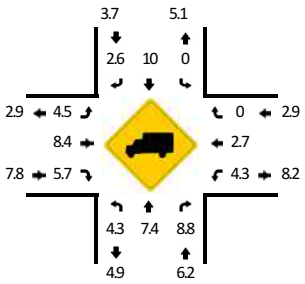
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

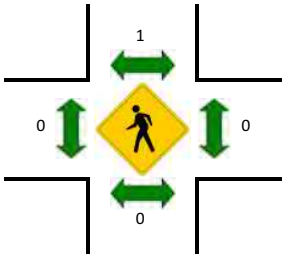
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

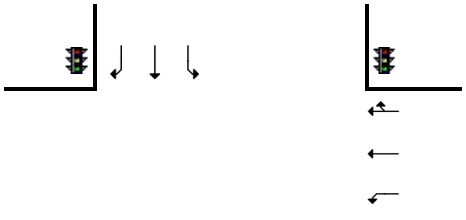
LOCATION: E Graves Ave/Halifax Crossing Blvd -- State Hwy 472 | **QC JOB #:** 15005911
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

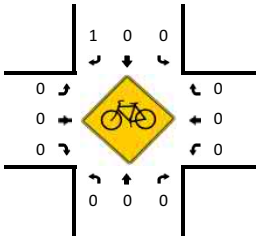
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

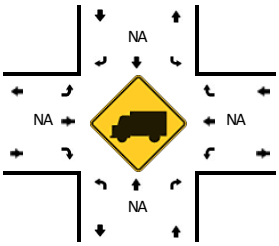


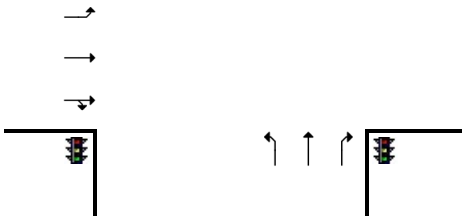


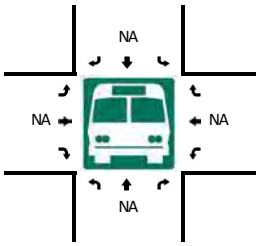












R* = RTOR

15-Min Count Period Beginning At	E Graves Ave/Halifax Crossing Blvd (Northbound)					E Graves Ave/Halifax Crossing Blvd (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	53	8	29	0	0	4	7	10	0	30	13	89	4	0	2	62	332	2	2	0	647	
7:15 AM	77	8	37	0	0	6	10	9	0	16	9	99	6	0	0	68	421	2	0	0	768	
7:30 AM	59	8	43	0	0	6	9	7	0	20	11	98	6	2	1	83	392	2	0	0	747	
7:45 AM	46	3	51	0	0	2	4	5	0	18	8	107	14	1	2	86	325	4	0	0	676	2838
8:00 AM	34	10	39	0	0	6	8	4	0	30	10	119	8	0	1	72	289	3	2	0	635	2826
8:15 AM	30	12	39	0	0	8	6	4	0	23	8	101	9	0	1	106	332	2	1	0	682	2740
8:30 AM	38	5	55	0	0	6	7	9	0	12	12	104	11	1	0	62	295	4	0	1	622	2615
8:45 AM	14	2	67	0	0	10	3	0	0	16	9	111	10	1	4	94	235	2	0	0	578	2517

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	308	32	148	0	0	24	40	100	0	64	36	396	24	0	0	272	1684	8	0	0	3136
Heavy Trucks	16	8	20			0	0	4			8	40	0			20	40	0			156
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

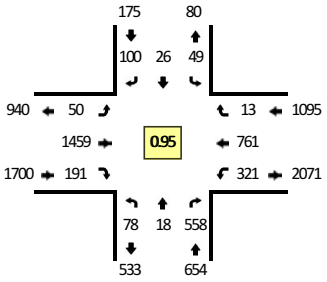
Comments:

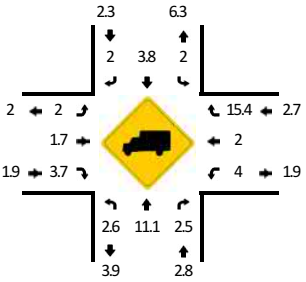
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

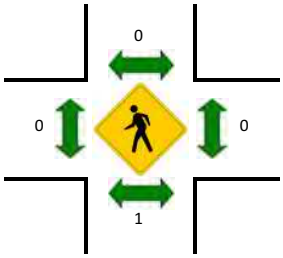
LOCATION: E Graves Ave/Halifax Crossing Blvd -- State Hwy 472 | **QC JOB #:** 15005912
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

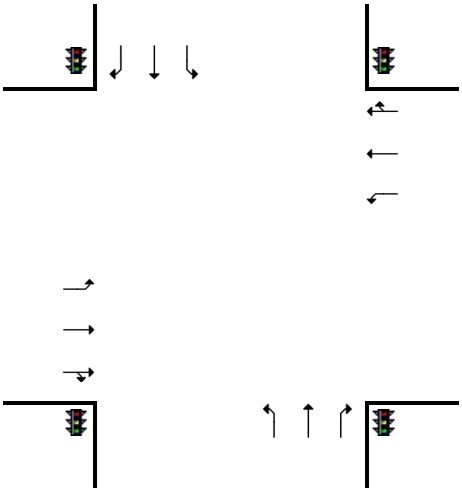
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

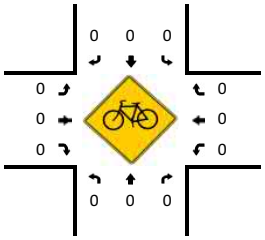


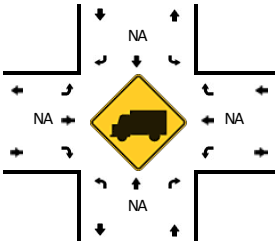


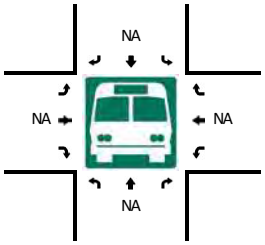
Quality Counts
DATA THAT DRIVES COMMUNITIES











R* = RTOR

15-Min Count Period Beginning At	E Graves Ave/Halifax Crossing Blvd (Northbound)					E Graves Ave/Halifax Crossing Blvd (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	29	6	129	0	0	4	3	1	0	12	10	337	28	3	2	91	168	5	0	0	828	
4:15 PM	20	7	125	0	0	12	11	3	0	17	14	317	44	1	1	75	160	4	0	1	812	
4:30 PM	26	4	120	0	0	9	4	5	0	11	8	282	43	3	0	69	163	1	2	0	750	
4:45 PM	16	2	129	0	0	8	3	5	0	8	16	321	35	1	3	84	142	0	0	0	773	3163
5:00 PM	18	7	154	0	0	16	4	2	0	12	6	341	47	0	2	79	183	4	0	0	875	3210
5:15 PM	19	2	134	0	0	9	8	10	0	34	12	381	59	1	0	73	183	3	2	0	930	3328
5:30 PM	18	4	142	0	0	11	5	4	0	22	15	380	50	0	0	81	214	3	3	0	952	3530
5:45 PM	23	5	128	0	0	13	9	1	0	15	16	357	30	0	3	83	181	3	0	0	867	3624

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	72	16	568	0	0	44	20	104	0	88	60	1520	200	0	0	324	856	12	12	0	3896
Heavy Trucks	4	0	16			0	0	4			0	12	4			16	28	0			84
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

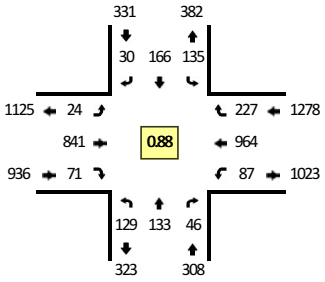
Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

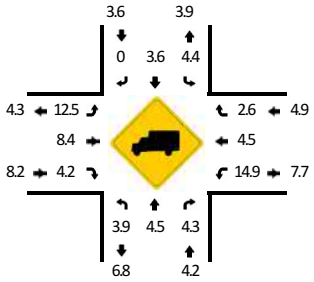
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

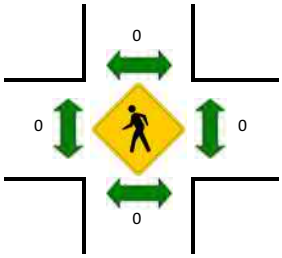
LOCATION: Dr Martin L King Jr Beltway/N Kentucky Ave -- State Hwy 472 | **QC JOB #:** 15005905
CITY/STATE: DeLand, FL | **DATE:** Thu, Jun 6 2019

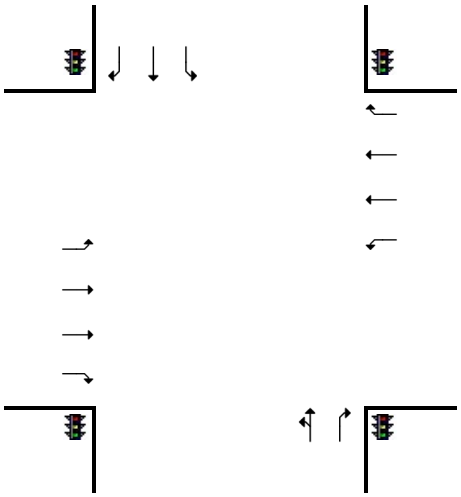
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

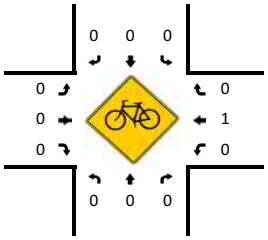


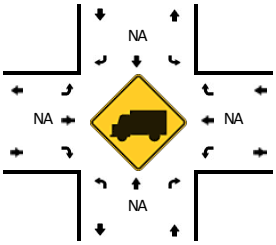


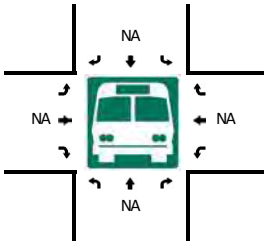












R* = RTOR

15-Min Count Period Beginning At	Dr Martin L King Jr Beltway/N Kentucky Ave (Northbound)					Dr Martin L King Jr Beltway/N Kentucky Ave (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	19	40	5	0	13	34	34	1	0	8	6	200	12	0	8	8	188	25	0	16	617	
7:15 AM	38	22	5	0	12	35	32	1	0	3	3	247	6	1	4	18	223	25	0	20	695	
7:30 AM	34	33	7	0	10	34	45	2	0	4	3	232	19	1	8	16	289	50	1	24	812	
7:45 AM	30	45	3	0	4	27	45	3	0	12	8	177	12	0	8	27	245	31	0	35	712	2836
8:00 AM	27	33	2	0	3	39	44	1	0	4	8	185	9	0	5	25	207	23	0	19	634	2853
8:15 AM	29	23	2	0	7	31	60	0	0	6	5	193	15	1	4	17	198	35	0	25	651	2809
8:30 AM	24	37	1	0	12	33	40	0	0	5	11	161	10	0	9	12	213	32	1	9	610	2607
8:45 AM	27	30	5	0	4	41	48	1	0	6	6	157	15	0	6	19	215	23	0	17	620	2515

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	136	132	68	0	40	136	180	24	0	16	12	928	108	4	32	64	1156	296	4	96	3432
Heavy Trucks	4	4	0			0	0	0			4	68	4			0	28	8			120
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

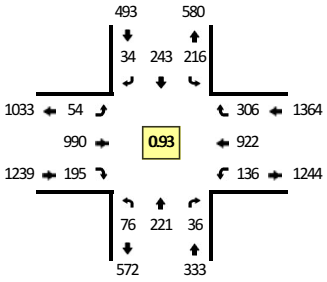
Comments:

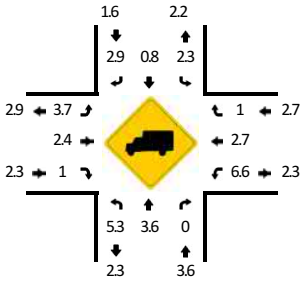
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

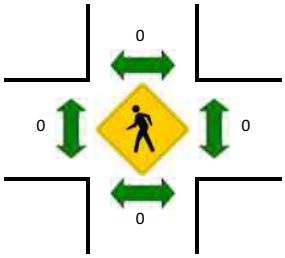
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

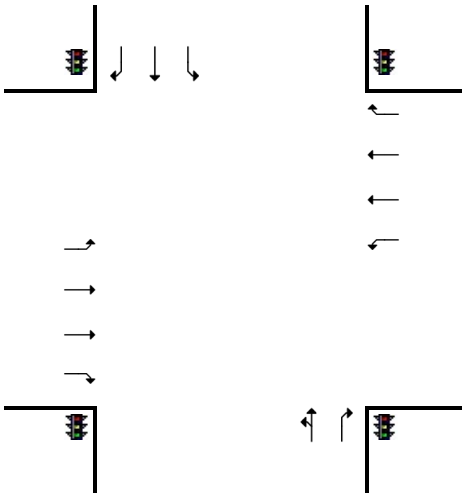
LOCATION: Dr Martin L King Jr Beltway/N Kentucky Ave -- State Hwy 472 | **QC JOB #:** 15005906
CITY/STATE: DeLand, FL | **DATE:** Thu, Jun 6 2019

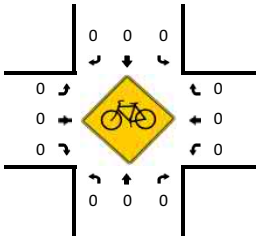
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

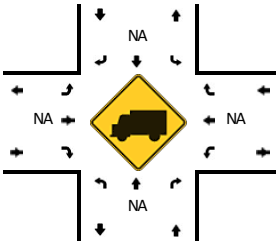


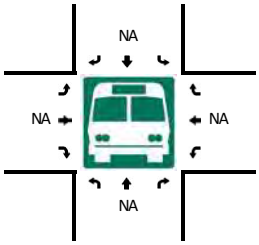












R* = RTOR

15-Min Count Period Beginning At	Dr Martin L King Jr Beltway/N Kentucky Ave (Northbound)					Dr Martin L King Jr Beltway/N Kentucky Ave (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	13	60	4	0	9	41	53	1	0	5	10	208	13	0	16	34	189	29	0	30	715	
4:15 PM	24	59	3	0	6	45	59	0	0	3	7	207	24	0	25	24	222	25	0	33	766	
4:30 PM	16	53	1	0	4	48	48	0	0	6	13	207	17	0	28	25	186	35	0	38	725	
4:45 PM	21	47	1	0	4	58	54	0	0	4	14	239	19	0	29	31	211	41	0	35	808	3014
5:00 PM	26	53	1	0	7	44	55	0	0	11	8	246	20	0	13	36	207	37	0	40	804	3103
5:15 PM	15	64	0	0	14	54	73	4	0	9	19	247	29	0	35	34	246	36	2	45	926	3263
5:30 PM	14	57	1	0	8	60	61	1	0	5	12	258	24	1	26	33	258	29	0	43	891	3429
5:45 PM	18	51	3	0	4	57	66	1	0	1	11	221	19	0	16	24	223	32	0	30	777	3398

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	60	256	56	0	56	216	292	52	0	36	76	988	256	0	140	136	984	324	8	180	4116
Heavy Trucks	0	4	0			0	4	4			0	20	0			4	28	0			64
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

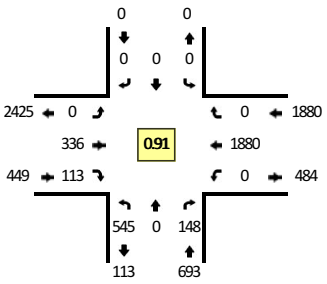
Type of peak hour being reported: Intersection Peak

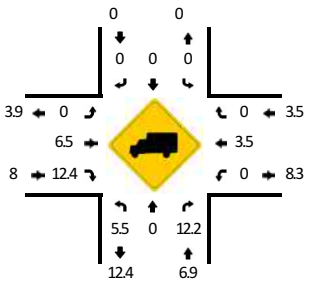
Method for determining peak hour: Total Entering Volume

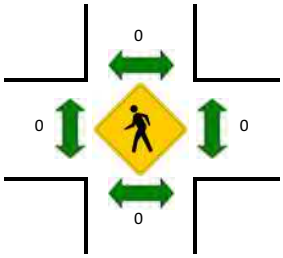
LOCATION: I-4 NB Ramps -- State Hwy 472
CITY/STATE: Deltona, FL

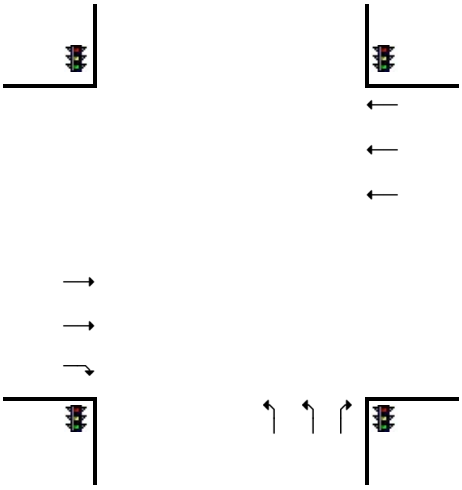
QC JOB #: 15005909
DATE: Tue, Jun 11 2019

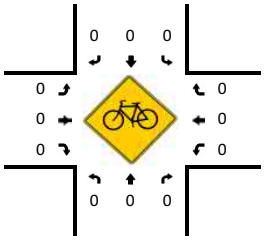
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

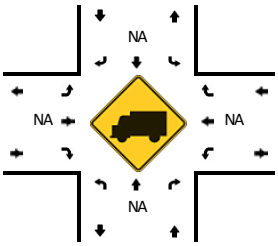


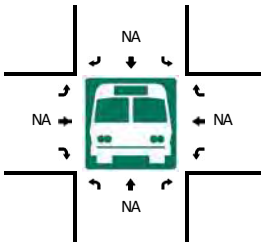












R* = RTOR

15-Min Count Period Beginning At	I-4 NB Ramps (Northbound)					I-4 NB Ramps (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	89	0	32	0	0	0	0	0	0	0	0	45	37	0	0	0	420	0	0	0	623	
7:15 AM	126	0	39	0	0	0	0	0	0	0	0	73	27	0	0	0	531	0	0	0	796	
7:30 AM	180	0	35	0	0	0	0	0	0	0	0	98	30	0	0	0	484	0	0	0	827	
7:45 AM	150	0	42	0	0	0	0	0	0	0	0	120	19	0	0	0	445	0	0	0	776	3022
8:00 AM	118	0	44	0	0	0	0	0	0	0	0	74	28	0	0	0	323	0	1	0	588	2987
8:15 AM	111	0	40	0	0	0	0	0	0	0	0	95	30	0	0	0	375	0	0	0	651	2842
8:30 AM	129	0	47	0	0	0	0	0	0	0	0	93	20	0	0	0	323	0	0	0	612	2627
8:45 AM	111	0	40	0	0	0	0	0	0	0	0	115	15	0	0	0	296	0	0	0	577	2428

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	720	0	140	0	0	0	0	0	0	0	0	392	120	0	0	0	1936	0	0	0	3308
Heavy Trucks	32	0	16			0	0	0			0	20	4			0	84	0			156
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

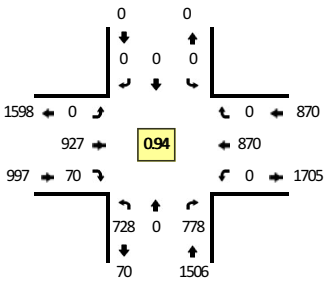
Report generated on 6/14/2019 4:04 PM

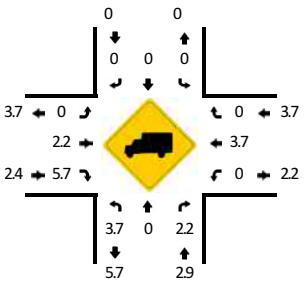
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

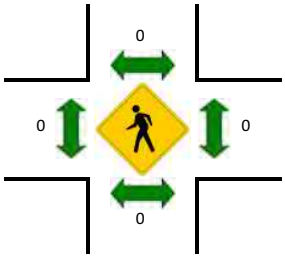
LOCATION: I-4 NB Ramps -- State Hwy 472 | **QC JOB #:** 15005910
CITY/STATE: Deltona, FL | **DATE:** Tue, Jun 11 2019

Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

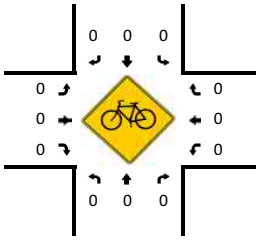


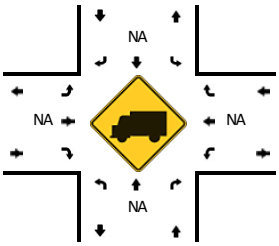


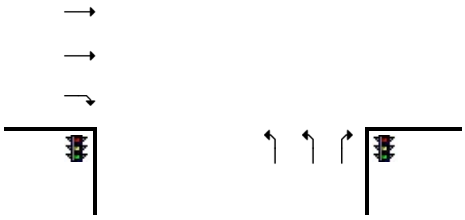
Quality Counts
DATA THAT DRIVES COMMUNITIES

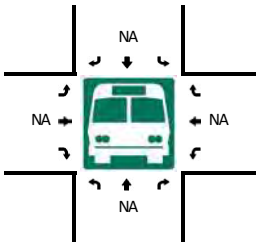












R* = RTOR

15-Min Count Period Beginning At	I-4 NB Ramps (Northbound)					I-4 NB Ramps (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	150	0	142	0	0	0	0	0	0	0	0	150	20	0	0	0	189	0	0	0	651	
4:15 PM	198	0	202	0	0	0	0	0	0	0	0	170	16	0	0	0	158	0	0	0	744	
4:30 PM	197	0	166	0	0	0	0	0	0	0	0	180	20	1	0	0	185	0	0	0	749	
4:45 PM	172	0	185	0	0	0	0	0	0	0	0	188	20	0	0	0	213	0	0	0	778	2922
5:00 PM	182	0	188	0	0	0	0	0	0	0	0	266	14	0	0	0	221	0	0	0	871	3142
5:15 PM	193	0	201	0	0	0	0	0	0	0	0	251	16	0	0	0	238	0	0	0	899	3297
5:30 PM	181	0	204	0	0	0	0	0	0	0	0	222	20	0	0	0	198	0	0	0	825	3373
5:45 PM	198	0	170	0	0	0	0	0	0	0	0	200	11	1	0	0	182	0	0	0	762	3357

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	772	0	804	0	0	0	0	0	0	0	0	1004	64	0	0	0	952	0	0	0	3596
Heavy Trucks	24	0	20			0	0	0			0	16	0			0	32	0			92
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

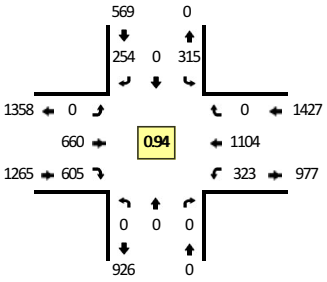
Type of peak hour being reported: Intersection Peak

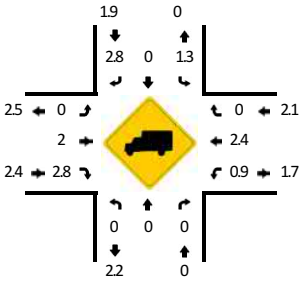
Method for determining peak hour: Total Entering Volume

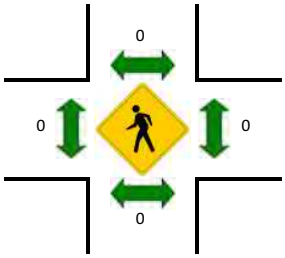
LOCATION: I-4 SB Ramps -- State Hwy 472
CITY/STATE: DeLand, FL

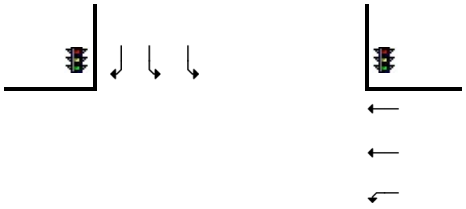
QC JOB #: 15005908
DATE: Thu, Jun 6 2019

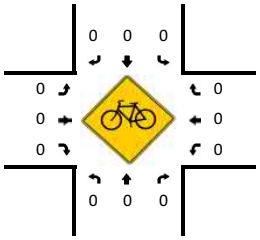
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

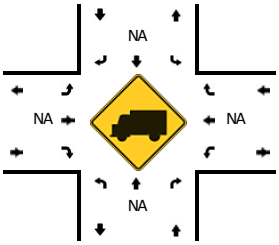




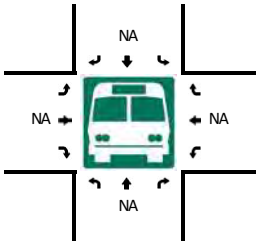












R* = RTOR

15-Min Count Period Beginning At	I-4 SB Ramps (Northbound)					I-4 SB Ramps (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	0	0	0	63	0	13	0	26	0	143	122	0	0	85	244	0	1	0	697	
4:15 PM	0	0	0	0	0	55	0	15	0	17	0	137	127	0	0	67	261	0	0	0	679	
4:30 PM	0	0	0	0	0	61	0	20	0	25	0	139	134	0	0	89	242	0	0	0	710	
4:45 PM	0	0	0	0	0	73	0	29	0	31	0	152	155	0	0	58	257	0	0	0	755	2841
5:00 PM	0	0	0	0	0	75	0	23	0	44	0	147	150	0	0	82	267	0	1	0	789	2933
5:15 PM	0	0	0	0	0	81	0	24	0	40	0	180	147	0	0	96	283	0	0	0	851	3105
5:30 PM	0	0	0	0	0	86	0	32	0	31	0	181	153	0	0	85	297	0	1	0	866	3261
5:45 PM	0	0	0	0	0	66	0	14	0	32	0	149	145	0	0	76	245	0	0	0	727	3233

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	0	0	0	344	0	252	0	124	0	724	612	0	0	340	1188	0	4	0	3588
Heavy Trucks	0	0	0			0	0	4			0	4	28			4	24	0			64
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

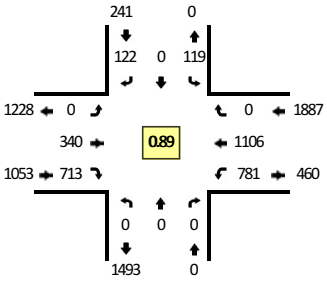
Report generated on 6/14/2019 4:04 PM

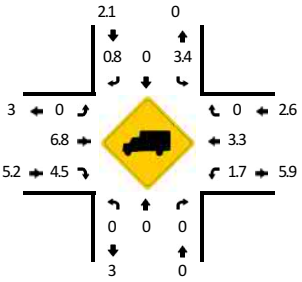
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

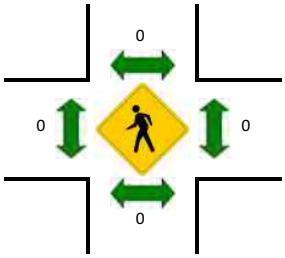
LOCATION: I-4 SB Ramps -- State Hwy 472 | **QC JOB #:** 15005907
CITY/STATE: DeLand, FL | **DATE:** Thu, Jun 6 2019

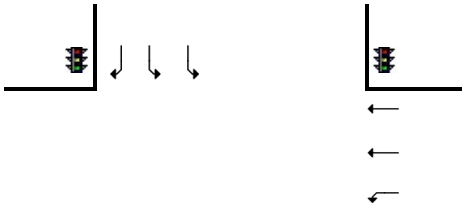
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

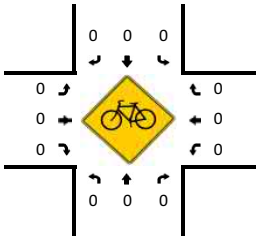


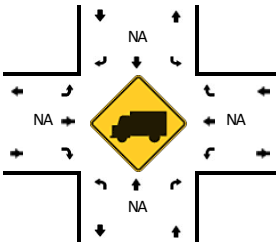


Quality Counts
DATA THAT DRIVES COMMUNITIES

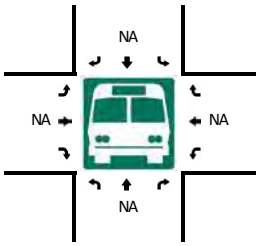












R* = RTOR

15-Min Count Period Beginning At	I-4 SB Ramps (Northbound)					I-4 SB Ramps (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	0	0	0	0	18	0	4	0	14	0	83	168	0	0	192	221	0	1	0	701	
7:15 AM	0	0	0	0	0	22	0	2	0	20	0	98	201	0	0	220	258	0	0	0	821	
7:30 AM	0	0	0	0	0	32	0	12	0	25	0	82	201	0	0	206	339	0	0	0	897	
7:45 AM	0	0	0	0	0	47	0	11	0	34	0	77	143	0	0	162	288	0	0	0	762	3181
8:00 AM	0	0	0	0	0	32	0	5	0	29	0	86	141	0	0	164	222	0	0	0	679	3159
8:15 AM	0	0	0	0	0	16	0	7	0	18	0	73	144	0	0	161	244	0	0	0	663	3001
8:30 AM	0	0	0	0	0	26	0	6	0	16	0	65	152	0	0	148	241	0	1	0	655	2759
8:45 AM	0	0	0	0	0	24	0	4	0	18	0	75	132	0	0	113	241	0	0	0	607	2604

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	0	0	0	128	0	148	0	100	0	328	804	0	0	824	1356	0	0	0	3688
Heavy Trucks	0	0	0			12	0	0			0	24	40			12	40	0			128
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

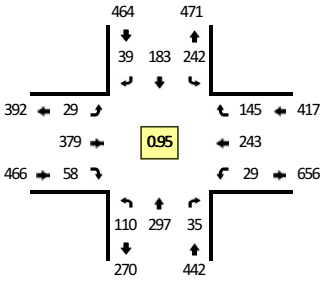
Type of peak hour being reported: Intersection Peak

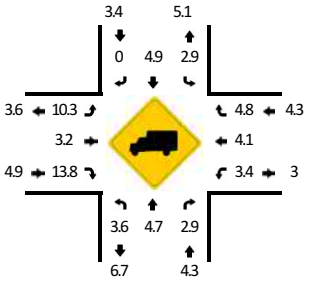
Method for determining peak hour: Total Entering Volume

LOCATION: Dr Martin L King Jr Beltway -- Orange Camp Rd
CITY/STATE: DeLand, FL

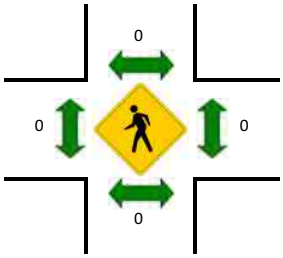
QC JOB #: 15005901
DATE: Thu, Jun 6 2019

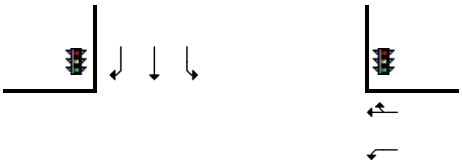
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

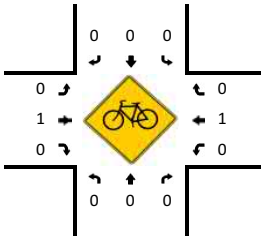


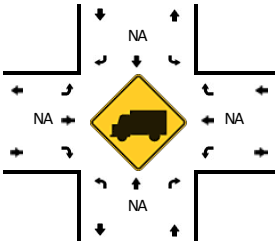


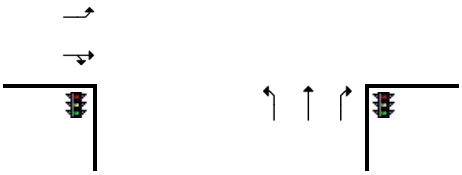
Quality Counts
DATA THAT DRIVES COMMUNITIES

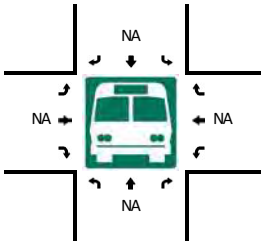












R* = RTOR

15-Min Count Period Beginning At	Dr Martin L King Jr Beltway (Northbound)					Dr Martin L King Jr Beltway (Southbound)					Orange Camp Rd (Eastbound)					Orange Camp Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	21	64	4	0	3	67	42	3	0	4	13	78	9	0	4	4	35	21	0	2	374	
7:15 AM	14	51	5	0	4	66	43	5	0	3	11	88	5	0	0	9	65	35	0	0	404	
7:30 AM	27	79	5	0	1	57	43	2	0	1	5	108	14	0	1	3	64	36	0	5	451	
7:45 AM	33	85	5	0	5	67	38	10	0	2	8	93	13	0	1	6	71	33	0	3	473	1702
8:00 AM	27	74	6	0	4	61	52	14	0	3	6	76	18	0	1	5	46	26	0	7	426	1754
8:15 AM	23	59	7	0	2	57	50	5	0	2	10	102	8	0	2	15	62	30	0	5	439	1789
8:30 AM	25	71	9	0	3	61	43	8	0	3	7	63	13	0	0	6	71	27	0	1	411	1749
8:45 AM	16	61	5	0	0	44	55	6	0	0	4	70	9	0	3	10	62	32	0	3	380	1656

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	132	340	40	0	20	268	152	48	0	8	32	372	56	0	4	24	284	144	0	12	1936
Heavy Trucks	12	12	0			8	16	0			4	8	12			4	20	12			108
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

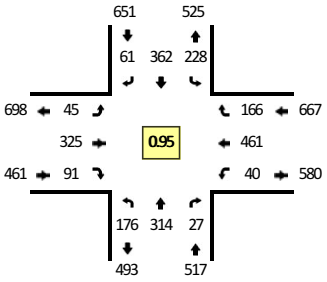
Report generated on 6/14/2019 4:04 PM

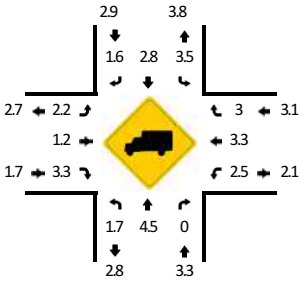
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

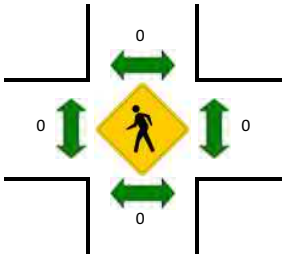
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

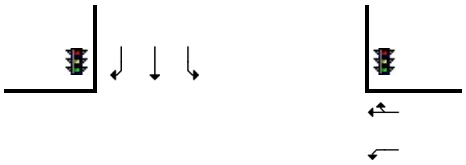
LOCATION: Dr Martin L King Jr Beltway -- Orange Camp Rd | **QC JOB #:** 15005902
CITY/STATE: DeLand, FL | **DATE:** Thu, Jun 6 2019

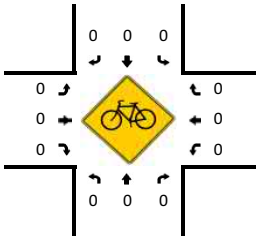
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

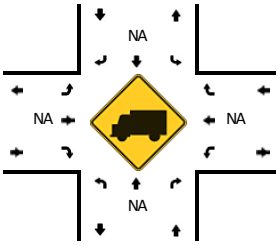


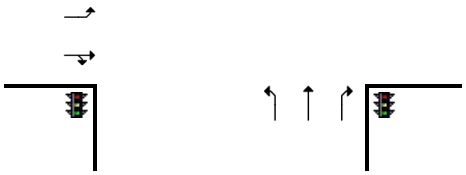


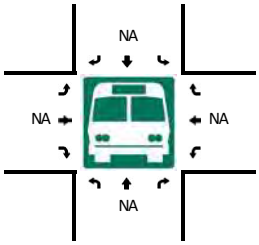












R* = RTOR

15-Min Count Period Beginning At	Dr Martin L King Jr Beltway (Northbound)					Dr Martin L King Jr Beltway (Southbound)					Orange Camp Rd (Eastbound)					Orange Camp Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	32	75	9	0	5	33	73	14	0	1	15	90	16	0	3	10	98	40	0	3	517	
4:15 PM	32	72	6	0	4	41	53	4	0	6	8	79	20	0	4	14	88	49	0	1	481	
4:30 PM	30	83	5	0	1	40	79	13	0	6	12	73	17	0	2	8	100	29	0	1	499	
4:45 PM	26	78	7	0	8	61	90	11	0	5	16	73	24	0	1	8	93	30	0	6	537	2034
5:00 PM	40	74	4	0	5	57	80	13	0	5	12	75	10	0	5	10	115	42	0	6	553	2070
5:15 PM	40	82	4	0	3	46	101	10	0	6	8	93	28	0	3	13	127	41	0	0	605	2194
5:30 PM	56	92	1	0	2	71	91	9	0	5	8	79	14	0	4	8	103	39	0	2	584	2279
5:45 PM	40	66	5	0	3	54	90	2	0	11	17	78	24	0	3	9	116	34	0	2	554	2296

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	160	328	28	0	12	184	404	64	0	24	32	372	124	0	12	52	508	164	0	0	2468
Heavy Trucks	0	16	0			0	16	0			0	8	0			4	24	0			68
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

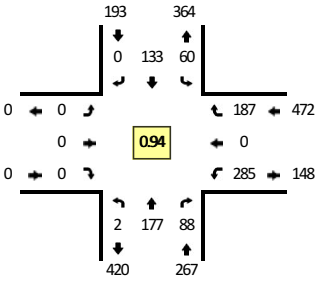
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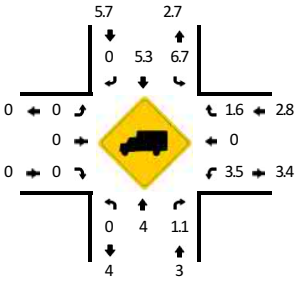
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

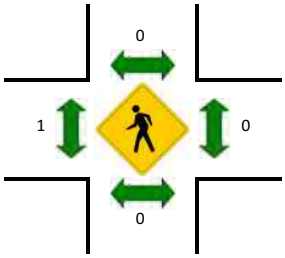
LOCATION: N Normandy Blvd -- Elkcam Blvd | **QC JOB #:** 15005943
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

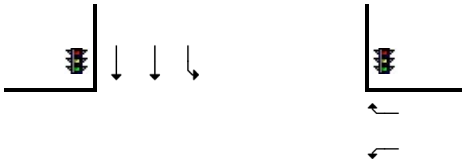
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

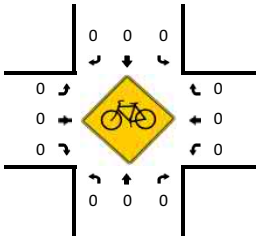


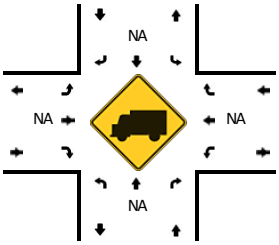


Quality Counts
DATA THAT DRIVES COMMUNITIES

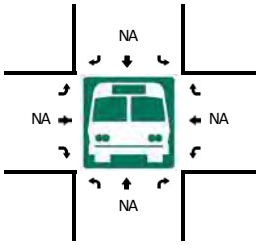












R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					Elkcam Blvd (Eastbound)					Elkcam Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	45	8	0	9	11	20	0	0	0	0	0	0	0	0	62	0	17	0	19	191	
7:15 AM	0	41	15	0	4	17	38	0	0	0	0	0	0	0	0	68	0	34	0	24	241	
7:30 AM	0	63	13	0	3	13	24	0	0	0	0	0	0	0	0	82	0	36	0	15	249	
7:45 AM	0	41	16	1	10	18	47	0	0	0	0	0	0	0	0	68	0	21	0	20	242	923
8:00 AM	0	32	17	1	10	12	24	0	0	0	0	0	0	0	0	67	0	22	0	15	200	932
8:15 AM	0	36	11	0	16	9	32	0	0	0	0	0	0	0	0	72	0	17	0	15	208	899
8:30 AM	0	42	14	0	12	10	25	0	0	0	0	0	0	0	0	71	0	11	0	18	203	853
8:45 AM	0	46	22	0	10	11	43	0	0	0	0	0	0	0	0	70	0	10	0	16	228	839

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	252	64	0	12	52	96	0	0	0	0	0	0	0	0	328	0	204	0	60	1068
Heavy Trucks	0	4	0			12	8	0			0	0	0			8	0	0			32
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

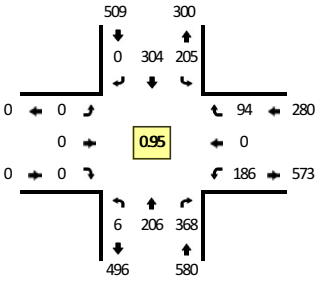
Comments:

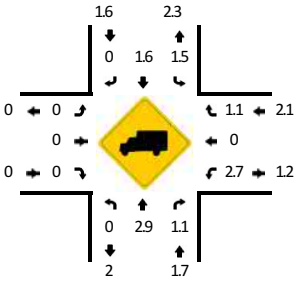
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

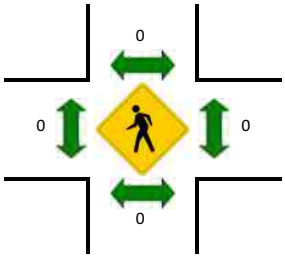
LOCATION: N Normandy Blvd -- Elkcam Blvd | **QC JOB #:** 15005944
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

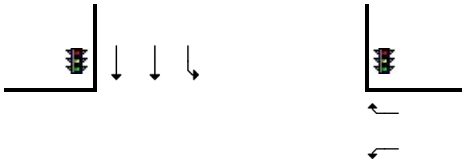
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

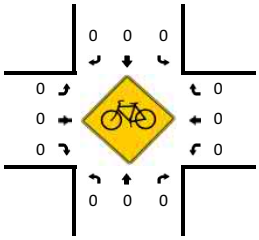


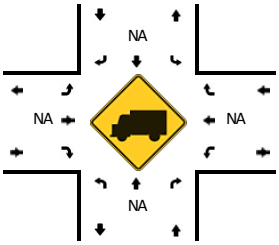


Quality Counts
DATA THAT DRIVES COMMUNITIES

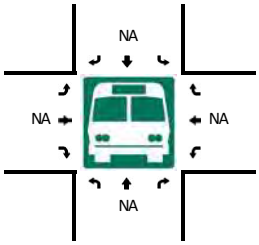












R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					Elkcam Blvd (Eastbound)					Elkcam Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	52	53	0	30	31	62	0	1	0	0	0	0	0	0	26	0	9	0	10	274	
4:15 PM	0	41	56	0	33	39	52	0	0	0	0	0	0	0	0	42	0	3	0	11	277	
4:30 PM	0	46	46	0	20	40	62	0	0	0	0	0	0	0	0	44	0	6	0	11	275	
4:45 PM	0	41	43	0	39	40	66	0	0	0	0	0	0	0	0	36	0	15	0	9	289	1115
5:00 PM	0	47	53	0	45	46	41	0	0	0	0	0	0	0	0	50	0	16	0	8	306	1147
5:15 PM	0	41	59	1	33	55	84	0	0	0	0	0	0	0	0	56	0	10	0	16	355	1225
5:30 PM	0	61	61	3	33	60	91	0	0	0	0	0	0	0	0	35	0	6	0	12	362	1312
5:45 PM	0	57	51	2	33	44	88	0	0	0	0	0	0	0	0	45	0	13	0	13	346	1369

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	244	376	12	132	240	364	0	0	0	0	0	0	0	0	140	0	72	0	48	1628
Heavy Trucks	0	12	0			0	8	0			0	0	0			0	0	0			20
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

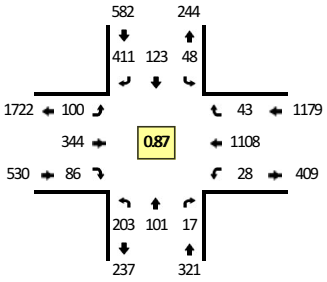
Comments:

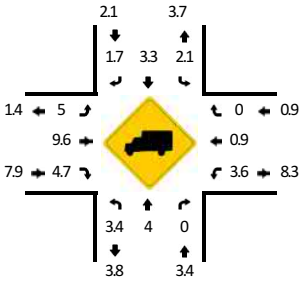
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

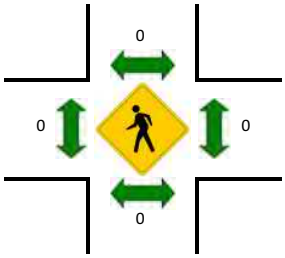
LOCATION: N Normandy Blvd -- Saxon Blvd | **QC JOB #:** 15005941
CITY/STATE: Deltona, FL | **DATE:** Tue, Jun 11 2019

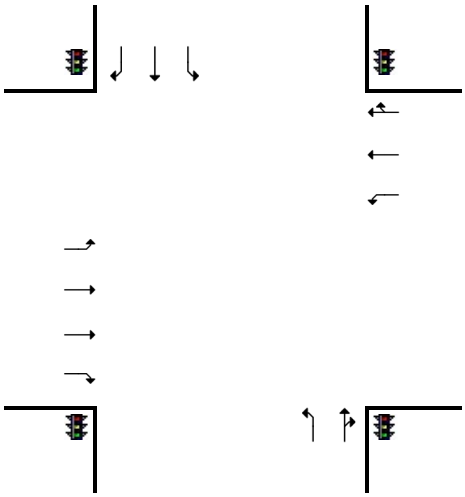
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

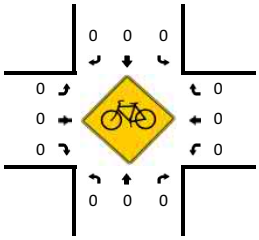


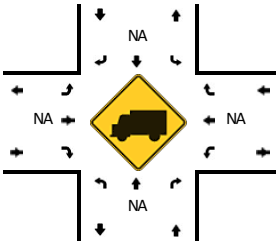


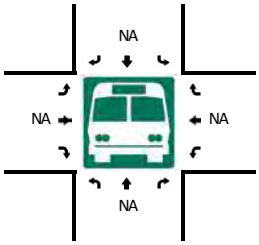
Quality Counts
DATA THAT DRIVES COMMUNITIES











R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	48	21	2	0	0	3	20	73	0	43	25	70	8	0	3	7	252	7	0	2	584	
7:15 AM	65	25	4	0	1	10	33	83	0	30	31	64	9	0	7	6	257	2	0	1	628	
7:30 AM	54	23	3	0	1	17	31	80	0	27	23	85	15	0	11	7	358	17	0	0	752	
7:45 AM	42	29	5	0	0	10	31	68	0	39	18	100	10	0	12	10	247	9	0	0	630	2594
8:00 AM	42	24	2	0	1	11	28	58	0	26	28	95	11	0	11	5	246	13	0	1	602	2612
8:15 AM	45	25	3	0	0	8	26	62	0	36	36	78	20	0	15	10	249	4	0	1	618	2602
8:30 AM	51	29	3	0	2	9	32	62	0	28	33	89	24	0	24	5	222	13	0	3	629	2479
8:45 AM	40	25	6	0	1	8	32	42	0	35	31	104	18	0	12	8	225	13	0	2	602	2451

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	216	92	16	0	4	68	124	428	0	108	92	340	104	0	44	28	1432	68	0	0	3164
Heavy Trucks	4	4	0			4	12	8			8	32	4			0	16	0			92
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

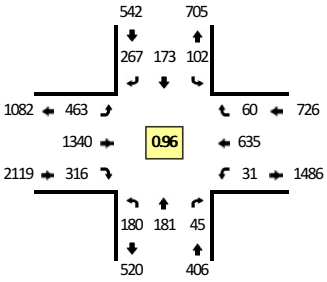
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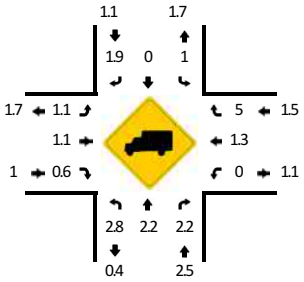
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

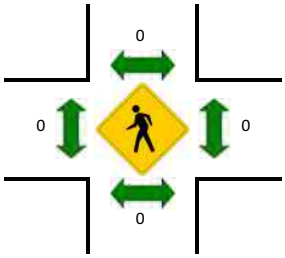
LOCATION: N Normandy Blvd -- Saxon Blvd | **QC JOB #:** 15005942
CITY/STATE: Deltona, FL | **DATE:** Tue, Jun 11 2019

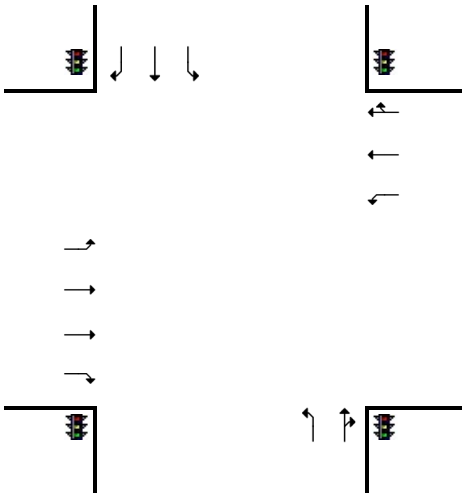
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

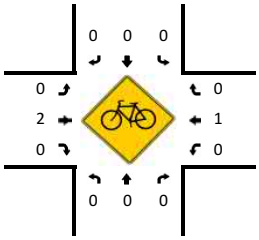


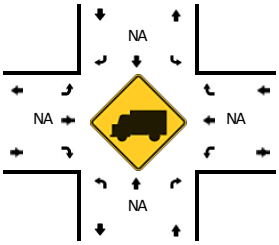


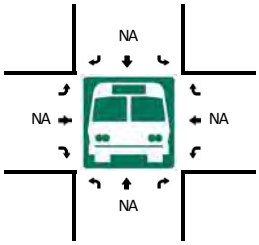
Quality Counts
DATA THAT DRIVES COMMUNITIES











R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	35	30	8	0	2	15	26	22	0	31	84	254	54	0	10	4	173	16	0	0	764	
4:15 PM	45	39	6	0	0	17	34	33	0	22	103	278	53	0	16	8	177	8	0	0	839	
4:30 PM	42	29	8	0	0	18	37	50	0	29	120	287	48	0	9	7	158	17	0	0	859	
4:45 PM	55	32	8	0	2	21	46	23	0	21	94	319	57	0	8	5	170	12	0	0	873	3335
5:00 PM	46	47	11	0	1	22	41	37	1	32	115	347	70	0	17	9	181	10	0	0	987	3558
5:15 PM	42	50	8	0	1	23	49	53	0	21	113	329	70	0	12	8	171	10	0	0	960	3679
5:30 PM	48	36	10	0	3	31	41	31	0	32	110	349	64	0	15	6	144	21	0	1	942	3762
5:45 PM	44	48	7	0	4	25	42	34	0	27	125	315	55	0	13	8	139	15	0	3	904	3793

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	184	188	48	0	4	88	164	276	4	128	460	1388	348	0	68	36	724	40	0	0	4148
Heavy Trucks	8	4	0			4	0	8			4	12	0			0	8	0			48
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	1	0			1
Railroad Stopped Buses																					

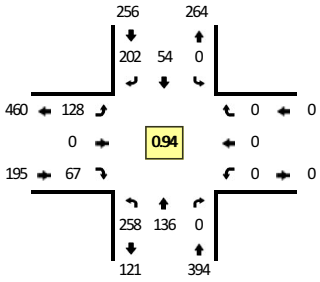
Comments:

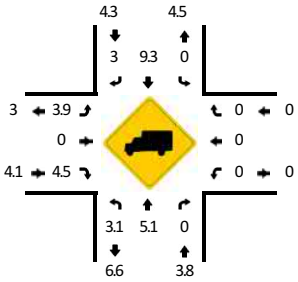
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

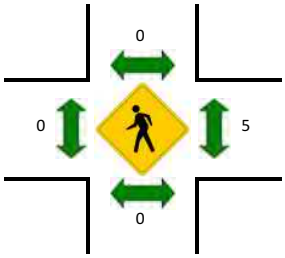
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: N Normandy Blvd -- Deltona Blvd | **QC JOB #:** 15005939
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

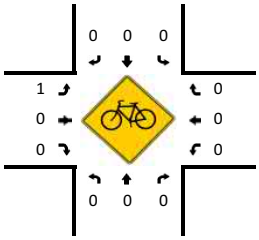
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

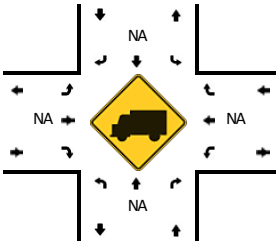




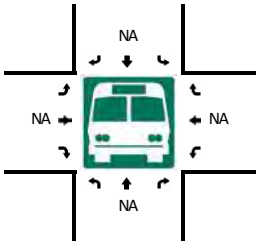












R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					Deltona Blvd (Eastbound)					Deltona Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	38	41	0	0	0	0	10	12	0	17	27	0	3	0	12	0	0	0	0	0	160	
7:15 AM	41	49	0	0	0	0	12	32	0	15	31	0	6	0	8	0	0	0	0	0	194	
7:30 AM	82	37	0	0	0	0	9	29	0	28	25	0	5	0	9	0	0	0	0	0	224	
7:45 AM	67	34	0	0	0	0	16	31	0	21	34	0	8	0	12	0	0	0	0	0	223	801
8:00 AM	51	33	0	0	0	0	16	18	0	15	28	0	6	0	10	0	0	0	0	0	177	818
8:15 AM	58	32	0	0	0	0	13	34	0	26	41	0	2	0	15	0	0	0	0	0	221	845
8:30 AM	51	35	0	0	0	0	19	24	0	26	35	0	5	0	18	0	0	0	0	0	213	834
8:45 AM	60	27	0	0	0	0	18	18	0	24	35	0	11	0	16	0	0	0	0	0	209	820

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	328	148	0	0	0	0	36	228	0	112	100	0	56	0	36	0	0	0	0	0	1044
Heavy Trucks	8	4	0			0	0	4			0	0	12			0	0	0			28
Pedestrians		0					0					0					4				4
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

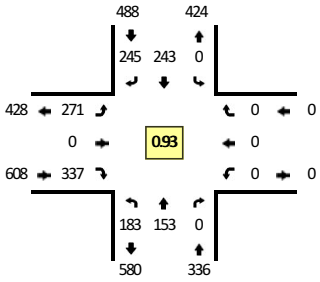
Comments:

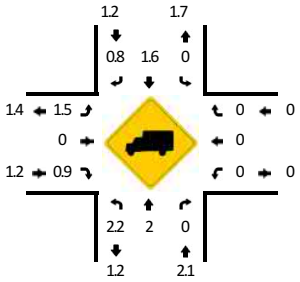
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

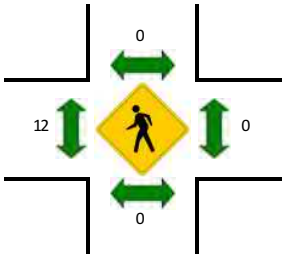
LOCATION: N Normandy Blvd -- Deltona Blvd | **QC JOB #:** 15005940
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

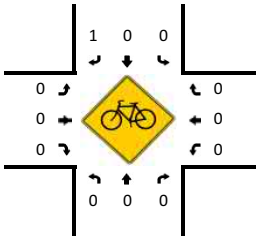


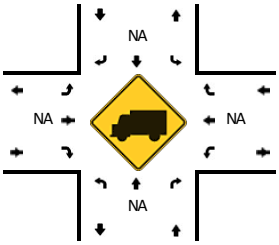


Quality Counts
DATA THAT DRIVES COMMUNITIES

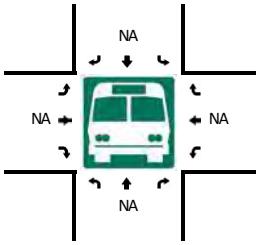












R* = RTOR

15-Min Count Period Beginning At	N Normandy Blvd (Northbound)					N Normandy Blvd (Southbound)					Deltona Blvd (Eastbound)					Deltona Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	23	26	0	0	0	0	39	40	0	18	66	0	34	0	47	0	0	0	0	0	293	
4:15 PM	40	21	0	0	0	0	50	26	0	25	66	0	25	0	49	0	0	0	0	0	302	
4:30 PM	38	37	0	0	0	0	58	36	0	23	59	0	26	0	53	0	0	0	0	0	330	
4:45 PM	35	48	0	0	0	0	62	20	0	19	62	0	29	0	32	0	0	0	0	0	307	1232
5:00 PM	29	35	0	0	0	0	60	23	0	24	84	0	45	0	49	0	0	0	0	0	349	1288
5:15 PM	49	43	0	0	0	0	63	42	0	23	76	0	42	0	49	0	0	0	0	0	387	1373
5:30 PM	53	40	0	0	0	0	59	39	0	19	42	0	33	0	48	0	0	0	0	0	333	1376
5:45 PM	52	35	0	0	0	0	61	60	0	15	69	0	27	0	44	0	0	0	0	0	363	1432

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	196	172	0	0	0	0	252	260	0	92	304	0	364	0	196	0	0	0	0	0	1836
Heavy Trucks	4	0	0			0	4	0			12	0	8			0	0	0			28
Pedestrians		0					0					4					0				4
Bicycles	0	0	0			0	0	1			0	0	0			0	0	0			1
Railroad																					
Stopped Buses																					

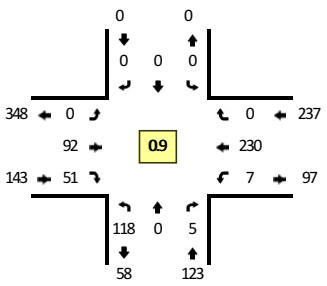
Comments:

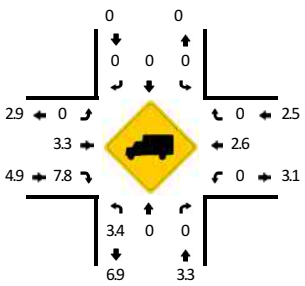
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

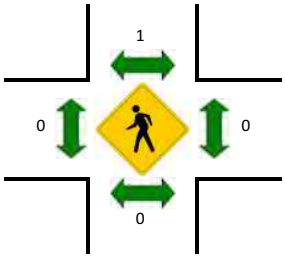
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

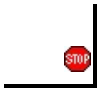
LOCATION: Fort Smith Blvd -- Elkcam Blvd | **QC JOB #:** 15005945
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

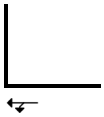
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

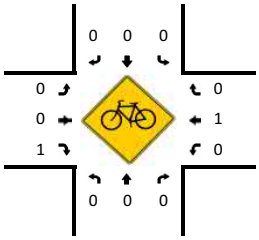


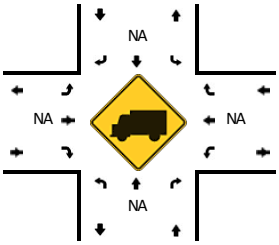


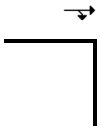


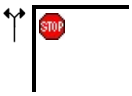


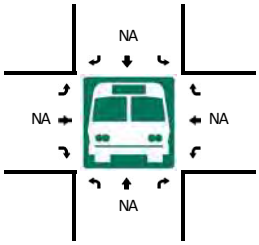












R* = RTOR

15-Min Count Period Beginning At	Fort Smith Blvd (Northbound)					Fort Smith Blvd (Southbound)					Elkcam Blvd (Eastbound)					Elkcam Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	29	0	0	0	0	0	0	0	0	0	0	18	14	0	0	1	43	0	1	0	106	
7:15 AM	40	0	0	0	0	0	0	0	0	0	0	15	14	0	0	3	48	0	0	0	120	
7:30 AM	34	0	3	0	0	0	0	0	0	0	0	20	17	0	0	2	64	0	0	0	140	
7:45 AM	20	0	1	0	0	0	0	0	0	0	0	29	10	0	0	0	59	0	0	0	119	485
8:00 AM	24	0	1	0	0	0	0	0	0	0	0	28	10	0	0	2	59	0	0	0	124	503
8:15 AM	27	0	1	0	0	0	0	0	0	0	0	22	8	0	0	0	46	0	0	0	104	487
8:30 AM	21	0	2	0	0	0	0	0	0	0	0	33	9	0	0	1	48	0	0	0	114	461
8:45 AM	17	0	1	0	0	0	0	0	0	0	0	29	11	0	0	1	56	0	0	0	115	457

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	136	0	12	0	0	0	0	0	0	0	0	80	68	0	0	8	256	0	0	0	560
Heavy Trucks	0	0	0			0	0	0			0	12	0			0	8	0			20
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

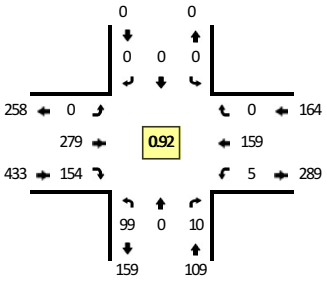
Type of peak hour being reported: Intersection Peak

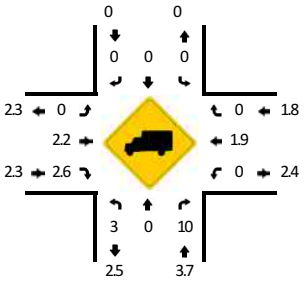
Method for determining peak hour: Total Entering Volume

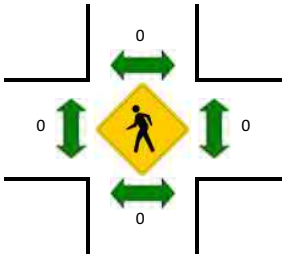
LOCATION: Fort Smith Blvd -- Elkcam Blvd
CITY/STATE: Deltona, FL

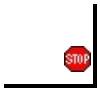
QC JOB #: 15005946
DATE: Thu, Jun 6 2019

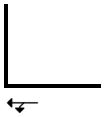
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

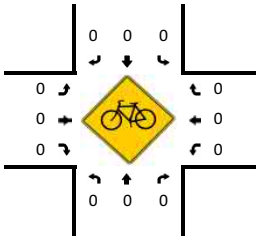


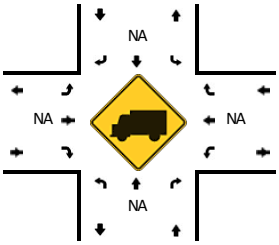


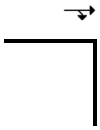


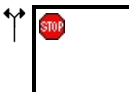


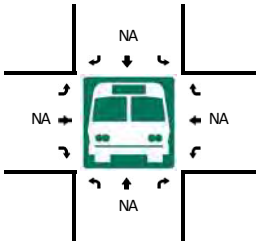












R* = RTOR

15-Min Count Period Beginning At	Fort Smith Blvd (Northbound)					Fort Smith Blvd (Southbound)					Elkcam Blvd (Eastbound)					Elkcam Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	18	0	1	0	0	0	0	0	0	0	0	64	28	0	0	3	25	0	0	0	139	
4:15 PM	17	0	2	0	0	0	0	0	0	0	0	62	24	0	0	2	34	0	0	0	141	
4:30 PM	19	0	3	0	0	0	0	0	0	0	0	67	37	0	0	3	39	0	0	0	168	
4:45 PM	24	0	0	0	0	0	0	0	0	0	0	65	34	0	0	3	38	0	0	0	164	612
5:00 PM	24	0	2	0	0	0	0	0	0	0	0	64	38	0	0	2	40	0	0	0	170	643
5:15 PM	25	0	2	0	0	0	0	0	0	0	0	79	37	0	0	1	48	0	0	0	192	694
5:30 PM	26	0	4	0	0	0	0	0	0	0	0	63	47	0	0	1	29	0	0	0	170	696
5:45 PM	24	0	2	0	0	0	0	0	0	0	0	73	32	0	0	1	42	0	0	0	174	706

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	100	0	8	0	0	0	0	0	0	0	0	316	148	0	0	4	192	0	0	0	768
Heavy Trucks	0	0	0			0	0	0			0	12	0			0	4	0			16
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

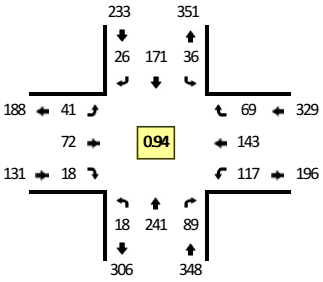
Report generated on 6/14/2019 4:04 PM

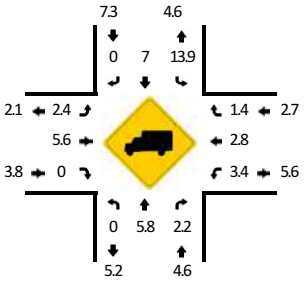
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

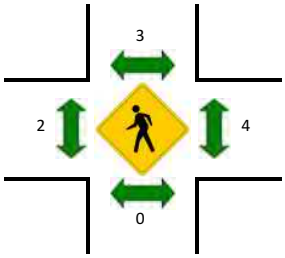
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

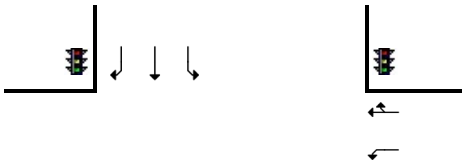
LOCATION: Providence Blvd -- Elkcam Blvd | **QC JOB #:** 15005947
CITY/STATE: Deltona, FL | **DATE:** Tue, Jun 11 2019

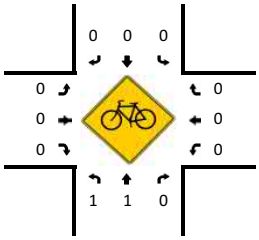
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

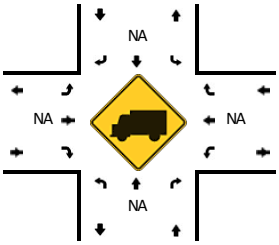


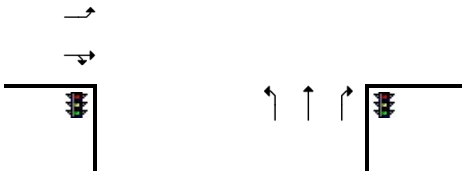


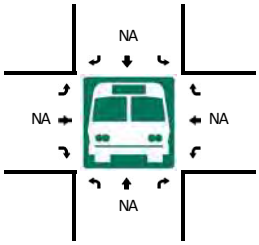












R* = RTOR

15-Min Count Period Beginning At	Providence Blvd (Northbound)					Providence Blvd (Southbound)					Elkcam Blvd (Eastbound)					Elkcam Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	6	43	8	0	9	5	22	2	0	3	8	13	2	0	3	25	28	13	0	5	195	
7:15 AM	6	45	8	0	9	6	29	3	0	0	10	16	6	0	2	23	41	3	0	3	210	
7:30 AM	10	50	7	0	11	5	47	2	0	2	6	19	3	0	0	27	38	9	0	3	239	
7:45 AM	4	80	11	0	10	6	57	5	0	2	8	17	3	0	2	20	41	10	0	2	278	922
8:00 AM	3	36	11	0	13	11	30	1	1	4	12	14	3	1	0	35	37	10	0	3	225	952
8:15 AM	5	67	6	0	10	12	43	4	0	5	9	19	4	0	2	28	34	16	0	6	270	1012
8:30 AM	6	58	15	0	13	6	41	3	0	2	11	22	1	0	3	34	31	15	0	7	268	1041
8:45 AM	4	49	10	0	14	9	38	2	0	6	8	20	2	0	1	39	35	5	0	2	244	1007

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	16	320	84	0	40	24	228	28	0	8	32	68	20	0	8	80	164	48	0	8	1176
Heavy Trucks	0	28	0			8	16	0			0	0	0			4	4	0			60
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

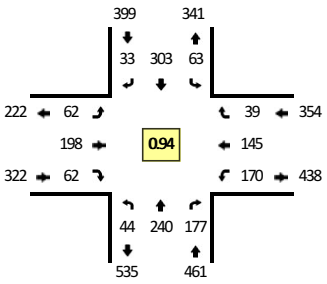
Comments:

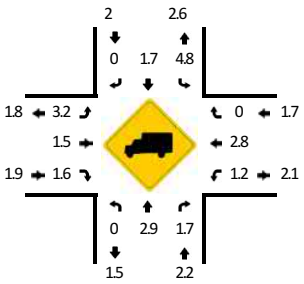
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

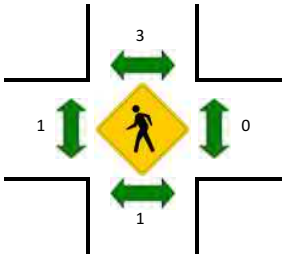
LOCATION: Providence Blvd -- Elkcam Blvd | **QC JOB #:** 15005948
CITY/STATE: Deltona, FL | **DATE:** Tue, Jun 11 2019

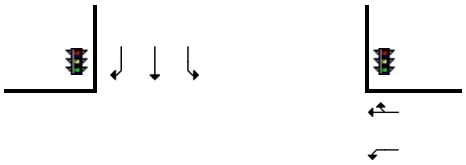
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

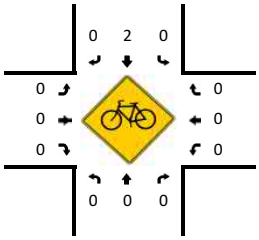


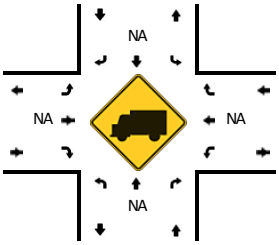


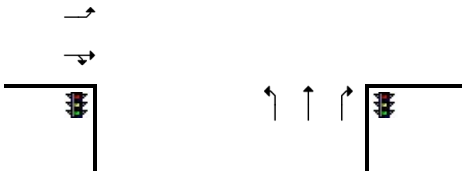
Quality Counts
DATA THAT DRIVES COMMUNITIES

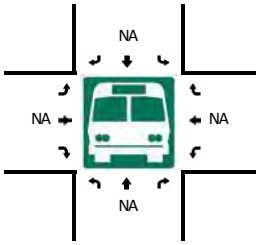












R* = RTOR

15-Min Count Period Beginning At	Providence Blvd (Northbound)					Providence Blvd (Southbound)					Elkcam Blvd (Eastbound)					Elkcam Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	11	58	27	0	22	14	68	2	0	1	7	37	8	0	3	45	20	7	0	2	332	
4:15 PM	11	53	19	0	20	11	65	6	0	5	6	50	10	0	2	28	24	5	0	3	318	
4:30 PM	10	44	20	0	15	11	73	3	0	7	11	43	8	0	4	55	33	5	0	2	344	
4:45 PM	9	59	26	0	21	16	53	6	0	4	9	47	9	0	2	43	25	11	0	1	341	1335
5:00 PM	13	57	27	0	22	16	83	5	0	9	15	43	10	0	5	41	32	8	0	4	390	1393
5:15 PM	12	60	20	0	20	13	73	4	0	3	11	59	14	0	1	39	36	2	0	1	368	1443
5:30 PM	10	58	17	0	20	13	65	1	0	7	12	55	11	0	3	46	37	14	0	1	370	1469
5:45 PM	9	65	30	0	21	21	82	2	0	2	24	41	15	0	3	44	40	8	0	1	408	1536

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	36	260	204	0	84	84	328	16	0	8	96	164	72	0	12	176	160	36	0	4	1740
Heavy Trucks	0	16	4			8	4	0			4	8	0			0	8	0			52
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

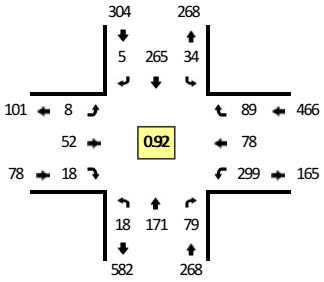
Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

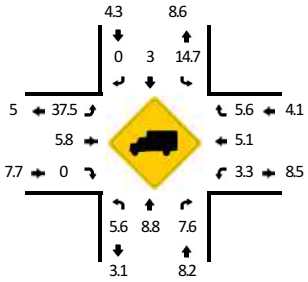
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

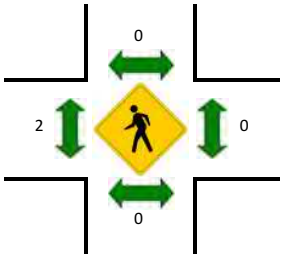
LOCATION: Providence Blvd -- Fort Smith Blvd | **QC JOB #:** 15005949
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

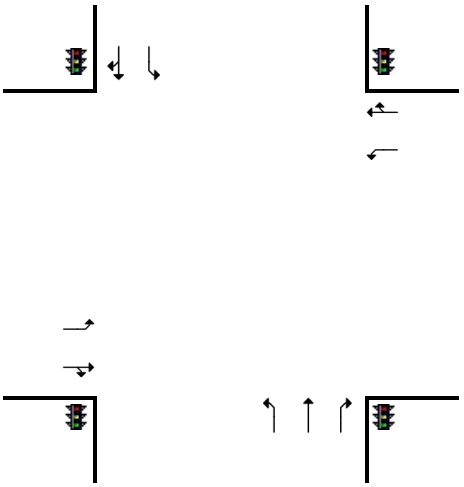
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

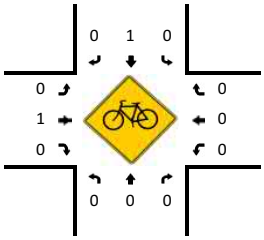


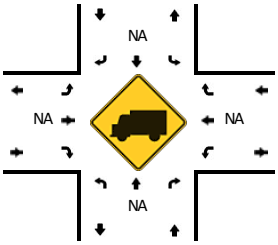


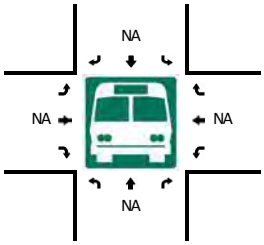












R* = RTOR

15-Min Count Period Beginning At	Providence Blvd (Northbound)					Providence Blvd (Southbound)					Fort Smith Blvd (Eastbound)					Fort Smith Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	1	36	11	0	8	9	56	1	0	0	1	9	4	0	4	72	22	15	0	10	259	
7:15 AM	3	32	5	0	7	3	69	0	0	0	1	10	4	0	2	82	24	19	0	10	271	
7:30 AM	5	25	14	0	8	8	61	3	0	0	3	21	4	0	2	84	18	12	0	6	274	
7:45 AM	6	60	19	0	12	11	71	0	0	0	2	10	3	0	2	64	17	21	0	6	304	1108
8:00 AM	4	54	9	0	5	12	64	2	0	0	2	11	0	0	1	69	19	7	0	8	267	1116
8:15 AM	4	44	16	0	9	9	58	2	0	1	0	8	4	0	1	66	14	16	0	6	258	1103
8:30 AM	2	58	10	0	6	12	69	2	0	0	2	4	1	0	3	66	10	19	0	13	277	1106
8:45 AM	3	54	16	0	10	9	56	2	0	0	1	8	1	0	4	67	3	11	0	6	251	1053

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	24	240	124	0	48	44	284	0	0	0	8	40	20	0	8	256	68	108	0	24	1296
Heavy Trucks	4	24	4			4	0	0			0	4	0			12	0	0			52
Pedestrians		0					0					4					0				4
Bicycles	0	0	0			0	1	0			0	0	0			0	0	0			1
Railroad																					
Stopped Buses																					

Comments:

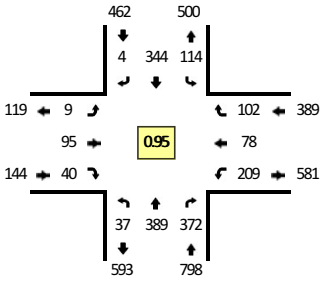
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

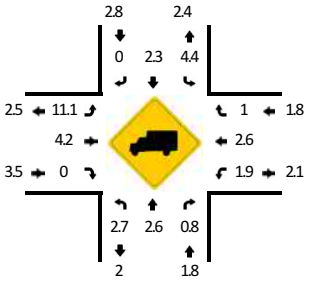
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Providence Blvd -- Fort Smith Blvd
CITY/STATE: Deltona, FL

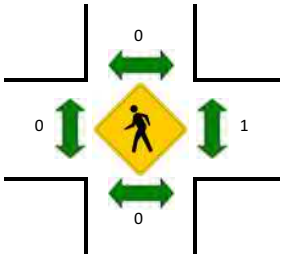
QC JOB #: 15005950
DATE: Thu, Jun 6 2019

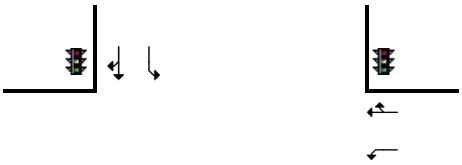
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

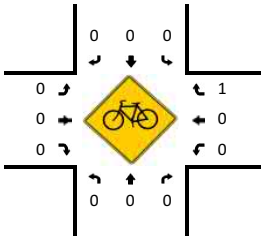


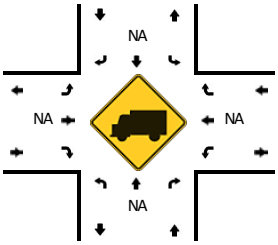


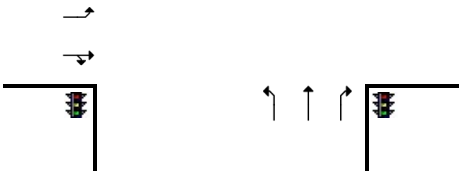
Quality Counts
DATA THAT DRIVES COMMUNITIES

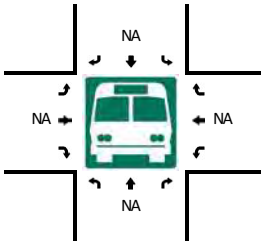












R* = RTOR

15-Min Count Period Beginning At	Providence Blvd (Northbound)					Providence Blvd (Southbound)					Fort Smith Blvd (Eastbound)					Fort Smith Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	5	82	54	0	14	20	79	0	0	0	1	23	5	0	2	45	13	8	0	1	352	
4:15 PM	4	84	45	0	18	12	72	2	0	0	1	15	1	0	4	40	17	7	0	8	330	
4:30 PM	3	76	47	0	29	19	89	0	0	0	1	24	3	0	6	48	16	7	0	10	378	
4:45 PM	11	92	40	0	25	24	83	1	0	0	2	20	3	0	2	39	23	12	0	7	384	1444
5:00 PM	12	92	48	0	31	34	77	2	0	0	3	22	7	0	4	47	13	14	0	7	413	1505
5:15 PM	5	87	79	0	23	27	76	0	0	0	0	28	6	0	3	49	23	22	0	10	438	1613
5:30 PM	8	89	73	0	30	34	85	2	0	0	4	27	9	0	1	60	22	21	0	4	469	1704
5:45 PM	12	121	58	0	30	19	106	0	0	0	2	18	7	0	3	53	20	13	0	11	473	1793

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	48	484	352	0	120	76	424	0	0	0	8	72	40	0	12	212	80	96	0	44	2068
Heavy Trucks	4	28	8			8	4	0			0	4	0			8	4	0			68
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	1			1
Railroad Stopped Buses																					

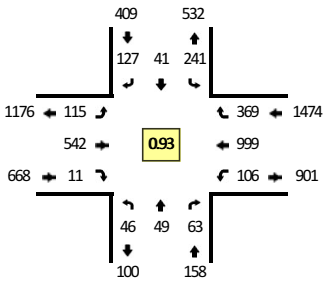
Comments:

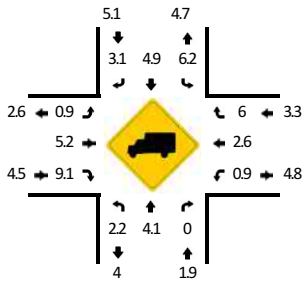
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

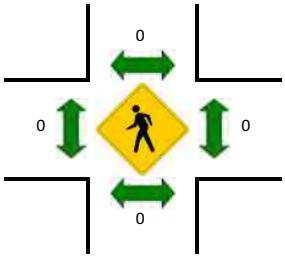
LOCATION: Veterans Memorial Pkwy -- Saxon Blvd | **QC JOB #:** 15005933
CITY/STATE: Orange City, FL | **DATE:** Thu, Jun 6 2019

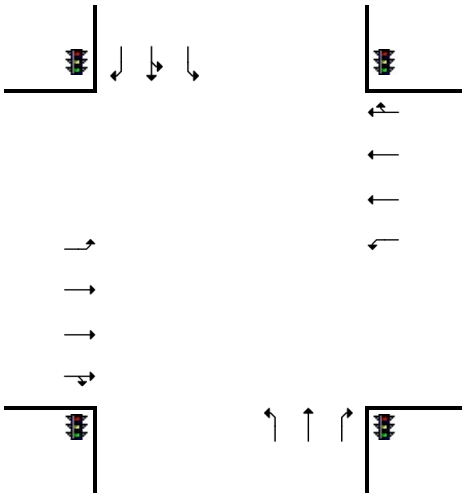
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

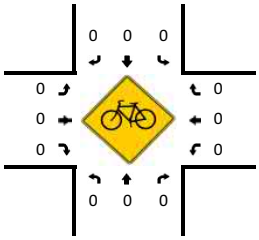


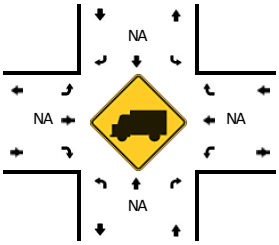


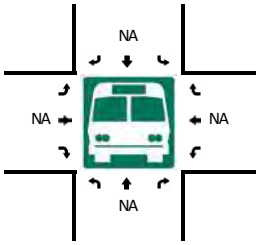
Quality Counts
DATA THAT DRIVES COMMUNITIES











R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	7	10	5	0	17	75	7	4	0	15	9	99	2	0	0	10	115	71	19	0	465	
7:15 AM	14	13	4	0	14	62	11	13	0	12	12	145	1	0	1	13	173	77	16	1	582	
7:30 AM	10	7	5	0	4	77	8	12	0	18	13	125	1	0	2	16	226	76	15	1	616	
7:45 AM	17	9	1	0	16	57	9	9	1	15	28	131	1	3	0	11	289	123	12	0	732	2395
8:00 AM	6	6	3	0	10	60	8	14	0	17	26	139	2	0	1	11	243	78	16	0	640	2570
8:15 AM	12	23	5	0	14	62	18	14	0	25	22	137	2	1	0	12	219	85	17	1	669	2657
8:30 AM	11	11	2	0	12	59	6	12	2	21	35	135	4	0	1	14	248	82	13	0	668	2709
8:45 AM	10	9	3	0	11	84	7	23	0	15	31	116	1	0	2	21	234	78	7	0	652	2629

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	68	36	68	0	64	228	36	96	4	60	112	524	4	12	0	44	1156	492	48	0	3052
Heavy Trucks	0	4	0			12	0	0			0	44	0			0	24	32			116
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

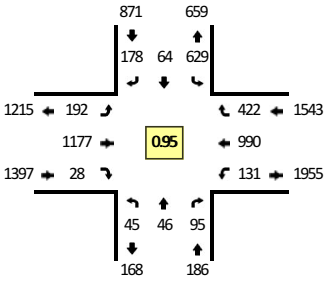
Comments:

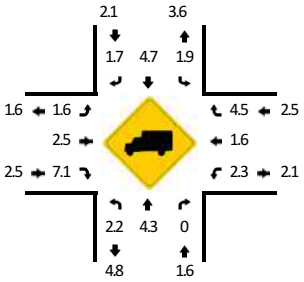
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

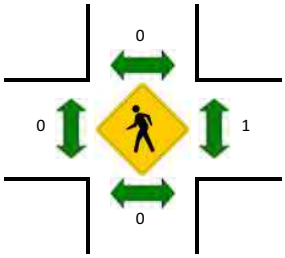
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

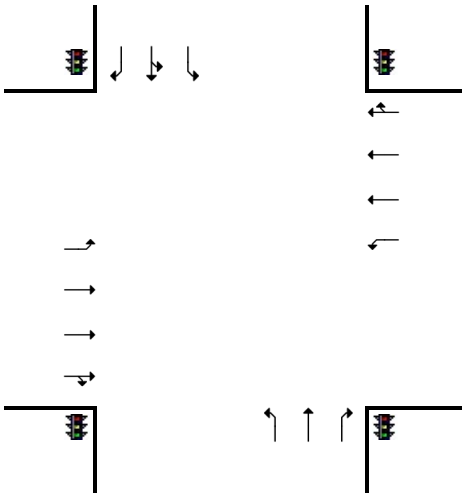
LOCATION: Veterans Memorial Pkwy -- Saxon Blvd | **QC JOB #:** 15005934
CITY/STATE: Orange City, FL | **DATE:** Thu, Jun 6 2019

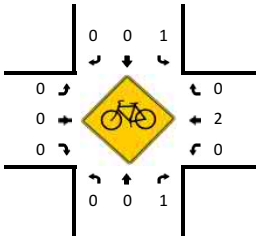
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

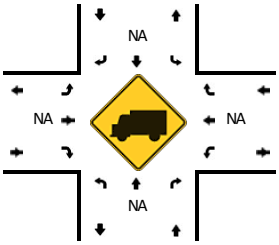


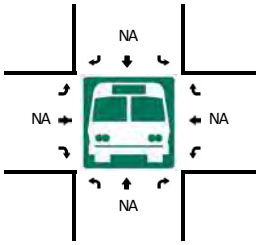












R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	5	15	1	0	16	124	12	20	0	33	46	256	1	0	3	18	211	101	15	0	877	
4:15 PM	15	6	7	0	10	150	15	23	0	19	36	258	6	0	2	15	242	92	13	0	909	
4:30 PM	7	10	5	0	11	170	9	16	0	25	47	269	2	0	3	11	218	97	8	0	908	
4:45 PM	9	18	5	0	11	127	17	27	1	32	44	232	7	2	1	18	186	105	8	0	850	3544
5:00 PM	7	14	14	0	11	164	14	24	0	15	52	333	6	1	3	13	244	126	16	0	1057	3724
5:15 PM	11	11	7	0	17	168	12	33	0	15	51	320	6	0	2	26	253	99	7	0	1038	3853
5:30 PM	19	14	15	0	10	143	22	15	0	23	38	272	6	1	1	19	259	108	10	0	975	3920
5:45 PM	8	7	2	0	19	153	16	36	1	17	49	252	3	0	1	18	234	89	22	0	927	3997

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	28	56	100	0	44	656	56	156	0	60	208	1332	36	4	12	52	976	504	64	0	4344
Heavy Trucks	0	8	0			16	0	0			8	24	0			8	20	36			120
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			1	0	0			0	0	0			0	1	0			2
Railroad																					
Stopped Buses																					

Comments:

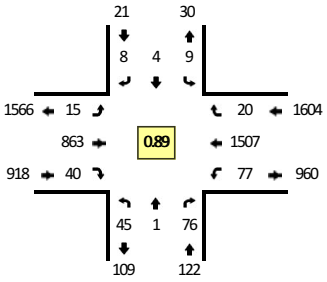
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

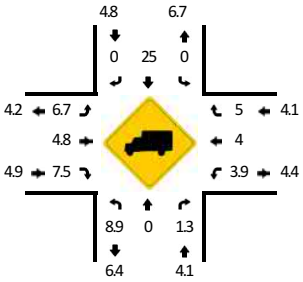
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: FDOT Park/Ride -- Saxon Blvd
CITY/STATE: Volusia, FL

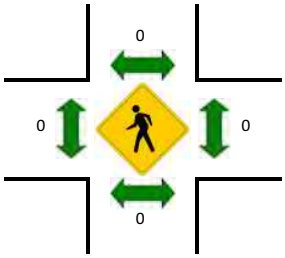
QC JOB #: 15012211
DATE: Wed, Jun 19 2019

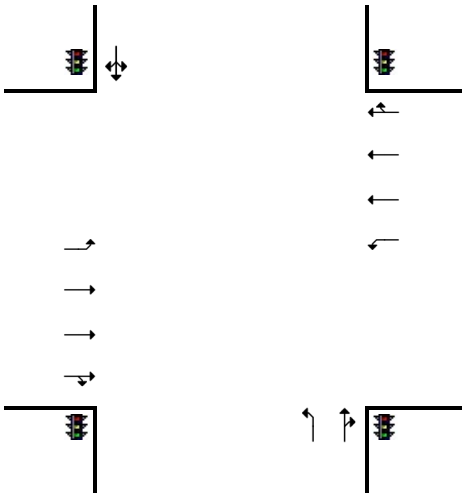
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

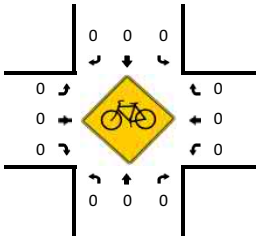


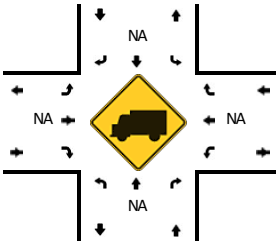


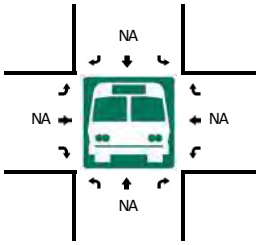
Quality Counts
DATA THAT DRIVES COMMUNITIES











R* = RTOR

15-Min Count Period Beginning At	FDOT Park/Ride (Northbound)					FDOT Park/Ride (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	10	2	3	0	5	3	0	0	0	1	6	208	4	0	0	14	228	3	0	0	487	
7:15 AM	21	0	5	0	13	2	0	0	0	3	3	229	13	2	0	13	295	2	2	0	603	
7:30 AM	11	0	2	0	20	2	1	0	0	1	1	208	8	1	2	14	387	3	5	0	666	
7:45 AM	6	0	0	0	20	0	1	2	0	2	4	188	7	3	1	21	482	8	4	1	750	2506
8:00 AM	7	1	3	0	13	5	2	0	0	0	1	238	8	0	1	17	343	6	1	0	646	2665
8:15 AM	5	1	0	0	10	1	0	0	0	0	5	189	7	1	0	16	355	6	0	1	597	2659
8:30 AM	8	0	3	0	18	1	1	1	0	2	0	203	9	0	1	13	367	2	1	0	630	2623
8:45 AM	8	0	7	0	15	0	0	0	0	0	1	184	16	1	0	15	408	0	1	0	656	2529

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	24	0	80	0	80	0	4	16	0	8	16	752	32	12	4	84	1928	36	16	4	3096
Heavy Trucks	0	0	0			0	0	0			0	40	0			0	32	0			72
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

Report generated on 6/21/2019 1:29 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

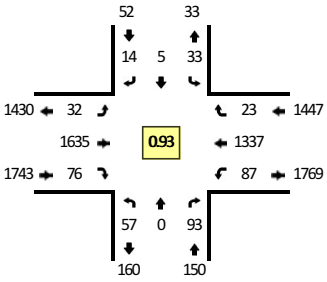
Type of peak hour being reported: Intersection Peak

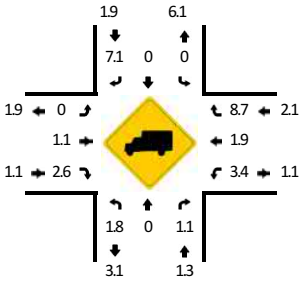
Method for determining peak hour: Total Entering Volume

LOCATION: FDOT Park/Ride -- Saxon Blvd
CITY/STATE: Volusia, FL

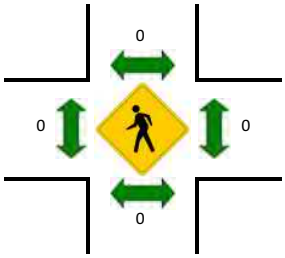
QC JOB #: 15012212
DATE: Wed, Jun 19 2019

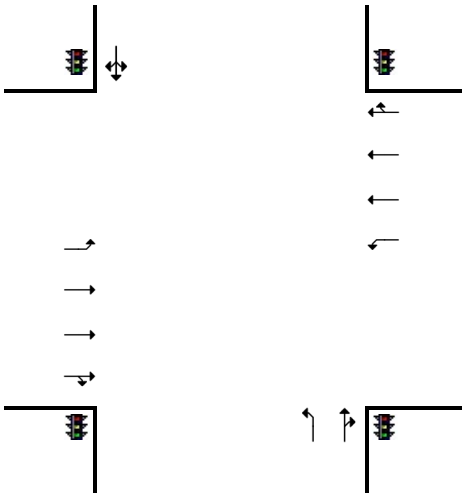
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

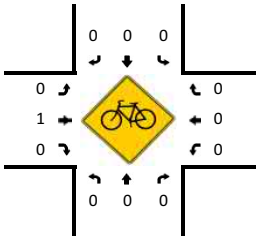


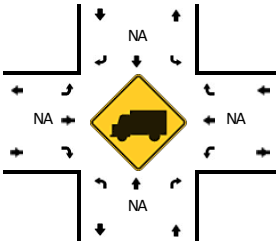


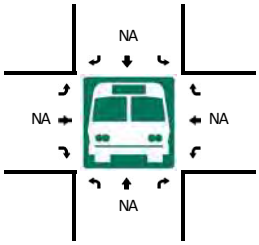
Quality Counts
DATA THAT DRIVES COMMUNITIES











R* = RTOR

15-Min Count Period Beginning At	FDOT Park/Ride (Northbound)					FDOT Park/Ride (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	9	1	6	2	17	11	1	0	0	6	2	385	15	6	1	27	335	5	0	0	829	
4:15 PM	17	0	15	0	28	1	1	2	0	2	1	366	11	0	0	33	328	2	4	0	811	
4:30 PM	19	0	10	0	9	7	2	2	0	3	0	405	5	2	0	17	263	5	2	1	752	
4:45 PM	14	0	9	0	15	8	1	1	0	0	3	378	13	7	1	25	324	8	1	1	809	3201
5:00 PM	10	0	5	1	10	15	1	3	0	2	2	467	11	5	0	20	322	5	0	0	879	3251
5:15 PM	15	0	15	0	18	7	3	1	0	4	2	416	34	3	3	17	361	6	5	0	910	3350
5:30 PM	17	0	8	0	13	2	0	1	1	2	2	374	14	8	0	16	330	3	3	0	794	3392
5:45 PM	16	0	10	0	13	3	1	1	0	1	2	288	11	6	1	13	243	3	0	0	612	3195

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	60	0	132	0	72	28	12	20	0	16	8	1664	148	12	12	68	1444	24	20	0	3740
Heavy Trucks	0	0	0			0	0	4			0	8	8			0	32	4			56
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

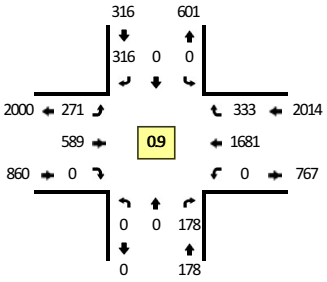
Report generated on 6/21/2019 1:29 PM

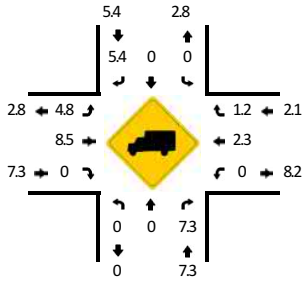
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

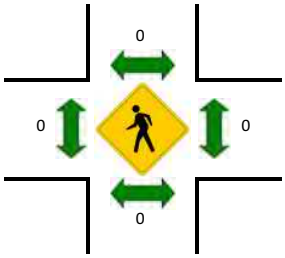
LOCATION: I-4 NB Ramps -- Saxon Blvd | **QC JOB #:** 15005937
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

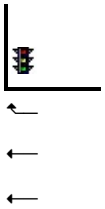


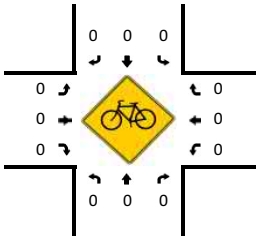


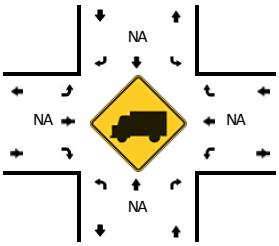
Quality Counts
DATA THAT DRIVES COMMUNITIES

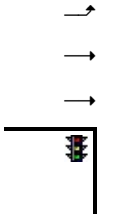


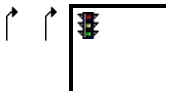


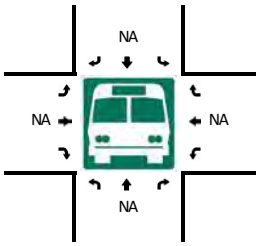












R* = RTOR

15-Min Count Period Beginning At	I-4 NB Ramps (Northbound)					I-4 NB Ramps (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	0	34	0	0	0	0	59	0	0	54	88	0	1	0	0	377	74	0	13	700	
7:15 AM	0	0	41	0	0	0	0	60	0	0	71	135	0	0	0	0	430	79	0	13	829	
7:30 AM	0	0	45	0	0	0	0	78	0	0	78	163	0	2	0	0	457	95	0	18	936	
7:45 AM	0	0	44	0	0	0	0	97	0	0	55	146	0	0	0	0	456	57	0	9	864	3329
8:00 AM	0	0	48	0	0	0	0	81	0	0	64	145	0	1	0	0	338	53	0	9	739	3368
8:15 AM	0	0	57	0	0	0	0	86	0	0	41	169	0	2	0	0	367	60	0	7	789	3328
8:30 AM	0	0	57	0	0	0	0	79	0	0	55	165	0	2	0	0	366	51	0	3	778	3170
8:45 AM	0	0	56	0	0	0	0	70	0	0	42	190	0	0	0	0	355	49	0	7	769	3075

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	180	0	0	0	0	312	0	0	312	652	0	8	0	0	1828	452	0	72	3816
Heavy Trucks	0	0	12			0	0	12			20	64	0			0	36	4			148
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

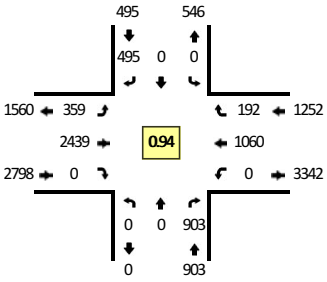
Comments:

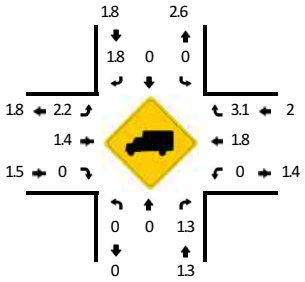
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

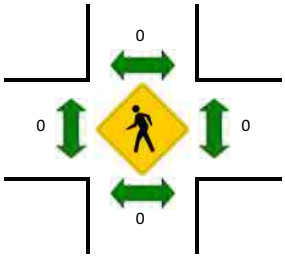
LOCATION: I-4 NB Ramps -- Saxon Blvd | **QC JOB #:** 15005938
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

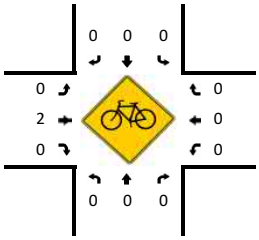


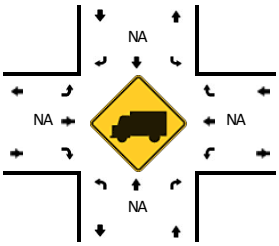


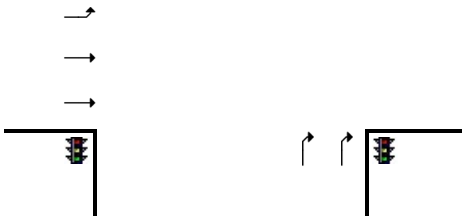
Quality Counts
DATA THAT DRIVES COMMUNITIES

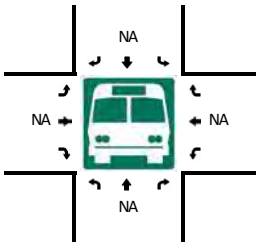












R* = RTOR

15-Min Count Period Beginning At	I-4 NB Ramps (Northbound)					I-4 NB Ramps (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	173	0	0	0	0	102	0	0	69	488	0	0	0	0	231	39	0	6	1108	
4:15 PM	0	0	215	0	0	0	0	120	0	0	75	543	0	1	0	0	220	29	0	5	1208	
4:30 PM	0	0	140	0	0	0	0	87	0	0	73	515	0	1	0	0	248	47	0	0	1111	
4:45 PM	0	0	189	0	0	0	0	113	0	0	81	549	0	1	0	0	275	41	0	5	1254	4681
5:00 PM	0	0	236	0	0	0	0	128	0	0	92	612	0	2	0	0	273	42	0	6	1391	4964
5:15 PM	0	0	241	0	0	0	0	129	0	0	109	665	0	1	0	0	243	57	0	5	1450	5206
5:30 PM	0	0	237	0	0	0	0	125	0	0	72	613	0	1	0	0	269	35	0	1	1353	5448
5:45 PM	0	0	183	0	0	0	0	105	0	0	73	557	0	0	0	0	238	35	0	0	1191	5385

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	964	0	0	0	0	516	0	0	436	2660	0	4	0	0	972	248	0	20	5820
Heavy Trucks	0	0	12			0	0	0			12	48	0			0	20	4			96
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	1	0			0	0	0			1
Railroad																					
Stopped Buses																					

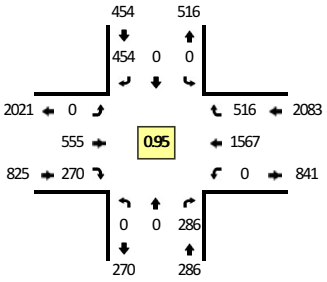
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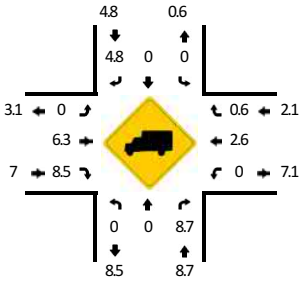
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

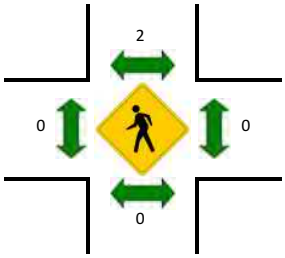
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

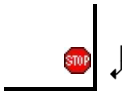
LOCATION: I-4 SB Ramps -- Saxon Blvd | **QC JOB #:** 15005935
CITY/STATE: Orange City, FL | **DATE:** Tue, Jun 11 2019

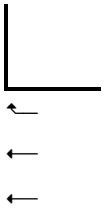
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:30 AM -- 8:45 AM

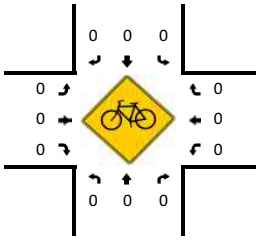


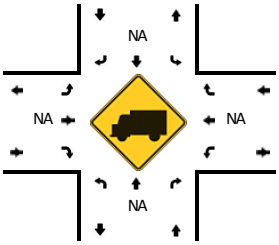


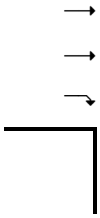


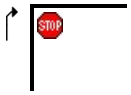


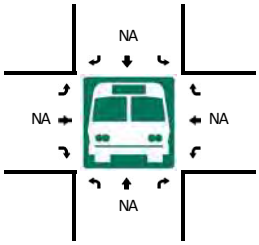












R* = RTOR

15-Min Count Period Beginning At	I-4 SB Ramps (Northbound)					I-4 SB Ramps (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	0	19	0	0	0	0	56	0	0	0	119	107	0	0	0	180	259	0	0	740	
7:15 AM	0	0	32	0	0	0	0	80	0	0	0	150	97	0	0	0	228	299	0	0	886	
7:30 AM	0	0	25	0	0	0	0	115	0	0	0	139	90	0	0	0	278	256	0	0	903	
7:45 AM	0	0	34	0	0	0	0	119	0	0	0	134	71	0	0	0	390	178	0	0	926	3455
8:00 AM	0	0	37	0	0	0	0	129	0	0	0	137	66	0	0	0	311	142	0	0	822	3537
8:15 AM	0	0	90	0	0	0	0	112	0	0	0	144	67	0	0	0	420	108	0	0	941	3592
8:30 AM	0	0	125	0	0	0	0	94	0	0	0	140	66	0	0	0	446	88	0	0	959	3648
8:45 AM	0	0	64	0	0	0	0	133	0	0	0	137	59	0	0	0	347	98	0	0	838	3560

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	500	0	0	0	0	376	0	0	0	560	264	0	0	0	1784	352	0	0	3836
Heavy Trucks	0	0	32			0	0	24			0	48	32			0	60	0			196
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

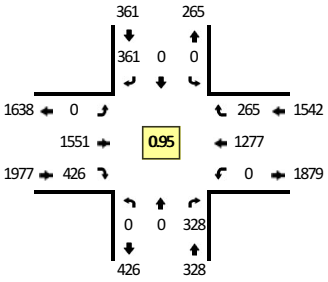
Comments:

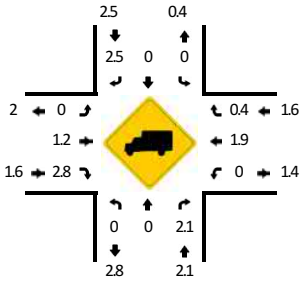
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

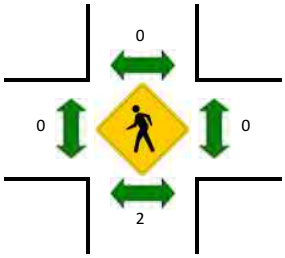
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

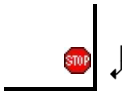
LOCATION: I-4 SB Ramps -- Saxon Blvd | **QC JOB #:** 15005936
CITY/STATE: Orange City, FL | **DATE:** Tue, Jun 11 2019

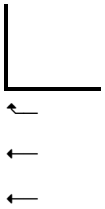
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

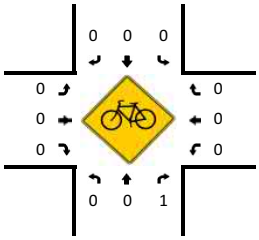


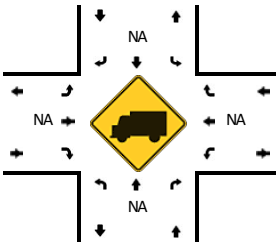


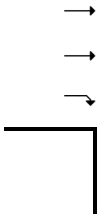


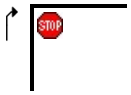


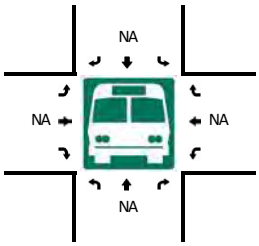












R* = RTOR

15-Min Count Period Beginning At	I-4 SB Ramps (Northbound)					I-4 SB Ramps (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	52	0	0	0	0	69	0	0	0	364	106	0	0	0	290	67	0	0	948	
4:15 PM	0	0	54	0	0	0	0	78	0	0	0	338	91	0	0	0	299	71	0	0	931	
4:30 PM	0	0	63	0	0	0	0	82	0	0	0	358	95	0	0	0	340	72	0	0	1010	
4:45 PM	0	0	73	0	0	0	0	74	0	0	0	342	104	0	0	0	314	53	0	0	960	3849
5:00 PM	0	0	82	0	0	0	0	97	0	0	0	425	117	0	0	0	320	67	0	0	1108	4009
5:15 PM	0	0	91	0	0	0	0	92	0	0	0	390	101	0	0	0	333	73	0	0	1080	4158
5:30 PM	0	0	82	0	0	0	0	98	0	0	0	394	104	0	0	0	310	72	0	0	1060	4208
5:45 PM	0	0	85	0	0	0	0	93	0	0	0	321	79	0	0	0	307	56	0	0	941	4189

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	328	0	0	0	0	388	0	0	0	1700	468	0	0	0	1280	268	0	0	4432
Heavy Trucks	0	0	20			0	0	16			0	12	20			0	20	0			88
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

PEDESTRIAN MOVEMENT SUMMARY

SECTION 0 **CITY** Deltona **COUNTY** Volusia
STATE ROUTE Saxon Boulevard **INTERSECTING ROUTE** Finland Drive
OBSERVER TEDS **DATE** 5/1/2018

REMARKS _____

FORM COMPLETED BY PHF **DATE** 05/22/18



HOURS	West side of Finland Drive			East side of Finland Drive			North side of Saxon Blvd			South side of Saxon Blvd			GRAND TOTAL
	NB	SB	TOTAL	NB	SB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	
7:00 - 8:00	0	1	**1**	0	0	**0**	0	0	**0**	0	0	**0**	1
8:00 - 9:00	0	0	**0**	1	0	**1**	0	0	**0**	0	0	**0**	1
11:00 - 12:00	0	0	**0**	1	1	**2**	0	0	**0**	0	0	**0**	2
12:00 - 1:00	0	0	**0**	0	0	**0**	0	0	**0**	1	0	**1**	1
2:00 - 3:00	0	1	**1**	1	1	**2**	2	0	**2**	0	0	**0**	5
3:00 - 4:00	2	0	**2**	0	0	**0**	0	3	**3**	0	0	**0**	5
4:00 - 5:00	1	0	**1**	0	0	**0**	1	0	**1**	0	0	**0**	2
5:00 - 6:00	1	2	**3**	3	1	**4**	0	1	**1**	0	0	**0**	8
TOTAL	**4**	**4**	**8**	**6**	**3**	**9**	**3**	**4**	**7**	**1**	**0**	**1**	25

BICYCLE MOVEMENT SUMMARY

SECTION 0 **CITY** Deltona **COUNTY** Volusia
STATE ROUTE Saxon Boulevard **INTERSECTING ROUTE** Finland Drive
OBSERVER TEDS **DATE** 5/1/2018

REMARKS

FORM COMPLETED BY PHF **DATE** 05/22/18



HOURS	West side of Finland Drive			East side of Finland Drive			North side of Saxon Blvd			South side of Saxon Blvd			GRAND TOTAL
	NB	SB	TOTAL	NB	SB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	
7:00 - 8:00	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**	1
8:00 - 9:00	0	0	**0**	0	0	**0**	0	0	**0**	0	2	**2**	2
11:00 - 12:00	0	0	**0**	0	0	**0**	1	0	**1**	0	0	**0**	1
12:00 - 1:00	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	0
2:00 - 3:00	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	0
3:00 - 4:00	0	0	**0**	0	0	**0**	0	0	**0**	1	0	**1**	1
4:00 - 5:00	2	1	**3**	0	0	**0**	0	0	**0**	0	0	**0**	3
5:00 - 6:00	1	0	**1**	0	0	**0**	0	1	**1**	0	0	**0**	2
TOTAL	**3**	**1**	**4**	**0**	**0**	**0**	**1**	**2**	**3**	**1**	**2**	**3**	10

File Name : Not Named 1
Site Code : 00000000
Start Date : 5/1/2018
Page No : 1

Groups Printed- All Vehicles

	FINLAND DRIVE Northbound					FINLAND DRIVE Southbound					SAXON BOULEVARD Eastbound					SAXON BOULEVARD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	40	2	7	0	49	8	0	84	0	92	19	137	6	0	162	5	401	1	0	407	710
07:15 AM	44	7	1	0	52	11	1	92	0	104	16	148	3	0	167	2	452	2	0	456	779
07:30 AM	39	7	4	0	50	11	4	111	1	127	19	160	2	0	181	4	466	1	0	471	829
07:45 AM	25	9	5	0	39	10	5	103	0	118	19	134	4	0	157	9	444	2	0	455	769
Total	148	25	17	0	190	40	10	390	1	441	73	579	15	0	667	20	1763	6	0	1789	3087
08:00 AM	34	8	6	0	48	4	4	112	0	120	14	121	5	0	140	9	398	0	0	407	715
08:15 AM	22	7	4	1	34	10	3	67	0	80	23	149	1	0	173	6	413	2	0	421	708
08:30 AM	19	4	2	0	25	8	3	69	0	80	15	150	5	0	170	2	353	5	0	360	635
08:45 AM	20	3	5	0	28	13	7	71	0	91	19	156	5	0	180	5	343	0	0	348	647
Total	95	22	17	1	135	35	17	319	0	371	71	576	16	0	663	22	1507	7	0	1536	2705
*** BREAK ***																					
11:00 AM	23	11	14	1	49	11	6	41	0	58	28	251	8	0	287	8	286	1	0	295	689
11:15 AM	17	6	19	1	43	7	5	56	0	68	38	217	5	0	260	11	278	2	0	291	662
11:30 AM	24	10	12	0	46	10	5	41	0	56	41	229	4	0	274	18	235	2	0	255	631
11:45 AM	14	9	18	0	41	11	4	47	0	62	25	260	7	0	292	15	268	3	0	286	681
Total	78	36	63	2	179	39	20	185	0	244	132	957	24	0	1113	52	1067	8	0	1127	2663
12:00 PM	26	7	15	0	48	5	6	33	0	44	36	290	2	1	329	13	237	5	0	255	676
12:15 PM	23	10	16	0	49	9	3	52	0	64	32	274	9	0	315	17	287	3	0	307	735
12:30 PM	16	5	20	0	41	8	7	37	0	52	27	253	7	0	287	18	280	2	0	300	680
12:45 PM	23	11	6	0	40	11	9	46	0	66	36	303	9	0	348	17	266	6	0	289	743
Total	88	33	57	0	178	33	25	168	0	226	131	1120	27	1	1279	65	1070	16	0	1151	2834
*** BREAK ***																					
02:00 PM	20	11	20	1	52	2	5	35	0	42	31	293	8	0	332	9	252	4	0	265	691
02:15 PM	19	6	15	1	41	6	4	40	0	50	29	308	4	0	341	21	294	4	2	321	753
02:30 PM	26	8	13	0	47	10	2	40	0	52	42	332	6	0	380	21	333	4	0	358	837
02:45 PM	29	9	21	0	59	7	10	42	1	60	45	376	8	0	429	16	238	3	0	257	805
Total	94	34	69	2	199	25	21	157	1	204	147	1309	26	0	1482	67	1117	15	2	1201	3086
03:00 PM	32	10	16	0	58	11	5	38	2	56	41	386	5	0	432	13	241	2	0	256	802
03:15 PM	19	9	23	0	51	11	9	39	0	59	51	406	7	0	464	17	285	9	1	312	886
03:30 PM	20	11	34	0	65	10	9	36	0	55	56	361	13	0	430	20	245	2	2	269	819
03:45 PM	17	11	28	0	56	15	9	47	0	71	51	411	9	0	471	18	261	4	0	283	881
Total	88	41	101	0	230	47	32	160	2	241	199	1564	34	0	1797	68	1032	17	3	1120	3388
04:00 PM	41	13	15	0	69	15	11	39	0	65	47	399	8	0	454	15	227	8	0	250	838
04:15 PM	15	11	23	0	49	11	6	47	0	64	68	428	8	0	504	21	274	4	1	300	917
04:30 PM	21	14	35	0	70	9	8	44	0	61	47	427	9	0	483	16	251	4	0	271	885
04:45 PM	32	20	24	0	76	8	5	42	1	56	45	413	13	0	471	16	215	6	0	237	840
Total	109	58	97	0	264	43	30	172	1	246	207	1667	38	0	1912	68	967	22	1	1058	3480
05:00 PM	26	16	24	0	66	15	8	50	0	73	53	462	15	0	530	19	284	5	0	308	977
05:15 PM	29	15	27	0	71	13	5	41	1	60	62	424	12	0	498	21	210	2	1	234	863
05:30 PM	18	15	35	1	69	16	11	33	1	61	61	444	9	0	514	19	249	4	0	272	916
05:45 PM	24	26	27	3	80	9	5	40	1	55	59	414	8	0	481	23	248	3	0	274	890
Total	97	72	113	4	286	53	29	164	3	249	235	1744	44	0	2023	82	991	14	1	1088	3646
Grand Total	797	321	534	9	1661	315	184	1715	8	2222	1195	9516	224	1	10936	444	9514	105	7	10070	24889
Apprch %	48	19.3	32.1	0.5		14.2	8.3	77.2	0.4		10.9	87	2	0		4.4	94.5	1	0.1		
Total %	3.2	1.3	2.1	0	6.7	1.3	0.7	6.9	0	8.9	4.8	38.2	0.9	0	43.9	1.8	38.2	0.4	0	40.5	

File Name : Not Named 1
Site Code : 00000000
Start Date : 5/1/2018
Page No : 2

	FINLAND DRIVE Northbound					FINLAND DRIVE Southbound					SAXON BOULEVARD Eastbound					SAXON BOULEVARD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**44**	7	1	0	**52**	**11**	1	92	0	104	16	148	3	0	167	2	452	**2**	0	456	779
07:30 AM	39	7	4	0	50	11	4	111	**1**	**127**	**19**	**160**	2	0	**181**	4	**466**	1	0	**471**	**829**
07:45 AM	25	**9**	5	0	39	10	**5**	103	0	118	19	134	4	0	157	**9**	444	2	0	455	769
08:00 AM	34	8	**6**	0	48	4	4	**112**	0	120	14	121	**5**	0	140	9	398	0	0	407	715
Total Volume	142	31	16	0	189	36	14	418	1	469	68	563	14	0	645	24	1760	5	0	1789	3092
% App. Total	75.1	16.4	8.5	0		7.7	3	89.1	0.2		10.5	87.3	2.2	0		1.3	98.4	0.3	0		
PHF	.807	.861	.667	.000	.909	.818	.700	.933	.250	.923	.895	.880	.700	.000	.891	.667	.944	.625	.000	.950	.932

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM					07:15 AM					07:00 AM					07:00 AM				
+0 mins.	40	2	**7**	0	49	**11**	1	92	0	104	**19**	137	**6**	0	162	5	401	1	0	407
+15 mins.	**44**	7	1	0	**52**	11	4	111	**1**	**127**	16	148	3	0	167	2	452	**2**	0	456
+30 mins.	39	7	4	0	50	10	**5**	103	0	118	19	**160**	2	0	**181**	4	**466**	1	0	**471**
+45 mins.	25	**9**	5	0	39	4	4	**112**	0	120	19	134	4	0	157	**9**	444	2	0	455
Total Volume	148	25	17	0	190	36	14	418	1	469	73	579	15	0	667	20	1763	6	0	1789
% App. Total	77.9	13.2	8.9	0		7.7	3	89.1	0.2		10.9	86.8	2.2	0		1.1	98.5	0.3	0	
PHF	.841	.694	.607	.000	.913	.818	.700	.933	.250	.923	.961	.905	.625	.000	.921	.556	.946	.750	.000	.950

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 12:00 PM

12:00 PM	**26**	7	15	0	48	5	6	33	0	44	**36**	290	2	**1**	329	13	237	5	0	255	676
12:15 PM	23	10	16	0	**49**	9	3	**52**	0	64	32	274	**9**	0	315	17	**287**	3	0	**307**	735
12:30 PM	16	5	**20**	0	41	8	7	37	0	52	27	253	7	0	287	**18**	280	2	0	300	680
12:45 PM	23	**11**	6	0	40	**11**	**9**	46	0	**66**	36	**303**	9	0	**348**	17	266	**6**	0	289	**743**
Total Volume	88	33	57	0	178	33	25	168	0	226	131	1120	27	1	1279	65	1070	16	0	1151	2834
% App. Total	49.4	18.5	32	0		14.6	11.1	74.3	0		10.2	87.6	2.1	0.1		5.6	93	1.4	0		
PHF	.846	.750	.713	.000	.908	.750	.694	.808	.000	.856	.910	.924	.750	.250	.919	.903	.932	.667	.000	.937	.954

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:30 AM					11:00 AM					12:00 PM					12:00 PM				
+0 mins.	24	**10**	12	0	46	**11**	**6**	41	0	58	**36**	290	2	**1**	329	13	237	5	0	255
+15 mins.	14	9	**18**	0	41	7	5	**56**	0	**68**	32	274	**9**	0	315	17	**287**	3	0	**307**
+30 mins.	**26**	7	15	0	48	10	5	41	0	56	27	253	7	0	287	**18**	280	2	0	300
+45 mins.	23	10	16	0	**49**	11	4	47	0	62	36	**303**	9	0	**348**	17	266	**6**	0	289
Total Volume	87	36	61	0	184	39	20	185	0	244	131	1120	27	1	1279	65	1070	16	0	1151
% App. Total	47.3	19.6	33.2	0		16	8.2	75.8	0		10.2	87.6	2.1	0.1		5.6	93	1.4	0	
PHF	.837	.900	.847	.000	.939	.886	.833	.826	.000	.897	.910	.924	.750	.250	.919	.903	.932	.667	.000	.937

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 05:00 PM

05:00 PM	26	16	24	0	66	15	8	**50**	0	**73**	53	**462**	**15**	0	**530**	19	**284**	**5**	0	**308**	**977**
05:15 PM	**29**	15	27	0	71	13	5	41	**1**	60	**62**	424	12	0	498	21	210	2	**1**	234	863
05:30 PM	18	15	**35**	1	69	**16**	**11**	33	1	61	61	444	9	0	514	19	249	4	0	272	916
05:45 PM	24	**26**	27	**3**	**80**	9	5	40	1	55	59	414	8	0	481	**23**	248	3	0	274	890
Total Volume	97	72	113	4	286	53	29	164	3	249	235	1744	44	0	2023	82	991	14	1	1088	3646
% App. Total	33.9	25.2	39.5	1.4		21.3	11.6	65.9	1.2		11.6	86.2	2.2	0		7.5	91.1	1.3	0.1		
PHF	.836	.692	.807	.333	.894	.828	.659	.820	.750	.853	.948	.944	.733	.000	.954	.891	.872	.700	.250	.883	.933

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM					03:45 PM					05:00 PM					02:00 PM				
+0 mins.	26	16	24	0	66	**15**	9	**47**	0	**71**	53	**462**	**15**	0	**530**	9	252	**4**	0	265
+15 mins.	**29**	15	27	0	71	15	**11**	39	0	65	**62**	424	12	0	498	**21**	294	4	**2**	321
+30 mins.	18	15	**35**	1	69	11	6	47	0	64	61	444	9	0	514	21	**333**	4	0	**358**
+45 mins.	24	**26**	27	**3**	**80**	9	8	44	0	61	59	414	8	0	481	16	238	3	0	257
Total Volume	97	72	113	4	286	50	34	177	0	261	235	1744	44	0	2023	67	1117	15	2	1201
% App. Total	33.9	25.2	39.5	1.4		19.2	13	67.8	0		11.6	86.2	2.2	0		5.6	93	1.2	0.2	
PHF	.836	.692	.807	.333	.894	.833	.773	.941	.000	.919	.948	.944	.733	.000	.954	.798	.839	.938	.250	.839

File Name : SAXON BLVD AT FINLAND DR
Site Code : 00000000
Start Date : 5/1/2018
Page No : 1

Groups Printed- Heavy Trucks

	FINLAND DRIVE Northbound					FINLAND DRIVE Southbound					SAXON BOULEVARD Eastbound					SAXON BOULEVARD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	0	1	0	2	0	0	0	0	0	1	4	1	0	6	0	2	1	0	3	11
07:15 AM	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	6
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	1	1	0	0	2	8
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	4
Total	1	1	1	0	3	1	0	0	0	1	1	17	1	0	19	1	4	1	0	6	29
08:00 AM	0	0	1	0	1	0	0	0	0	0	0	4	0	0	4	0	3	0	0	3	8
08:15 AM	1	1	0	0	2	1	0	0	0	1	0	5	0	0	5	0	1	0	0	1	9
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	1	1	0	2	6
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3
Total	1	1	1	0	3	1	0	0	0	1	0	15	0	0	15	0	6	1	0	7	26
*** BREAK ***																					
11:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	5	0	0	5	6
11:15 AM	0	0	0	1	1	0	0	1	0	1	1	2	0	0	3	0	2	0	0	2	7
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	1	0	0	2	4
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	1	0	0	1	5
Total	0	0	0	1	1	0	0	2	0	2	1	7	1	0	9	1	9	0	0	10	22
12:00 PM	1	0	0	0	1	0	0	1	0	1	0	2	0	0	2	0	2	0	0	2	6
12:15 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	2	5	0	0	7	10
12:30 PM	1	0	1	0	2	0	0	1	0	1	0	1	0	0	1	0	2	0	0	2	6
12:45 PM	1	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	6	0	0	6	9
Total	4	0	1	0	5	0	0	2	0	2	1	6	0	0	7	2	15	0	0	17	31
*** BREAK ***																					
02:00 PM	0	0	1	1	2	0	0	1	0	1	0	1	0	0	1	0	3	0	0	3	7
02:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	1	2	6	7
02:30 PM	2	0	0	0	2	1	0	1	0	2	0	0	0	0	0	0	2	0	0	2	6
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	6	0	0	6	8
Total	2	0	1	1	4	1	0	3	0	4	0	3	0	0	3	0	14	1	2	17	28
03:00 PM	0	0	0	0	0	0	0	0	2	2	0	9	0	0	9	0	0	0	0	0	11
03:15 PM	0	0	2	0	2	0	1	0	0	1	0	7	0	0	7	0	1	1	0	2	12
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	0	0	2	5
Total	0	0	2	0	2	0	1	0	2	3	0	20	0	0	20	0	4	1	0	5	30
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	4
04:15 PM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	0	5	0	1	6	9
04:30 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	5
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	1	1	0	2	0	1	0	0	1	4
Total	1	0	0	0	1	0	0	1	1	2	0	5	1	0	6	0	12	0	1	13	22
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1	3
05:15 PM	1	0	0	0	1	0	0	0	0	0	1	2	0	0	3	0	2	0	0	2	6
05:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	3
05:45 PM	0	0	0	1	1	0	0	0	1	1	0	2	0	0	2	0	0	0	0	0	4
Total	1	0	0	1	2	1	0	0	1	2	1	5	1	0	7	0	5	0	0	5	16
Grand Total	10	2	6	3	21	4	1	8	4	17	4	78	4	0	86	4	69	4	3	80	204
Apprch %	47.6	9.5	28.6	14.3		23.5	5.9	47.1	23.5		4.7	90.7	4.7	0		5	86.2	5	3.8		
Total %	4.9	1	2.9	1.5	10.3	2	0.5	3.9	2	8.3	2	38.2	2	0	42.2	2	33.8	2	1.5	39.2	

File Name : SAXON BLVD AT FINLAND DR
Site Code : 00000000
Start Date : 5/1/2018
Page No : 2

	FINLAND DRIVE Northbound					FINLAND DRIVE Southbound					SAXON BOULEVARD Eastbound					SAXON BOULEVARD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**1**	0	**1**	0	**2**	0	0	0	0	0	**1**	4	**1**	0	**6**	0	**2**	**1**	0	**3**	**11**
07:15 AM	0	**1**	0	0	1	**1**	0	0	0	**1**	0	4	0	0	4	0	0	0	0	0	6
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	**6**	0	0	6	**1**	1	0	0	2	8
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	4
Total Volume	1	1	1	0	3	1	0	0	0	1	1	17	1	0	19	1	4	1	0	6	29
% App. Total	33.3	33.3	33.3	0		100	0	0	0		5.3	89.5	5.3	0		16.7	66.7	16.7	0		
PHF	.250	.250	.250	.000	.375	.250	.000	.000	.000	.250	.250	.708	.250	.000	.792	.250	.500	.250	.000	.500	.659

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM					07:00 AM					07:00 AM					07:30 AM				
+0 mins.	**1**	0	**1**	0	**2**	0	0	0	0	0	**1**	4	**1**	0	**6**	**1**	1	0	0	2
+15 mins.	0	**1**	0	0	1	**1**	0	0	0	**1**	0	4	0	0	4	0	1	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	**6**	0	0	6	0	**3**	0	0	**3**
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1
Total Volume	1	1	1	0	3	1	0	0	0	1	1	17	1	0	19	1	6	0	0	7
% App. Total	33.3	33.3	33.3	0		100	0	0	0		5.3	89.5	5.3	0		14.3	85.7	0	0	
PHF	.250	.250	.250	.000	.375	.250	.000	.000	.000	.250	.250	.708	.250	.000	.792	.250	.500	.000	.000	.583

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 12:00 PM

12:00 PM	**1**	0	0	0	1	0	0	**1**	0	**1**	0	**2**	0	0	**2**	0	2	0	0	2	6
12:15 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	**2**	5	0	0	**7**	**10**
12:30 PM	1	0	**1**	0	**2**	0	0	1	0	1	0	1	0	0	1	0	2	0	0	2	6
12:45 PM	1	0	0	0	1	0	0	0	0	0	**1**	1	0	0	2	0	**6**	0	0	6	9
Total Volume	4	0	1	0	5	0	0	2	0	2	1	6	0	0	7	2	15	0	0	17	31
% App. Total	80	0	20	0		0	0	100	0		14.3	85.7	0	0		11.8	88.2	0	0		
PHF	1.00	.000	.250	.000	.625	.000	.000	.500	.000	.500	.250	.750	.000	.000	.875	.250	.625	.000	.000	.607	.775

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	12:00 PM					10:30 AM					11:15 AM					12:00 PM				
+0 mins.	**1**	0	0	0	1	0	0	0	0	0	**1**	2	0	0	3	0	2	0	0	2
+15 mins.	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	**2**	5	0	0	**7**
+30 mins.	1	0	**1**	0	**2**	0	0	**1**	0	**1**	0	**3**	**1**	0	**4**	0	2	0	0	2
+45 mins.	1	0	0	0	1	0	0	1	0	1	0	2	0	0	2	0	**6**	0	0	6
Total Volume	4	0	1	0	5	0	0	2	0	2	1	9	1	0	11	2	15	0	0	17
% App. Total	80	0	20	0		0	0	100	0		9.1	81.8	9.1	0		11.8	88.2	0	0	
PHF	1.000	.000	.250	.000	.625	.000	.000	.500	.000	.500	.250	.750	.250	.000	.688	.250	.625	.000	.000	.607

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 02:30 PM

02:30 PM	**2**	0	0	0	**2**	**1**	0	**1**	0	**2**	0	0	0	0	0	0	2	0	0	2	6
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	**6**	0	0	**6**	8
03:00 PM	0	0	0	0	0	0	0	0	**2**	2	0	**9**	0	0	**9**	0	0	0	0	0	11
03:15 PM	0	0	**2**	0	2	0	**1**	0	0	1	0	7	0	0	7	0	1	**1**	0	2	**12**
Total Volume	2	0	2	0	4	1	1	1	2	5	0	18	0	0	18	0	9	1	0	10	37
% App. Total	50	0	50	0		20	20	20	40		0	100	0	0		0	90	10	0		
PHF	.250	.000	.250	.000	.500	.250	.250	.250	.250	.625	.000	.500	.000	.000	.500	.000	.375	.250	.000	.417	.771

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

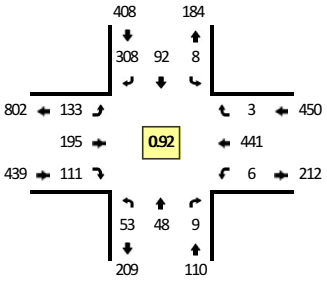
	02:00 PM					02:15 PM					03:00 PM					02:00 PM				
+0 mins.	0	0	**1**	**1**	**2**	0	0	**1**	0	1	0	**9**	0	0	**9**	0	3	0	0	3
+15 mins.	0	0	0	0	0	**1**	0	1	0	**2**	0	7	0	0	7	0	3	**1**	**2**	**6**
+30 mins.	**2**	0	0	0	2	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2
+45 mins.	0	0	0	0	0	0	0	0	**2**	2	0	3	0	0	3	0	**6**	0	0	6
Total Volume	2	0	1	1	4	1	0	2	2	5	0	20	0	0	20	0	14	1	2	17
% App. Total	50	0	25	25		20	0	40	40		0	100	0	0		0	82.4	5.9	11.8	
PHF	.250	.000	.250	.250	.500	.250	.000	.500	.250	.625	.000	.556	.000	.000	.556	.000	.583	.250	.250	.708

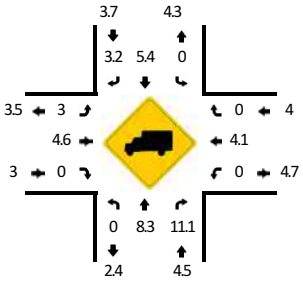
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

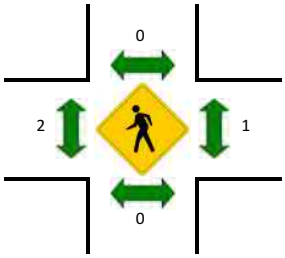
LOCATION: Tivoli Dr -- Saxon Blvd
CITY/STATE: Deltona, FL

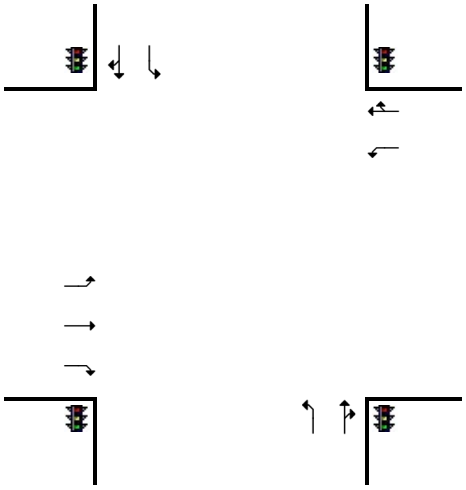
QC JOB #: 15005953
DATE: Thu, Jun 13 2019

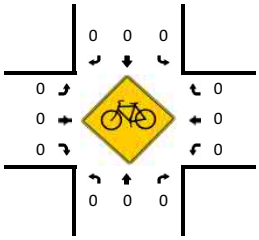
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

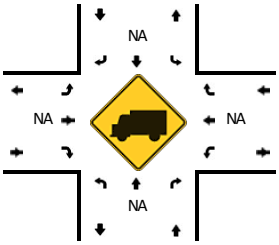


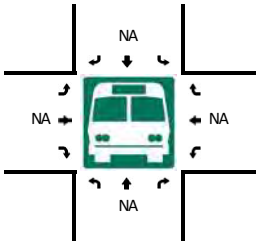












R* = RTOR

15-Min Count Period Beginning At	Tivoli Dr (Northbound)					Tivoli Dr (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	14	12	1	0	0	3	23	71	0	0	19	27	3	0	31	2	93	0	0	0	299	
7:15 AM	13	7	1	0	2	1	13	86	0	0	23	43	2	0	23	3	95	0	0	0	312	
7:30 AM	15	13	0	0	0	2	16	97	0	0	29	51	6	0	26	1	128	0	0	0	384	
7:45 AM	8	15	2	0	2	2	31	70	0	0	37	58	6	0	33	1	96	2	0	0	363	1358
8:00 AM	15	9	2	0	1	3	24	67	0	0	29	55	3	0	19	1	107	1	0	0	336	1395
8:15 AM	15	11	1	0	1	1	21	74	0	0	38	31	4	0	14	3	110	0	0	0	324	1407
8:30 AM	16	15	1	0	0	1	25	79	0	0	38	37	3	0	20	5	128	0	0	0	368	1391
8:45 AM	7	12	1	0	3	4	26	74	0	0	50	41	6	0	26	0	108	2	0	0	360	1388

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	60	52	0	0	0	8	64	388	0	0	116	204	128	0	104	4	512	0	0	0	1640
Heavy Trucks	0	0	0			0	0	8			0	16	0			0	16	0			40
Pedestrians		0					0					0					4				4
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

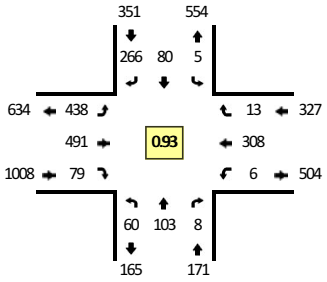
Report generated on 7/1/2019 11:48 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

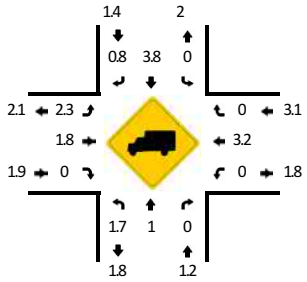
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Tivoli Dr -- Saxon Blvd
CITY/STATE: Deltona, FL

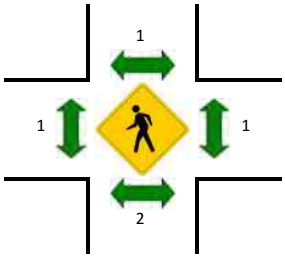
QC JOB #: 15005954
DATE: Thu, Jun 13 2019

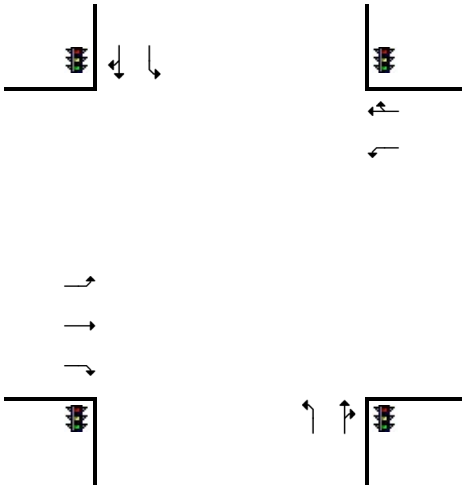
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

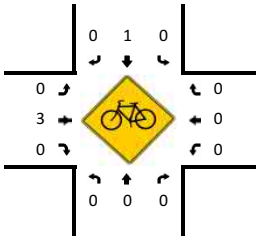


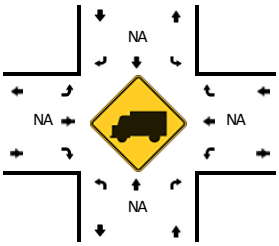


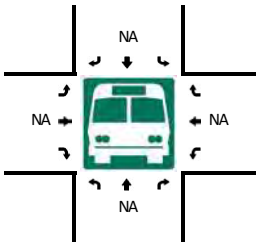
Quality Counts
DATA THAT DRIVES COMMUNITIES











R* = RTOR

15-Min Count Period Beginning At	Tivoli Dr (Northbound)					Tivoli Dr (Southbound)					Saxon Blvd (Eastbound)					Saxon Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	7	19	0	0	0	4	22	41	0	20	96	102	8	0	8	0	82	1	0	0	410	
4:15 PM	11	16	3	0	0	1	13	40	0	35	85	121	12	0	8	1	64	3	0	1	414	
4:30 PM	7	25	1	0	0	2	21	40	0	29	122	103	12	0	4	5	65	3	0	0	439	
4:45 PM	10	20	1	0	3	1	17	47	0	23	123	109	12	0	6	0	72	4	0	1	449	1712
5:00 PM	16	33	3	0	0	0	17	55	0	21	93	109	9	0	10	2	61	1	0	0	430	1732
5:15 PM	16	25	0	0	0	1	15	38	0	22	124	142	16	0	4	3	87	4	0	0	497	1815
5:30 PM	18	25	1	0	0	3	31	41	0	19	98	131	12	0	10	1	88	3	0	0	481	1857
5:45 PM	10	36	2	0	1	0	24	52	0	16	79	111	13	0	6	2	66	4	0	1	423	1831

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	64	100	0	0	0	4	60	240	0	88	496	568	80	0	16	12	348	16	0	0	2092
Heavy Trucks	0	0	0			0	4	0			8	12	0			0	16	0			40
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	2	0			0	0	0			2
Railroad																					
Stopped Buses																					

Comments:

Report generated on 7/1/2019 11:48 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

DE TRAFFIC

http:de-traffic.com
Forest Edge Dr at SR 472
Volusia County, FL

File Name : Forest at 472 AM
Site Code : 00000004
Start Date : 12/14/2017
Page No : 1

Groups Printed- Automobiles - Commercial

	Forest Edge Dr Southbound				SR 472/Howland Blvd Westbound				Forest Edge Dr Northbound				SR 472/Howland Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	4	3	12	19	10	420	11	441	8	0	11	19	10	114	9	133	612
07:15 AM	9	4	21	34	11	457	15	483	11	1	13	25	11	147	11	169	711
07:30 AM	13	5	24	42	15	429	16	460	10	1	14	25	14	171	15	200	727
07:45 AM	17	5	35	57	16	405	18	439	17	2	15	34	16	150	13	179	709
Total	43	17	92	152	52	1711	60	1823	46	4	53	103	51	582	48	681	2759
08:00 AM	16	6	42	64	18	420	11	449	16	3	16	35	16	140	15	171	719
08:15 AM	13	9	35	57	13	355	13	381	13	1	13	27	18	145	14	177	642
08:30 AM	21	8	29	58	10	319	16	345	14	0	12	26	21	163	15	199	628
08:45 AM	11	4	32	47	13	378	19	410	13	0	15	28	19	163	16	198	683
Total	61	27	138	226	54	1472	59	1585	56	4	56	116	74	611	60	745	2672
Grand Total	104	44	230	378	106	3183	119	3408	102	8	109	219	125	1193	108	1426	5431
Apprch %	27.5	11.6	60.8		3.1	93.4	3.5		46.6	3.7	49.8		8.8	83.7	7.6		
Total %	1.9	0.8	4.2	7	2	58.6	2.2	62.8	1.9	0.1	2	4	2.3	22	2	26.3	
Automobiles	102	44	225	371	106	3153	119	3378	97	6	102	205	122	1163	108	1393	5347
% Automobiles	98.1	100	97.8	98.1	100	99.1	100	99.1	95.1	75	93.6	93.6	97.6	97.5	100	97.7	98.5
Commercial	2	0	5	7	0	30	0	30	5	2	7	14	3	30	0	33	84
% Commercial	1.9	0	2.2	1.9	0	0.9	0	0.9	4.9	25	6.4	6.4	2.4	2.5	0	2.3	1.5

DE TRAFFIC

http:de-traffic.com
Forest Edge Dr at SR 472
Volusia County, FL

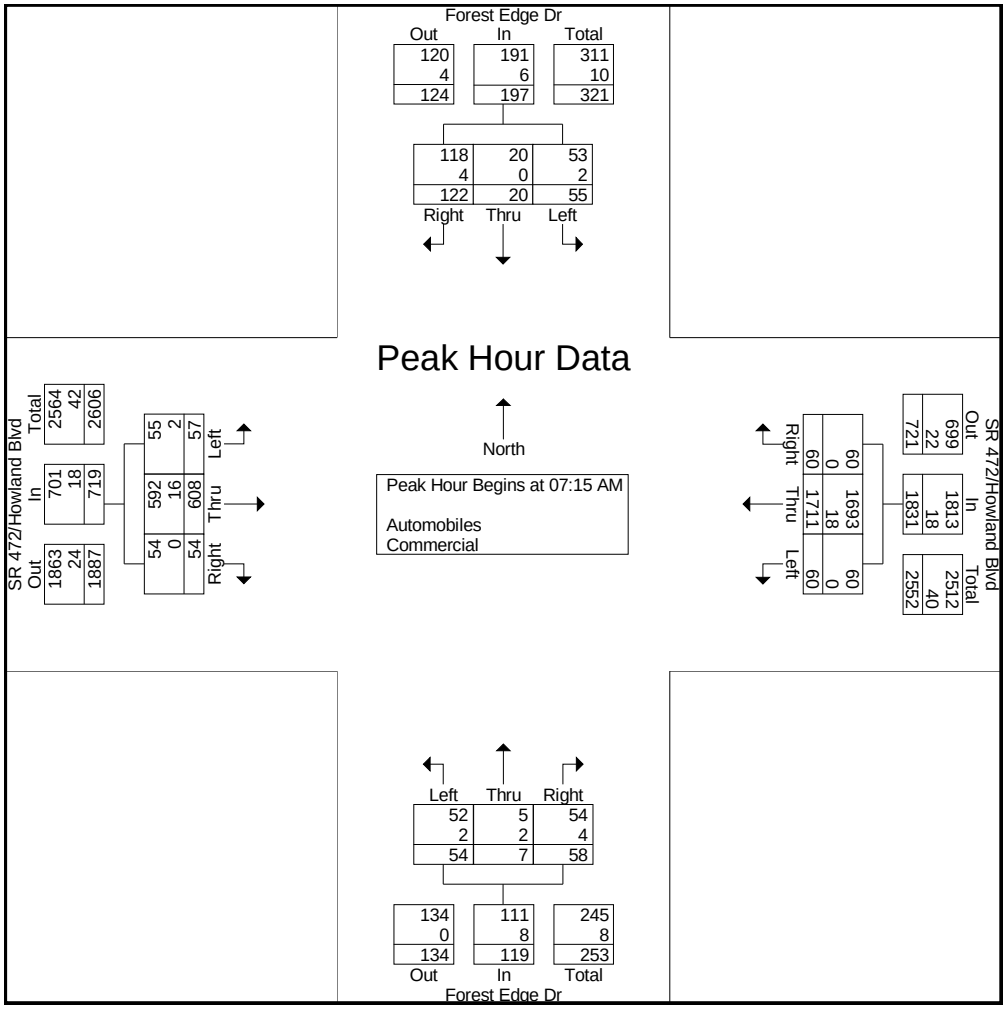
File Name : Forest at 472 AM
Site Code : 00000004
Start Date : 12/14/2017
Page No : 2

	Forest Edge Dr Southbound				SR 472/Howland Blvd Westbound				Forest Edge Dr Northbound				SR 472/Howland Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	9	4	21	34	11	457	15	483	11	1	13	25	11	147	11	169	711
07:30 AM	13	5	24	42	15	429	16	460	10	1	14	25	14	171	15	200	727
07:45 AM	17	5	35	57	16	405	18	439	17	2	15	34	16	150	13	179	709
08:00 AM	16	6	42	64	18	420	11	449	16	3	16	35	16	140	15	171	719
Total Volume	55	20	122	197	60	1711	60	1831	54	7	58	119	57	608	54	719	2866
% App. Total	27.9	10.2	61.9		3.3	93.4	3.3		45.4	5.9	48.7		7.9	84.6	7.5		
PHF	.809	.833	.726	.770	.833	.936	.833	.948	.794	.583	.906	.850	.891	.889	.900	.899	.986
Automobiles	53	20	118	191	60	1693	60	1813	52	5	54	111	55	592	54	701	2816
% Automobiles	96.4	100	96.7	97.0	100	98.9	100	99.0	96.3	71.4	93.1	93.3	96.5	97.4	100	97.5	98.3
Commercial	2	0	4	6	0	18	0	18	2	2	4	8	2	16	0	18	50
% Commercial	3.6	0	3.3	3.0	0	1.1	0	1.0	3.7	28.6	6.9	6.7	3.5	2.6	0	2.5	1.7

DE TRAFFIC

http:de-traffic.com
Forest Edge Dr at SR 472
Volusia County, FL

File Name : Forest at 472 AM
Site Code : 00000004
Start Date : 12/14/2017
Page No : 3



DE TRAFFIC

http:de-traffic.com
Forest Edge Dr at SR 472
Volusia County, FL

File Name : Forest at 472 AM
Site Code : 00000004
Start Date : 12/14/2017
Page No : 4

Groups Printed- Peds

	Forest Edge Dr Southbound					SR 472/Howland Blvd Westbound					Forest Edge Dr Northbound					SR 472/Howland Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

DE TRAFFIC

http:de-traffic.com
Wolf Pack Run at SR 472
Volusia County, FL

File Name : Wolf pack at 472 AM
Site Code : 00000005
Start Date : 12/14/2017
Page No : 1

Groups Printed- Automobiles - Commercial

	N/A Southbound				SR 472/Howland Blvd Westbound				Wolf Pack Run Northbound				SR 472/Howland Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	0	0	18	405	0	423	28	0	17	45	0	109	33	142	610
07:15 AM	0	0	0	0	24	437	0	461	36	0	11	47	0	139	41	180	688
07:30 AM	0	0	0	0	35	414	0	449	43	0	15	58	0	158	36	194	701
07:45 AM	0	0	0	0	32	408	0	440	54	0	19	73	0	165	43	208	721
Total	0	0	0	0	109	1664	0	1773	161	0	62	223	0	571	153	724	2720
08:00 AM	0	0	0	0	42	417	0	459	65	0	21	86	0	146	52	198	743
08:15 AM	0	0	0	0	31	336	0	367	56	0	16	72	0	151	43	194	633
08:30 AM	0	0	0	0	27	316	0	343	42	0	11	53	0	164	27	191	587
08:45 AM	0	0	0	0	19	358	0	377	50	0	9	59	0	155	16	171	607
Total	0	0	0	0	119	1427	0	1546	213	0	57	270	0	616	138	754	2570
Grand Total	0	0	0	0	228	3091	0	3319	374	0	119	493	0	1187	291	1478	5290
Apprch %	0	0	0		6.9	93.1	0		75.9	0	24.1		0	80.3	19.7		
Total %	0	0	0	0	4.3	58.4	0	62.7	7.1	0	2.2	9.3	0	22.4	5.5	27.9	
Automobiles	0	0	0	0	228	3058	0	3286	361	0	117	478	0	1167	287	1454	5218
% Automobiles	0	0	0	0	100	98.9	0	99	96.5	0	98.3	97	0	98.3	98.6	98.4	98.6
Commercial	0	0	0	0	0	33	0	33	13	0	2	15	0	20	4	24	72
% Commercial	0	0	0	0	0	1.1	0	1	3.5	0	1.7	3	0	1.7	1.4	1.6	1.4

DE TRAFFIC

http:de-traffic.com
Wolf Pack Run at SR 472
Volusia County, FL

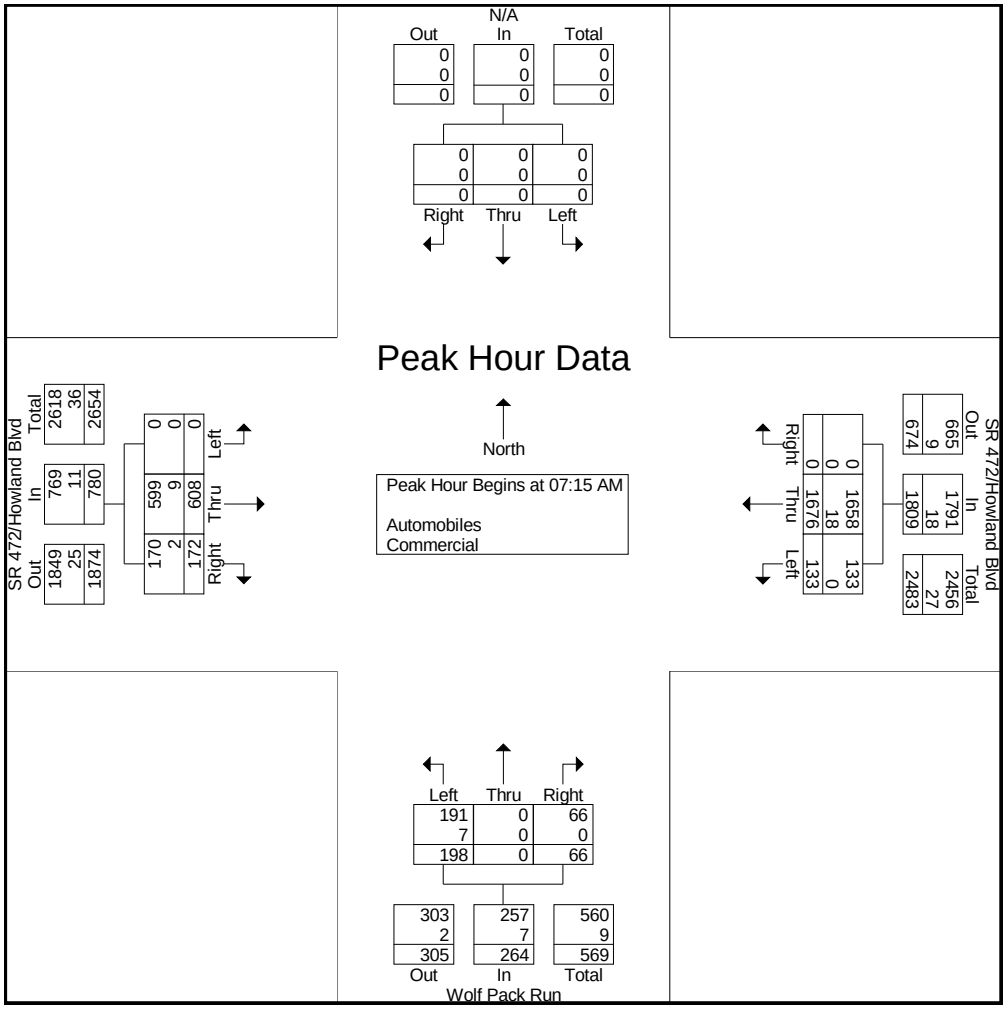
File Name : Wolf pack at 472 AM
Site Code : 00000005
Start Date : 12/14/2017
Page No : 2

	N/A Southbound				SR 472/Howland Blvd Westbound				Wolf Pack Run Northbound				SR 472/Howland Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	24	437	0	461	36	0	11	47	0	139	41	180	688
07:30 AM	0	0	0	0	35	414	0	449	43	0	15	58	0	158	36	194	701
07:45 AM	0	0	0	0	32	408	0	440	54	0	19	73	0	165	43	208	721
08:00 AM	0	0	0	0	42	417	0	459	65	0	21	86	0	146	52	198	743
Total Volume	0	0	0	0	133	1676	0	1809	198	0	66	264	0	608	172	780	2853
% App. Total	0	0	0		7.4	92.6	0		75	0	25		0	77.9	22.1		
PHF	.000	.000	.000	.000	.792	.959	.000	.981	.762	.000	.786	.767	.000	.921	.827	.938	.960
Automobiles	0	0	0	0	133	1658	0	1791	191	0	66	257	0	599	170	769	2817
% Automobiles	0	0	0	0	100	98.9	0	99.0	96.5	0	100	97.3	0	98.5	98.8	98.6	98.7
Commercial	0	0	0	0	0	18	0	18	7	0	0	7	0	9	2	11	36
% Commercial	0	0	0	0	0	1.1	0	1.0	3.5	0	0	2.7	0	1.5	1.2	1.4	1.3

DE TRAFFIC

http:de-traffic.com
Wolf Pack Run at SR 472
Volusia County, FL

File Name : Wolf pack at 472 AM
Site Code : 00000005
Start Date : 12/14/2017
Page No : 3



DE TRAFFIC

http:de-traffic.com
Wolf Pack Run at SR 472
Volusia County, FL

File Name : Wolf pack at 472 AM
Site Code : 00000005
Start Date : 12/14/2017
Page No : 4

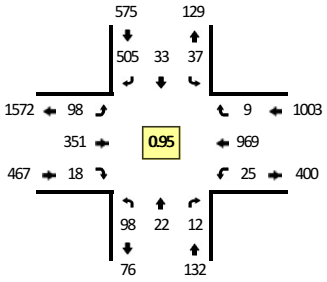
Groups Printed- Peds

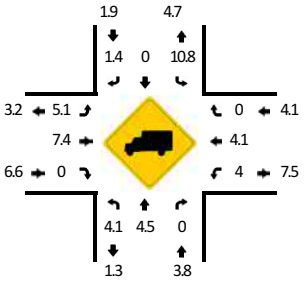
	N/A Southbound					SR 472/Howland Blvd Westbound					Wolf Pack Run Northbound					SR 472/Howland Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:15 AM	0	0	0	3	3	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	6
07:30 AM	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	4
07:45 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	5
Total	0	0	0	5	5	0	0	0	7	7	0	0	0	0	0	0	0	0	3	3	15
08:00 AM	0	0	0	2	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	7
08:15 AM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	4
08:30 AM	0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	3
08:45 AM	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	1	1	4
Total	0	0	0	3	3	0	0	0	12	12	0	0	0	0	0	0	0	0	3	3	18
Grand Total	0	0	0	8	8	0	0	0	19	19	0	0	0	0	0	0	0	0	6	6	33
Apprch %	0	0	0	100		0	0	0	100		0	0	0	0		0	0	0	100		
Total %	0	0	0	24.2	24.2	0	0	0	57.6	57.6	0	0	0	0	0	0	0	0	18.2	18.2	

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

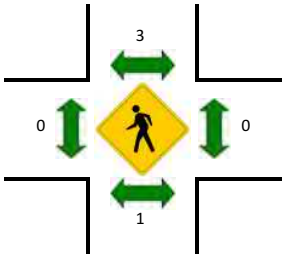
LOCATION: Catalina Blvd -- State Hwy 472 | **QC JOB #:** 15005913
CITY/STATE: Deltona, FL | **DATE:** Tue, Jun 11 2019

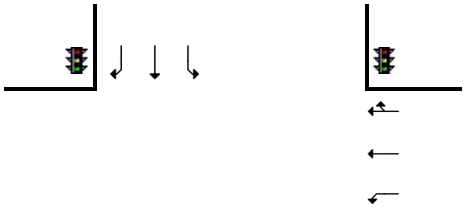
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

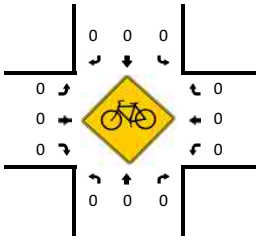


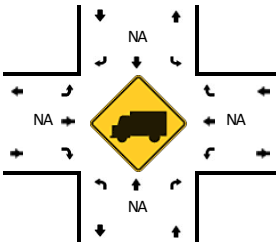


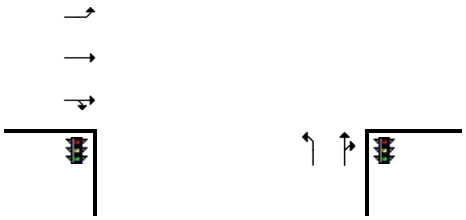
Quality Counts
DATA THAT DRIVES COMMUNITIES

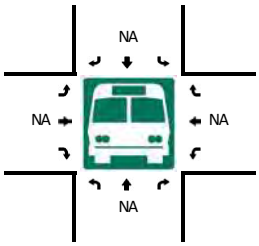












R* = RTOR

15-Min Count Period Beginning At	Catalina Blvd (Northbound)					Catalina Blvd (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	31	3	3	0	1	10	7	48	0	62	17	70	5	0	0	6	225	0	0	0	488	
7:15 AM	19	7	1	0	0	10	9	86	0	62	17	87	4	0	0	6	257	1	0	0	566	
7:30 AM	20	5	1	0	2	9	10	83	0	57	30	89	3	0	0	6	255	4	0	0	574	
7:45 AM	28	7	4	0	0	8	7	56	0	51	34	105	5	0	1	7	232	4	0	0	549	2177
8:00 AM	20	4	2	0	2	7	5	34	0	72	26	94	3	0	0	8	204	3	1	0	485	2174
8:15 AM	19	5	3	0	1	18	17	46	0	56	21	103	4	0	1	3	184	9	0	0	490	2098
8:30 AM	13	4	1	0	3	13	7	34	0	67	33	93	7	0	0	10	171	10	0	1	467	1991
8:45 AM	13	9	5	0	3	7	13	12	0	79	28	105	5	1	0	5	171	8	0	0	464	1906

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	80	20	12	0	8	36	40	560	0	228	120	356	12	0	0	24	1020	16	0	0	2532
Heavy Trucks	4	0	0			0	0	4			8	16	0			0	28	0			60
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

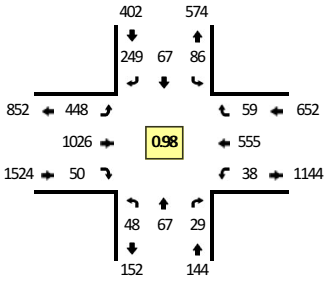
Comments:

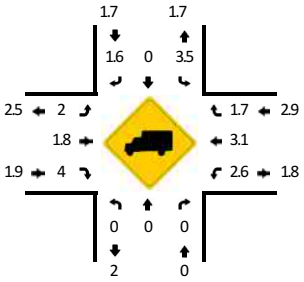
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

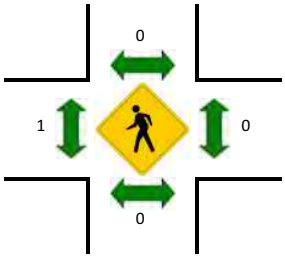
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

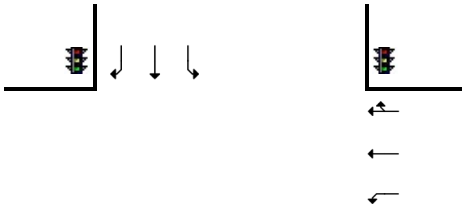
LOCATION: Catalina Blvd -- State Hwy 472 | **QC JOB #:** 15005914
CITY/STATE: Deltona, FL | **DATE:** Tue, Jun 11 2019

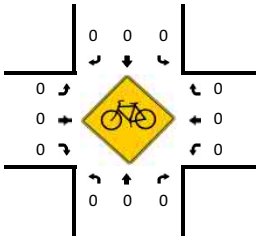
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

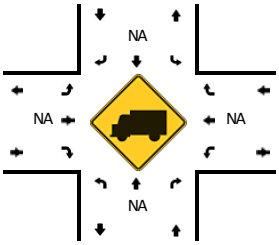


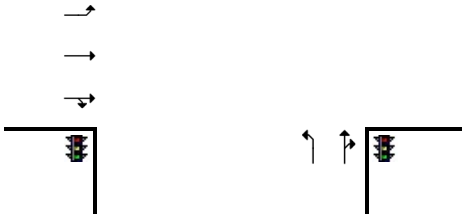


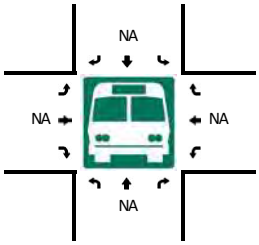












R* = RTOR

15-Min Count Period Beginning At	Catalina Blvd (Northbound)					Catalina Blvd (Southbound)					State Hwy 472 (Eastbound)					State Hwy 472 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	8	20	4	0	1	22	9	13	0	26	80	178	15	0	0	9	122	16	0	0	523	
4:15 PM	9	13	4	0	2	23	13	18	0	39	94	248	16	0	3	6	114	14	0	0	616	
4:30 PM	15	9	2	0	0	14	15	14	0	40	120	204	15	0	0	4	118	11	0	1	582	
4:45 PM	13	13	3	0	0	20	20	25	0	31	101	229	11	0	0	12	146	16	0	0	640	2361
5:00 PM	7	17	3	0	0	15	15	19	0	35	101	258	16	0	0	7	144	20	2	0	659	2497
5:15 PM	10	14	5	0	5	34	20	18	0	36	119	262	12	0	0	8	137	16	0	0	696	2577
5:30 PM	16	18	5	0	1	14	16	23	0	47	120	260	9	0	0	9	143	6	0	0	687	2682
5:45 PM	15	18	8	0	2	23	16	28	0	43	108	246	13	0	0	11	131	17	1	0	680	2722

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	40	56	40	0	20	136	80	216	0	144	476	1048	48	0	0	32	548	64	0	0	2948
Heavy Trucks	0	0	0			4	0	8			8	20	4			0	16	0			60
Pedestrians		0					0					4					0				4
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

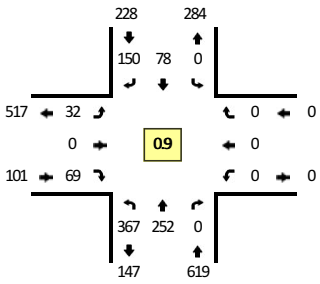
Type of peak hour being reported: Intersection Peak

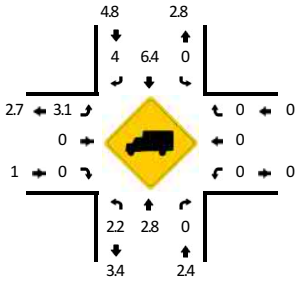
Method for determining peak hour: Total Entering Volume

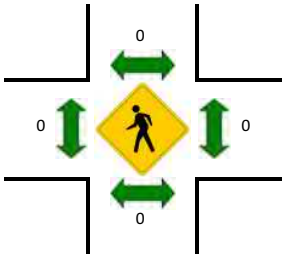
LOCATION: Lake Helen Osteen Rd -- Catalina Blvd
CITY/STATE: Deltona, FL

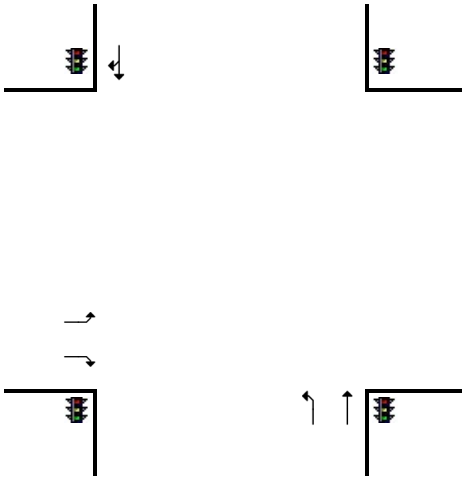
QC JOB #: 15005915
DATE: Thu, Jun 6 2019

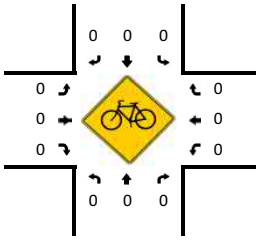
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

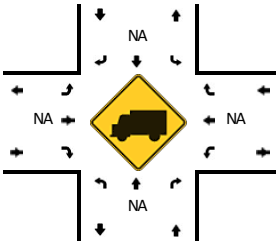


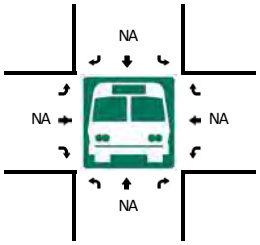












R* = RTOR

15-Min Count Period Beginning At	Lake Helen Osteen Rd (Northbound)					Lake Helen Osteen Rd (Southbound)					Catalina Blvd (Eastbound)					Catalina Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	93	63	0	0	0	0	24	36	0	3	4	0	0	0	13	0	0	0	0	0	236	
7:15 AM	113	64	0	0	0	0	20	31	0	4	8	0	2	0	21	0	0	0	0	0	263	
7:30 AM	89	78	0	0	0	0	16	31	0	5	8	0	3	0	16	0	0	0	0	0	246	
7:45 AM	72	47	0	0	0	0	18	33	0	7	12	0	1	0	13	0	0	0	0	0	203	948
8:00 AM	56	39	0	0	0	0	20	45	0	2	14	0	3	0	19	0	0	0	0	0	198	910
8:15 AM	92	31	0	0	0	0	17	23	0	4	7	0	3	0	11	0	0	0	0	0	188	835
8:30 AM	67	28	0	0	0	0	15	20	0	5	7	0	4	0	17	0	0	0	0	0	163	752
8:45 AM	62	36	0	0	0	0	19	26	0	5	14	0	6	0	23	0	0	0	0	0	191	740

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	452	256	0	0	0	0	80	140	0	16	32	0	92	0	84	0	0	0	0	0	1152
Heavy Trucks	12	12	0			0	8	8			0	0	0			0	0	0			40
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

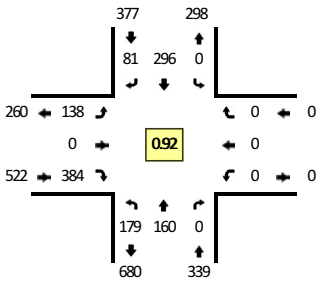
Report generated on 6/14/2019 4:04 PM

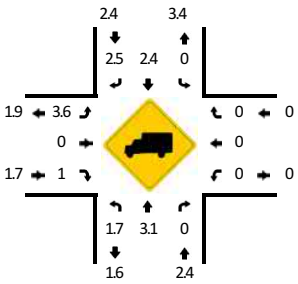
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

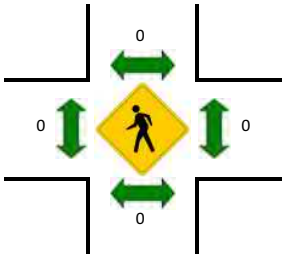
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Lake Helen Osteen Rd -- Catalina Blvd | **QC JOB #:** 15005916
CITY/STATE: Deltona, FL | **DATE:** Thu, Jun 6 2019

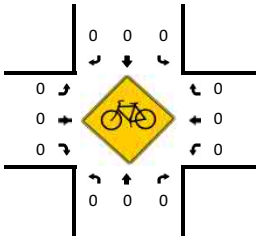
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

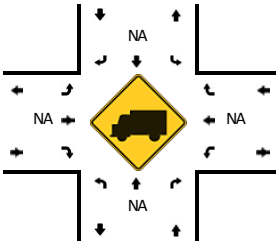




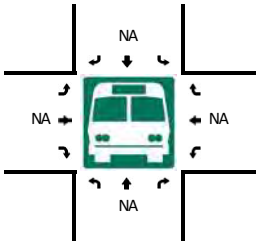












R* = RTOR

15-Min Count Period Beginning At	Lake Helen Osteen Rd (Northbound)					Lake Helen Osteen Rd (Southbound)					Catalina Blvd (Eastbound)					Catalina Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	42	16	0	0	0	0	55	14	0	4	39	0	38	0	50	0	0	0	0	0	258	
4:15 PM	39	34	0	0	0	0	49	8	0	3	37	0	39	0	40	0	0	0	0	0	249	
4:30 PM	48	31	0	0	0	0	62	12	0	3	34	0	22	0	47	0	0	0	0	0	259	
4:45 PM	44	20	0	0	0	0	61	19	0	6	34	0	35	0	58	0	0	0	0	0	277	1043
5:00 PM	39	31	0	0	0	0	60	20	0	4	31	0	34	0	45	0	0	0	0	0	264	1049
5:15 PM	54	47	0	0	0	0	87	17	0	3	43	0	34	0	48	0	0	0	0	0	333	1133
5:30 PM	46	39	0	0	0	0	92	19	0	5	32	0	62	0	43	0	0	0	0	0	338	1212
5:45 PM	40	43	0	0	0	0	57	9	0	4	32	0	52	0	66	0	0	0	0	0	303	1238

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	184	156	0	0	0	0	368	96	0	20	128	0	420	0	172	0	0	0	0	0	1544
Heavy Trucks	0	4	0			0	8	0			0	0	0			0	0	0			12
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

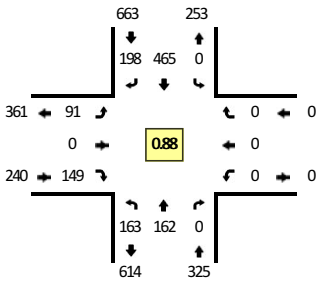
Comments:

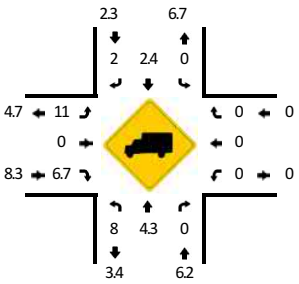
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

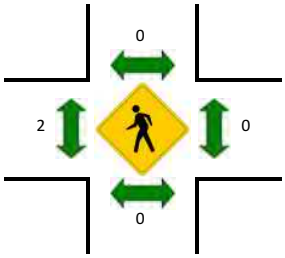
LOCATION: Veterans Memorial Pkwy -- E Rhode Island Ave | **QC JOB #:** 15005927
CITY/STATE: Orange City, FL | **DATE:** Tue, Jun 11 2019

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

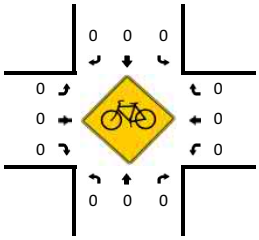


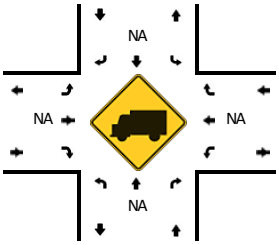


Quality Counts
DATA THAT DRIVES COMMUNITIES

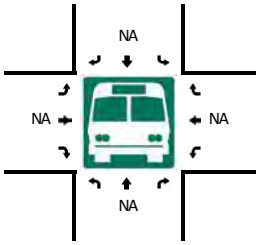












R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					E Rhode Island Ave (Eastbound)					E Rhode Island Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	29	30	0	0	0	0	81	26	0	0	25	0	10	0	14	0	0	0	0	0	215	
7:15 AM	35	38	0	0	0	0	94	30	0	0	21	0	15	0	19	0	0	0	0	0	252	
7:30 AM	38	37	0	0	0	0	116	55	0	0	24	0	12	0	16	0	0	0	0	0	298	
7:45 AM	51	38	0	0	0	0	113	62	0	0	25	0	20	0	39	0	0	0	0	0	348	1113
8:00 AM	38	43	0	0	0	0	127	33	0	0	25	0	20	0	18	0	0	0	0	0	304	1202
8:15 AM	36	44	0	0	0	0	109	48	0	0	17	0	6	0	18	0	0	0	0	0	278	1228
8:30 AM	42	40	0	0	0	0	127	33	0	0	21	0	13	0	17	0	0	0	0	0	293	1223
8:45 AM	38	52	0	0	0	0	115	36	0	0	27	0	17	0	9	0	0	0	0	0	294	1169

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	204	152	0	0	0	0	452	248	0	0	100	0	236	0	156	0	0	0	0	0	1548
Heavy Trucks	16	0	0			0	12	4			12	0	16			0	0	0			60
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

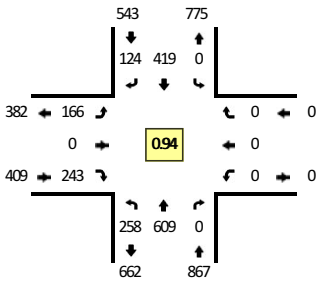
Comments:

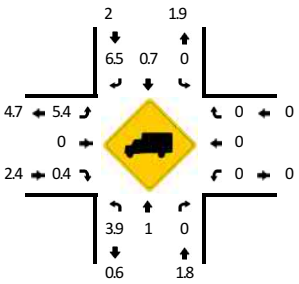
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

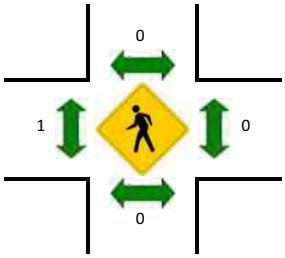
LOCATION: Veterans Memorial Pkwy -- E Rhode Island Ave | **QC JOB #:** 15005928
CITY/STATE: Orange City, FL | **DATE:** Tue, Jun 11 2019

Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

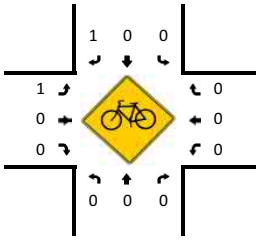


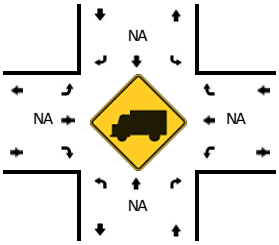


Quality Counts
DATA THAT DRIVES COMMUNITIES

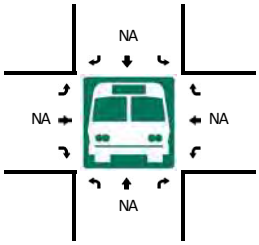












R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					E Rhode Island Ave (Eastbound)					E Rhode Island Ave (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	51	118	0	0	0	0	104	28	0	12	43	0	21	0	31	0	0	0	0	0	408	
4:15 PM	52	135	0	0	0	0	93	27	0	12	28	0	20	0	35	0	0	0	0	0	402	
4:30 PM	68	140	0	0	0	0	116	17	0	6	36	0	32	0	36	0	0	0	0	0	451	
4:45 PM	57	153	0	0	0	0	93	20	0	14	23	0	21	0	28	0	0	0	0	0	409	1670
5:00 PM	61	164	0	0	0	0	101	19	0	14	58	0	25	0	31	0	0	0	0	0	473	1735
5:15 PM	75	161	0	0	0	0	104	18	0	20	36	0	33	0	35	0	0	0	0	0	482	1815
5:30 PM	63	138	0	0	0	0	104	19	0	11	38	0	32	0	45	0	0	0	0	0	450	1814
5:45 PM	59	146	0	0	0	0	110	17	0	6	34	0	12	0	30	0	0	0	0	0	414	1819

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	300	644	0	0	0	0	416	152	0	80	144	0	272	0	140	0	0	0	0	0	2148
Heavy Trucks	12	4	0			0	12	12			0	0	0			0	0	0			40
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

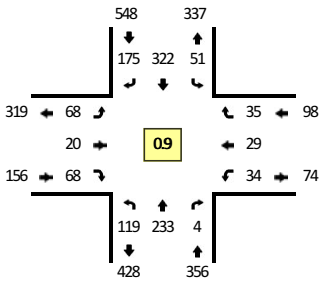
Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

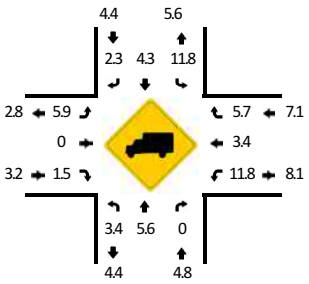
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

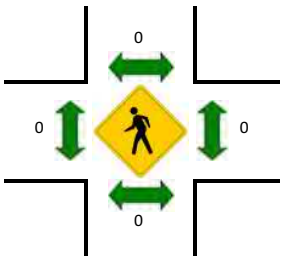
LOCATION: Veterans Memorial Pkwy -- Harley Strickland Blvd | **QC JOB #:** 15005931
CITY/STATE: Orange City, FL | **DATE:** Thu, Jun 6 2019

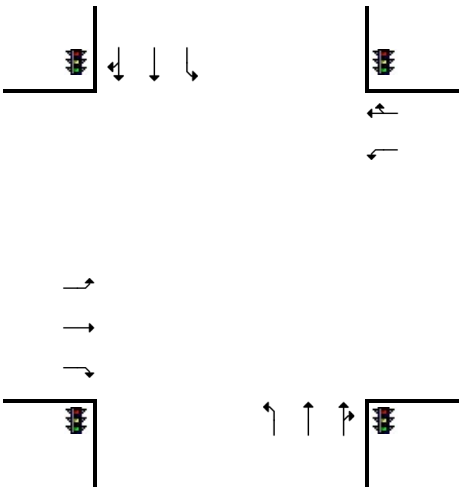
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:45 AM -- 9:00 AM

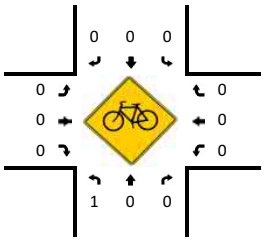


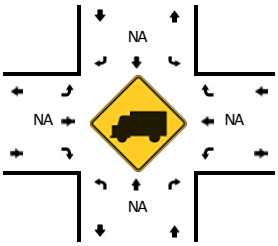


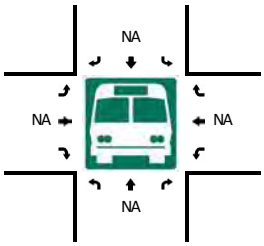












R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					Harley Strickland Blvd (Eastbound)					Harley Strickland Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	15	57	0	0	0	6	69	26	0	8	11	1	5	0	7	1	7	2	0	7	222	
7:15 AM	11	58	0	0	0	8	80	24	0	3	19	3	5	0	1	6	4	1	0	4	227	
7:30 AM	17	53	1	3	0	12	88	40	0	2	17	4	3	0	17	2	4	2	0	3	268	
7:45 AM	21	84	0	0	0	9	75	37	0	5	11	7	4	0	10	2	4	2	0	6	277	994
8:00 AM	21	57	1	1	0	11	82	28	0	5	18	2	3	0	9	9	5	2	0	4	258	1030
8:15 AM	29	61	1	1	0	10	86	41	0	6	13	3	1	0	10	3	8	4	0	3	280	1083
8:30 AM	38	51	1	1	0	10	93	38	0	3	16	6	6	0	17	8	3	4	0	4	299	1114
8:45 AM	27	64	0	1	1	19	61	46	1	8	21	9	3	0	19	14	13	6	0	8	321	1158

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	108	256	4	4	4	76	244	216	4	32	84	36	88	0	76	56	52	56	0	32	1428
Heavy Trucks	0	20	0			8	16	4			4	0	0			8	4	4			68
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

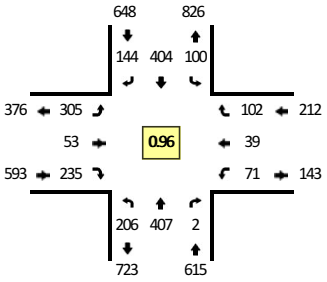
Comments:

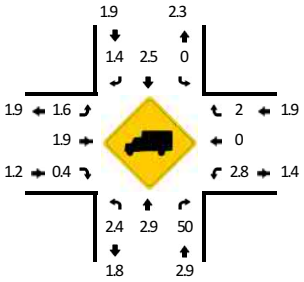
Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

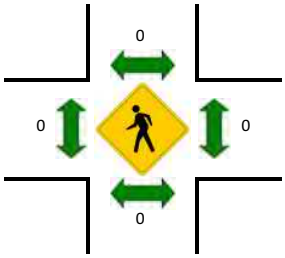
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

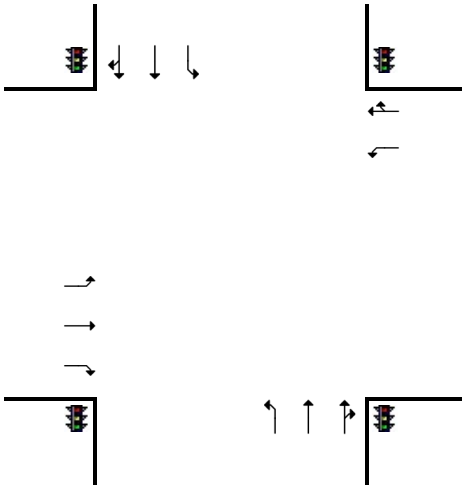
LOCATION: Veterans Memorial Pkwy -- Harley Strickland Blvd | **QC JOB #:** 15005932
CITY/STATE: Orange City, FL | **DATE:** Thu, Jun 6 2019

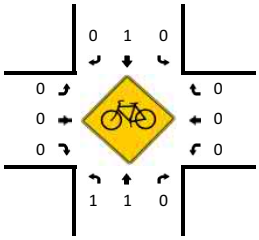
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

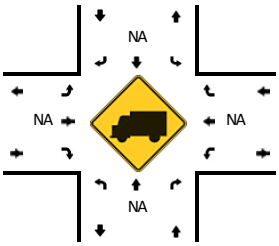


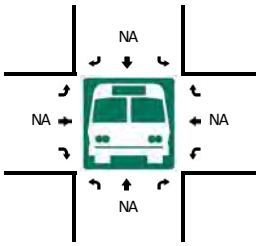












R* = RTOR

15-Min Count Period Beginning At	Veterans Memorial Pkwy (Northbound)					Veterans Memorial Pkwy (Southbound)					Harley Strickland Blvd (Eastbound)					Harley Strickland Blvd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	45	86	1	4	0	24	82	33	1	13	65	21	20	0	39	24	17	23	0	10	508	
4:15 PM	34	94	0	4	0	13	81	31	3	14	56	17	25	0	25	10	15	14	0	9	445	
4:30 PM	57	55	0	2	0	17	84	29	4	2	80	22	36	0	39	21	13	20	0	10	491	
4:45 PM	59	90	1	4	0	17	90	30	3	5	78	17	35	0	25	22	10	17	0	8	511	1955
5:00 PM	47	114	1	2	0	21	104	25	2	8	82	14	35	0	26	19	11	14	0	13	538	1985
5:15 PM	39	106	0	5	0	21	111	25	6	9	73	13	31	0	29	15	10	29	0	2	524	2064
5:30 PM	48	97	0	2	0	29	99	35	1	7	72	9	27	0	27	15	8	17	0	2	495	2068
5:45 PM	37	103	0	2	0	13	98	31	1	4	61	10	7	0	47	18	10	10	0	17	469	2026

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	188	456	4	8	0	84	416	132	8	32	328	56	244	0	104	76	44	108	0	52	2340
Heavy Trucks	8	28	4			0	8	0			4	4	0			4	0	0			60
Pedestrians		0					0					0					0				0
Bicycles	0	1	0			0	1	0			0	0	0			0	0	0			2
Railroad																					
Stopped Buses																					

Comments:

Report generated on 6/14/2019 4:04 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

APPENDIX C: SIGNAL TIMING WORKSHEETS

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: CR 4101 & Orange Camp Road
DeLand

ISOLATED: X

DATE: 2/22/2018

SIGNAL #: 276

CO-ORD:

Design By: M. Tobin

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	NBL	SB	EBL	WB	SBL	NB	WBL	EB	
TURN TYPE	PERM/PROT	-	PERM/PROT	-	PERM/PROT	-	PERM/PROT	-	
MIN GREEN	5	17	5	7	5	17	5	7	
EXTENSION	3	4	3	4	3	4	3	4	
CLEARANCE	3.5	5.5	3.5	5.5	3.5	5.5	3.5	5.5	
ALL RED	3.0	2.0	3.0	2.0	3.0	2.0	3.0	2.0	
WALK	-	10	-	-	-	-	-	10	
FDW	-	20	-	-	-	-	-	20	
MAX 1	30	60	30	60	30	60	30	60	
MAX 2	-	-	-	-	-	-	-	-	
MAX 3	0	0	0	75	0	0	0	0	
ADJUST	0	0	0	10	0	0	0	0	
RECALL	-	MIN	-	-	-	MIN	-	-	
DETECTOR	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK	
FLASH	-	YELLOW	-	RED	-	YELLOW	-	RED	
SET				2					
CLEAR				2					

BASE DAY		1	2	3	4	5	6	7
MON #1	TIME	00:01-00:00						
	PLAN	FREE						
TUES#1	TIME	00:01-00:00						
	PLAN	FREE						
WED #1	TIME	00:01-00:00						
	PLAN	FREE						
THU #1	TIME	00:01-00:00						
	PLAN	FREE						
FRI #1	TIME	00:01-00:00						
	PLAN	FREE						
SAT #1	TIME	00:01-00:00						
	PLAN	FREE						
SUN #1	TIME	00:01-00:00						
	PLAN	FREE						

Crosswalk Length
P2
70 Feet
P4
-
P6
-
P8
58 Feet
SIGNAL OWNER
County
LED -

CONTROLLER TYPE		CONDITION OF OVERHEAD	Poor	PROM NUMBER
3000E		OVERHEAD STREET NAMES	YES	
PHASES:	8Φ	ILLUMINATED STREET NAMES	NO	92R09
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS
CABINET DATE	02/1993	PRE-EMPTION TYPE	N/A	-

REMARKS:

1	2	3	4
5	6		8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: SR 472 @ CR 4101 (MLK Beltway)
Orange City

FREE: [ ]

DATE: 10/5/2018

SIGNAL #: 222

CO-ORD: [X]

Design By: Sean Castello

NETWORK #: OC/Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	EBL	WB	SB	NB	WBL	EB			
TURN TYPE	PROT	-	SPLIT LEAD	SPLIT LAG	PROT	-			
MIN GREEN	5	17	7	7	5	17			
EXTENSION	3	4	4	4	3	4			
YELLOW	5.5	5.5	5.6	5.5	5.5	5.5			
RED CLR	2.8	2.8	3.8	3.3	2.8	2.8			
WALK									
PED CLR									
MAX 1	25	60	35	35	35	60			
MAX 2									
MAX 3		-		-		-			
DYM MAX		90		35		90			
DYM STP		10		10		10			
RECALL		MIN		-		MIN			
DETECTOR	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK			
FLASH	RED	YELLOW	RED	RED	RED	YELLOW			

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE	150	130	150	-	-	-	-	-	
OFFSET	93	99	0	-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1	19	57	37	37	19	57			
PATTERN 2	19	43	31	37	19	43			
PATTERN 3	19	59	35	37	20	58			
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP	10.40.91.25	Switch IP	10.40.90.25	Camera IP	10.40.92.25
Controller Gateway	10.40.91.1	Switch Gateway	10.40.90.1	Camera Gateway	10.40.92.1

REMARKS:

Pattern #1		2	1		4	3	Pat #2		1	2		3	4	Pat #3		1	2		4	3
Seq #4		5	6				Seq #5		6	5				Seq #7		6	5			

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: SR 472 @ CR 4101 (MLK Beltway)
Orange City

FREE: [ ]

DATE: 10/5/2018

SIGNAL #: 222

CO-ORD: [X]

Design By: Sean Castello

NETWORK #: OC/Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
MON #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P2
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
TUES #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
WED #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P4
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
THU #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
FRI #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P6
	TIME	00:00-00:00							
SAT #2	PATTERN	FREE							
	TIME	00:00-00:00							
SUN #2	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	
Econolite ASC/3		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.62.00	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	YES	Controller IP Address	FDOT
CABINET DATE	03/2008	PRE-EMPTION TYPE	INFRARED	10.40.91.25	LED: YES

REMARKS:

Seq #4					Seq #5					Seq #7				
2	1	4	3		1	2	3	4		1	2	4	3	
5	6				6	5				6	5			

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ I 4 WB RAMP
Deltona

FREE:

DATE: 10/5/2018

SIGNAL #: 358

CO-ORD: X

Design By: Sean Castello

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8
DIRECTION		WB			WBL	EB		SB
TURN TYPE		-			PROT	-		-
MIN GREEN		17			6	17		7
EXTENSION		3			3	3		3
YELLOW		5.1			5.1	5.1		5.1
RED CLR		2.0			2.0	2.0		2.9
WALK		7						
PED CLR		20						
MAX 1		40			25	40		25
MAX 2								
MAX 3		-				-		
DYM MAX					60			
DYM STP					10			
RECALL		MIN				MIN		
DETECTOR		LOCK			LOCK	LOCK		NON-LOCK
FLASH		YELLOW			RED	YELLOW		RED

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8
CYCLE	150	130	150	-	-	-	-	-
OFFSET	138	11	38	-	-	-	-	-

PHASE	1	2	3	4	5	6	7	8
PATTERN 1		120	30		80	40		30
PATTERN 2		101	29		43	58		29
PATTERN 3		111	39		45	66		39
PATTERN 4	-	-	-	-	-	-	-	-
PATTERN 5	-	-	-	-	-	-	-	-
PATTERN 6	-	-	-	-	-	-	-	-
PATTERN 7	-	-	-	-	-	-	-	-

Controller IP	10.40.91.24	Switch IP	10.40.90.24	Camera IP	
Controller Gateway	10.40.91.1	Switch Gateway	10.40.90.1	Camera Gateway	

REMARKS:

PATTERNS 2,3 FREE
SEQ #1

	2	8	
5	6		

PATTERN 1
SEQ #5

	2	8	
6	5		

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ I 4 WB RAMP
Deltona

FREE: [ ]

DATE: 10/5/2018

SIGNAL #: 358

CO-ORD: [X]

Design By: Sean Castello

NETWORK #: Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
MON #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P2
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
TUES #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				66
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
WED #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P4
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
THU #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
FRI #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P6
	TIME	00:00-00:00							
SAT #2	PATTERN	FREE							
	TIME	00:00-00:00							
SUN #2	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	
Econolite ASC/3		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.62.00	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	YES	Controller IP Address	FDOT
CABINET DATE	03/2008	PRE-EMPTION TYPE	INFRARED	10.40.91.24	LED YES

REMARKS:

PATTERNS 1, 2, FREE			2	8
SEQ #1	5	6		

PATTERN 3			2	8
SEQ #5	6	5		

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ I 4 EB RAMP
Deltona

FREE: [ ]

DATE: 10/5/2018

SIGNAL #: 359

CO-ORD: [X]

Design By: Sean Castello

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION		WB		NB		EB			
TURN TYPE		-		SPLIT LEAD		-			
MIN GREEN		17		7		17			
EXTENSION		4		3		4			
YELLOW		5.5		4.8		5.5			
RED CLR		2.0		2.4		2.0			
WALK						0			
PED CLR									
MAX 1		40		25		60			
MAX 2									
MAX 3		-		-		-			
DYM MAX									
DYM STP									
RECALL		MIN		-		MIN			
DETECTOR		LOCK		NON-LOCK		LOCK			
FLASH		YELLOW		RED		YELLOW			

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE	150	130	150	-	-	-	-	-	
OFFSET	74	84	73	-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1		96		54		96		54	
PATTERN 2		72		58		72		58	
PATTERN 3		91		59		91		59	
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP	10.40.91.26	Switch IP	10.40.90.26	Camera IP	
Controller Gateway	10.40.91.1	Switch Gateway	10.40.90.1	Camera Gateway	

REMARKS:

2 4 8
5 6

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ I 4 EB RAMP
Deltona

FREE:

DATE: 10/5/2018

SIGNAL #: 359

CO-ORD: X

Design By: Sean Castello

NETWORK #: Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	06:30-09:00	09:00-15:30	15:30-19:00	19:00-00:00				
MON #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P2
	TIME	06:30-09:00	09:00-15:30	15:30-19:00	19:00-00:00				
TUES #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				86
	TIME	06:30-09:00	09:00-15:30	15:30-19:00	19:00-00:00				
WED #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P4
	TIME	06:30-09:00	09:00-15:30	15:30-19:00	19:00-00:00				
THU #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				
	TIME	06:30-09:00	09:00-15:30	15:30-19:00	19:00-00:00				
FRI #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P6
	TIME	00:00-00:00							
SAT #2	PATTERN	FREE							
	TIME	00:00-00:00							
SUN #2	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	
Econolite ASC/3		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.62.00	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	YES	Controller IP Address	FDOT
CABINET DATE	03/2008	PRE-EMPTION TYPE	INFRARED	10.40.91.26	LED YES

REMARKS:

	2	4	8
5	6		

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

Continuing Services Contract for Traffic Operations

Volusia County 2017

FM: 237988-1-32-11

Volusia County FLORIDA

US 17/92 at Graves Avenue (111)				Prepared By:	FDA	Date:	11/1/2017
North-South Roadway	US 17/92		East-West Roadway		Graves Avenue		

PHASE TIMES

PHASE	1	2	3	4	5	6	7	8
DIRECTION		SB		WB	SBL	NB		EB
LEFT TURN		Perm		Prot	Prot/Perm	Perm		Prot
MIN GRN		15		10	5	15		10
GAP EXT		4.0		3.0	3.0	4.0		3.0
YEL CLR		4.5		3.8	4.4	4.5		3.4
RED CLR		2.8		2.1	2.8	2.8		2.3
MAX 1		50		30	20	50		20
MAX 2								
DYM MAX		90				90		
DYM STEP		10				10		
WALK		7		7		7		7
PED CLR		35		24		27		22
RECALL		MIN				MIN		
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK		NON-LOCK
FLASH		YELLOW		RED	RED	YELLOW		RED
SET								
CLEAR								

Weekday (Monday-Friday) Day 1

TIME BASE COORDINATION				COORDINATION PATTERN TABLES			
Plan	Start	End	Pattern	Cycle Length	Offset	Coord Phase	Sequence
Existing	0:00	6:00	11	Free			
AM	6:00	9:00	1	150	24	2, 6	1
Midday	9:00	13:30	2	130	12	2, 6	1
PM	13:30	18:30	3	150	117	2, 6	1
Evening	18:30	20:00	2	130	12	2, 6	1
Existing	20:00	0:00	11	Free			

Weekend (Saturday) Day 2

TIME BASE COORDINATION				COORDINATION PATTERN TABLES			
Plan	Start	End	Pattern	Cycle Length	Offset	Coord Phase	Sequence
Existing	0:00	9:30	11	Free			
Midday	9:30	20:00	2	130	12	2, 6	1
Existing	20:00	0:00	11	Free			

Weekend (Sunday) Day 3

TIME BASE COORDINATION				COORDINATION PATTERN TABLES			
Plan	Start	End	Pattern	Cycle Length	Offset	Coord Phase	Sequence
Existing	0:00	10:00	11	Free			
Midday	10:00	19:00	2	130	12	2, 6	1
Existing	19:00	0:00	11	Free			

COORDINATION SPLIT TABLES

Pattern 1

Phase	1	2	3	4	5	6	7	8
Time (sec)		95		30	20	75		25
Recall								

Pattern 2

Phase	1	2	3	4	5	6	7	8
Time (sec)		85		25	20	65		20
Recall								

Pattern 3

Phase	1	2	3	4	5	6	7	8
Time (sec)		100		30	20	80		20
Recall								

CONTROLLER TYPE		CONDITION OF OVERHEAD		PROM NUMBER	SIGNAL OWNER
		OVERHEAD STREET NAMES			
PHASES:		ILLUMINATED STREET NAMES			
CABINET TYPE		PRE-EMPTION		IP ADDRESS	LED
CABINET DATE		PRE-EMPTION TYPE			

NOTES

1. Offset Reference: Yellow
2. Force-off: Fixed
3. Maximum Select: Inhibit Max
4. Use Ped Time: No
5. Omit phase 5 when phase 6 is active

	2	4	8
5	6		

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Graves Ave. @ Veterans Memorial Pkwy
Deltona

FREE: X

DATE: 2/15/2017

SIGNAL #: 350

CO-ORD:

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	WBL	EB				WB		NB	
TURN TYPE	PERM/PROT	-				-		-	
MIN GREEN	7	11				11		7	
EXTENSION	3	4				4		3	
YELLOW	4.5	4.5				4.5		5.0	
RED CLR	2.5	2.5				2.5		2.0	
WALK		7						7	
PED CLR		27						16	
MAX 1	20	30				30		25	
MAX 2									
MAX 3		-				-			
DYM MAX	35								
DYM STP	10								
RECALL		MIN				MIN			
DETECTOR	NON-LOCK	LOCK				LOCK		NON-LOCK	
FLASH	-	YELLOW				YELLOW		RED	

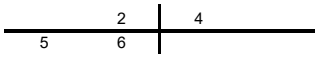
COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE				-	-	-	-	-	
OFFSET				-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1									
PATTERN 2									
PATTERN 3									
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP		Switch IP		Camera IP	
Controller Gateway		Switch Gateway		Camera Gateway	

REMARKS:



COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Graves Avenue & CR 4101-Kentucky Av
Orange City

ISOLATED: X

DATE: 10/15/2018

SIGNAL #: 229

CO-ORD:

Design By: Sean Castello

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	-	EB	SB	NB	EBL	WB	-	-	
TURN TYPE	-	-	SPLIT LEAD	SPLIT LAG	PERM/PROT	-	-	-	
MIN GREEN		11	7	7	5	11			
EXTENSION		4	3	3	3	4			
CLEARANCE		5.0	5.0	4.0	4.0	5.0			
ALL RED		2.0	2.0	3.0	2.0	2.0			
WALK		-	-		-				
FDW		-	-		-				
MAX 1		50	50	20	20	50			
MAX 2		-	-	-	-	-			
MAX 3		-	-	-	60	-			
ADJUST		-	-	-	10	-			
RECALL		MIN	-	-	-	MIN			
DETECTOR		LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK			
FLASH		YELLOW	RED	RED	-	YELLOW			
SET		-	-	-		-			
CLEAR		-	-	-		-			

BASE DAY		1	2	3	4	5	6	7
	TIME	00:01-00:00						
MON #1	PLAN	FREE						
	TIME	00:01-00:00						
TUES#1	PLAN	FREE						
	TIME	00:01-00:00						
WED #1	PLAN	FREE						
	TIME	00:01-00:00						
THU #1	PLAN	FREE						
	TIME	00:01-00:00						
FRI #1	PLAN	FREE						
	TIME	00:01-00:00						
SAT #1	PLAN	FREE						
	TIME	00:01-00:00						
SUN #1	PLAN	FREE						

Crosswalk Length

P2

-

P4

-

P6

-

P8

-

CONTROLLER TYPE		CONDITION OF OVERHEAD	New - 2011	PROM NUMBER
1880 EL		OVERHEAD STREET NAMES	YES	
PHASES:	8Φ	ILLUMINATED STREET NAMES	NO	
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS
CABINET DATE	2017	PRE-EMPTION TYPE	N/A	-

SIGNAL OWNER

County

LED YES

REMARKS:

	2	3 & 6R	4
5 & 3R	6		

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Graves Ave. @ Normandy Blvd.
Deltona

FREE: X

DATE: 5/19/2017

SIGNAL #: 347

CO-ORD:

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION		WB		NB	WBL	EB			
TURN TYPE		-		-	PERM/PROT	-			
MIN GREEN		12		7	5	12			
EXTENSION		4		3	3	4			
YELLOW		5.0		4.0	5.0	5.0			
RED CLR		2.0		2.0	2.0	2.0			
WALK						7			
PED CLR									
MAX 1		45		25	20	45			
MAX 2									
MAX 3		-		-		-			
DYM MAX		90				90			
DYM STP		10				10			
RECALL		MIN		-		MIN			
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK			
FLASH		YELLOW		RED	-	YELLOW			

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE				-	-	-	-	-	
OFFSET				-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1									
PATTERN 2									
PATTERN 3									
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP	10.40.91.28	Switch IP	10.40.90.28	Camera IP	
Controller Gateway	10.40.91.1	Switch Gateway	10.40.90.1	Camera Gateway	

REMARKS:
Omit Phase 5 when Phase 6 is active

	2	4	
5	6		

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Graves Ave.
Deltona

FREE:

DATE: 10/5/2018

SIGNAL #: 360

CO-ORD: X

Design By: Sean Castello

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8
DIRECTION	EBL	WB	-	NB	WBL	EB	-	SB
TURN TYPE	PERM/PROT	-	-	SPLIT LEAD	PERM/PROT	-	-	SPLIT LAG
MIN GREEN	7	17		7	5	17		7
EXTENSION	3	4		3	3	4		3
YELLOW	5.0	5.5		5.0	5.0	5.5		5.0
RED CLR	2.0	2.0		3.0	2.0	2.0		2.5
WALK		9				7		
PED CLR		23						
MAX 1	20	60		30	30	60		20
MAX 2								
MAX 3		-		-		-		
DYM MAX								
DYM STP								
RECALL		MIN		-		MIN		
DETECTOR	NON-LOCK	LOCK		NON-LOCK	NON-LOCK	LOCK		NON-LOCK
FLASH	-	YELLOW		RED	-	YELLOW		RED

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8
CYCLE	150	130	150	-	-	-	-	-
OFFSET	82	80	89	-	-	-	-	-

PHASE	1	2	3	4	5	6	7	8
PATTERN 1	25	79		30	54	40		16
PATTERN 2	25	59		30	34	50		16
PATTERN 3	14	104		18	34	76		14
PATTERN 4	-	-	-	-	-	-	-	-
PATTERN 5	-	-	-	-	-	-	-	-
PATTERN 6	-	-	-	-	-	-	-	-
PATTERN 7	-	-	-	-	-	-	-	-

Controller IP	10.40.91.27	Switch IP	10.40.90.27	Camera IP	
Controller Gateway	10.40.91.1	Switch Gateway	10.40.90.1	Camera Gateway	

REMARKS:
Pattern #3, Sequence #2 by TOD

Pattern #1 & 2

1	2	4	8
5	6		

Pattern #3

2	1	4	8
5	6		

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Graves Ave.
Deltona

FREE:

DATE: 10/5/2018

SIGNAL #: 360

CO-ORD: X

Design By: Sean Castello

NETWORK #: Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
MON #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P2
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
TUES #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				86
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
WED #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P4
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
THU #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				
	TIME	06:30-09:00	09:00-16:00	16:00-18:15	18:15-00:00				
FRI #1	PATTERN	PATTERN #1	PATTERN #2	PATTERN #3	FREE				P6
	TIME	00:00-00:00							
SAT #2	PATTERN	FREE							
	TIME	00:00-00:00							
SUN #2	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	
Econolite ASC/3		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.62.00	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	YES	Controller IP Address	County
CABINET DATE	08/2000	PRE-EMPTION TYPE	INFRARED	10.40.91.27	LED YES

REMARKS:
Pattern #3, Sequence #2 by TOD

Pattern #1 & 2				
	1	2	4	8
	5	6		

Pattern #3				
	2	1	4	8
	5	6		

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Catalina Blvd
Deltona

FREE:

DATE: 2/8/2017

SIGNAL #: 250

CO-ORD: X

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8
DIRECTION	EBL	WB	-	NB	WBL	EB	NBL	SB
TURN TYPE	PERM/PROT	-	-	-	PERM/PROT	-	PERM/PROT	-
MIN GREEN	5	11		7	5	11	5	7
EXTENSION	3	4		3	3	4	3	4
YELLOW	5.0	5.0		4.0	5.0	5.0	4.0	4.0
RED CLR	3.5	3.5		3.0	3.5	3.5	3.0	3.0
WALK		7		7		7		7
PED CLR		23		23		23		23
MAX 1	30	45		25	20	45	20	35
MAX 2								
MAX 3		-		-		-		-
DYM MAX		90						50
DYM STP		10						10
RECALL		MIN		-		MIN		-
DETECTOR	NON-LOCK	LOCK		NON-LOCK	NON-LOCK	LOCK	NON-LOCK	NON-LOCK
FLASH	-	YELLOW		RED	-	YELLOW	-	RED

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8
CYCLE	150	150	150	-	-	-	-	-
OFFSET	0	0	0	-	-	-	-	-

PHASE	1	2	3	4	5	6	7	8
PATTERN 1	24	59		67	18	65	24	43
PATTERN 2	31	59		60	20	65	25	40
PATTERN 3	30	60		60	20	65	20	45
PATTERN 4	-	-	-	-	-	-	-	-
PATTERN 5	-	-	-	-	-	-	-	-
PATTERN 6	-	-	-	-	-	-	-	-
PATTERN 7	-	-	-	-	-	-	-	-

Controller IP	10.40.91.32	Switch IP	10.40.90.32	Camera IP	
Controller Gateway	10.40.91.1	Switch Gateway	10.40.90.1	Camera Gateway	

REMARKS:
Phase #6 advanced loop bad. Temp. Removed dynamic max time for Phase #6

1	2	4	
5	6	7	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Catalina Blvd
Deltona

FREE:

DATE: 2/8/2017

SIGNAL #: 250

CO-ORD: X

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	06:30-00:00	09:00-14:30	14:30-19:00	19:00-00:00				
MON #1	PATTERN	PATTERN #1	FREE	PATTERN #3	FREE				P2
	TIME	06:30-00:00	09:00-14:30	14:30-19:00	19:00-00:00				
TUES #1	PATTERN	PATTERN #1	FREE	PATTERN #3	FREE				80
	TIME	06:30-00:00	09:00-14:30	14:30-19:00	19:00-00:00				
WED #1	PATTERN	PATTERN #1	FREE	PATTERN #3	FREE				P4
	TIME	06:30-00:00	09:00-14:30	14:30-19:00	19:00-00:00				
THU #1	PATTERN	PATTERN #1	FREE	PATTERN #3	FREE				76
	TIME	06:30-00:00	09:00-14:30	14:30-19:00	19:00-00:00				
FRI #1	PATTERN	PATTERN #1	FREE	PATTERN #3	FREE				P6
	TIME	00:00-00:00							
SAT #2	PATTERN	FREE							78
	TIME	00:00-00:00							
SUN #2	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	
Econolite ASC/3		OVERHEAD STREET NAMES	NO		76
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.64.00	SIGNAL OWNER
CABINET TYPE	IV	PRE-EMPTION	YES	Controller IP Address	County
CABINET DATE		PRE-EMPTION TYPE	INFRARED	10.40.91.32	LED YES

REMARKS:

1	2	4	
5	6	7	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Lake Helen-Osteen Rd & Catalina Blvd
Deltona

ISOLATED: X

DATE: 3/2/2015

SIGNAL #: 400

CO-ORD:

Design By: M. Tobin

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8
DIRECTION	NBL	SB	-	-	-	NB	-	EB
TURN TYPE	PERM/PROT	-	-	-	-	-	-	-
MIN GREEN	5	15				15		5
EXTENSION	5	5				5		5
CLEARANCE	5.0	5.0				5.0		3.5
ALL RED	2.5	2.5				2.5		3.0
WALK	-	-				-		-
FDW	-	-				-		-
MAX 1	20	30				30		20
MAX 2	-	-				-		-
MAX 3	-	-				-		-
ADJUST	-	-				-		-
RECALL	-	MIN				MIN		-
DETECTOR	NON-LOCK	LOCK				LOCK		NON-LOCK
FLASH	-	YELLOW				YELLOW		RED
SET	-	-				-		-
CLEAR	-	-				-		-

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	00:01-00:00							
MON #1	PLAN	FREE							P2
	TIME	00:01-00:00							
TUES#1	PLAN	FREE							-
	TIME	00:01-00:00							
WED #1	PLAN	FREE							P4
	TIME	00:01-00:00							
THU #1	PLAN	FREE							-
	TIME	00:01-00:00							
FRI #1	PLAN	FREE							P6
	TIME	00:01-00:00							
SAT #2	PLAN	FREE							-
	TIME	00:01-00:00							
SUN #3	PLAN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	OK	PROM NUMBER	
3000E		OVERHEAD STREET NAMES	NO		-
PHASES:	4Φ	ILLUMINATED STREET NAMES	YES	8216A 3.7.3	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS	County
CABINET DATE	09/2005	PRE-EMPTION TYPE	N/A	-	LED YES

REMARKS:

Omit PH 1 when PH 2 is active

1	2	
	6	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Providence Blvd
Deltona

FREE:

DATE: 10/9/2018

SIGNAL #: 236

CO-ORD: X

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	-	WB	-	NB	WBL	EB	NBL	SB	
TURN TYPE	-	-	-	-	PERM/PROT	-	PERM/PROT	-	
MIN GREEN		11		7	5	11	5	7	
EXTENSION		4		3	3	4	4	3	
YELLOW		5.0		4.5	5.0	5.0	4.5	4.5	
RED CLR		2.0		2.5	2.0	2.0	2.5	2.5	
WALK		7		7		7		7	
PED CLR		21		24		21		24	
MAX 1		60		20	20	60	35	20	
MAX 2									
MAX 3		-		-		-		-	
DYM MAX									
DYM STP									
RECALL		MIN		-		MIN		-	
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	
FLASH		YELLOW		RED	-	YELLOW	-	RED	

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE	150	150	150	-	-	-	-	-	
OFFSET	0	28	28	-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1		100		50	20	85	25	20	
PATTERN 2		90		40	20	65	25	20	
PATTERN 3		110		40	20	85	25	20	
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP	10.40.91.33	Switch IP	10.40.90.33	Camera IP	
Controller Gateway	10.40.91.1	Switch Gateway	10.40.90.1	Camera Gateway	

REMARKS:

1	2	4	
5	6	7	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Providence Blvd
Deltona

FREE:

DATE: 10/9/2018

SIGNAL #: 236

CO-ORD: X

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	06:30-00:00	09:00-14:30	14:30-16:00	16:00-18:15	18:15-00:00			
MON #1	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			P2
	TIME	06:30-00:00	09:00-14:30	14:30-16:00	16:00-18:15	18:15-00:00			
TUES #1	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			60
	TIME	06:30-00:00	09:00-14:30	14:30-16:00	16:00-18:15	18:15-00:00			
WED #1	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			P4
	TIME	06:30-00:00	09:00-14:30	14:30-16:00	16:00-18:15	18:15-00:00			
THU #1	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			55
	TIME	06:30-00:00	09:00-14:30	14:30-16:00	16:00-18:15	18:15-00:00			
FRI #1	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			P6
	TIME	00:00-00:00							
SAT #2	PATTERN	FREE							71
	TIME	00:00-00:00							
SUN #2	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	82
Econolite ASC/3		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.64.00	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	YES	Controller IP Address	County
CABINET DATE	05/2000	PRE-EMPTION TYPE	INFRARED	10.40.91.33	LED: YES

REMARKS:

1	2	4	
5	6	7	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Veterans Memorial Pkwy & Rhode Island Blvd
Orange City
ISOLATED: X
DATE: 7/14/2017

SIGNAL #: 375
CO-ORD:
Design By: M. Tobin

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	OLA	7	8	
DIRECTION	NBL	SB	-	EB	-	NB	-	-	
TURN TYPE	PERM/PROT	-	-	-	-	-	-	-	
MIN GREEN	5	11		7		11			
EXTENSION	3	4		3		4			
CLEARANCE	5.5	5.5		3.5		5.5			
ALL RED	3.0	3.0		3.0		3.0			
WALK	-	7		7		7			
FDW	-	20		18		20			
MAX 1	15	35		20		35			
MAX 2	-	-		-		-			
MAX 3	-	60		-		-			
ADJUST	-	10		-		-			
RECALL	-	MIN		-		MIN			
DETECTOR	NON-LOCK	LOCK		NON-LOCK		LOCK			
FLASH	-	YELLOW		RED		YELLOW			
SET	-	1		-		-			
CLEAR	-	2		-		-			

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
MON #1	TIME	00:00-00:00							
	PLAN	FREE							P2
TUES#1	TIME	00:00-00:00							
	PLAN	FREE							70 Feet
WED #1	TIME	00:00-00:00							
	PLAN	FREE							P4
THU #1	TIME	00:00-00:00							
	PLAN	FREE							63 Feet
FRI #1	TIME	00:00-00:00							
	PLAN	FREE							P6
SAT #2	TIME	00:00-00:00							
	PLAN	FREE							-
SUN #3	TIME	00:00-00:00							
	PLAN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	Fair	PROM NUMBER	
1880 EL		OVERHEAD STREET NAMES	NO		-
PHASES:	4Φ	ILLUMINATED STREET NAMES	NO	92R09	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS	County
CABINET DATE	05/1998	PRE-EMPTION TYPE	N/A	-	LED YES

REMARKS:

1 2 4
OLA

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

Switch IP.# _____
Controller IP.# _____ - _____
Camera IP # _____

DATE: 7/14/2017 DESIGNED BY: M. Tobin

LOCATION: ans Memorial Pkwy & Rhode Islan

CITY: Orange City SIGNAL ID NO: 375 SYSTEM ID: -

CONTROLLER TIME CHART

TP# XX

MVMNT	MIN	EXT	CLR	A.R.	WALK	FDW	MAX1	MAX2	MAX3	ADJST	REC	DET	FL	SET	CLR
1	5	3	5.5	3	-	-	15	-	-	-	-	NL	-	-	-
2	11	4	5.5	3	7	20	35	-	60	10	MIN	L	Y	1	2
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	7	3	3.5	3	7	18	20	-	-	-	-	NL	R	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	11	4	5.5	3	7	20	35	-	-	-	MIN	L	Y	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CO-ORDINATION

PLAN	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1		
CYCLE								
OFF 1								
OFF 2								
OFF 3								
OFF 4								
OFF 5								
PERM	10%	10%	10%	10%	10%	10%	10%	10%

PHASE SPLITS (seconds)

CY/SP	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1		
PH 1	-	-	-	-	-	-		
PH 2	-	-	-	-	-	-		
PH 3	-	-	-	-	-	-		
PH 4	-	-	-	-	-	-		
PH 5	-	-	-	-	-	-		
PH 6	-	-	-	-	-	-		
PH 7	-	-	-	-	-	-		
PH 8	-	-	-	-	-	-		

1	2	4
	OLA	

BASE DAY		1	2	3	4	5	6	7	8	9	10	11	
	TIME	00:00-00:00											
MON #1	PLAN	FREE											
	TIME	00:00-00:00											
TUES#1	PLAN	FREE											
	TIME	00:00-00:00											
WED #1	PLAN	FREE											
	TIME	00:00-00:00											
THU #1	PLAN	FREE											
	TIME	00:00-00:00											
FRI #1	PLAN	FREE											
	TIME	00:00-00:00											
SAT #2	PLAN	FREE											
	TIME	00:00-00:00											
SUN #3	PLAN	FREE											

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Normandy Blvd & Elkcam Blvd
Deltona

ISOLATED: X

DATE: 2/23/2015

SIGNAL #: 370

CO-ORD:

Design By: M. Tobin

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8
DIRECTION	-	SB	-	WB	SBL	NB	-	-
TURN TYPE	-	-	-	-	PERM/PROT	-	-	-
MIN GREEN		12		5	5	12		
EXTENSION		3		3	3	3		
CLEARANCE		4.0		4.0	4.0	4.5		
ALL RED		2.5		2.5	2.5	2.5		
WALK		-		7	-	7		
FDW		-		20	-	12		
MAX 1		35		20	15	35		
MAX 2		-		-	-	-		
MAX 3		-		-	-	-		
ADJUST		-		-	-	-		
RECALL		MIN		-	-	MIN		
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK		
FLASH		YELLOW		RED	-	YELLOW		
SET		-		-	-	-		
CLEAR		-		-	-	-		

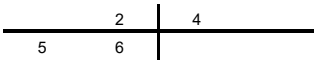
BASE DAY		1	2	3	4	5	6	7
	TIME	00:01-00:00						
MON #1	PLAN	FREE						
	TIME	00:01-00:00						
TUES#1	PLAN	FREE						
	TIME	00:01-00:00						
WED #1	PLAN	FREE						
	TIME	00:01-00:00						
THU #1	PLAN	FREE						
	TIME	00:01-00:00						
FRI #1	PLAN	FREE						
	TIME	00:01-00:00						
SAT #2	PLAN	FREE						
	TIME	00:01-00:00						
SUN #3	PLAN	FREE						

Crosswalk Length
P2
-
P4
70 Feet
P6
41 Feet
P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	Good	PROM NUMBER	-
3000E		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	8216A 3.6.3	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS	Deltona
CABINET DATE	07/2007	PRE-EMPTION TYPE	N/A	-	LED: YES

REMARKS:

Omit PH 5 when PH 6 is Active



COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Elkcam Blvd & Providence Blvd
Deltona

ISOLATED: X

DATE: 1/13/2015

SIGNAL #: 235

CO-ORD:

Design By: M. Tobin

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8
DIRECTION	WBL	EB	NBL	SB	EBL	WB	SBL	NB
TURN TYPE	PERM/PROT	-	PERM/PROT	-	PERM/PROT	-	PERM/PROT	-
MIN GREEN	5	6	5	6	5	6	5	6
EXTENSION	3	4	3	4	3	4	3	4
CLEARANCE	4.5	4.5	4.0	4.5	4.5	4.5	4.5	4.0
ALL RED	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
WALK	-	10	-	10	-	10	-	10
FDW	-	20	-	17	-	20	-	17
MAX 1	15	30	20	35	15	30	20	35
MAX 2	-	-	-	-	-	-	-	-
MAX 3	-	-	-	-	-	-	-	-
ADJUST	-	-	-	-	-	-	-	-
RECALL	-	MIN	-	-	-	MIN	-	-
DETECTOR	NON-LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK
FLASH	-	YELLOW	-	RED	-	YELLOW	-	RED
SET	-	-	-	-	-	-	-	-
CLEAR	-	-	-	-	-	-	-	-

BASE DAY		1	2	3	4	5	6	7
MON #1	TIME	00:01-00:00						
	PLAN	FREE						
TUES#1	TIME	00:01-00:00						
	PLAN	FREE						
WED #1	TIME	00:01-00:00						
	PLAN	FREE						
THU #1	TIME	00:01-00:00						
	PLAN	FREE						
FRI #1	TIME	00:01-00:00						
	PLAN	FREE						
SAT #2	TIME	00:01-00:00						
	PLAN	FREE						
SUN #3	TIME	00:01-00:00						
	PLAN	FREE						

CONTROLLER TYPE		CONDITION OF OVERHEAD	Fair	PROM NUMBER
3000E		OVERHEAD STREET NAMES	YES	
PHASES:	8Φ	ILLUMINATED STREET NAMES	NO	8216A 3.7.3
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS
CABINET DATE	11/2000	PRE-EMPTION TYPE	N/A	-

Crosswalk Length	
P2	
59 Feet	
P4	
53 Feet	
P6	
69 Feet	
P8	
59 Feet	
SIGNAL OWNER	
County	
LED	YES

REMARKS:

Speed Limit is 35 MPH

1	2	3	4
5	6	7	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Providence Blvd & Ft. Smith Blvd
Deltona

ISOLATED: X

DATE: 8/21/2018

SIGNAL #: 316

CO-ORD:

Design By: M. Tobin

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	SBL	NB	-	EB	-	SB	-	WB	
TURN TYPE	PERM/PROT	-	-	-	-	-	-	-	
MIN GREEN	5	12		7		12		7	
EXTENSION	3	4		3		4		3	
CLEARANCE	4.5	4.0		4.0		4.5		4.0	
ALL RED	3.5	2.5		3.0		3.5		2.5	
WALK	-	7		7		7		7	
FDW	-	26		20		26		20	
MAX 1	20	35		30		35		30	
MAX 2	-	-		-		-		-	
MAX 3	25	60		40		60		40	
ADJUST	5	5		5		5		5	
RECALL	-	MIN		-		-		-	
DETECTOR	NON-LOCK	LOCK		NON-LOCK		LOCK		NON-LOCK	
FLASH	-	YELLOW		RED		YELLOW		RED	
SET	2	2		2		2		2	
CLEAR	2	2		2		2		2	

BASE DAY		1	2	3	4	5	6	7
	TIME	00:01-00:00						
MON #1	PLAN	FREE						
	TIME	00:01-00:00						
TUES#1	PLAN	FREE						
	TIME	00:01-00:00						
WED #1	PLAN	FREE						
	TIME	00:01-00:00						
THU #1	PLAN	FREE						
	TIME	00:01-00:00						
FRI #1	PLAN	FREE						
	TIME	00:01-00:00						
SAT #2	PLAN	FREE						
	TIME	00:01-00:00						
SUN #3	PLAN	FREE						

Crosswalk Length

P2

82 Feet

P4

70 Feet

P6

88 Feet

P8

65 Feet

SIGNAL OWNER

County

CONTROLLER TYPE		**CONDITION OF OVERHEAD**	**Good**	**PROM NUMBER**	
3000E		**OVERHEAD STREET NAMES**	**NO**		
PHASES:	8Φ	**ILLUMINATED STREET NAMES**	**YES**	**8216A 3.7.3**	
CABINET TYPE	**V**	**PRE-EMPTION**	**NO**	**IP ADDRESS**	**LED** -
CABINET DATE	**06/2000**	**PRE-EMPTION TYPE**	**N/A**	**10.77.8.54**	

REMARKS:

1	2	4
	6	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Veterans Mem. Pkwy & Harley Strickland Blvd
Orange City

FREE: [ ]

DATE: 3/24/2017

SIGNAL #: 369

CO-ORD: [X]

Design By: M. Tobin

NETWORK #: Orange City Area Network # 70

Controller Timing Chart

PHASE	1	2	3	4	5	6	7 (act. WBL)	8	
DIRECTION	NBL	SB	EBL	WB	SBL	NB	NBL	EB	
TURN TYPE	PERM/PROT	-	PERM/PROT	-	PERM/PROT	-	PERM/PROT		
MIN GREEN	5	16	5	7	5	16	5	7	
EXTENSION	3	4	3	3	3	4	3	3	
YELLOW	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
RED CLR	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
WALK	-	7	-				-	7	
PED CLR	-	20	-				-	30	
MAX 1	35	35	25	25	20	35	20	25	
MAX 2	-	-	-				-		
MAX 3	-	-	-				-		
DYM MAX	-		-	35			-		
DYM STP	-		-	5			-		
RECALL	-	MIN				MIN			
DETECTOR	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	
FLASH	-	YELLOW	-	RED	-	YELLOW	-	RED	
			-				-		

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE	130	140		-	-	-	-	-	
OFFSET	40	40		-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1	30	40	25	35	20	50	20	40	
PATTERN 2	30	45	35	30	20	60	20	40	
PATTERN 3			-				-	-	
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP	10.40.71.45	Switch IP	10.40.70.45	Camera IP	
Controller Gateway	10.40.71.1	Switch Gateway	10.40.70.1	Camera Gateway	

REMARKS:

1	2	3	4
5	6	7	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Veterans Mem. Pkwy & Harley Strickland Blvd
Orange City
FREE: X
DATE: 3/24/2017

SIGNAL #: 424
CO-ORD:
Design By: M. Tobin

NETWORK #: Orange City Area Network # 70

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
	TIME	07:00-18:00	18:00-00:00						
MON #1	PATTERN	PATTERN #1	FREE						P2
	TIME	07:00-18:00	18:00-00:00						
TUES #1	PATTERN	PATTERN #1	FREE						70 Feet
	TIME	07:00-18:00	18:00-00:00						
WED #1	PATTERN	PATTERN #1	FREE						P4
	TIME	07:00-18:00	18:00-00:00						
THU #1	PATTERN	PATTERN #1	FREE						
	TIME	07:00-18:00	18:00-00:00						
FRI #1	PATTERN	PATTERN #1	FREE						P6
	TIME	00:00-00:00							
SAT #2	PATTERN	FREE							
	TIME	00:00-00:00							
SUN #2	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	104 Feet
Econolite ASC/3		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.64.00	SIGNAL OWNER
CABINET TYPE	VI	PRE-EMPTION	NO	Controller IP Address	City
CABINET DATE		PRE-EMPTION TYPE	N/A	10.40.71.45	LED: YES

REMARKS:

1	2	4	4
5	6	8	8

Saxon Boulevard - Signal System Retiming
Volusia County
Contract #: 17-SQ-27JD

Designed By:	JM
Date:	12/13/2018
Checked By:	RAA
Date:	12/13/2018

Section	79000003	Mile Post		Node	4
Sig ID	337	Controller	Econolite ASC/3-2100	System ID	
Maj. Street	Saxon Blvd	Orientation	E-W	SOP	9
Min. Street	Veteran's Memorial Pkwy	Orientation	N-S		

Pedestrians

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	EBL	WB	SB	NB	WBL	EB			
Speed Limit (mph)	45	45	40	30	45	45			
Vehicle Traversed Width	129	152	155	156	125	155			
Approach Grades	-0.7%	-0.4%	-0.9%	-0.5%	-0.4%	-0.7%			
Ped-X (curb to curb)		103	111	118		63			
Crossing Time		30	32	34		18			
Ped-X (button to curb)		16	16	9		9			
Ped-X (button to far curb)		119	127	127		72			
Crossing Time (to far curb)		34	37	37		21			

Controller Timings (seconds)

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	EBL	WB	SB	NB	WBL	EB			
Turn Type	Prot/Perm		Split	Split	Prot/Perm				
Min Green	5	12	7	7	5	12			
Ext	3.0	3.0	3.0	3.0	3.0	3.0			
Yellow Change Interval	4.8	4.8	4.5	3.7	4.8	4.8			
Red Clearance Interval	3.1	2.0	3.8	3.8	3.0	2.0			
Max I	20	40	25	20	20	40			
Max II	23	100	28	11	13	100			
Max III	19	100	36	11	13	100			
Walk		7	7	7		7			
Flashing Don't Walk		30	32	34		18			
Min Splits	13.0	44.0	48.0	49.0	13.0	32.0			
Detector Memory	Off	On	On	Off	Off	On			
Det. Cross Switch.	ON				ON				
Recall		Min				Min			
CNA									
Coord Phase		Yes				Yes			

Coordination Timings (seconds)

Plan	Pattern	C-O-S	Splits								Cycle Length	Offset	Seq
AM	1		20	72	30	18	20	72	-	-	140	18	1
MIDDAY	2		30	45	48	27	20	55	-	-	150	86	1
PM	3		26	45	48	31	20	51	-	-	150	124	1

Notes

1. Offset referenced to end of main street green
2. Use Fixed Force-offs
3. Use Inhibit Max termination during pattern 1
4. Use Max II during pattern 2
5. Use Max III during pattern 3
6. Run MaxP and Rest in Walk on phases 2 & 6 during coordination

All Patterns

Ring-1	1	2	3	4
Ring-2	5	6		

Saxon Boulevard - Signal System Retiming
Volusia County
Contract #: 17-SQ-27JD

Designed By:	JM
Date:	1/2/2019
Checked By:	RAA
Date:	1/2/2019

Section	79000003	Mile Post		Node	5
Sig ID	344	Controller	Econolite ASC/3-2100	System ID	
Maj. Street	Saxon Blvd	Orientation	E-W	SOP	7
Min. Street	Park & Ride	Orientation	N-S		

Pedestrians

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	EBL	WB		NB	WBL	EB		SB	
Speed Limit (mph)	45	45		25	45	45		25	
Vehicle Traversed Width	122	140		135	123	145		139	
Approach Grades	-0.8%	-0.9%		-0.6%	-0.9%	-0.8%		-10.2%	
Ped-X (curb to curb)		72		101		61		99	
Crossing Time		21		29		18		29	
Ped-X (button to curb)		10		6		10		11	
Ped-X (button to far curb)		82		107		71		110	
Crossing Time (to far curb)		24		31		21		32	

Controller Timings (seconds)

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	EBL	WB		NB	WBL	EB		SB	
Turn Type	Prot./Perm.				Prot./Perm.				
Min Green	5	11		7	5	11		7	
Ext	3.0	4.0		3.0	3.0	4.0		3.0	
Yellow Change Interval	4.8	4.9		4.2	4.9	4.9		4.2	
Red Clearance Interval	2.9	2.0		3.4	2.9	2.0		3.4	
Max I	20	40		20	20	40		20	
Max II	11	110		21	15	110		21	
Walk		7		7		7		7	
Flashing Don't Walk		21		29		18		29	
Min Splits	13.0	35.0		44.0	13.0	32.0		44.0	
Detector Memory	Off	On		Off	Off	On		Off	
Det. Cross Switch.	ON				ON				
Recall		Min				Min			
CNA									
Coord Phase		Yes				Yes			

Coordination Timings (seconds)

Plan	Pattern	C-O-S	Splits								Cycle Length	Offset	Seq
AM	1		18	104	-	18	20	102	-	18	140	21	1
MIDDAY	2		20	110	-	20	20	110	-	20	150	96	1
PM	3		18	88	-	44	22	84	-	44	150	31	1

Notes

1. Offset referenced to end of main street green
2. Use Float Force-offs
3. Use Inhibit Max termination during coordination
4. Run MaxP and Rest in Walk on phases 2 & 6 during coordination
5. Run Max II and Fixed force offs during pattern 3

All Patterns

Ring-1	1	2	4
Ring-2	5	6	8

Saxon Boulevard - Signal System Retiming
Volusia County
Contract #: 17-SQ-27JD

Designed By:	JM
Date:	12/13/2018
Checked By:	RAA
Date:	12/13/2018

Section	79000003	Mile Post		Node	6 & 7
Sig ID	426	Controller	Econolite ASC/3-2100	System ID	
Maj. Street	Saxon Blvd	Orientation	E-W	SOP	10 Modified
Min. Street	I-4 EB On & Off Ramps	Orientation	N-S		

Pedestrians

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
	I-4 EB ON-RAMP				I-4 EB OFF-RAMP				
Direction	EBL	WB			NBR	EB			
Speed Limit (mph)	45	45			35	45			
Vehicle Traversed Width	100	98			92	160			
Approach Grades	-5.0%	-0.4%			0.0%	0.0%			
Ped-X (curb to curb)		28				51			
Crossing Time		8				15			
Ped-X (button to curb)		11				12			
Ped-X (button to far curb)		39				63			
Crossing Time (to far curb)		12				18			

Controller Timings (seconds)

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	EBL	WB			NBR	EB			
Turn Type	Prot				Prot				
Min Green	5	17			6	15			
Ext	3.0	3.0			3.0	3.0			
Yellow Change Interval	5.4	4.8			4.0	4.8			
Red Clearance Interval	2.3	2.0			2.0	2.0			
Max I	30	40			30	60			
Max II									
Walk		7				7			
Flashing Don't Walk		10				15			
Min Splits	13.0	24.0			12.0	29.0			
Detector Memory	Off	On			Off	On			
Det. Cross Switch.									
Recall		Min				Min			
CNA									
Coord Phase		Yes				Yes			

Coordination Timings (seconds)

Plan	Pattern	C-O-S	Splits								Cycle Length	Offset	Seq
AM	1		35	105	-	-	22	118	-	-	140	104	1
MIDDAY	2		35	115	-	-	28	122	-	-	150	37	1
PM	3		50	100	-	-	57	93	-	-	150	26	1

Notes

1. Offset referenced to end of main street green
2. Saxon Blvd/I-4 WB On-Ramp & Saxon Blvd/I-4 EB Off-Ramp operate under one controller
3. Use Float Force-offs
4. Use Inhibit Max termination during coordination
5. Run MaxP and Rest in Walk on phases 2 & 6 during coordination

All Patterns

Ring-1	1	2
Ring-2	5	6

Saxon Boulevard - Signal System Retiming
Volusia County
Contract #: 17-SQ-27JD

Designed By:	JM
Date:	12/13/2018
Checked By:	RAA
Date:	12/13/2018

Section	79000003	Mile Post		Node	9
Sig ID	157	Controller	Econolite ASC/3-2100	System ID	
Maj. Street	Saxon Blvd	Orientation	E-W	SOP	10
Min. Street	Normandy Blvd	Orientation	N-S		

Pedestrians

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB	
Speed Limit (mph)	40	40	35	35	40	40	35	35	
Vehicle Traversed Width	133	147	114	138	133	147	118	135	
Approach Grades	0.2%	-4.6%	-7.3%	1.1%	-4.6%	0.2%	1.1%	-7.3%	
Ped-X (curb to curb)		103		79		66		84	
Crossing Time		30		23		19		24	
Ped-X (button to curb)		23		15		10		10	
Ped-X (button to far curb)		126		94		76		94	
Crossing Time (to far curb)		36		27		22		27	

Controller Timings (seconds)

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB	
Turn Type	Prot./Perm.		Prot./Perm.		Prot./Perm.		Prot./Perm.		
Min Green	5	15	5	10	5	15	5	10	
Ext	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0	
Yellow Change Interval	4.4	4.9	4.8	4.8	4.9	4.9	4.0	4.8	
Red Clearance Interval	3.2	2.0	2.7	2.1	3.2	2.0	2.8	2.1	
Max I	25	45	25	40	25	45	25	40	
Max II									
Walk		7		7		7		7	
Flashing Don't Walk		30		23		19		24	
Min Splits	13.0	44.0	13.0	37.0	14.0	33.0	12.0	38.0	
Detector Memory	Off	On	Off	Off	Off	On	Off	Off	
Det. Cross Switch.	ON		ON		ON		ON		
Recall		Min				Min			
CNA									
Coord Phase		Yes				Yes			

Coordination Timings (seconds)

Plan	Pattern	C-O-S	Splits								Cycle Length	Offset	Seq
AM	1		21	69	18	32	18	72	27	23	140	48	1
MIDDAY	2		28	76	20	26	18	86	28	18	150	138	1
PM	3		38	62	18	32	18	82	25	25	150	95	1

Notes

1. Offset referenced to end of main street green
2. Use Fixed Force-offs
3. Use Inhibit Max termination during coordination
4. Run MaxP and Rest in Walk on phases 2 & 6 during coordination

All Patterns

Ring-1	1	2	3	4
Ring-2	5	6	7	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Saxon Blvd & Tivoli Drive
Deltona

ISOLATED: X

DATE: 5/9/2019

SIGNAL #: 232

CO-ORD:

Design By: Sean Castello

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	-	EB	-	NB	EBL	WB	-	SB	
TURN TYPE	-	-	-	-	PERM/PROT	-	-	-	
MIN GREEN		11		5	5	11		5	
EXTENSION		4		3	3	4		3	
CLEARANCE		4.0		4.0	4.5	4.0		4.0	
ALL RED		2.5		2.5	2.5	2.5		2.5	
WALK		7		7 ADV	-	7		7 ADV	
FDW		16		20	-	16		20	
MAX 1		30		30	15	30		30	
MAX 2		-		-	-	-			
MAX 3		-		40	30	-		40	
ADJUST		-		5	5	-		5	
RECALL		MIN		-	-	MIN			
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK		NON-LOCK	
FLASH		YELLOW		RED	-	YELLOW		RED	
SET		-		2	2	-		2	
CLEAR		-		2	2	-		2	

BASE DAY		1	2	3	4	5	6	7
	TIME	00:01-00:00						
MON #1	PLAN	FREE						
	TIME	00:01-00:00						
TUES#1	PLAN	FREE						
	TIME	00:01-00:00						
WED #1	PLAN	FREE						
	TIME	00:01-00:00						
THU #1	PLAN	FREE						
	TIME	00:01-00:00						
FRI #1	PLAN	FREE						
	TIME	00:01-00:00						
SAT #2	PLAN	FREE						
	TIME	00:01-00:00						
SUN #3	PLAN	FREE						

Crosswalk Length

P2

55 Feet

P4

52 Feet

P6

53 Feet

P8

69 Feet

SIGNAL OWNER

County

CONTROLLER TYPE		CONDITION OF OVERHEAD	OK	PROM NUMBER	LED
1880 EL		OVERHEAD STREET NAMES	NO		-
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	92R09	
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS	
CABINET DATE	10/2003	PRE-EMPTION TYPE	N/A	-	

REMARKS:

	2	4
5	6	8

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

Switch IP.# _____
Controller IP.# -
Camera IP # _____

DATE: 5/9/2019 DESIGNED BY: Sean Castello

LOCATION: Saxon Blvd & Tivoli Drive
CITY: Deltona SIGNAL ID NO: 232 SYSTEM ID: -

CONTROLLER TIME CHART TP# xx

MVMNT	MIN	EXT	CLR	A.R.	WALK	FDW	MAX1	MAX2	MAX3	ADJST	REC	DET	FL	SET	CLR	CO-ORDINATION								
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PLAN	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1		
2	11	4	4	2.5	7	16	30	-	-	-	MIN	L	Y	-	-	CYCLE								
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OFF 1								
4	5	3	4	2.5	7 ADV	20	30	-	40	5	-	NL	R	2	2	OFF 2								
5	5	3	4.5	2.5	-	-	15	-	30	5	-	NL	-	2	2	OFF 3								
6	11	4	4	2.5	7	16	30	-	-	-	MIN	L	Y	-	-	OFF 4								
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OFF 5								
8	5	3	4	2.5	7 ADV	20	30	-	40	5	-	NL	R	2	2	PERM	10%	10%	10%	10%	10%	10%	10%	10%

PHASE SPLITS (seconds)

CY/SP	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1		
PH 1	-	-	-	-	-	-		
PH 2	-	-	-	-	-	-		
PH 3	-	-	-	-	-	-		
PH 4	-	-	-	-	-	-		
PH 5	-	-	-	-	-	-		
PH 6	-	-	-	-	-	-		
PH 7	-	-	-	-	-	-		
PH 8	-	-	-	-	-	-		

	2	4	
5	6	8	

BASE DAY		1	2	3	4	5	6	7	8	9	10	11	
	TIME	00:01-00:00											
MON #1	PLAN	FREE											
	TIME	00:01-00:00											
TUES#1	PLAN	FREE											
	TIME	00:01-00:00											
WED #1	PLAN	FREE											
	TIME	00:01-00:00											
THU #1	PLAN	FREE											
	TIME	00:01-00:00											
FRI #1	PLAN	FREE											
	TIME	00:01-00:00											
SAT	PLAN	FREE											
	TIME	00:01-00:00											
SUN	PLAN	FREE											

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: N. Normandy Blvd & Deltona Blvd
Deltona

FREE: X

DATE: 2/9/2015

SIGNAL #: 283

CO-ORD:

Design By: M. Tobin

System #: -

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8
DIRECTION	-	NB	-	EB	NBL	SB	-	-
TURN TYPE	-	-	-	-	PERM/PROT	-	-	-
MIN GREEN		10		4	3	10		
EXTENSION		3		2.5	2.5	3		
CLEARANCE		4.0		4.0	4.0	4.5		
ALL RED		2.5		2.0	2.5	2.5		
WALK		-		7	-	7		
FDW		-		18	-	21		
MAX 1		25		20	15	25		
MAX 2		-		-	-	-		
MAX 3		-		-	-	-		
ADJUST		-		-	-	-		
RECALL		MIN		-	-	MIN		
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK		
FLASH		YELLOW		RED	-	YELLOW		
SET		-		-	-	-		
CLEAR		-		-	-	-		

BASE DAY		1	2	3	4	5	6	7
MON #1	TIME	00:00-00:00						
	PLAN	FREE						
TUES#1	TIME	00:00-00:00						
	PLAN	FREE						
WED #1	TIME	00:00-00:00						
	PLAN	FREE						
THU #1	TIME	00:00-00:00						
	PLAN	FREE						
FRI #1	TIME	00:00-00:00						
	PLAN	FREE						
SAT #2	TIME	00:00-00:00						
	PLAN	FREE						
SUN #3	TIME	00:00-00:00						
	PLAN	FREE						

Crosswalk Length
P2
-
P4
63 Feet
P6
73 Feet
P8
-
SIGNAL OWNER
Deltona
LED YES

CONTROLLER TYPE		CONDITION OF OVERHEAD		PROM NUMBER
3000E		OVERHEAD STREET NAMES	YES	
PHASES:	8Φ	ILLUMINATED STREET NAMES	NO	8216A 3.6.4
CABINET TYPE	V	PRE-EMPTION	NO	IP ADDRESS
CABINET DATE	-	PRE-EMPTION TYPE	N/A	-

REMARKS:

2 4
5 6

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

Switch IP.# _____
Controller IP.# _____ - _____
Camera IP # _____

DATE: 2/9/2015 DESIGNED BY: M. Tobin

LOCATION: N. Normandy Blvd & Deltona Blvd

CITY: Deltona SIGNAL ID NO: 283 SYSTEM ID: -

CONTROLLER TIME CHART

TP# XX

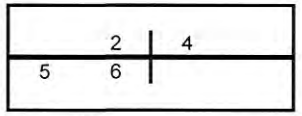
MVMNT	MIN	EXT	CLR	A.R.	WALK	FDW	MAX1	MAX2	MAX3	ADJST	REC	DET	FL	SET	CLR
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	10	3	4	2.5	-	-	25	-	-	-	MIN	L	Y	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4	2.5	4	2	7	18	20	-	-	-	-	NL	R	-	-
5	3	2.5	4	2.5	-	-	15	-	-	-	-	NL	-	-	-
6	10	3	4.5	2.5	7	21	25	-	-	-	MIN	L	Y	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CO-ORDINATION

PLAN	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1		
CYCLE								
OFF 1								
OFF 2								
OFF 3								
OFF 4								
OFF 5								
PERM	10%	10%	10%	10%	10%	10%	10%	10%

PHASE SPLITS (seconds)

CY/SP	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1		
PH 1	-	-	-	-	-	-		
PH 2	-	-	-	-	-	-		
PH 3	-	-	-	-	-	-		
PH 4	-	-	-	-	-	-		
PH 5	-	-	-	-	-	-		
PH 6	-	-	-	-	-	-		
PH 7	-	-	-	-	-	-		
PH 8	-	-	-	-	-	-		



BASE DAY		1	2	3	4	5	6	7	8	9	10	11	
	TIME	00:00-00:00											
MON #1	PLAN	FREE											
	TIME	00:00-00:00											
TUES#1	PLAN	FREE											
	TIME	00:00-00:00											
WED #1	PLAN	FREE											
	TIME	00:00-00:00											
THU #1	PLAN	FREE											
	TIME	00:00-00:00											
FRI #1	PLAN	FREE											
	TIME	00:00-00:00											
SAT #2	PLAN	FREE											
	TIME	00:00-00:00											
SUN #3	PLAN	FREE											

Saxon Boulevard - Signal System Retiming
Volusia County
Contract #: 17-SQ-27JD

Designed By:	JM
Date:	12/13/2018
Checked By:	RAA
Date:	12/13/2018

Section	79000003	Mile Post		Node	8
Sig ID	321	Controller	Econolite ASC/3-2100	System ID	
Maj. Street	Saxon Blvd	Orientation	E-W	SOP	7
Min. Street	Finland Dr	Orientation	N-S		

Pedestrians

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	WBL	EB		SB	EBL	WB		NB	
Speed Limit (mph)	40	40		30	40	40		30	
Vehicle Traversed Width	90	94		115	104	102		116	
Approach Grades	-4.4%	0.4%		0.1%	0.4%	-4.4%		-0.8%	
Ped-X (curb to curb)		71		86		78		79	
Crossing Time		21		25		23		23	
Ped-X (button to curb)		9		9		11		11	
Ped-X (button to far curb)		80		95		89		90	
Crossing Time (to far curb)		23		28		26		26	

Controller Timings (seconds)

Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8	Notes
Direction	WBL	EB		SB	EBL	WB		NB	
Turn Type	Prot.				Prot.				
Min Green	5	11		6	5	11		6	
Ext	3.0	4.0		4.0	3.0	4.0		4.0	
Yellow Change Interval	4.9	4.9		3.7	4.4	4.9		3.7	
Red Clearance Interval	2.0	2.0		2.1	2.4	2.0		2.1	
Max I	20	60		35	30	60		35	
Max II									
Walk		7		7		7		7	
Flashing Don't Walk		21		25		23		23	
Min Splits	12.0	35.0		38.0	12.0	37.0		36.0	
Detector Memory	Off	On		Off	Off	On		Off	
Det. Cross Switch.									
Recall		Min				Min			
CNA									
Coord Phase		Yes				Yes			

Coordination Timings (seconds)

Plan	Pattern	C-O-S	Splits								Cycle Length	Offset	Seq
AM	1		18	91	-	31	18	91	-	31	140	78	1
MIDDAY	2		18	97	-	35	21	94	-	35	150	24	1
PM	3		18	100	-	32	30	88	-	32	150	15	5
PM Peak	6		18	106	-	26	35	89	-	26	150	17	5
PM OffPk	7		18	103	-	29	35	86	-	29	150	15	6

Notes
1. Offset referenced to end of main street green
2. Use Float Force-offs
3. Use Inhibit Max termination during coordination
4. Pattern 6 runs 16:00-18:00
5. Pattern 7 runs 18:00-18:30
6. Run MaxP and Rest in Walk on phases 2 & 6 during coordination

Patterns 1 & 2

Ring-1	1	2	4
Ring-2	5	6	8

Patterns 3, 6, & 7

Ring-1	1	2	4
Ring-2	6	5	8

Time of Day Plan

Designed By:	JM
Date:	1/2/2019
Checked By:	RAA
Date:	1/2/2019

Section:	79000250/79000005/79000003
Corridor:	Saxon Blvd
From:	Market Place Dr
To:	Normandy Blvd

TIME OF DAY

Day	Plan	Time		Pattern	Cycle Length
Monday Thru Friday	FREE	0:00	6:15	-	FREE
	AM	6:15	9:00	1	140
	MIDDAY	9:00	14:00	2	150
	PM	14:00	18:30	3	150
	MIDDAY	18:30	21:15	2	150
	FREE	21:15	0:00	-	FREE
Saturday	FREE	0:00	8:30	-	FREE
	MIDDAY	8:30	20:30	2	150
	FREE	20:30	0:00	-	FREE
Sunday	FREE	0:00	10:00	-	FREE
	MIDDAY	10:00	19:00	2	150
	FREE	19:00	0:00	-	FREE

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Forest Edge
Deltona

FREE: [ ]

DATE: 5/19/2017

SIGNAL #: 248

CO-ORD: [X]

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	EBL	WB	-	NB	WBL	EB	-	SB	
TURN TYPE	PERM/PROT	-	-	-	PERM/PROT	-	-	-	
MIN GREEN	5	15		7	5	15		7	
EXTENSION	3	4		3	3	4		3	
YELLOW	5.0	5.0		4.0	5.0	5.0		4.0	
RED CLR	3.5	3.5		3.5	3.5	3.5		3.5	
WALK		10		10		10		10	
PED CLR		20		31		20		31	
MAX 1	25	60		25	25	60		25	
MAX 2									
MAX 3		-		-		-			
DYM MAX		90		55		90			
DYM STP		10		10		10			
RECALL		MIN		-		MIN			
DETECTOR	NON-LOCK	LOCK		NON-LOCK	NON-LOCK	LOCK		NON-LOCK	
FLASH	-	YELLOW		RED	-	YELLOW		RED	

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE	150	130	150	-	-	-	-	-	
OFFSET	82	81	112	-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1	25	90		35	25	90		35	
PATTERN 2	25	70		35	25	70		35	
PATTERN 3	25	85		40	25	85		40	
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP		Switch IP		Camera IP	
Controller Gateway		Switch Gateway		Camera Gateway	

REMARKS:
10 seconds delay green on phases 4 & 8, (advanced walk)

1	2	4
5	6	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Forest Edge
Deltona

FREE: [ ]

DATE: 5/19/2017

SIGNAL #: 248

CO-ORD: [X]

Design By: M. Tobin

Volusia County FLORIDA

NETWORK #: Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7	Crosswalk Length
MON #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	15:30-19:00	19:00-00:00			
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			P2
TUES #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00			
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			66
WED #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00			
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			P4
THU #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00			
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			93
FRI #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00			
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE			P6
SAT #2	TIME	00:00-00:00							
	PATTERN	FREE							54
SUN #2	TIME	00:00-00:00							
	PATTERN	FREE							P8

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	97
Econolite ASC/3		OVERHEAD STREET NAMES	NO		
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.62.00	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	YES	Controller IP Address	County
CABINET DATE	03/1999	PRE-EMPTION TYPE	INFRARED		LED YES

REMARKS:

1	2	4
5	6	8

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Wolf Pack Run
Deltona

FREE: [ ]

DATE: 5/19/2017

SIGNAL #: 354

CO-ORD: [X]

Design By: M. Tobin

NETWORK #: Deltona Area Network # 90

Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION	-	WB	-	NB	WBL	EB	-	-	
TURN TYPE	-	-	-	-	PERM/PROT	-	-	-	
MIN GREEN		15		7	5	15			
EXTENSION		4		3	3	4			
YELLOW		5.0		4.0	5.0	5.0			
RED CLR		3.5		3.5	3.5	3.5			
WALK				7		7			
PED CLR				20		20			
MAX 1		60		30	25	60			
MAX 2									
MAX 3		-		-		-			
DYM MAX		90				90			
DYM STP		10				10			
RECALL		MIN		-		MIN			
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK			
FLASH		YELLOW		RED	-	YELLOW			

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE	150	130	150	-	-	-	-	-	
OFFSET	78	81	108	-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1		105		45	45	60		45	
PATTERN 2		90		40	30	60		40	
PATTERN 3		100		50	40	60		50	
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	

Controller IP		Switch IP		Radio IP	
Controller Gateway		Switch Gateway		Radio Gateway	

REMARKS:
7 seconds delay phase 6 (advanced walk)

1	2	4
5	6	

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: Howland Blvd @ Wolf Pack Run
Deltona

FREE: [ ]

DATE: 5/19/2017

SIGNAL #: 354

CO-ORD: [X]

Design By: M. Tobin

Volusia County FLORIDA

NETWORK #: Deltona Area Network # 90

TIME OF DAY SCHEDULE

BASE DAY		1	2	3	4	5	6	7
MON #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	15:30-19:00	19:00-00:00		
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE		
TUES #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00		
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE		
WED #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00		
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE		
THU #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00		
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE		
FRI #1	TIME	06:30-00:00	09:00-14:30	14:30-15:30	19:00-00:00	19:00-00:00		
	PATTERN	PATTERN #1	FREE	PATTERN #2	PATTERN #3	FREE		
SAT #2	TIME	00:00-00:00						
	PATTERN	FREE						
SUN #2	TIME	00:00-00:00						
	PATTERN	FREE						

CONTROLLER TYPE		CONDITION OF OVERHEAD	GOOD	PROGRAM NUMBER	Crosswalk Length
Econolite ASC/3		OVERHEAD STREET NAMES	NO		P2
PHASES:	8Φ	ILLUMINATED STREET NAMES	YES	02.62.00	SIGNAL OWNER
CABINET TYPE	V	PRE-EMPTION	YES	Controller IP Address	County
CABINET DATE	11/1999	PRE-EMPTION TYPE	INFRARED		LED YES

Crosswalk Length: P2, P4, 70, P6, 71, P8

REMARKS:

1	2	4
5	6	

APPENDIX D: VOLUSIA COUNTY 2018 AADT & HISTORICAL COUNTS REPORT; FDOT Q/LOS TABLES

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
Rd_Name	Limits	Cnt_Sta	EVAC2014	MainRes	Tfare17	Distance	Lanes_17	Lanes_18	SPD2013	Direction	F_Type_17	Fun_Class_2010	AADT_09	AADT_10	AADT_11	AADT_12	AADT_13	AADT_14	AADT_15	AADT_16	AADT_17	AADT_18	VCA_LOS_18	Cap_18	VCRatio_1	LOS_18	PMPKHR_2	W_Cap_18
I-4	SR 46 to Volusia Co.	0266-S	Yes	FDOT	Yes	1.90	6	6	65	E+W	UA_FWIS_6L + AUX	Principal Arterial - Interstate - Urban	108,000	115,000	109,500	103,000	107,500	114,500	125,500	128,500	137,500	139,500	D	131,800	1.06	D	10,120	11,860
I-4	Seminole Co. to Dirksen Dr.	484	Yes	FDOT	Yes	3.58	6	6	65	E+W	UA_FWIS_6L	Principal Arterial - Interstate - Urban	107,500	111,500	102,500	106,500	108,000	110,000	113,000	110,000	112,000	114,000	D	111,800	1.02	E	n/a	10,060
I-4	Dirksen Dr. to Saxon Blvd.	9906	Yes	FDOT	Yes	2.79	6	6	70	E+W	UA_FWIS_6L	Principal Arterial - Interstate - Urban	94,700	95,400	93,600	93,900	96,400	99,800	106,510	108,000	-	112,700	D	111,800	1.01	D	n/a	10,060
I-4	Saxon Blvd. to SR 472	1003	Yes	FDOT	Yes	3.15	6	6	70	E+W	UA_FWIS_6L	Principal Arterial - Interstate - Urban	53,500	86,500	79,500	88,000	88,500	89,500	92,500	90,000	92,000	94,000	D	111,800	0.84	C	n/a	10,060
I-4	SR 472 to Orange Camp Rd.	485	Yes	FDOT	Yes	2.12	6	6	70	E+W	UA_FWIS_6L	Principal Arterial - Interstate - Urban	75,000	76,000	70,500	77,500	77,000	78,000	80,500	71,000	72,500	74,000	D	111,800	0.66	C	n/a	10,060
I-4	Orange Camp Rd. to SR 44	497	Yes	FDOT	Yes	2.56	6	6	70	E+W	UA_FWIS_6L	Principal Arterial - Interstate - Urban	61,500	65,000	62,000	55,500	60,500	65,500	71,500	74,500	77,000	79,000	D	111,800	0.71	C	n/a	10,060
I-4	SR 44 to US 92 Connector	486	Yes	FDOT	Yes	10.31	6	6	70	E+W	UA_FWIS_6L	Principal Arterial - Interstate - Rural	56,000	56,000	54,000	55,000	55,000	56,000	57,000	58,000	65,500	65,500	C	93,000	0.70	B	4,779	8,370
I-4	US 92 Connector to I-95	491	Yes	FDOT	Yes	3.52	6	6	70	E+W	UA_FWIS_6L	Principal Arterial - Interstate - Urban	45,500	43,000	43,000	40,000	40,000	41,000	41,500	42,000	46,000	47,000	D	111,800	0.42	B	n/a	10,060
I-95	N. of Volusia/Flagler Co. Line	255-F	Yes	FDOT			6	6	70	N+S	UA_FWIS_6L	Principal Arterial - Interstate - Urban	63,200	64,700	62,500	63,200	65,100	67,300	46,500	47,000	45,000	46,000	D	111,800	0.41	B	n/a	10,060
I-95	Flagler Co. Line/Old Dixie to US 1	496	Yes	FDOT	Yes	5.00	6	6	70	N+S	UA_FWIS_6L	Principal Arterial - Interstate - Urban	66,000	67,000	60,500	64,500	69,500	70,500	72,500	66,000	62,000	65,500	D	111,800	0.59	C	n/a	10,060
I-95	US 1 to SR 40	495	Yes	FDOT	Yes	5.55	6	6	70	N+S	UA_FWIS_6L	Principal Arterial - Interstate - Urban	68,500	69,000	62,500	66,500	63,500	64,500	66,000	50,500	47,500	50,500	D	111,800	0.45	B	n/a	10,060
I-95	SR 40 to LPGA Blvd.	534	Yes	FDOT	Yes	2.64	6	6	70	N+S	UA_FWIS_6L + AUX	Principal Arterial - Interstate - Urban	79,500	68,000	76,000	69,500	70,000	74,000	77,000	85,000	87,000	78,500	D	113,000	0.69	B	5,465	11,860
I-95	LPGA Blvd. to US 92	494	Yes	FDOT	Yes	3.56	6	6	65	N+S	UA_FWIS_6L	Principal Arterial - Interstate - Urban	70,000	70,500	74,500	71,500	71,500	75,500	77,000	66,500	62,500	66,500	D	111,800	0.59	C	n/a	10,060
I-95	US 92 to Beville Rd./I-4	494	Yes	FDOT	Yes	1.26	6	6	65	N+S	UA_FWIS_6L + AUX	Principal Arterial - Interstate - Urban	70,000	70,500	74,500	71,500	71,500	75,500	77,000	66,500	62,500	66,500	D	111,800	0.59	B	n/a	11,860
I-95	Beville Rd./I-4 to SR 421 (Dunlawton Ave	492	Yes	FDOT	Yes	4.57	6	6	70	N+S	UA_FWIS_6L	Principal Arterial - Interstate - Urban	52,500	51,000	44,500	42,500	45,000	46,500	47,500	49,500	51,500	-	D	111,800	-	C	-	10,060
I-95	SR 421 (Dunlawton Ave.) to SR 44	133	Yes	FDOT	Yes	6.99	6	6	70	N+S	UA_FWIS_6L	Principal Arterial - Interstate - Urban	37,400	38,000	36,600	36,900	36,600	37,700	37,000	40,700	-	-	D	111,800	-	-	-	10,060
I-95	SR 44 to SR 442 (Indian River Blvd.)	503	Yes	FDOT	Yes	4.84	6	6	70	N+S	UA_FWIS_6L	Principal Arterial - Interstate - Urban	32,000	32,000	31,000	31,000	32,500	35,000	36,000	46,500	41,500	42,500	D	111,800	0.38	B	n/a	10,060
I-95	SR 442 (Indian River Blvd.) to Brevard C	0436-B	Yes	FDOT	Yes	11.45	6	6	70	N+S	RUA_FW_6L	Principal Arterial - Interstate - Urban/Rural	26,000	24,500	30,500	30,000	26,500	27,500	36,000	29,000	29,000	30,500	C	64,000	0.48	C	2,129	6,720
US 1	N. of Volusia/Flagler Co. Line	0263-F		FDOT	Yes		4	4	65	N+S	UA_UFH_2W_4L_D_WL	Principal Arterial - Other - Urban	12,100	11,600	11,200	10,700	10,700	11,000	11,900	12,200	12,700	12,900	D	65,600	0.20	B	n/a	5,900
US 1	Flagler Co. to I-95	536		FDOT	Yes	1.53	4	4	60	N+S	UA_UFH_2W_4L_D_WL	Principal Arterial - Other - Urban	15,200	15,400	15,100	13,400	14,300	14,200	14,800	16,000	16,800	17,200	D	65,600	0.26	B	n/a	5,900
US 1	I-95 to Airport Rd.	351	Yes	FDOT	Yes	2.81	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	21,500	21,500	20,500	19,400	20,200	21,000	22,500	23,000	24,500	23,500	D	39,800	0.59	C	2,109	3,580
US 1	Airport Rd. to Nova Rd.	100	Yes	FDOT	Yes	1.13	4	4	55	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	25,500	25,500	26,000	22,500	25,500	26,500	26,000	28,500	29,500	30,500	D	39,800	0.77	C	2,701	3,580
US 1	Nova Rd. to SR 40	1019	Yes	FDOT	Yes	1.83	4	4	55	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	17,000	16,800	16,300	16,400	16,600	17,500	18,100	19,300	20,000	19,100	D	39,800	0.48	C	1,656	3,580
US 1	SR 40 to Hand Ave.	5142	Yes	FDOT	Yes	0.84	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,500	23,000	21,500	19,000	20,300	20,800	21,500	22,000	23,000	23,500	D	39,800	0.59	C	1,907	3,580
US 1	Hand Ave. to LPGA Blvd.	1018	Yes	FDOT	Yes	2.00	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	26,000	26,000	26,000	21,500	24,000	24,500	23,500	24,500	24,000	25,500	D	39,800	0.64	C	1,948	3,580
US 1	LPGA Blvd. to SR 430 (Mason Ave.)	1018	Yes	FDOT	Yes	1.47	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	26,000	26,000	26,000	21,500	24,000	24,500	23,500	24,500	24,000	25,500	D	32,400	0.79	D	1,948	2,920
US 1	SR 430 (Mason Ave.) to Fairview/Main S	5074	Yes	FDOT	Yes	0.54	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	29,500	28,500	27,000	27,000	27,500	27,000	28,000	27,000	27,000	26,000	D	32,400	0.80	D	2,040	2,920
US 1	Fairview/Main St. to US 92/ISB	5071	Yes	FDOT	Yes	0.66	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	28,000	27,000	24,000	23,500	26,000	30,500	31,500	-	-	-	D	32,400	-	-	-	2,920
US 1	US 92/ISB to Orange Ave.	5070	Yes	FDOT	Yes	0.30	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	29,000	28,000	28,000	26,000	29,000	26,500	27,500	31,000	28,500	29,500	D	32,400	0.91	D	n/a	2,920
US 1	Orange Ave. to Bellevue Ave.	5066	Yes	FDOT	Yes	0.72	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	29,500	28,500	28,000	29,500	28,000	29,500	30,500	28,500	29,000	30,000	D	39,800	0.75	C	n/a	3,580
US 1	Bellevue Ave. to SR 400/Beville Rd.	452	Yes	FDOT	Yes	1.05	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	31,500	30,500	32,500	30,000	29,500	33,000	32,000	34,000	30,500	33,000	D	39,800	0.83	C	2,441	3,580
US 1	SR 400/Beville Rd. to Bellewood Ave.	5063	Yes	FDOT	Yes	0.27	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	28,000	26,000	28,000	27,500	26,000	29,000	30,000	26,500	26,000	27,000	D	39,800	0.68	C	n/a	3,580
US 1	Bellewood Ave. to Big Tree Rd.	5062	Yes	FDOT	Yes	0.45	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	28,000	27,500	26,500	24,500	27,000	29,000	30,000	-	-	-	D	39,800	-	-	-	3,580
US 1	Big Tree Rd. to Reed Canal Rd.	5061	Yes	FDOT	Yes	1.17	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	29,500	29,000	27,500	25,000	26,500	27,500	28,500	27,000	28,000	27,500	D	39,800	0.69	C	2,255	3,580
US 1	Reed Canal Rd. to SR 421 (Dunlawton A	213	Yes	FDOT	Yes	1.18	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	26,000	25,500	24,500	24,500	24,500	26,500	25,000	28,500	25,500	26,500	D	39,800	0.67	C	n/a	3,580
US 1	SR 421 (Dunlawton Ave.) to Commonwe	5057	Yes	FDOT	Yes	1.37	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	20,500	20,100	20,500	19,600	20,300	20,500	21,500	20,500	20,400	21,000	D	39,800	0.53	C	1,768	3,580
US 1	Commonwealth to Nova Rd.	152	Yes	FDOT	Yes	1.23	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	15,200	15,800	14,100	13,800	13,900	13,200	13,800	15,400	15,700	15,700	D	39,800	0.39	C	1,370	3,580
US 1	Nova Rd. to Art Center Ave.	13	Yes	FDOT	Yes	3.19	4	4	45	N+S	UA_UFH_2W_4L_D_WL	Principal Arterial - Other - Urban	20,900	20,100	19,400	19,600	20,500	21,500	21,500	25,000	26,000	25,500	D	65,600	0.39	B	2,199	5,900
US 1	Art Center Ave. to Turnbull Bay Rd.	5159	Yes	FDOT	Yes	2.24	4	4	55	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	11,600	22,500	23,500	22,500	23,500	24,500	25,500	26,500	27,500	26,000	D	39,800	0.65	C	2,144	3,580
US 1	Turnbull Bay Rd. to Canal St. (Bus. SR 4	5155	Yes	FDOT	Yes	1.34	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	26,000	23,500	22,500	24,500	22,000	23,000	24,000	26,500	24,500	25,500	D	39,800	0.64	C	n/a	3,580
US 1	Canal St. (Bus. SR 44) to 10th Ave.	5154	Yes	FDOT	Yes	1.52	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	25,000	24,000	22,000	21,500	18,600	18,700	19,500	24,000	22,500	22,000	D	32,400	0.68	D	1,748	2,920
US 1	10th Ave. to Park Ave.	5168	Yes	FDOT	Yes	1.00	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,000	28,000	27,000	25,500	25,000	25,000	26,000	26,000	26,000	27,000	D	39,800	0.68	C	n/a	3,580
US 1	Park Ave. to SR 442 (Indian River Blvd.)	5170	Yes	FDOT	Yes	1.49	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,000	27,500	26,500	25,500	25,000	24,500	25,500	27,500	28,500	29,500	D	39,800	0.74	C	2,472	3,580
US 1	SR 442 (Indian River Blvd.) to Volco Rd.	27	Yes	FDOT	Yes	2.26	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	19,600	20,000	18,900	19,000	18,800	18,200	20,400	21,500	21,500	22,500	D	39,800	0.57	C	n/a	3,580
US 1	Volco Rd. to H.H. Birch Rd.	9929	Yes	FDOT	Yes	3.70	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	11,700	11,400	11,000	11,100	11,100	11,400	12,400	13,300	13,600	14,100	D	39,800	0.35	C	-	3,580
US 1	H.H. Birch Rd. to Halifax Ave.	9929	Yes	FDOT	Yes	2.05	4	4	45	N+S	RDA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	11,700	11,400	11,000	11,100	11,100	11,400	12,400	13,300	13,600	14,100	C	40,700	0.35	B	-	1,550
US 1	Halifax Ave. to Putnam Grove Rd.	531	Yes	FDOT	Yes	0.57	4	4	65	N+S	RDA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	3,800	3,500	3,400	3,100	3,100	3,200	3,400	3,600	3,400	3,400	C	40,700	0.08	B	n/a	1,550
US 1	Putnam Grove Rd. to Kennedy Pkwy.	531	Yes	FDOT	Yes	1.63	4	4	65	N+S	RDA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	3,800	3,500	3,400	3,100	3,100	3,200	3,400	3,600	3,400	3,400	C	40,700	0.08	B	n/a	1,550
US 1	Kennedy Pkwy. to Brevard Co.	531	Yes	FDOT	Yes	3.97	4	4	55	N+S	RUA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	3,800	3,500	3,400	3,100	3,100	3,200	3,400	3,600	3,400	3,400	C	25,700	0.13	B	n/a	3,820
US 1	S. of Volusia/Brevard Co. Line	0404-B	Yes	FDOT	Yes		4	4	65	N+S	RUA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	3,000	2,700	2,800	3,000	3,100	3,000	3,400	2,800	3,200	3,800	C	25,700	0.15	B	344	3,820
US 17	N. of Volusia/Putnam Co. Line	67-P		FDOT	Yes		2	2	60	N+S	RUA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	5,100	5,300	5,000	4,900	5,000	5,100	4,800	5,600	5,900	6,100	C	8,400	0.73	C	570	790
US 17	Putnam County to CR 305/Lk George Rd	280		FDOT	Yes	3.41	2	2	60	N+S	RUA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	4,600	4,500	4,400	4,400	4,400	4,200	4,800	5,200	5,400	5,900	C	8,400	0.70	C	515	790
US 17	CR 305/Lk George Rd to Washington Av	46		FDOT	Yes	5.28	2	2	55	N+S	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	4,700	4,600	4,600	4,300	4,500	4,400	4,900	5,000	5,400	5,300	C	16,400	0.32	B	419	1,550
US 17	Washington Ave. to SR 40	448		FDOT	Yes	5.02	2	2	45	N+S	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	6,400	6,000	6,300	5,700	6,200	5,500	6,100	6,200	6,600	7,400	C	16,400	0.45	B	556	1,550
US 17	SR 40 to Lake Winona Rd.	104		FDOT	Yes	4.93	2	2	45	N+S	RUA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	8,000	7,900	7,500	7,400	7,300	7,400	8,100	8,400	8,600	9,000	C	8,400	1.07	D	677	790
US 17	Lake Winona Rd. to Spring Garden Ranc	104		FDOT	Yes	0.56	2	2	45	N+S	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	8,000	7,900	7,500	7,400	7,300	7,400	8,100	8,400	8,600	9,000	D	18,150	0.50	B	677	2,170
US 17	Spring Garden Ranch Rd. to Reynolds R	519		FDOT	Yes	1.09	2	2	55	N+S	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	10,800	11,000	10,100	10,200	10,100	10,000	10,400	11,400	11,600	12,000	D	24,200	0.50	C	1,029	2,170
US 17	Reynolds Rd to SR 15A/CR 15A	476		FDOT	Yes	2.76	4	4	45	N+S	UA_UFH_2W_4L_D_WL	Principal Arterial - Other - Urban	17,500	18,000	16,400	16,000	15,800	16,200	17,200	17,200	18,500	18,100	D	65,600	0.28	B	1,623	5,900
US 17	SR 15A/CR 15A to Glenwood Rd.	236		FDOT	Yes	1.64	4	4	55	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	15,200	15,100	14,500	13,700	13,500	13,500	14,800	14,800	17,300	15,200	D	39,800	0.38	C	1,245	3,580
US 17	Glenwood Rd. to Mercers Fernery Rd.	69		FDOT	Yes	0.51	4	4	55	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,500	21,500	21,000	20,500	20,500	19,500	21,000	24,500	25,500	26,000	D	39,800	0.65	C	2,014	3,580
US 17	Mercers Fernery Rd. to US 92	1000		FDOT	Yes	0.68	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	32,000	29,500	30,000	27,500	29,000	29,000	30,000	33,500	29,000	37,500	E	42,190	0.89	C	2,778	3,790
US 17/92	US 92 to Plymouth Ave.	66		FDOT	Yes	0.83	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	23,000	22,000	21,500	22,500	20,500	21,000	22,000	23,000	21,500	22,500	E	42,190	0.53	C	1,884	3,790
US 17/92	Plymouth Ave. to SR 44 (New York Ave.	5008		FDOT	Yes	1.01	2	2	30	N+S	UA_SSAC2_2W_2L_U_WL	Principal Arterial - Other - Urban	16,300	16,700	16,400	16,000	16,300	15,500	16,100	18,200	16,200	19,100	DeLand	19,150	1.00	DeLand	1,913	1,410
US 17/92	SR 44 (New York Ave.) to Euclid Ave.	5004		FDOT	Yes	0.49	2	2	30	N+S	UA_SSAC2_2W_2L_U_WL	Principal Arterial - Other - Urban	14,700	15,300	16,600	15,100	16,300	14,800	15,400	17,200	17,800	13,000	E	15,600	0.83	D	1,003	1,410
US 17/92	Euclid Ave. to Beresford Ave.	5173		FDOT	Yes	0.49	2	2	35	N+S	UA_SSAC2_2W_2L_D_WL	Principal Arterial - Other - Urban	16,400	17,300	18,000	16,800	16,600	16,400	17,000	16,300	18,500	19,300	E	16,380	1.18	F	1,693	1,480
US 17/92	Beresford Ave. to SR 15A (Taylor Rd.)	1006		FDOT	Yes	1.02	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	26,500	26,500	27,500	27,000	27,000	27,500	23,500	33,500	30,000	31,000	E	42,190	0.73	C	n/a	3,790
US 17/92	SR 15A (Taylor Rd.) to SR 472	1004		FDOT	Yes	1.75	6	6	45	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	43,500	44,000	44,000	41,000	45,000	42,000	44,000	47,000	47,500	55,500	D	59,900	0.93	C	4,524	5,390
US 17/92	SR 472 to New York Ave.	445		FDOT	Yes	0.75	4	4	55	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,500	28,000	27,000	26,000	27,000	25,000	28,000	29,000	30,000	30,000	D	39,800	0.75	C	2,423	3,580
US 17/92	New York Ave. to Graves Ave.	5166		FDOT	Yes	1.00	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	29,500	30,000	29,000	27,500	26,500	27,500	28,500	29,500	29,500	30,500	D	39,800	0.77	C	n/a	3,580
US 17/92	Graves Ave. to Rhode Island Ave.	5165		FDOT	Yes	1.01	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	29,500	30,000	29,000	26,500	29,000	27,500	28,500	31,000	32,000	32,000	D	39,800	0.80	C	2,592	3,580
US 17/92	Rhode Island Ave. to Enterprise Rd.	444		FDOT	Yes	0.75	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	33,000	31,000	32,500	29,500	30,500	29,000	32,000	31,500	31,000	33,000	D	39,800	0.83	C	2,633	3,580
US 17/92	Enterprise Rd. to Saxon Blvd.	539		FDOT	Yes	0.80	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,500	27,500	27,500	26,000	17,600	18,600	19,400	21,000	22,000	23,000	D	39,800	0.58	C	n/a	3,580
US 17/92	Saxon Blvd. to DeBary Plantation Blvd	509		FDOT	Yes	0.61	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,500	27,500	27,500	26,000	26,000	25,500	27,500	30,500	29,500	32,000	D	39,800	0.80	C	2,791	3,580
US 17/92	DeBary Plantation Blvd to Highbanks Rd	8		FDOT	Yes	0.92	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,500	27,500	27,500	26,000	22,000	23,000	24,500	25,500	25,000	25,000	D	39,800	0.63	C	2,215	3,580
US 17/92	Highbanks Rd. to Valencia Rd	7		FDOT	Yes	0.74	4	4	40	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	21,000	21,500	21,000	21,500	21,500	21,500	24,000	24,500	25,500	25,500	D	39,800	0.64	C	2,371	3,580
US 17/92	Valencia Rd. to Dirksen Dr.	479		FDOT	Yes	1.05	4	4	50	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	21,000	21,500	21,000	21,500	21,500	21,000	22,500	22,000	24,000	25,000	D	39,800	0.63	C	n/a	3,580
US 17/92	Dirksen to Ft. Florida Rd.	101		FDOT	Yes	0.72	4	4	50	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,000	21,500	19,800	19,300	23,000	24,000	23,000	28,500	28,000	30,000	D	39,800	0.75	C	2,681	3,580
US 17/92	Ft. Florida Rd. to Barwick Rd	0040-S		FDOT	Yes	0.76	4	4	50	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,000	21,500	19,800	19,300	22,000	22,500	26,500	27,500	29,500	31,000	D	39,800	0.78	C	3,122	3,580
US 17/92	Barwick Rd. to Seminole Co.	0040-S		FDOT	Yes	0.52	4	4	50	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,000	21,500	19,800	19,300	22,000	22,500	26,500	27,500	29,500	31,000	D	39,800	0.78	C	3,122	3,580
US 92	US 17 to Jacobs Rd.	1001	Yes	FDOT	Yes	1.41	4	4	45	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,000	24,000	25,000	24,500	25,500	24,500	25,500	28,000	28,500	28,500	E	42,190	0.68	C	2,435	3,790
US 92	Jacobs Rd. to Kepler Rd.	5	Yes	FDOT	Yes	1.23	4	4	45	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	27,000	24,000	25,000	22,500	22,500	22,500	26,000	26,000	25,000	25,000	E	42,190	0.59	C	2,124	3,790
US 92	Kepler Rd. to Old Daytona Rd.	9925	Yes	FDOT	Yes	1.32	4	4	65	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	14,200	14,000	13,400	13,000	13,000	14,100	15,100	16,400	16,200	16,200	D	39,800	0.41	C	n/a	3,580
US 92	Old Daytona Rd. to Red John Dr.	9925	Yes

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
SR A1A - Ocean Shore Blvd.	Flagler Co Line to High Bridge Rd	368	Yes	FDOT	Yes	1.26	2	2	55	N+S	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	15,100	15,700	15,500	15,300	15,800	15,500	16,100	15,500	16,200	16,600	D	24,200	0.69	C	n/a	2,170
SR A1A - Ocean Shore Blvd.	High Bridge Rd to Ormond Mall	368	Yes	FDOT	Yes	6.42	2	2	55	N+S	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	15,100	15,700	15,500	15,300	15,800	15,500	16,100	15,500	16,200	16,600	D	24,200	0.69	C	n/a	2,170
SR A1A - Ocean Shore Blvd.	Ormond Mall to Neptune Ave	174	Yes	FDOT	Yes	1.69	2	2	40	N+S	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	16,400	15,800	18,500	15,100	15,400	15,700	16,000	15,800	16,400	15,000	D	24,200	0.62	C	1,172	2,170
SR A1A - Ocean Shore Blvd.	Neptune Ave to SR 40 (Granada Blvd.)	5125	Yes	FDOT	Yes	0.70	2	2	35	N+S	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	17,900	16,800	15,600	12,300	14,000	16,600	17,200	16,200	17,000	17,400	D	24,200	0.72	D	n/a	2,170
SR A1A - Atlantic Ave. North	SR 40 to Harvard Dr.	5124	Yes	FDOT	Yes	1.70	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	19,500	16,500	16,600	17,600	16,400	15,600	16,200	17,200	17,800	19,400	D	39,800	0.49	D	1,399	2,920
SR A1A - Atlantic Ave. North	Harvard Dr. to SR430/Seabreeze Blvd.)	5121	Yes	FDOT	Yes	2.53	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	18,500	17,000	17,100	16,400	17,800	18,200	18,900	18,000	17,800	20,300	D	39,800	0.51	D	1,533	2,920
SR A1A - Atlantic Ave. North	SR 430/Seabreeze Blvd. to SR430/Oakri	5117	Yes	FDOT	Yes	0.12	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	17,900	19,800	20,800	17,100	15,200	16,300	16,800	20,000	20,800	17,300	D	39,800	0.43	D	1,398	2,920
SR A1A - Atlantic Ave. North	SR 430/Oakridge Blvd. to US 92/ISB	5115	Yes	FDOT	Yes	0.90	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	17,400	17,800	15,200	16,500	17,300	15,300	16,400	15,800	16,600	18,300	D	39,800	0.46	D	1,319	2,920
SR A1A - Atlantic Ave. South	US 92 to Silver Beach Ave.	5112	Yes	FDOT	Yes	0.69	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	12,800	12,200	11,200	12,000	12,700	11,900	12,300	14,200	13,500	15,400	D	39,800	0.39	D	1,194	2,920
SR A1A - Atlantic Ave. South	Silver Beach Ave. to Florida Shores	436	Yes	FDOT	Yes	2.34	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	11,400	10,100	10,700	10,400	12,500	11,900	12,700	12,000	13,500	12,600	D	39,800	0.32	C	992	2,920
SR A1A - Atlantic Ave. South	Florida Shores to Van Ave.	5179	Yes	FDOT	Yes	1.29	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	11,800	16,100	13,800	11,400	12,800	13,200	13,700	13,900	12,800	15,200	D	39,800	0.38	D	1,208	2,920
SR A1A - Atlantic Ave. South	Van Ave. to SRA1A/Dunlawton Ave.	477	Yes	FDOT	Yes	1.05	4	4	35	N+S	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	15,800	15,500	13,700	11,200	12,500	11,800	12,200	13,600	12,600	14,800	D	39,800	0.37	D	1,164	2,920
SR A1A - Dunlawton Ave.	SR A1A/Atlantic Ave. to US 1	427	Yes	FDOT	Yes	1.25	4	4	35	E+W	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	27,000	24,500	27,000	26,000	26,000	28,000	30,000	30,500	22,500	23,500	D	39,800	0.59	D	n/a	2,920
SR 5A - Nova Rd.	US 1 to Wilmette Ave.	459	Yes	FDOT	Yes	1.00	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	13,400	12,800	12,800	12,300	12,400	13,100	13,600	14,000	13,600	14,300	D	39,800	0.36	C	1,147	3,580
SR 5A - Nova Rd.	Wilmette Ave. to SR 40	518	Yes	FDOT	Yes	0.51	6	6	45	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	23,000	23,000	24,000	23,500	23,500	23,500	24,500	24,000	25,500	25,500	D	59,900	0.43	C	2,039	5,390
SR 5A - Nova Rd.	SR 40 to Hand Ave.	510	Yes	FDOT	Yes	1.15	6	6	45	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	27,500	26,500	24,000	28,500	27,500	25,500	26,500	27,500	28,000	29,000	D	59,900	0.48	C	n/a	5,390
SR 5A - Nova Rd.	Hand Ave. to LPGA Blvd.	528	Yes	FDOT	Yes	2.06	6	6	45	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	29,000	29,000	28,000	28,500	26,000	26,500	27,500	29,000	34,000	26,500	D	59,900	0.44	C	1,994	5,390
SR 5A - Nova Rd.	LPGA Blvd. to SR 430/Mason Blvd	366	Yes	FDOT	Yes	1.47	6	6	45	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	30,000	29,500	27,500	27,000	25,500	26,500	28,500	29,000	34,500	35,500	D	59,900	0.59	C	n/a	5,390
SR 5A - Nova Rd.	SR 430/Mason Ave. to US 92/ISB	5088	Yes	FDOT	Yes	1.22	6	6	45	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	33,500	32,000	30,000	30,000	31,000	31,500	31,000	32,000	36,000	31,500	D	59,900	0.53	C	2,428	5,390
SR 5A - Nova Rd.	US 92/ISB to Bellevue Ave.	5090	Yes	FDOT	Yes	1.07	6	6	45	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	34,500	35,000	32,500	32,000	33,000	32,500	34,500	36,000	35,000	36,000	D	59,900	0.60	C	n/a	5,390
SR 5A - Nova Rd.	Bellevue Ave. to SR 400/Beville Rd.	348	Yes	FDOT	Yes	1.00	6	6	50	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	34,500	35,000	34,000	33,000	33,000	34,500	35,500	37,000	36,500	37,500	D	59,900	0.63	C	3,109	5,390
SR 5A - Nova Rd.	SR 400/Beville Rd. to Big Tree	363	Yes	FDOT	Yes	0.70	6	6	50	N+S	UA_SSAC1_2W_6L_D_WL	Principal Arterial - Other - Urban	27,500	28,500	27,000	25,500	26,500	26,500	26,500	27,000	26,000	27,000	D	59,900	0.45	C	2,122	5,390
SR 5A - Nova Rd.	Big Tree to Madeline Ave.	363	Yes	FDOT	Yes	1.61	5	5	50	N+S	UA_SSAC1_2W_5L_D_WL	Principal Arterial - Other - Urban	27,500	28,500	27,000	25,500	26,500	26,500	26,500	27,000	26,000	27,000	D	49,850	0.54	C	2,122	4,490
SR 5A - Nova Rd.	Madeline Ave to SR 421/Dunlawton Ave.	1017	Yes	FDOT	Yes	1.30	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	26,500	27,000	26,500	25,500	26,000	27,000	28,000	26,500	27,500	27,000	D	39,800	0.68	C	2,175	3,580
SR 5A - Nova Rd.	SR 421/Dunlawton Ave. to Spruce Creek	1016	Yes	FDOT	Yes	1.08	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	25,000	25,500	23,500	25,000	24,500	26,000	27,000	26,000	29,500	25,000	D	39,800	0.63	C	1,982	3,580
SR 5A - Nova Rd.	Spruce Creek Rd. to US 1	458	Yes	FDOT	Yes	1.44	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	16,700	16,900	16,800	16,300	16,800	17,900	17,200	17,800	19,100	18,800	D	39,800	0.47	C	1,501	3,580
SR 11	CR 304 (in Flagler Co.) to SR 40	0009-F		FDOT	Yes	2.42	2	2	60	N+S	RUA_UFH_2W_2L_U_0L	Principal Arterial - Other - Rural	2,400	2,200	2,000	2,200	2,100	2,400	2,400	2,800	2,800	2,700	C	6,300	0.43	B	229	590
SR 11	SR 40 to CR 15A	527		FDOT	Yes	9.19	2	2	60	N+S	RUA_UFH_2W_2L_U_0L	Principal Arterial - Other - Rural	2,600	2,600	2,700	2,700	2,800	2,900	3,100	3,400	3,700	3,900	C	6,300	0.62	C	404	590
SR 11	CR 15A to US 17	4		FDOT	Yes	2.45	2	2	55	N+S	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	6,400	6,000	6,100	6,000	6,300	6,200	6,400	7,700	6,900	7,100	D	24,200	0.29	B	569	2,170
SR 15A	US 17 to Glenwood Rd.	466		FDOT	Yes	1.11	4	4	50	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	10,800	10,700	10,300	10,200	10,600	10,500	10,900	10,900	12,200	12,600	D	37,900	0.33	C	n/a	3,580
SR 15A	Glenwood Rd. to CR 92	465		FDOT	Yes	1.20	4	4	50	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	14,000	13,800	13,800	13,100	13,600	13,400	14,000	14,700	15,600	17,400	D	37,900	0.46	C	1,473	3,580
SR 15A	CR 92 to Plymouth Ave.	537	Yes	FDOT	Yes	0.83	4	4	50	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,000	22,000	22,500	18,900	21,500	20,800	21,500	21,800	25,500	24,000	D	37,900	0.63	C	2,033	3,580
SR 15A	Plymouth Ave. to SR 44/New York Ave.	463	Yes	FDOT	Yes	1.01	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	25,500	23,500	21,900	23,000	23,000	25,000	25,000	26,000	27,000	28,000	D	37,900	0.74	C	2,132	3,580
SR 15A	SR 44/New York Ave. to Beresford Ave.	474		FDOT	Yes	1.00	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,500	22,500	21,500	21,000	22,000	22,000	24,000	25,000	25,500	26,500	D	37,900	0.70	C	n/a	3,580
SR 15A	Beresford Ave. to New Hampshire Ave.	6		FDOT	Yes	0.59	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	20,000	19,200	21,000	20,500	21,000	20,100	23,000	23,500	24,000	26,000	D	37,900	0.69	C	1,981	3,580
SR 15A	New Hampshire Ave. to US 17/92	1005		FDOT	Yes	1.17	4	4	45	N+S	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	21,000	19,100	19,700	19,000	20,500	21,000	21,900	22,500	25,000	26,000	D	37,900	0.69	C	1,944	3,580
SR 40	W. of the St. Johns River	0050-L	Yes	FDOT			2	2	45	E+W	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	7,500	7,100	6,800	6,400	7,300	8,000	8,700	8,100	8,200	8,000	C	16,400	0.49	B	678	1,550
SR 40	Lake County to Emporia Rd.	533	Yes	FDOT	Yes	0.86	2	2	55	E+W	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	7,700	6,800	7,000	6,800	6,300	6,800	7,000	8,700	8,500	9,800	C	16,400	0.60	C	749	1,550
SR 40	Emporia Rd. to US 17	344	Yes	FDOT	Yes	5.58	2	2	55	E+W	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	7,000	6,500	6,500	6,600	5,900	6,200	7,600	8,500	8,000	8,200	C	16,400	0.50	B	651	1,550
SR 40	US 17 to SR 11	530	Yes	FDOT	Yes	6.69	2	2	60	E+W	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	5,700	6,000	4,800	5,400	5,500	5,600	5,800	6,900	6,800	7,200	C	16,400	0.44	B	570	1,550
SR 40	SR 11 to Pinto Lane	530	Yes	FDOT	Yes	6.83	2	2	60	E+W	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	5,700	6,000	4,800	5,400	5,500	5,600	5,800	6,900	6,800	7,200	C	16,400	0.44	B	570	1,550
SR 40	Pinto Lane to Rima Ridge Rd (urban bou	523	Yes	FDOT	Yes	1.25	4	4	60	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban/Rural	10,800	10,000	10,600	9,400	9,400	10,000	10,400	11,100	11,800	11,600	D	39,800	0.29	C	950	3,580
SR 40	Rima Ridge Rd to Tymber Creek Rd.	499	Yes	FDOT	Yes	4.36	4	4	60	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	29,000	27,000	27,000	26,500	27,000	27,000	28,000	30,500	35,000	31,500	D	39,800	0.79	C	2,470	3,580
SR 40	Tymber Creek Rd. to I-95	499	Yes	FDOT	Yes	0.79	4	4	50	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	29,000	27,000	27,000	26,500	27,000	27,000	28,000	30,500	35,000	31,500	D	39,800	0.79	C	2,470	3,580
SR 40	I-95 to Clyde Morris Blvd.	522	Yes	FDOT	Yes	1.58	4	4	50	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	35,500	36,000	36,000	33,000	33,500	34,500	35,500	35,500	38,000	34,500	D	39,800	0.87	C	3,100	3,580
SR 40	Clyde Morris Blvd. to SR 5A/Nova Rd.	489	Yes	FDOT	Yes	1.06	4	4	50	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	33,500	33,000	33,000	33,000	32,000	33,000	33,000	32,000	34,000	34,500	D	39,800	0.87	C	2,513	3,580
SR 40	SR5A/Nova Rd. to US 1	1020	Yes	FDOT	Yes	1.33	4	4	45	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	32,000	29,500	30,000	30,000	30,000	30,000	31,000	31,000	32,000	33,500	D	39,800	0.84	C	2,635	3,580
SR 40	US 1 to Halifax Ave.	171	Yes	FDOT	Yes	1.11	4	4	35	E+W	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	34,500	34,000	34,000	33,500	34,000	31,500	31,000	34,500	38,500	39,500	D	32,400	1.22	F	n/a	2,920
SR 40	Halifax Ave. to SR A1A	5128	Yes	FDOT	Yes	0.37	4	4	35	E+W	UA_SSAC2_2W_4L_D_WL	Principal Arterial - Other - Urban	22,000	19,500	20,500	18,000	18,900	19,500	20,400	20,200	21,000	21,000	D	32,400	0.65	D	1,605	2,920
SR 44	W. of the St. Johns River	0010-L	Yes	FDOT			2	2	45	E+W	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	6,200	5,600	5,900	6,200	5,500	5,600	6,700	8,700	7,600	8,000	C	16,400	0.49	B	828	1,550
SR 44	Lake Co. to Shell Rd.	1007	Yes	FDOT	Yes	1.19	2	2	55	E+W	RDA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	10,400	9,400	9,000	9,400	9,200	9,600	10,000	12,900	11,000	12,200	C	16,400	0.74	C	1,152	1,550
SR 44	Shell Rd. to Grand Ave.	1007	Yes	FDOT	Yes	1.26	2	2	45	E+W	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	10,400	9,400	9,000	9,400	9,200	9,600	10,000	12,900	11,000	12,200	D	24,200	0.50	C	1,152	2,170
SR 44	Grand Ave. to Old New York/Hazen Rd.	290	Yes	FDOT	Yes	0.70	2	2	55	E+W	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	10,800	10,400	9,700	9,300	9,700	9,800	10,100	10,800	11,200	12,400	D	24,200	0.51	C	1,107	2,170
SR 44	Old New York/Hazen Rd. to SR 15A/Spri	274	Yes	FDOT	Yes	0.71	2	2	40	E+W	UA_UFH_2W_2L_U_WL	Principal Arterial - Other - Urban	10,600	12,500	11,800	11,500	11,700	11,600	11,900	12,800	13,200	13,900	D	24,200	0.57	C	1,129	2,170
SR 44	SR 15A/Spring Garden Ave. to Stone St.	447	Yes	FDOT	Yes	0.50	2	2	40	E+W	UA_SSAC1_2W_2L_U_WL	Principal Arterial - Other - Urban	12,000	11,400	11,300	11,300	10,600	10,800	11,500	11,700	11,500	11,700	E	18,939	0.62	C	967	1,712
SR 44	Stone St. to Clara Ave.	5012	Yes	FDOT	Yes	0.51	2	2	35-40	E+W	UA_SSAC1_2W_2L_U_WL	Principal Arterial - Other - Urban	12,200	10,900	11,100	10,900	10,600	10,300	10,700	10,800	11,200	11,000	E	18,939	0.58	C	876	1,712
SR 44	Clara Ave. to Amelia Ave.	5015	Yes	FDOT	Yes	0.50	2	2	25-35	E+W	UA_SSAC2_2W_2L_U_WL	Principal Arterial - Other - Urban	9,700	9,900	9,200	9,400	8,700	8,600	9,000	9,300	9,700	9,900	E	15,600	0.63	D	n/a	1,410
SR 44	Amelia Ave. to Hill Ave.	5019	Yes	FDOT	Yes	1.00	2	2	35/40/45	E+W	UA_SSAC1_2W_2L_U_WL	Principal Arterial - Other - Urban	13,600	13,700	13,300	13,000	14,100	12,200	12,600	13,100	13,500	-	E	18,939	-	-	-	1,712
SR 44	Hill Ave. to Blue Lake Ave.	80	Yes	FDOT	Yes	0.51	2	2	45	E+W	UA_SSAC1_2W_2L_U_WL	Principal Arterial - Other - Urban	14,500	12,300	13,300	13,000	12,600	11,900	14,000	12,600	12,500	12,900	DeLand	19,800	0.65		n/a	1,712
SR 44	Blue Lake Ave. to Kepler Rd.	19	Yes	FDOT	Yes	0.94	2	2	45	E+W	UA_SSAC1_2W_2L_U_WL	Principal Arterial - Other - Urban	15,100	14,600	16,400	15,600	15,900	14,300	16,900	15,700	17,500	17,300	DeLand	20,800	0.83		1,464	1,712
SR 44	Kepler Rd. to Summit Ave.	259	Yes	FDOT	Yes	1.18	2	2	45-50	E+W	UA_SSAC1_2W_2L_U_WL	Principal Arterial - Other - Urban	17,300	17,800	18,300	17,800	18,000	16,700	17,200	20,200	19,400	21,500	DeLand	19,800	1.09		1,892	1,712
SR 44	Summit Ave. to I-4	538	Yes	FDOT	Yes	0.98	4	4	45	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	16,300	16,800	16,800	17,500	17,000	15,200	15,800	18,100	21,500	20,500	D	39,800	0.52	C	1,754	3,580
SR 44	I-4 to Prevatt Ave.	480	Yes	FDOT	Yes	0.74	4	4	55	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	17,600	17,700	16,400	17,200	19,900	18,700	20,500	21,500	21,500	21,500	D	39,800	0.54	C	1,954	3,580
SR 44	Prevatt Ave. to Pioneer Tr.	41	Yes	FDOT	Yes	5.93	4	4	65	E+W	RDA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	15,100	15,100	13,600	14,900	16,700	16,400	17,600	19,500	13,900	14,300	C	25,900	0.55	B	n/a	3,860
SR 44	Pioneer Tr. to SR 415/CR 415	1011	Yes	FDOT	Yes	3.56	4	4	65	E+W	RDA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	12,000	12,400	10,500	9,900	12,200	12,500	12,900	14,500	15,600	15,700	C	25,900	0.61	B	1,290	3,860
SR 44	SR 415/CR 415 to Samsula Dr.	1012	Yes	FDOT	Yes	1.14	4	4	65	E+W	RDA_UFH_2W_4L_D_WL	Principal Arterial - Other - Rural	16,400	17,300	15,800	13,500	15,700	17,000	17,600	20,500	22,000	21,500	C	25,900	0.83	B	1,814	3,860
SR 44	Samsula Dr. to Airport Rd	423	Yes	FDOT	Yes	1.70	4	4	65	E+W	RDA_UFH_2W_4L_D_WL	Principal Arterial - Other - Urban/Rural	18,200	17,700	16,200	14,400	18,300	17,400	19,200	20,000	22,000	15,600	C	25,900	0.60	B	1,344	4,460
SR 44	Airport Rd. to I-95	423	Yes	FDOT	Yes	2.05	4	4	65	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	18,200	17,700	16,200	14,400	18,300	17,400	19,200	20,000	22,000	15,600	D	39,800	0.39	C	1,344	3,580
SR 44	I-95 to Mission Dr	515	Yes	FDOT	Yes	2.83	4	4	55	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	25,500	22,500	25,000	27,500	30,000	27,500	28,500	35,000	31,500	35,500	D	39,800	0.89	C	2,896	3,580
SR 44	Mission Dr. to Live Oak	514	Yes	FDOT	Yes	1.35	4	4	45	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	22,000	22,500	17,800	18,700	19,600	18,300	19,000	19,500	18,000	23,500	D	39,800	0.59	C	1,893	3,580
SR 44/SR A1A/S Causeway	Live Oak to Peninsula Ave.	207	Yes	FDOT	Yes	1.30	4	4	50	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	30,000	29,500	24,000	26,500	26,500	27,000	29,500	30,000	23,500	32,500	D	39,800	0.82	C	2,490	3,580
SR 44/SR A1A/S Causeway	Peninsula Ave. to Saxon Dr.	5180	Yes	FDOT	Yes	0.35	4	4	40	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	26,000	25,000	21,000	22,500	23,000	22,000	23,000	24,500	25,500	28,000	D	39,800	0.70	C	2,113	3,580
SR 44/SR A1A/3rd Ave/Atlantic	Saxon Dr. to 6th Ave	5043	Yes	FDOT	Yes	0.50	4	4	40	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	18,300	17,000	14,000	15,300	14,200	14,000	14,600	12,700	17,500	17,900	D	39,800	0.45	C	n/a	3,580
SR 44 (Business) - Canal St.	SR 44/Lytle St to Pioneer Trail	516		FDOT	Yes	0.17	2	2	40	E+W	UA_SSAC1_2W_2L_U_WL	Minor Arterial - Urban	12,200	11,200	11,400	10,800	11,300	10,500	10,900	9,500	9,800	10,000	D	17,700	0.56	C	811	1,600
SR 44 (Business) - Canal St.	Pioneer Tr. to US 1	111		FDOT	Yes	0.76	2	2	40	E+W	UA_SSAC1_2W_2L_U_WL	Minor Arterial - Urban	12,500	11,500	11,700	11,100	11,600	11,500	12,500	11,500	11,900	12,600	D	17,700	0.71	C	1,019	1,600
SR 44 (Old) - N Causeway	Riverside Dr to Peninsula	421		FDOT	Yes	0.14	2	2	30	E+W	UA_SSAC2_2W_2L_U_WL	Minor Arterial - Urban	9,200	8,600	9,000	9,300	10,200	8,400	10,000	10,200	9,600	10,000	D	14,800	0.68	D	801	1,330
SR 46	Seminole Co. to Brevard Co.	0416-B		FDOT	Yes	5.44	2	2	55	E+W	RUA_UFH_2W_2L_U_WL	Principal Arterial - Other - Rural	8,500	5,200	5,600	6,000	5,600	5,300	7,100	5,900	7,400	7,600	C	8,400	0.90	C	n/a	790
SR 100 - Flagler County	John Anderson Hwy (CR 201) to Lamber	1000-F	Yes	FDOT		0.50	4	4	35	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	17,400	16,400	16,700	16,300	17,300	18,500	17,600	18,600	18,700	16,100	D	39,800	0.40	C	1,379	3,580
SR 100 - Flagler County	Lambert Ave. (CR 201) to SR A1A	5012-F	Yes	FDOT		0.70	4	4	35	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	14,000	11,500	12,100	11,200	12,900	14,100	12,200	14,000	14,600	14,800	D	39,800	0.37	C	n/a	3,580
SR 400 - Beville Rd.	I-95 to Williamson Blvd.	501	Yes	FDOT	Yes	0.28	4	4	55	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	24,000	24,500	24,000	24,000	26,500	28,000	29,000	26,000	28,500	29,000	D	39,800	0.73	C

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
SR 430 - Oakridge Blvd. - EB	Beach St. to Peninsula Dr	5194		FDOT	Yes	0.70	2	2	40	E+W	UA_SSAC1_1W_2L_D_WL	Minor Arterial - Urban	5,800	6,000	5,500	5,300	5,600	5,900	6,400	7,200	6,500	7,500	D	23,880	0.31	C	511	2,150
SR 430 - Oakridge Blvd. - EB	Peninsula Dr to SR A1A/Atlantic	5195		FDOT	Yes	0.28	2	2	40	E+W	UA_SSAC1_1W_2L_D_WL	Minor Arterial - Urban	5,500	4,800	4,700	3,600	4,100	4,200	4,400	4,600	5,400	6,000	D	23,880	0.25	C	416	2,150
SR 430 - Seabreeze Bridge - WB	Beach St. to Peninsula Dr	5186	Yes	FDOT	Yes	1.01	2	2	40	E+W	UA_SSAC1_1W_2L_D_WL	Minor Arterial - Urban	7,600	6,700	8,100	7,100	7,200	6,400	6,600	-	-	-	D	23,880	-	-	n/a	2,150
SR 430 - Seabreeze Bridge - WB	Peninsula Dr to SR A1A/Atlantic	5191	Yes	FDOT	Yes	0.29	2	2	30	E+W	UA_SSAC2_1W_2L_D_WL	Minor Arterial - Urban	6,300	5,000	5,300	4,300	4,900	4,900	5,100	5,800	6,400	7,000	D	19,440	0.36	C	504	1,400
SR 441 - Peninsula Dr.	US 92/ISB to Silver Beach Ave.	5187		FDOT	Yes	0.65	2	2	35	N+S	UA_SSAC1_2W_2L_U_WL	Minor Arterial - Urban	9,900	9,400	8,700	9,400	9,300	8,300	8,700	9,000	8,800	8,800	D	17,700	0.50	C	756	1,600
SR 441 - Peninsula Dr.	Silver Beach Ave. to Florida Shores	5187		FDOT	Yes	2.34	2	2	35	N+S	UA_SSAC1_2W_2L_U_WL	Minor Arterial - Urban	9,900	9,400	8,700	9,400	9,300	8,300	8,700	9,000	8,800	8,800	D	17,700	0.50	C	756	1,600
SR 441 - Peninsula Dr.	Florida Shores to SR A1A/Dunlawton	5188		FDOT	Yes	2.42	2	2	40	N+S	UA_SSAC1_2W_2L_U_WL	Minor Arterial - Urban	6,100	6,000	5,600	5,300	5,400	5,600	5,400	5,600	5,900	5,700	D	17,700	0.32	C	539	1,600
SR 442 - Indian River Blvd.	I-95 to Air Park Rd.	170	Yes	FDOT	Yes	2.09	4	4	55	E+W	UA_SSAC1_2W_4L_D_WL	Minor Arterial - Urban	9,200	9,300	8,900	9,500	9,920	10,200	10,800	11,400	12,100	12,600	D	39,800	0.32	C	n/a	3,580
SR 442 - Indian River Blvd.	Air Park Rd. to US 1	5190	Yes	FDOT	Yes	1.69	4	4	45	E+W	UA_SSAC1_2W_4L_D_WL	Minor Arterial - Urban	16,800	17,700	16,400	16,100	16,800	16,400	17,000	17,600	17,000	16,500	D	39,800	0.41	C	1,361	3,580
SR 472	US 17/92 to CR 4101/MLK Blvd	472		FDOT	Yes	2.31	4	4	60	E+W	UA_UFH_2W_4L_D_WL	Principal Arterial - Other - Urban	19,200	20,200	19,700	20,100	21,000	21,400	23,000	24,000	24,000	29,000	D	65,600	0.44	B	2,373	5,900
SR 472	CR 4101/MLK Blvd to I-4 (end of state ro	535		FDOT	Yes	1.10	4	4	60	E+W	UA_SSAC1_2W_4L_D_WL	Principal Arterial - Other - Urban	24,000	24,500	22,000	24,500	24,000	25,500	26,500	29,000	30,000	29,500	D	39,800	0.74	C	2,473	3,580
SR 483 - Clyde Morris Blvd.	SR 430 (Mason Ave.) to US 92/ISB	5182		FDOT	Yes	1.20	4	4	45	N+S	UA_SSAC1_2W_4L_U_WL	Principal Arterial - Other - Urban	17,700	18,300	20,000	18,100	18,900	20,000	20,000	20,500	21,000	20,300	D	37,800	0.54	C	1,624	3,400
SR 483 - Clyde Morris Blvd.	US 92/ISB to Aviation Ctr Pkwy/Bellevue	5193		FDOT	Yes	1.20	4	4	45	N+S	UA_SSAC1_2W_4L_U_WL	Principal Arterial - Other - Urban	26,500	31,000	30,500	27,000	26,000	32,500	32,000	29,500	32,000	27,000	D	37,800	0.71	C	2,213	3,400
SR 483 - Clyde Morris Blvd.	Aviation Ctr Pkwy/Bellevue to SR 400/Be	5193		FDOT	Yes	0.98	4	4	45	N+S	UA_SSAC1_2W_4L_U_WL	Principal Arterial - Other - Urban	26,500	31,000	30,500	27,000	26,000	32,500	32,000	29,500	32,000	27,000	D	37,800	0.71	C	2,213	3,400
6th St.	Derbyshire Rd. to SR 5A/Nova Rd	11		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,610	2,820	2,980	2,780	2,710	2,750	2,900	2,870	2,620	2,790	E	13,640	0.20	C	250	1,020
13th St.	Derbyshire Rd. to SR 5A/Nova Rd	31		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,900	2,060	2,090	1,600	1,700	1,760	1,620	1,660	1,570	1,710	E	13,640	0.13	C	160	1,020
Adelle Ave.	Beresford Ave. to New Hampshire Ave.	43		County	No	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	2,850	2,290	2,530	2,410	2,650	2,640	-	2,840	3,080	3,170	E	13,640	0.23	C	290	1,020
Adelle Ave.	New Hampshire Ave. to SR 15A	41		County	No	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	300	270	320	320	330	330	-	370	340	350	E	13,640	0.03	C	30	1,020
Air Park Rd.	Park Ave. to Ragis Rd	52		County	Yes	0.87	2	2	40	N+S	UA_UFH_2W_2L_U_0L	Minor Collector - Urban	2,030	1,700	2,030	2,100	2,270	2,420	2,330	2,500	2,470	2,640	E	24,975	0.11	B	210	2,240
Air Park Rd.	Ragis Rd. to SR 442	50		County	Yes	0.55	2	2	40	N+S	UA_UFH_2W_2L_U_0L	Minor Collector - Urban	1,340	1,840	1,470	1,840	2,060	2,100	2,150	2,350	2,630	2,600	E	24,975	0.10	B	220	2,240
Airport Rd. (OB)	Tymber Creek Rd. to Pineland Tr.	60		County	Yes	2.05	2	2	35	E+W	UA_UFH_2W_2L_U_0L	Major Collector - Urban	5,630	5,290	5,020	5,680	5,230	4,880	5,080	6,400	6,660	6,850	E	24,975	0.27	B	680	2,240
Airport Rd. (OB)	Pineland Tr. to Sunshine Blvd.	62		County	Yes	1.40	2	2	45	N+S	UA_UFH_2W_2L_U_0L	Major Collector - Urban	4,490	4,460	4,400	5,040	4,670	4,960	4,090	5,530	5,400	6,090	E	24,975	0.24	B	610	2,240
Airport Rd. (OB)	Sunshine Blvd. to US 1	63		County	Yes	0.30	2	2	35	E+W	UA_UFH_2W_2L_U_0L	Major Collector - Urban	7,190	6,640	6,780	7,640	7,090	7,360	6,460	8,350	6,260	8,960	E	24,975	0.36	C	860	2,240
Airport Rd. (PO)	Williamson Blvd to Pioneer Tr.	64		County	Yes	2.50	2	2	45	N+S	UA_UFH_2W_2L_U_WL	Major Collector - Urban	5,410	5,440	6,000	6,160	6,040	6,120	7,690	8,430	7,590	7,170	E	33,300	0.22	B	620	2,990
Airport Rd. (NSB)	Pioneer Tr. to Luna Bella Ln	67		City	Yes	1.60	2	2	45	N+S	UA_UFH_2W_2L_D_WL	Major Collector - Urban	2,730	2,690	3,110	3,300	3,320	3,550	3,930	4,570	7,590	4,180	E	34,965	0.12	B	350	3,140
Airport Rd. (NSB)	Luna Bella Ln to SR 44	68		City	Yes	1.80	2	2	45	N+S	UA_UFH_2W_2L_D_WL	Major Collector - Urban	2,730	1,040	2,250	2,610	2,770	3,270	3,760	4,780	7,590	5,150	E	34,965	0.15	B	430	3,140
Amelia Ave.	US 92 to Plymouth Ave.	77		County	Yes	0.85	2	2	35	N+S	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	7,920	7,340	6,610	6,080	6,700	6,980	6,050	7,430	7,050	6,870	E	14,040	0.49	C	620	1,270
Amelia Ave.	Plymouth Ave. to Minnesota Ave.	75		County	Yes	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	12,620	11,570	10,610	10,230	10,590	10,630	9,170	11,890	11,500	12,840	E	14,040	0.91	D	1,150	1,270
Amelia Ave.	Minnesota Ave. to Ohio Ave.	74		County	Yes	0.15	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	12,300	11,440	10,310	10,260	10,380	10,320	9,310	11,630	11,140	12,110	E	13,640	0.89	D	990	1,020
Amelia Ave.	Ohio Ave. to SR 44	73		County	Yes	0.15	4	4	30	N+S	UA_NSSRC2_2W_4L_U_0L	Major Collector - Urban	11,900	10,810	10,380	10,580	10,650	10,430	9,410	10,990	11,250	11,780	E	22,820	0.52	C	1,010	2,060
Amelia Ave. (Deland)	SR 44 to Voorhis Ave.	797063		City	No	0.25	4	4	30	N+S	UA_NSSRC2_2W_4L_U_0L	Major Collector - Urban	9,570	9,260	8,590	8,920	9,669	6,400	6,600	6,900	7,300	7,500	E	22,820	0.33	C	n/a	2,060
Amelia Ave. (DeLand)	Voorhis Ave. to Beresford Ave.	797063		City	No	0.75	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,280	6,650	7,000	7,070	6,940	6,400	6,600	6,900	7,300	7,500	E	13,640	0.55	D	n/a	1,020
Anderson Dr./Cloverleaf Blvd. (De	Cloverleaf Blvd. to Providence Blvd.	DEL-85		City	No	1.00	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	n/c		DELT	-	-	-	3,030	3,030	-		3,251	D	10,660	0.30	C	287	960
Ariel Rd.	Beacon Light Rd. to US 1	91		County	No	1.20	2	2	35	E+W	RUA_UFH_2W_2L_U_0L	n/c	530	500	560	540	540	540	640	670	550	690	C	6,300	0.11	B	60	590
Arredondo Grant Rd.	Spring Garden Ranch Rd. to James St.	100		County	Yes	0.60	2	2	30	E+W	RUA_UFH_2W_2L_U_0L	Major Collector - Urban/Rural	1,130	1,050	1,100	1,140	1,020	1,000	-	1,030	1,150	1,230	C	6,300	0.20	B	120	590
Arredondo Grant Rd.	James St. to SR 11	101		County	Yes	2.00	2	2	35	E+W	RUA_UFH_2W_2L_U_0L	Major Collector - Rural	460	450	510	580	600	610	-	700	780	810	C	6,300	0.13	B	90	590
Atlantic Ave. (DBS)	SR A1A/Dunlawton Ave. to Phillis Ave.	115	Yes	County	Yes	0.40	4	4	35	N+S	UA_NSSRC2_2W_4L_D_WL	Minor Collector - Urban	12,400	14,380	9,170	13,680	13,050	12,920	14,770	15,190	13,540	12,970	E	30,420	0.43	D	990	2,740
Atlantic Ave. (DBS)	Phillis Ave. to Marcelle Ave.	113	Yes	County	Yes	0.75	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	10,110	12,930	8,250	11,990	11,760	11,450	11,850	12,920	12,330	9,970	E	14,740	0.68	D	770	1,330
Atlantic Ave. (DBS)	Marcelle Ave. to Major St	111	Yes	County	Yes	1.30	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	8,580	10,480	6,780	9,420	9,420	9,260	9,600	9,670	9,720	7,680	E	13,640	0.56	D	610	1,020
Atlantic Ave. (PI)	Major St to Beach St.	110	Yes	County	Yes	2.80	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,410	3,190	1,760	2,930	2,910	2,630	8,840	3,310	3,420	3,000	E	13,640	0.22	D	210	1,020
Atlantic Ave/Turtle Mound Rd.(NSB	Flagler Ave. (N. Causeway) to 6th Ave.	797084	Yes	City	Yes	1.25	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Principal Arterial - Other - Urban	3,410	3,550	2,760	3,350	3,300	3,200	3,400	3,600	3,900	2,200	E	14,740	0.15	C	n/a	1,330
Atlantic Ave/Turtle Mound Rd.	6th Ave. to 27th Ave.	122	Yes	County	Yes	1.45	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	16,840	16,200	13,430	16,510	14,560	12,960	14,450	12,070	15,900	12,720	E	37,970	0.34	C	1,040	3,410
Atlantic Ave/Turtle Mound Rd.	27th Ave. to Hiles Blvd.	120	Yes	County	Yes	1.55	2	2	45	N+S	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other - Urban	12,190	12,790	9,900	11,900	11,400	9,650	8,370	11,630	9,600	9,600	E	17,050	0.56	C	690	1,540
Atlantic Ave/Turtle Mound Rd.	Hiles Blvd. to Saxon Dr	118	Yes	County	Yes	0.45	2	2	45	N+S	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other - Urban	6,870	6,580	5,650	6,530	6,370	5,450	7,470	7,300	5,380	5,000	E	17,050	0.29	C	400	1,540
Atlantic Ave/Turtle Mound Rd.	Saxon Dr. to Turtle Mound Rd.	116	Yes	County	Yes	1.60	2	2	45	N+S	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other - Urban	7,030	5,470	5,580	6,560	6,390	5,520	4,190	6,690	4,850	5,000	E	17,050	0.29	C	390	1,540
Atlantic Ave/Turtle Mound Rd.	Turtle Mound Rd. to Canaveral Nat'l Par	1872	Yes	County	Yes	7.65	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Principal Arterial - Other - Urban	2,740	2,150	2,230	2,610	2,450	2,180	2,960	3,050	1,770	2,170	E	13,640	0.16	C	220	1,230
Barwick Rd. (DeBary)	Ft. Florida Rd. to US 17/92	127		City	No	1.50	2	2	30	N+S & E+W	UA_NSSRC2_2W_2L_U_0L	n/c	680	650	750	930	770	740	730	1,210	-	-	D	10,660	-	-	-	960
Beach/Riverside/Beach (OB)	Pine Tree Dr to Inglesa Ave.	137		County	Yes	1.10	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,490	2,220	2,000	1,950	1,830	1,840	2,010	2,160	2,140	2,650	E	13,640	0.19	C	240	1,020
Beach/Riverside/Beach (OB)	Inglesa Ave. to Wilmette Ave.	135		County	Yes	2.55	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,390	5,880	5,660	5,740	5,300	5,410	7,390	6,250	5,410	6,930	E	13,640	0.51	D	620	1,020
Beach/Riverside/Beach (OB)	Wilmette Ave. to SR 40	132		County	Yes	0.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	9,840	8,610	8,780	8,780	8,070	8,950	8,610	9,310	7,800	9,700	E	13,640	0.71	D	810	1,020
Beach/Riverside/Beach (OB)	SR 40 to Division Ave.	131		County	Yes	0.60	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,770	7,290	6,860	6,800	6,620	7,280	6,700	8,530	6,940	8,090	E	13,640	0.59	D	710	1,020
Beach/Riverside/Beach (HH)	Division Ave. to LPGA Blvd.	1632		City	No	1.60	2	2	25	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,400	5,000	4,930	5,050	4,570	4,950	-	-	-	-	E	13,640	-	-	-	1,020
Beach/Riverside/Beach (HH)	LPGA Blvd. to 5th St	130		City	No	0.20	2	2	25	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,060	4,600	4,920	4,960	4,740	5,150	-	-	-	-	E	13,640	-	-	-	1,020
Beach/Riverside/Beach (HH)	5th St to SR 430/Mason	130		City	No	0.20	4	4	25	N+S	UA_NSSRC2_2W_4L_U_0L	Major Collector - Urban	5,060	4,600	4,920	4,960	4,740	5,150	-	-	-	-	E	22,820	-	-	-	2,060
Beacon Light Rd.	Volco Rd. to Ariel Rd.	141		County	Yes	1.25	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	360	370	430	370	380	410	390	500	520	460	C	6,300	0.07	B	40	590
Beacon Light Rd.	Ariel Rd. to Halifax Ave.	140		County	Yes	2.75	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	170	190	190	210	170	180	190	240	250	240	C	6,300	0.04	B	20	590
Bellevue Ave. Extension	CR 415/Tomoka Farms Rd to Williamso	151		County	Yes	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	5,450	5,470	4,970	5,010	5,290	5,290	6,210	5,520	6,100	7,310	E	13,640	0.54	D	570	1,020
Bellevue Ave. Extension	Williamson Blvd to SR 483/Clyde Morris	153		County	Yes	2.50	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	2,560	2,950	2,760	2,410	2,570	2,880	2,540	3,250	3,160	4,350	E	13,640	0.32	C	430	1,230
Bellevue Ave. (DAY)	Clyde Morris Blvd. to Nova Rd.	798076		City	No	0.70	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,460	7,640	7,100	7,000	7000.00	7,900	8,300	8,700	3,600	3,700	D	10,660	0.35	D	n/a	960
Bellevue Ave. (DAY)	Nova Rd. to US 1	798076		City	No	1.20	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,780	7,000	7,100	7,000	7000.00	7,900	8,300	8,700	3,600	3,700	D	10,660	0.35	D	n/a	960
Beresford Ave.	Beresford Rd. to Fatio Rd	161		County	Yes	0.70	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,290	1,300	1,280	1,340	1,340	820	1,320	1,560	2,110	1,810	E	13,640	0.13	C	180	1,020
Beresford Ave.	Fatio Rd. to SR 15A	162		County	Yes	1.30	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,760	3,600	3,590	3,720	3,540	3,750	3,240	3,440	4,160	4,320	E	13,640	0.32	C	330	1,020
Beresford Ave.	SR 15A to US 17/92	164		County	Yes	1.75	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	4,700	4,290	4,810	4,760	4,740	4,130	-	4,780	5,210	5,070	E	13,640	0.37	C	430	1,020
Beresford Ave.	US 17/92 to Amelia Ave	165		County	Yes	0.25	2	2	35	E+W	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban	9,590	9,260	9,700	9,520	9,750	9,520	9,490	10,410	10,480	12,250	E	14,740	0.83	D	1,120	1,330
Beresford Ave.	Amelia Ave. to Hill Ave.	167		County	Yes	1.00	2	2	40	E+W	UA_NSSRC1_2W_2L_D_WL	Major Collector - Urban	5,650	5,400	5,600	5,970	6,070	5,710	5,280	5,710	7,090	7,930	E	17,900	0.44	C	690	1,620
Beresford Ave.	Hill Ave. to Blue Lake Ave.	169		County	Yes	1.35	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	n/c	3,250	3,330	2,980	3,300	3,460	3,240	-	3,780	4,440	5,170	E	13,640	0.38	C	460	1,230
Beresford Ave.	Blue Lake Ave. to MLK (Kepler Rd.)	171		County	Yes	0.80	0	0	40	E+W	UA_NSSRC1_2W_2L_U_0L	n/c	-	-	-	-	-	-	-	-	-	-	E	13,640	-	-	-	-
Beresford Ave.	MLK (Kepler Rd.) to SR 44	172		County	Yes	0.75	0	0	40	E+W	UA_NSSRC1_2W_2L_U_0L	n/c	-	-	-	-	-	-	-	-	-	-	E	13,640	-	-	-	-
Beresford Rd.	Old New York Ave. to Beresford Ave.	183		County	No	0.30	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,890	1,860	1,990	2,050	1,890	2,100	2,130	2,640	2,620	2,980	E	13,640	0.22	C	290	1,020
Beresford Rd.	Beresford Ave. to Fatio Rd.	182		County	No	1.30	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,050	920	1,050	1,060	950	1,120	1,150	1,370	1,370	1,630	E	13,640	0.12	C	160	1,020
Beresford Rd.	Fatio Rd. to Spring Garden Ave.	181		County	No	0.75	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	680	720	670	710	630	670	-	850	780	690	E	13,640	0.05	C	50	1,020
Beresford Rd.	Spring Garden Ave. to SR 15A	180		County	No	0.40	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	860	500	470	940	890	860	-	3,520	1,000	5,270	E	13,640	0.39	D	440	1,020
Big Tree Rd.	Clyde Morris Blvd. to Nova Rd.	192		County	Yes	1.10	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	8,630	7,940	7,700	8,080	7,200	7,670	5,680	8,750	5,850	6,520	E	13,640	0.48	D	570	1,020
Big Tree Rd.	Nova Rd. to Magnolia Ave.	193		County	Yes	0.40	2	2	35	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	13,150	12,830	12,230	11,460	11,040	11,350	11,820	13,740	13,190	13,990	E	14,740	0.95	D	1,200	1,330
Big Tree Rd.	Magnolia Ave. to Kenilworth Ave.	195		County	Yes	0.45	3	3	35	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	11,180	11,310	10,850	10,160	9,290	10,010	9,970	12,190	11,380	11,860	E	14,740	0.80	D	1,020	1,330
Big Tree Rd.	Kenilworth Ave. to US 1	196		County	Yes	0.55	3	3	35	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	8,190	7,010	7,270	6,790	6,570	6,970	8,930	8,880	8,110	8,640	E	14,740	0.59	D	700	1,330
Bill France Blvd. (DAY)	Clyde Morris Blvd. to Mason Ave.	202		City	No	0.38	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Collector - Urban	5,750	5,850	5,230	4,970	5,140	5,030	-	-	-	-	D	35,820	0.00	A		3,220
Bill France Blvd. (DAY)	Mason Ave. to Dunn Ave.	201		City	No	0.63	4	4	40	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Collector - Urban	8,930	8,930	7,960	7,790	7,950	8,160	-	-	-	-	D	35,820	0.00	A		3,220
Bill France Blvd. (DAY)	Dunn Ave. to US 92	200		City	No	0.60	4	4	35	N+S	UA_NSSRC2_2W_4L_U_WL	Minor Collector - Urban	10,260	11,410	10,250	10,750	11,270	11,270	11,300	11,800	12,200	12,300	D	27,700	0.44	C	n/a	2,500
Blackburn Rd.	CR 3 to Emporia Rd	211		County	No	1.25	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	730	560	550	550	550	560	640	650	580	590	C	6,300	0.09	B	60	590

* 2014 AADT's for City of Deltona Port Orange are 2015 AADT's

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
Blackwelder Rd.	Lake Winona Rd. to SR 11	221		County	No	3.25	2	2	35	E+W	RUA_UFH_2W_2L_U_0L	n/c	240	190	180	180	170	170	220	210	150	210	C	6,300	0.03	B	20	590
Blue Lake Ave.	Plymouth Ave. to Minnesota Ave.	237		County	Yes	1.00	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	5,090	5,100	5,780	5,380	5,200	5,670	5,680	5,790	6,750	7,750	E	13,640	0.57	C	760	1,230
Blue Lake Ave.	Minnesota Ave. to SR 44	236		County	Yes	0.55	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,920	3,760	4,330	4,190	4,060	4,500	3,880	4,200	5,380	4,920	E	13,640	0.36	C	500	1,020
Blue Lake Ave.	SR 44 to Voorhis Ave.	235		County	Yes	0.25	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,260	3,200	3,480	3,520	3,370	3,520	3,550	3,570	3,900	4,560	E	13,640	0.33	C	440	1,020
Blue Lake Ave.	Voorhis Ave. to Beresford Ave.	234		County	Yes	0.75	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,950	3,940	4,180	4,310	4,010	3,750	4,480	4,420	4,610	5,290	E	13,640	0.39	D	520	1,020
Blue Lake Ave.	Beresford Ave.. to Taylor Rd.	232		County	Yes	1.05	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	4,970	4,890	5,200	5,730	5,440	5,820	5,080	5,770	6,910	8,240	E	13,640	0.60	C	770	1,230
Blue Lake Ave.	Taylor Rd. to Orange Camp Rd.	231		County	Yes	1.05	2	2	45	N+S	UA_NSSRC1_2W_2L_U_WL	Major Collector - Urban	4,190	4,130	4,110	4,250	3,980	4,180	-	4,660	5,140	4,750	E	17,050	0.28	C	470	1,540
Blue Springs Av (West)	Sparkman Dr to Lawton Dr	239		County	No	0.60	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	7,710	6,120	5,830	5,410	5,080	5,460	4,020	4,200	5,920	5,600	E	13,640	0.41	D	500	1,020
Brownlee Rd.	Raulerson Rd. #1 to Raulerson Rd.	240		County	No	1.70	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	n/c	100	260	140	180	180	190	160	180	170	190	C	6,300	0.03	B	20	590
Captain Dr. (Deltona)	Lake Helen-Osteen Rd. to Snow Dr	DLT-15.000		City	No	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	n/c		-	-	-	-	-	-	-	-	-	E	13,640	-	-		1,020
Captain Dr. (Deltona)	Snow Dr to Courtland Blvd.	DLT-15.010		City	No	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	n/c		-	-	-	-	-	-	-	-	-	E	13,640	-	-		1,020
Cardinal Blvd.	SR 421/Dunlawton Ave. to Demotte Ave	245			No	0.15	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban							1,280	1,690	1,110	1,110	E	13,640	0.08	C	100	1,020
Cardinal Blvd.	Demotte Ave. to Marcelle Ave	260		County	No	0.90	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	4,630	4,830	5,090	5,160	4,740	4,740	5,230	7,190	5,030	5,190	E	13,640	0.38	C	430	1,020
Cardinal Blvd.	Marcelle Ave to Major St.	261		County	No	1.00	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	940	940	790	870	730	820	880	1,330	810	690	E	13,640	0.05	C	60	1,020
Carter Rd.	SR 11 to Marsh Rd.	270		County	No	1.75	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	n/c	1,470	1,540	1,400	1,460	1,420	1,520	-	1,700	1,700	1,800	E	13,640	0.13	C	170	1,230
Cassadaga Rd.	W. Volusia Bltwy. to Macy Ave.	280		County	Yes	1.80	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,170	2,100	1,970	2,190	2,010	1,900	2,260	2,200	2,500	2,400	E	13,640	0.18	C	210	1,230
Catalina Blvd. (Deltona)	Wolfpack Run to Howland Blvd.	DLT-20.010		City	No	1.00	2	2	35	N+S	UA_OCCRAC1_2W_2L_U_0L	n/c		-	-	-		3,060	3,060			3,062	D	10,660	0.29	C	313	960
Catalina Blvd. (Deltona)	Howland Blvd. to Sixma Rd.	DLT-20.020		City	No	0.50	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	11,700	12,590	12,590			10,764	D	10,660	1.01	E	1,002	960
Catalina Blvd. (Deltona)	Sixma Rd. to Lake Helen-Osteen Rd.	DLT-20.030		City	No	0.40	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	9,780	10,630	10,630			9,674	D	10,660	0.91	D	856	960
Clara Ave.	Beresford Ave. to New Hampshire Ave.	303		County	No	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,350	1,910	2,070	2,040	2,270	2,200	-	2,350	3,050	2,860	E	13,640	0.21	C	260	1,020
Clara Ave.	New Hampshire Ave. to SR 15A	301		County	No	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,410	1,540	1,640	1,640	1,850	1,870	-	1,820	2,100	2,050	E	13,640	0.15	C	180	1,020
Clifton Rd.	Lake Winona Rd. to SR 11	311		County	No	1.70	2	2	30	E+W	RUA_UFH_2W_2L_U_0L	n/c	200	180	190	160	170	160	170	230	170	210	C	6,300	0.03	B	20	590
Cloverleaf Blvd./Anderson Dr.	Deltona Blvd. to Anderson Dr.	DLT-25.000		City	No	1.00	2	2	30	N+S	UA_OCCRAC1_2W_2L_U_0L	n/c		-	-	-						2,360	D	10,660	0.22	C	212	960
Clyde Morris Blvd.	SR 40 to Hand Ave	348		County	Yes	0.80	4	4	35	N+S	UA_NSSRC2_2W_4L_D_WL	Principal Arterial - Other - Urban	12,220	13,030	12,340	11,940	11,230	11,670	12,230	12,130	12,460	14,400	E	30,420	0.47	D	1,390	2,740
Clyde Morris Blvd.	Hand Ave. to LPGA Blvd.	343		County	Yes	1.50	4	4	50	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	11,970	13,000	14,070	13,560	12,280	13,520	13,440	15,250	15,620	15,440	E	37,970	0.41	C	1,280	3,410
Clyde Morris Blvd.	LPGA Blvd. to Bill France Blvd.	341		County	Yes	1.25	4	4	50	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	12,660	13,690	13,450	12,880	12,290	13,370	14,540	13,480	15,910	16,280	E	37,970	0.43	C	1,260	3,410
Clyde Morris Blvd.	Bill France Blvd. to Mason Ave.	338		County	Yes	0.60	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	12,610	13,630	13,140	12,310	11,990	12,960	13,930	14,960	14,750	17,520	E	37,970	0.46	C	1,350	3,410
Clyde Morris Blvd./SR 483	SR 430/Mason Ave. to US 92	5182		FDOT	Yes	1.20	4	4	45	N+S	UA_SSAC1_2W_4L_U_WL	Principal Arterial - Other - Urban	17,700	18,300	20,000	18,100	18,900	20,000	20,000	20,500	21,000	20,300	D	37,800	0.54	C	1,624	3,400
Clyde Morris Blvd./SR 483	US 92 to Beville Rd.	5193		FDOT	Yes	2.00	4	4	45	N+S	UA_SSAC1_2W_4L_U_WL	Principal Arterial - Other - Urban	26,500	31,000	30,500	27,000	26,000	32,500	32,000	29,500	32,000	27,000	D	37,800	0.71	C	2,213	3,400
Clyde Morris Blvd.	Beville Rd. to Big Tree Rd.	337		County	Yes	0.90	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	23,350	23,290	24,600	22,880	21,790	23,460	21,760	23,500	24,140	24,280	E	37,970	0.64	C	1,970	3,410
Clyde Morris Blvd.	Big Tree Rd. to Madeline Ave.	335		County	Yes	1.00	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	21,970	23,010	24,200	22,260	20,800	22,910	25,110	20,770	24,230	21,490	E	37,970	0.57	C	1,810	3,410
Clyde Morris Blvd.	Madeline Ave. to Willow Run Blvd.	333		County	Yes	1.30	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	21,200	22,130	22,750	21,460	20,000	21,710	20,770	22,480	23,240	24,390	E	37,970	0.64	C	1,980	3,410
Clyde Morris Blvd.	Willow Run Blvd. to SR 421/Dunlawton A	332		County	Yes	0.65	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	19,810	19,890	21,310	19,060	18,420	19,280	21,080	21,990	20,230	21,070	E	37,970	0.55	C	1,650	3,410
Clyde Morris Blvd.	SR 421/Dunlawton Ave to Taylor Rd.	330		County	Yes	0.95	2	2	40	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	10,300	10,530	10,060	9,900	9,190	9,390	8,810	11,220	10,440	10,520	E	17,050	0.62	C	880	1,540
Commonwealth Blvd.	Spruce Creek Rd. to Orange Ave.	360		County	No	0.55	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	5,210	5,380	5,250	5,450	5,220	5,180	5,460	5,450	5,530	5,430	E	13,640	0.40	D	420	1,020
Commonwealth Blvd.	Orange Ave. to US 1	361		County	No	0.35	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	3,460	3,590	3,670	3,540	3,530	3,620	3,890	3,920	3,840	3,680	E	13,640	0.27	C	310	1,020
CR 3	US 17 to Washington Ave.	386		County	Yes	2.20	2	2	35	N+S	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	1,220	1,200	1,040	1,100	1,060	1,250	1,160	1,330	1,100	1,140	C	12,300	0.09	B	100	1,160
CR 3	Washington Ave. to Emporia Rd	384		County	Yes	1.20	2	2	30	N+S	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	1,980	1,870	1,650	1,680	1,660	1,580	1,750	2,190	2,300	2,130	C	12,300	0.17	B	170	1,160
CR 3	Emporia Rd to SR 40	382		County	Yes	3.40	2	2	45	N+S	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	880	760	700	680	720	690	-	890	1,030	1,060	C	12,300	0.09	B	80	1,160
CR 3	SR 40 to Lake Winona Rd.	380		County	Yes	5.04	2	2	35	N+S	RDA_UFH_2W_2L_U_0L	n/c	680	690	670	610	680	680	-	870	850	910	C	12,300	0.07	B	90	1,160
CR 3	Lake Winona Rd. to Ponce DeLeon Blvd	380		County	Yes	0.45	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	680	690	670	610	690	680	-	870	850	910	E	12,740	0.07	B	90	1,230
CR 15A	US 17 to Airport Rd.	440		County	Yes	0.90	2	2	50	N+S	UA_UFH_2W_2L_U_0L	Minor Arterial - Urban	4,380	4,300	4,220	4,160	3,980	4,120	-	4,770	4,810	4,720	E	24,975	0.19	B	400	2,240
CR 15A	Airport Rd. to SR 11	441		County	Yes	1.25	2	2	40	E+W	UA_UFH_2W_2L_U_0L	Minor Arterial - Urban	2,230	2,150	2,190	2,060	2,070	2,130	-	2,680	2,610	2,480	E	24,975	0.10	B	210	2,240
CR 92 (Intn'l Spdwy Blvd.)	SR 15A to Stone St.	450	Yes	County	Yes	0.25	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	12,350	12,040	11,970	11,770	12,070	11,940	13,310	14,620	14,060	13,620	E	37,970	0.36	C	1,050	3,410
CR 92 (Intn'l Spdwy Blvd.)	Stone St. to US 17/92	452	Yes	County	Yes	0.75	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Principal Arterial - Other - Urban	15,630	14,870	14,370	14,000	14,510	13,800	15,230	16,440	15,250	13,230	E	30,420	0.43	D	1,040	2,740
CR 305 (Bunnell Rd.)	US 17 to Cowart Rd.	460		County	Yes	1.50	2	2	50	E+W	RUA_UFH_2W_2L_U_0L	Major Collector - Rural	1,660	1,220	1,490	1,420	1,360	1,460	1,560	1,790	1,750	1,850	C	6,300	0.29	B	170	590
CR 305 (Bunnell Rd.)	Cowart Rd. to Flagler Co.	461		County	Yes	3.00	2	2	50	E+W	RUA_UFH_2W_2L_U_0L	Major Collector - Rural	1,140	710	990	890	910	990	-	1,370	1,270	1,360	C	6,300	0.22	B	150	590
Courtland Blvd. (Deltona)	Beckwith St. to Haulover Blvd.	DLT-30.010		City	No	1.00	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban		-	-	-	2,010	2,600	2,600			4,026	D	12,740	0.32	C	365	1,150
Courtland Blvd. (Deltona)	Haulover Blvd. to Elkcam Blvd	DLT-30.030		City	No	1.50	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban		-	-	-	4,570	4,620	4,620			3,420	D	12,740	0.27	C	380	1,150
Courtland Blvd. (Deltona)	Elkcam Blvd. to end of road (Puerto Rico	DLT-30.040		City	No	0.75	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban		-	-	-	1,160	1,500	1,500			1,732	D	10,660	0.16	C	162	960
Courtland Blvd. (Deltona)	Wavecrest St. to Newmark Dr.	DLT-30.050		City	No	0.25	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban		-	-	-	1,280	1,440	1,440			1,622	D	10,660	0.15	C	164	960
Courtland Blvd. (Deltona)	Newmark Dr. to Howland Blvd	DLT-30.070		City	No	1.00	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban		-	-	-	2,400	2,400	2,400			3,025	D	10,660	0.28	C	262	960
Courtland Blvd. (Deltona)	Howland Blvd. to India Blvd	DLT-30.090		City	No	1.20	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	6,470	6,690	6,690			6,866	D	10,660	0.64	D	642	960
Courtland Blvd. (Deltona)	India Blvd. to Ft Smith Blvd	DLT-30.100		City	No	0.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	8,000	8,550	8,550			8,572	D	10,660	0.80	D	779	960
Courtland Blvd. (Deltona)	Ft Smith Blvd. to Doyle Rd	DLT-30.130		City	No	1.80	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban		-	-	-	6,080	6,570	6,570			6,274	D	12,740	0.49	C	569	1,150
Courtland Blvd. (Deltona)	Doyle Rd. to Enterprise-Osteen Rd.	DLT-30.140		City	No	0.90	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	1,600	1,760	1,760			1,853	D	10,660	0.17	C	179	960
Cowart Rd.	Bunnell Rd to Little Brown Church Rd.	430		County	No	2.05	2	2	40	N+S	RUA_UFH_2W_2L_U_0L	n/c	280	310	260	230	220	250	230	250	290	320	C	6,300	0.05	B	30	590
Cow Creek Rd.	SR 442 to Volco Rd.	420		County	Yes	3.50	2	2	50	N+S	RUA_UFH_2W_2L_U_0L	n/c	750	720	750	740	760	850	840	860	800	900	C	6,300	0.14	B	80	590
Daugharty Rd.	SR 11 to Marsh Rd.	472		County	No	0.95	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	540	610	550	550	510	580	-	760	720	700	C	6,300	0.11	B	70	590
Daugharty Rd. (S. End)	Marsh Rd. to SR 11	470		County	Yes	0.80	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	n/c	520	500	510	510	490	520	-	560	500	520	C	6,300	0.08	B	50	590
Deltona Blvd. (Deltona)	Normandy Blvd. to Cloverleaf Blvd./Ande	DLT-35.000		City	No	1.25	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Major Collector - Urban		-	-	-	11,420	11,510	11,510			11,262	D	29,160	0.39	C	2,031	2,630
Deltona Blvd. (Deltona)	Cloverleaf Blvd./Anderson Dr. to Enterpr	DLT-35.030		City	No	0.50	4	4	35	N+S	UA_NSSRC2_2W_4L_D_WL	Major Collector - Urban		-	-	-	14,270	14,990	14,990			9,994	D	29,160	0.34	C	831	2,630
Deltona Blvd. (Deltona)	Enterprise Rd. to DeBary Ave	DLT-35.040		City	No	0.85	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban		-	-	-	9,320	9,670	9,670			10,154	D	13,990	0.73	D	923	1,260
Demotte Ave.	Peninsula Dr. to Cardinal Blvd	500		County	No	0.20	2	2	25	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	3,900	4,250	3,940	4,480	4,050	4,120	4,690	6,270	4,610	4,740	E	13,640	0.35	C	380	1,020
Derbyshire Rd.	Flomich St. to LPGA Blvd.	512		County	Yes	0.75	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,420	7,680	7,930	7,470	7,320	7,280	6,040	8,020	7,300	8,790	E	13,640	0.64	D	760	1,020
Derbyshire Rd.	LPGA Blvd. to SR 430/Mason Ave.	511		County	No	1.45	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,400	6,160	5,950	5,980	5,870	6,130	6,330	6,590	6,410	8,230	E	13,640	0.60	D	690	1,020
Dirksen/DeBary/Doyle	US 17/92 to Sunrise Blvd.	520		County	Yes	1.75	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	6,330	6,270	6,910	6,230	6,190	6,680	7,780	10,270	8,050	8,290	E	18,300	0.45	C	940	2,060
Dirksen/DeBary/Doyle	Sunrise Blvd to WB I-4 Ramps	521		County	Yes	0.20	4	4	45	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	10,980	10,720	11,180	10,690	9,980	10,660	10,750	14,400	14,220	13,400	E	30,420	0.44	D	1,400	2,740
Dirksen/DeBary/Doyle	WB I-4 Ramps to EB I-4 Ramps	522		County	Yes	0.20	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	18,470	17,940	18,660	17,850	17,380	17,850	19,720	22,090	22,200	22,150	E	30,420	0.73	D	1,730	2,740
Dirksen/DeBary/Doyle	I-4 to Deltona Blvd.	480		County	Yes	0.10	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	26,450	25,730	26,830	26,260	25,480	24,950	31,470	27,550	36,170	29,000	E	30,420	0.76	D	1,910	2,740
Dirksen/DeBary/Doyle	Deltona Blvd. to Enterprise St.	481		County	Yes	0.65	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	17,680	17,220	17,190	17,630	17,240	17,240	19,190	20,870	23,000	29,000	E	30,420	0.58	D	1,630	2,740
Dirksen/DeBary/Doyle	Enterprise St. to Main St.	482		County	Yes	0.15	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	16,970	22,090	23,180	23,030	22,400	24,130	25,060	27,050	29,020	29,000	E	30,420	0.77	D	1,890	2,740
Dirksen/DeBary/Doyle	Main St. to Providence Blvd.	484		County	Yes	0.80	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	18,560	19,280	20,230	21,260	20,460	20,600	23,820	24,850	26,230	29,000	E	30,420	0.74	D	1,880	2,740
Dirksen/DeBary/Doyle	Providence Blvd. to Garfield Rd.	485		County	Yes	1.20	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	11,570	10,670	11,700	12,400	11,890	11,950	13,120	13,670	14,140	15,000	E	28,200	0.53	D	1,340	2,530
Dirksen/DeBary/Doyle	Garfield Rd. to Saxon Blvd.	530		County	Yes	1.50	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	9,670	7,590	9,420	9,580	9,220	9,240	9,660	10,300	10,970	10,520	E	28,200	0.37	D	920	2,530
Dirksen/DeBary/Doyle	Saxon Blvd. to Courtland Blvd.	531		County	Yes	2.55	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	8,870	8,720	7,880	8,020	7,800	7,670	8,860	8,910	9,940	9,080	E	28,200	0.32	C	780	2,530
Dirksen/DeBary/Doyle	Courtland Blvd. to SR 415	533		County	Yes	1.50	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	6,370	5,800	6,020	5,950	5,680	5,450	5,330	6,770	7,040	6,590	E	28,200	0.23	C	580	2,530
Dunn/George Engram/Fairview/Ma	Tomoka Farms Rd. to Williamson Blvd.	716		County	Yes	0.75	2	2	40	E+W	UA_NSSRC1_2W_2L_U_WL	Major Collector - Urban	-	-	1,220	1,660	1,800	2,350	3,020	3,720	3,540	4,780	E	17,050	0.28	C	470	1,540
Dunn/George Engram/Fairview/Ma	Williamson Blvd. to Bill France Blvd.	717		County	Yes	1.00	2	2	40	E+W	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	6,140	6,150	5,910	6,530	6,760	6,940	5,870	8,380	9,160	8,290	E	17,050	0.49	C	820	1,540

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
Dunn/George Engram/Fairview/Ma	Bill France Blvd. to Clyde Morris Blvd.	718(DB-54)		County	Yes	0.85	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	12,430	12,740	11,350	11,530	11,350	12,080		12,880	10,510	14,510	E	14,040	1.03	F	1,180	1,270
Dunn/George Engram/Fairview/Ma	Clyde Morris Blvd. to Nova Rd.	719(DB-46)		County	Yes	1.00	4	4	40	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	11,410	11,590	10,550	10,400	10,150	10,730	10,640	10,870	10,800	11,500	E	37,970	0.30	C	930	3,410
Dunn/George Engram/Fairview/Ma	Nova Rd. to US 1	720		County	Yes	1.20	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	11,790	12,090	10,430	10,310	10,230	10,830	9,640	10,550	10,750	11,790	E	30,420	0.39	C	970	2,740
Dunn/George Engram/Fairview/Ma	US 1 to Beach St	631		County	Yes	0.40	2	2	30	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	5,500	5,670	5,570	5,060	5,380	4,990	5,880	5,350	5,620	6,080	E	14,040	0.43	C	500	1,270
Dunn/George Engram/Fairview/Ma	Beach St. to Peninsula Dr.	1170		County	Yes	0.60	2	2	30	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	6,220	6,710	6,980	6,330	6,560	6,190	8,020	7,190	7,440	8,410	E	14,040	0.60	D	680	1,270
Dunn/George Engram/Fairview/Ma	Peninsula Dr. to SR A1A	1171		County	Yes	0.35	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	5,360	5,870	6,010	5,700	5,540	5,210	4,210	6,540	6,990	6,350	E	13,640	0.47	D	530	1,020
Elkcam Blvd. (Deltona)	Normandy Blvd. to Ft. Smith Blvd.	DLT-45.000		City	No	1.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	7,500	7,850	7,850			8,596	D	10,660	0.81	D	723	960
Elkcam Blvd. (Deltona)	Ft. Smith Blvd. to Providence Blvd.	DLT-45.010		City	No	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	6,130	6,280	6,280			6,360	D	10,660	0.60	D	538	960
Elkcam Blvd. (Deltona)	Providence Blvd. to Montecito Ave.	DLT-45.020		City	No	1.05	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	10,080	10,170	10,170			8,559	D	10,660	0.80	D	742	960
Elkcam Blvd. (Deltona)	Montecito Ave. to Howland Blvd.	DLT-45.040		City	No	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	9,930	10,230	10,230			10,013	D	10,660	0.94	D	863	960
Elkcam Blvd. (Deltona)	Howland Blvd. to Lake Helen-Osteen Rd.	DLT-45.050		City	No	0.15	2	2	35	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban		-	-	-	10,530	10,750	10,750			10,967	D	13,990	0.78	D	960	1,260
Elkcam Blvd. (Deltona)	Lake Helen-Osteen Rd to Courtland Blvd	DLT-45.060		City	No	0.70	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban		-	-	-	6,900	7,190	7,190			8,114	D	10,660	0.76	D	720	960
Elkcam Blvd. (Deltona)	Courtland Blvd. to Riverhead Dr.	DLT-45.080		City	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c		-	-	-	480	500	500			523	D	10,660	0.05	C	47	960
Emporia Rd.	SR 40 to Peterson/Blackburn	560		County	Yes	3.00	2	2	40	N+S	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	850	860	690	720	690	660	-	910	860	850	C	6,300	0.13	B	80	590
Emporia Rd.	Peterson/Blackburn to US 17	564		County	Yes	1.45	2	2	40	E+W	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	1,420	1,880	1,280	1,230	1,320	1,060	-	1,250	1,220	1,110	C	6,300	0.18	B	100	590
Enterprise Ave. (NSB)	Pioneer Tr. to Halleck St.	570		County	Yes	0.10	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,210	7,640	7,460	7,000	7,740	7,900	8,210	8,550	9,760	9,230	E	13,640	0.68	D	790	1,020
Enterprise Rd.	US 17/92 to Harley Strickland Blvd.	586		County	Yes	0.50	4	4	35	N+S	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	23,210	22,160	22,090	20,900	19,330	20,650	20,860	21,370	21,970	23,760	E	30,420	0.78	D	1,870	2,740
Enterprise Rd.	Harley Strickland Blvd. to Saxon Blvd.	585		County	Yes	0.50	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	25,340	23,250	23,670	22,790	20,710	22,110	23,120	23,900	23,240	19,220	E	37,970	0.51	C	1,510	3,410
Enterprise Rd.	Saxon Blvd. to Highbanks Rd.	584		County	Yes	1.55	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	24,490	23,470	23,460	23,750	21,590	23,790	20,550	20,510	25,710	19,820	E	37,970	0.52	C	1,530	3,410
Enterprise Rd.	Highbanks Rd. to Deltona Blvd.	582		County	Yes	0.50	4	4	35	N+S	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	14,990	12,530	15,330	14,620	14,110	15,010	15,820	14,130	16,650	16,720	E	30,420	0.55	D	1,330	2,740
Enterprise Rd.	Deltona Blvd. to Main St.	581		County	Yes	1.10	2	2	35	N+S	UA_NSSRC2_2W_2L_U_WL	n/c	6,100	7,030	7,800	7,150	7,270	7,390	7,050	8,300	8,660	9,320	E	14,040	0.66	D	790	1,270
Enterprise-Osteen Rd.	Providence to Garfield Rd	600		County	Yes	1.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,480	2,570	2,690	2,470	2,470	2,490	2,630	3,110	3,360	3,350	E	10,220	0.33	C	330	1,020
Enterprise-Osteen Rd.	Garfield Rd to Reed Ellis Rd.	601		County	Yes	1.70	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,840	1,750	1,850	1,690	1,690	1,760	1,960	2,400	2,930	2,860	E	10,220	0.28	C	310	1,020
Enterprise-Osteen Rd.	Reed Ellis Rd. to SR 415	602		County	Yes	2.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,210	1,050	1,160	1,080	1,160	1,140	1,250	1,480	1,360	1,250	E	10,220	0.12	C	120	1,020
Euclid Ave.	Grand to Fatio Rd.	610		County	No	0.25	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,220	1,190	1,190	1,080	1,150	1,030	1,130	1,190	1,310	1,300	E	13,640	0.10	C	130	1,020
Euclid Ave.	Fatio Rd. to Woodward Ave.	611		County	No	0.25	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,380	1,340	1,360	1,270	1,330	1,220	1,360	1,390	1,460	1,570	E	13,640	0.12	C	130	1,020
Euclid Ave.	Woodward Ave. to SR 15A	612		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,390	2,270	2,310	2,300	2,290	2,140	2,280	2,320	2,440	2,640	E	13,640	0.19	C	230	1,020
Euclid Ave.	SR 15A to Adelle Ave.	613		County	No	0.75	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,740	2,520	2,440	2,510	2,430	2,380	2,450	2,830	2,790	3,130	E	13,640	0.23	C	310	1,020
Euclid Ave.	Adelle Ave. to US 17/92	614		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,940	2,180	2,150	2,200	2,150	2,210	-	2,260	2,190	2,330	E	13,640	0.17	C	210	1,020
Eustace Ave. (Deltona)	Catalina Blvd. to Providence Blvd	DLT-55.010		City	No	0.85	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c		-	-	-	3,480	3,770	3,770			3,591	D	10,660	0.34	C	423	960
Flagler Ave. (NSB)	N. Causeway to Peninsula Ave.	640		FDOT	Yes	0.40	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	8,820	9,100	8,560	9,500	-	-	11,080	10,090	9,600	10,000	E	13,640	-	-	n/a	1,020
Flagler Ave. (NSB)	Peninsula Ave. to Atlantic Ave.	641		City	Yes	0.30	2	2	20	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,120	5,420	5,050	4,130	-	-	6,380	6,100	9,600	10,000	E	13,640	-	-	n/a	1,020
Flomich St.	Derbyshire Rd. to SR 5A/Nova Rd.	650		County	Yes	0.30	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	4,980	5,520	5,450	5,570	5,430	5,140	4,900	5,300	5,470	5,540	E	13,640	0.41	D	500	1,020
Flomich St.	SR 5A/Nova Rd. to US 1	798057		City	No	1.40	2	2	25	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	-	-	4,300	4,300	4,300	4,900	5,100	5,300	-	-	E	13,640	-	-	-	1,020
Fort Florida Rd. (DeBary)	Highbanks Rd. to Ft. Florida Point Rd.	797058		City	No	1.75	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,150	970	1,090	1,080	1,170	1,020	-	1,450	1,450	1,450	E	10,220	0.14	C	n/a	1,020
Fort Florida Rd. (DeBary)	Ft. Florida Point Rd. to Barwick Rd.	797057		City	No	2.25	2	2	35	N+S & E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	230	260	640	770	730	700	-	1,060	1,150	1,150	E	10,220	0.11	C	n/a	1,020
Fort Florida Rd. (DeBary)	Barwick Rd. to US 17/92	797057		City	No	0.60	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	980	960	1,340	1,350	1,260	-	1,450	1,670	1,150	1,150	E	10,220	0.11	C	n/a	1,020
Fort Smith Blvd. (Deltona)	Elkcam Blvd. to Providence Blvd	DLT-60.000		City	No	1.00	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	2,250	3,140	3,140			3,508	D	10,660	0.33	C	332	960
Fort Smith Blvd. (Deltona)	Providence Blvd. to Newmark Dr.	DLT-60.020		City	No	0.50	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban		-	-	-	10,500	11,260	11,260			16,307	D	13,990	1.17	F	1,490	1,260
Fort Smith Blvd. (Deltona)	Newmark Dr. to Normandy Blvd	DLT-60.030		City	No	0.85	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban		-	-	-	8,610	8,160	8,160			8,888	D	13,990	0.64	D	826	1,260
Fort Smith Blvd. (Deltona)	Normandy Blvd. to India Blvd	DLT-60.050		City	No	0.55	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban		-	-	-	11,570	11,990	11,990			13,074	D	13,990	0.93	D	1,110	1,260
Fort Smith Blvd. (Deltona)	India Blvd. to Courtland Blvd	DLT-60.070		City	No	2.25	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban		-	-	-	6,260	6,610	6,610			8,648	D	13,990	0.62	D	742	1,260
Fort Smith Blvd. (Deltona)	Courtland Blvd. to Howland Blvd	DLT-60.100		City	No	0.75	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	8,460	9,410	9,410			13,500	D	13,990	0.96	D	1,097	1,260
Fort Smith Blvd. (Deltona)	Howland Blvd. to SR 415	DLT-60.110		City	No	0.55	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	2,840	3,030	3,030			4,029	D	10,660	0.38	C	440	960
French Ave.	Beginning of road to Blue Springs Park	690		County	No	1.00	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	160	130	140	180	130	270	-	200	-	160	E	13,640	0.01	C	20	1,020
French Ave.	Blue Springs Park to Lawton Ave./Hamilt	691		County	No	1.25	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,340	800	520	670	480	1,260	-	710	-	1,000	E	13,640	0.07	C	100	1,020
French Ave.	Lawton Ave./Hamilton to US 17/92	694		County	Yes	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	5,970	5,320	5,660	5,240	4,480	4,870	-	4,870	-	5,180	E	13,640	0.38	C	460	1,020
Garfield Ave.	US 92 to Plymouth Ave.	702		County	Yes	0.85	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	2,230	2,240	2,310	2,220	2,100	2,280	-	2,390	2,760	3,100	E	13,640	0.23	C	260	1,020
Garfield Ave.	Plymouth Ave. to SR 44	700		County	Yes	1.00	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	2,240	2,230	2,350	2,280	1,980	1,910	-	2,430	2,270	2,400	E	13,640	0.18	C	180	1,020
Garfield Ave.	SR 44 to Beresford Ave.	698		City	No	1.00	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	-	-	2,330	2,140	2,100	2,300	-	2,090	2,400	2,550	E	13,640	0.19	C	220	1,020
Garfield Rd.	Doyle Rd. to Enterprise-Osteen Rd	711		County	Yes	0.90	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	1,590	1,530	1,860	1,680	1,530	1,550	1,670	1,900	2,130	1,850	E	13,640	0.14	C	190	1,230
Glencoe Rd.	Pioneer Tr. to SR 44	732		County	No	0.85	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,380	1,370	1,670	1,820	1,930	1,870	1,570	1,500	1,590	1,770	E	13,640	0.13	C	160	1,020
Glencoe Rd.	SR 44 to Paige Ave.	731		County	No	1.10	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	3,300	3,380	3,710	3,780	3,820	3,720	4,030	4,280	-	-	E	13,640	-	-	-	1,020
Glencoe Rd.	Paige Ave. to Taylor Rd.	730		County	No	1.50	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	1,070	1,120	1,310	1,300	1,410	1,510	1,660	1,740	1,810	2,040	E	13,640	0.15	C	190	1,230
Glenwood Rd.	Grand Ave. to SR 15A	741		County	Yes	1.60	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,980	3,980	4,210	4,170	4,030	4,040	-	4,360	4,120	4,380	E	13,640	0.32	C	380	1,020
Glenwood Rd.	SR 15A to US 17	743		County	Yes	1.25	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,260	2,190	2,140	2,140	2,050	2,000	-	2,400	2,260	2,340	E	13,640	0.17	C	210	1,020
Grand Av/CR 4053	Retta St. to Lemon St.	756		County	Yes	1.80	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	1,770	1,750	1,740	1,720	1,700	1,740	1,990	2,100	1,860	2,190	E	13,640	0.16	C	200	1,230
Grand Av/CR 4053	Lemon St. to Glenwood Rd.	754		County	Yes	1.30	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban	3,790	3,720	3,700	3,630	3,550	3,550	3,860	4,010	4,020	4,200	E	14,740	0.28	C	350	1,330
Grand Av/CR 4053	Glenwood Rd. to Plymouth Ave.	752		County	Yes	2.10	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	2,250	2,270	1,910	2,010	2,080	1,990	2,330	2,680	2,310	2,570	E	12,300	0.21	C	230	1,230
Grand Av/CR 4053	Plymouth Ave. to Minnesota Ave.	751		County	Yes	0.50	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	1,280	1,290	1,240	1,270	1,260	1,240	1,410	1,760	1,530	1,680	E	13,640	0.12	C	170	1,230
Grand Av/CR 4053	Minnesota Ave. to SR 44	750		County	Yes	0.90	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,600	2,570	2,250	1,820	2,190	2,280	2,570	3,090	3,010	3,630	E	13,640	0.27	C	340	1,020
Grand Av/CR 4053	SR 44 to Old New York Ave.	748		County	Yes	0.60	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	-	-	810	860	830	940	970	-	1,230	1,550	E	13,640	-	-	150	1,020
Graves Av/CR 4145	US 17/92 to Leavitt Ave.	770		County	Yes	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban	6,610	6,110	6,680	6,470	5,550	5,880	6,060	6,390	6,270	7,360	E	14,740	0.50	D	640	1,330
Graves Av/CR 4145	Leavitt Ave. to Veteran's Memorial Pkwy	772		County	Yes	1.20	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,450	6,770	6,780	6,520	6,510	7,060	6,780	7,970	7,410	7,560	E	13,640	0.55	D	650	1,020
Graves Av/CR 4145	Veteran's Memorial Pkwy. to Kentucky A	775		County	Yes	0.30	2	2	45	E+W	UA_NSSRC1_2W_2L_D_WL	Minor Arterial - Urban	16,590	16,840	17,570	17,140	16,750	17,160	18,780	19,180	19,190	19,590	E	17,900	1.09	F	1,600	1,620
Graves Av/CR 4145	Kentucky Ave. to Howland Blvd.	900		County	Yes	0.90	2	2	45	E+W	UA_NSSRC1_2W_2L_D_WL	Minor Arterial - Urban	12,660	11,530	13,790	11,840	12,970	13,640	14,510	15,310	14,060	15,520	E	17,900	0.87	C	1,400	1,620
Greens Dairy Rd.	SR 15A to Stone St.	780		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	120	100	120	90	100	120	-	150	200	210	E	13,640	0.02	C	30	1,020
Halifax Dr. (OB)	John Anderson Dr. to Neptune Ave.	797064		City	Yes	1.35	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,330	3,850	3,620	3,560	3,300	5,400	5,600	5,800	4,000	4,200	E	13,640	0.31	C	n/a	1,020
Halifax Dr. (OB)	Neptune Ave. to SR 40	800		City	Yes	0.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,220	5,900	6,080	5,790	-	-	-	-	-	-	E	13,640	-	-	-	1,020
Halleck St. (NSB)	Wayne Ave. to Enterprise Ave.	810		County	Yes	0.20	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,110	6,210	6,170	5,780	5,890	6,450	6,530	6,410	6,940	7,200	E	13,640	0.53	D	600	1,020
Hand Ave.	Williamson Blvd. to Clyde Morris Blvd.	830		County	Yes	1.25	2	2	50	E+W	UA_NSSRC1_2W_2L_U_WL	Major Collector - Urban	7,110	8,340	7,660	7,900	6,750	8,330	9,520	8,720	6,880	9,860	E	17,050	0.58	C	890	1,540
Hand Ave.	Clyde Morris Blvd. to Shangri La Dr.	832		County	Yes	0.75	2	2	50	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	11,880	13,510	13,220	13,090	10,230	13,950	14,870	15,370	16,690	17,010	E	13,640	1.25	F	1,380	1,230
Hand Ave.	Shangri La Dr. to Nova Rd.	833		County	Yes	0.25	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	13,750	15,150	14,880	14,320	13,350	14,950	16,320	15,820	17,270	18,250	E	37,970	0.48	C	1,490	3,410
Hand Ave. (OB)	Nova Rd. to US 1	834		City	Yes	1.90	2	2	25	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,270	7,670	8,080	5,360	-	-	-	-	-	-	E	13,640	-	-	-	1,020
Harley Strickland Blvd. (OC)	Enterprise Rd. to Veteran's Memorial Pkv	798209		City	No	1.35	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	12,110	12,770	12,390	11,850	11,760	12,700	13,200	13,800	12,000	12,400	E	14,040	0.88	D	n/a	1,270
Hazen Rd.	Mercers Fernery Rd. to Plymouth Ave.	852		County	Yes	1.50	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	630	590	720	700	800	820	680	850	910	1,020	E	13,640	0.07	C	90	1,020
Hazen Rd.	Plymouth Ave. to SR 44	850		County	Yes	1.00	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	1,130	1,130	1,050	1,240	1,250	1,400	1,480	1,680	1,680	1,980	E	13,640	0.15	C	180	1,230
Highbanks Rd. (DeBary)	Fort Florida Rd. to Westside Connector	860		City	No	1.75	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	2,260	1,880	1,810	1,840	2,120	1,760	7,880	2,900	-	-	D	12,740	-	-	-	1,150
Highbanks Rd. (DeBary)	Westside Connector to US 17/92	798004		City	No	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	10,380	9,600	10,010	9,840	9,880		7,870	11,310	-	-	D	10,660	-	-	-	960
Highbanks Rd. (DeBary)	US 17/92 to Enterprise Rd.	863		City	No	1.45	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	7,070	6,800	7,360	7,370	7,380		-	8,310	-	-	D	12,740	-	-	-	1,150
Highbridge Rd.	Walter Boardman Ln. to John Anderson	871		County	Yes	1.60	2	2	30	E+W	RDA_UFH_2W_2L_U_0L	Major Collector - Rural	2,370	2,130	1,830	2,100	1,750	2,020	2,480	2,770	2,210	2,570	C	12,300	0.21	C	230	1,090
Highbridge Rd.	John Anderson Dr. to SR A1A	872		County	Yes	0.20	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,920	1,730	1,520	1,780	1,490	1,660	2,170	2,380	2,120	2,110	E	13,640	0.15	C	190	1,020

* 2014 AADT's for City of Deltona Port Orange are 2015 AADT's

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
Hill Ave./Jacobs Rd.	US 92 to Plymouth Ave.	950		County	Yes	0.85	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	5,100	6,190	5,870	5,190	5,820	5,900	6,170	7,590	7,510	8,420	E	13,640	0.62	C	710	1,230
Hill Ave. (DeLand)	Plymouth Ave. to Minnesota Ave.	885		City	Yes	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	4,700	4,340	5,240	5,020	4,890	5,210	-	5,850	5,800	6,770	E	13,640	0.50	C	540	1,020
Hill Ave. (DeLand)	Minnesota Ave. to SR 44	798035		City	Yes	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,800	3,810	4,060	4,010	3,800	1,700	1,800	1,900	1,950	2,800	E	13,640	0.21	C	268	1,020
Hill Ave.	SR 44 to Voorhis Ave.	882		County	Yes	0.25	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,290	2,400	2,530	2,780	2,540	2,760	-	3,220	3,150	3,710	E	13,640	0.27	C	340	1,020
Hill Ave.	Voorhis Ave. to Beresford Ave.	881		County	Yes	0.75	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,080	2,130	2,310	2,370	2,200	2,510	-	2,680	2,780	2,840	E	13,640	0.21	C	280	1,020
Hill Ave.	Beresford Ave. to Taylor Rd.	878		County	Yes	1.00	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	-	-	430	480	550	820	-	1,070	1,030	1,260	E	13,640	0.09	C	120	1,020
Hontoon Rd.	Old New York Ave. to Botts Landing Rd.	891		County	No	1.15	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	2,930	2,930	3,050	2,840	2,820	2,990	3,180	3,450	3,240	3,020	C	13,640	0.22	C	250	1,090
Hontoon Rd.	Botts Landing Rd. to end of road	890		County	No	2.00	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	780	920	870	790	840	880	1,000	1,090	1,040	930	C	13,640	0.07	C	70	470
Howland Blvd.	I-4/SR 472 to Wolf Pack Run	901		FDOT	Yes	0.40	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	28,290	30,330	30,490	29,890	27,480	30,590	36,570	32,320	38,300	36,990	E	37,970	0.97	E	2,900	3,410
Howland Blvd.	Wolf Pack Run to Catalina Blvd.	903		County	Yes	1.15	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	25,260	27,640	28,010	27,440	25,280	27,770	31,520	30,270	30,040	31,480	E	37,970	0.83	C	2,530	3,410
Howland Blvd.	Catalina Blvd. to Providence Blvd.	905		County	Yes	0.35	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	19,640	21,390	22,110	21,930	20,070	22,700	23,710	23,950	25,520	23,110	E	37,970	0.61	C	1,830	3,410
Howland Blvd.	Providence Blvd. to Elkcam Blvd.	906		County	Yes	2.10	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	13,380	15,390	16,890	14,140	15,150	16,430	16,780	17,220	18,800	18,930	E	13,640	1.39	F	1,420	1,230
Howland Blvd.	Elkcam Blvd. to Lake Helen-Osteen Rd.	908		County	Yes	0.30	4	4	45/40	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	15,250	15,030	15,300	15,620	14,220	15,090	16,530	15,940	18,760	18,190	E	37,970	0.48	C	1,410	3,410
Howland Blvd.	Lake Helen-Osteen Rd. to Newmark Dr.	909		County	Yes	0.70	4	4	40	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	16,330	19,340	20,350	20,990	19,330	19,900	19,690	21,360	25,290	23,160	E	37,970	0.61	C	1,880	3,410
Howland Blvd.	Newmark Dr. to Courtland Blvd.	911		County	Yes	1.15	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	13,640	16,250	16,640	16,990	15,600	15,490	16,060	17,440	20,200	18,130	E	37,970	0.48	C	1,450	3,410
Howland Blvd.	Courtland Blvd. to Ft Smith Blvd.	913		County	Yes	1.80	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	11,570	12,820	13,280	12,920	11,770	11,240	10,990	12,000	16,230	14,620	E	37,970	0.39	C	1,170	3,410
Howland Blvd.	Ft Smith Blvd. to SR 415	915		County	Yes	0.65	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	11,580	12,770	12,650	12,180	12,530	12,960	14,030	13,600	18,230	16,400	E	37,970	0.43	C	1,480	3,410
Humphrey Blvd. (Deltona)	Newmark Dr. to India Blvd	DLT-75.000		City	No	1.50	2	2	30	N+S	UA_OCCRAC1_2W_2L_U_0L	n/c		-	-	-						2,088	E	9,180	-		196	
India Blvd. (Deltona)	Fort Smith Blvd. to Humphrey Blvd.	DLT-80.000		City	No	2.06	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban		-	-	-	3,520	4,120	4,120			4,266	D	10,660	0.40	C	357	960
India Blvd. (Deltona)	Humphrey Blvd. to Courtland Blvd.	DLT-80.010		City	No		2	2	35	E+W	UA_OCCRAC1_2W_2L_U_0L	n/c		-	-	-		4,390	4,390			5,169	D	10,660	0.48	C	455	960
Indian Lake Rd.	Tiger Bay Rd. to US 92	935		County	No	0.80	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	5,380	5,020	6,090	5,550	5,180	5,150	5,870	6,660	6,590	6,370	E	12,740	0.50	C	560	1,230
Jimmy Ann Dr. (DAY)	LPGA Blvd. to Clyde Morris Blvd.	797027		City	No	0.30	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	7,890	8,470	7,520	7,650	7,680	6,980	5,300	6,800	7,000	7,200	D	12,740	0.57	C	n/a	1,150
Jimmy Ann Dr. (DAY)	Clyde Morris Blvd. to Mason Ave.	797027		City	No	0.15	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	4,460	4,900	4,380	4,000	4,070	3,890	5,300	6,800	7,000	7,200	D	12,740	0.57	C	n/a	1,150
John Anderson Dr.	Highbridge Rd. to Lynnhurst	974		County	Yes	7.40	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	4,080	3,880	3,590	3,960	4,570	3,240	3,700	4,190	4,080	3,870	E	13,640	0.28	C	300	1,020
John Anderson Dr.	Lynnhurst to Halifax Dr	972		County	Yes	0.85	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,620	5,220	5,390	5,520	6,730	4,370	5,180	5,790	5,520	5,200	E	13,640	0.38	C	430	1,020
John Anderson Dr. (OB)	Halifax Dr. to -Neptune	798162		City	Yes	1.00	2	2	25	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	3,550	3,620	3,610	3,950	4,900	1,750	1,800	1,850	6,400	6,600	E	13,640	0.48	D	n/a	1,020
John Anderson Dr. (OB)	Neptune to SR 40	798162		City	Yes	1.00	2	2	25	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	5,550	5,110	5,060	5,930	4,900	1,750	1,800	1,850	6,400	6,600	E	13,640	0.48	D	n/a	1,020
John Anderson Hwy.	Walter Boardman Lane to Flagler Co.	990		County	Yes	1.00	2	2	5 NB / 30 S	N+S	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	1,040	960	1,000	1,140	900	950	1,150	1,190	1,170	1,200	C	12,300	0.10	B	110	1,150
Josephine St./10th St.	Old Mission Rd. to Tatum Blvd.	1000		County	Yes	0.30	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,370	6,000	5,810	5,860	5,910	5,820	4,830	6,650	6,230	5,590	E	13,640	0.41	D	430	1,020
Josephine St./10th St. (NSB)	Tatum Blvd. to US 1	1002		City	Yes	1.80	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	7,400	7,310	7,350	7,140	-	-	4,940	6,990	-	-	E	14,040	-	-	-	1,270
Kathy Dr. (N. Penin.)	John Anderson Dr. to SR A1A	1011		County	No	0.44	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	420	470	420	460	470	460	410	500	410	440	E	13,640	0.03	C	40	1,020
Kennedy Pkwy (Old SR 3)	US 1 to Park Entrance	798158		Federal	No	4.00	2	2	55	E+W	RUA_UFH_2W_2L_U_0L	Major Collector - Rural	930	1,040	700	660	900	900	950	1,000	850	850	C	6,300	0.13	B	n/a	590
Kicklighter Rd.	Macy Ave. to Lake Helen-Osteen/Prevatt	1051		County	Yes	0.75	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,770	1,930	2,080	1,810	1,690	1,680	1,820	2,020	2,100	2,190	E	13,640	0.16	C	190	1,020
Lake George Rd.	Bream Dr. to US 17	1062		County	No	3.90	2	2	30	E+W	RUA_UFH_2W_2L_U_0L	n/c	1,010	780	860	820	740	780	810	810	850	880	C	6,300	0.14	B	70	590
Lake Helen-Osteen Rd.	Kicklighter Rd. to Captain Dr.	1076		County	Yes	1.40	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	7,310	7,020	7,030	6,570	6,750	6,760	6,990	7,280	7,910	7,590	E	13,640	0.56	D	780	1,020
Lake Helen-Osteen Rd.	Captain Dr. to Catalina Blvd.	1073		County	Yes	0.40	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	6,990	7,390	7,410	7,090	6,840	7,110	7,420	7,700	7,830	8,560	E	13,640	0.63	D	750	1,020
Lake Helen-Osteen Rd.	Catalina Blvd. to Haulover Blvd.	1072		County	Yes	0.50	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	9,430	10,200	10,320	9,740	9,570	9,850	10,510	11,000	11,260	12,610	E	13,640	0.92	E	1,080	1,020
Lake Helen-Osteen Rd.	Haulover Blvd. to Elkcam Blvd.	1071		County	Yes	1.75	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	7,000	7,470	7,690	7,540	7,220	6,920	5,440	5,680	5,490	9,500	E	13,640	0.70	D	850	1,020
Lake Helen-Osteen Rd.	Elkcam Blvd. to Howland Blvd.	1070		County	Yes	0.40	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	3,440	5,490	6,140	6,050	6,060	5,920	6,140	6,360	7,430	7,800	E	13,640	0.57	D	720	1,020
Lake Helen-Osteen Rd.	Howland Blvd. to Providence Blvd.	1069		County	Yes	0.40	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	6,990	7,390	7,410	7,090	6,840	7,110	7,420	7,700	7,830	8,560	E	13,640	0.63	D	750	1,020
Children's Way/Lakeshore Dr.	Main St. to Providence Blvd.	1090		County	Yes	0.70	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	2,080	1,220	1,000	960	900	870	940	1,000	1,000	840	E	13,640	0.06	C	90	1,020
Lakeshore Dr.	Providence Blvd. to Garfield Rd	1092		County	Yes	0.45	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	2,860	2,680	2,590	2,610	2,520	2,570	2,820	3,170	3,180	2,970	E	13,640	0.22	C	280	1,020
Lakeview Dr.	New York Ave. to Main St.	1101		County	No	0.25	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,080	1,100	1,130	1,190	1,110	1,140	1,250	1,150	1,420	1,170	C	13,640	0.09	C	110	470
Lakeview Dr.	Main St. to Ohio Ave.	1100		County	Yes	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,300	2,900	2,600	2,790	2,740	3,280	3,690	3,280	4,330	4,390	C	13,640	0.32	C	470	470
Lake Winona Rd.	SR 40 to Blackwelder Rd.	1082		County	Yes	3.70	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	180	180	150	120	140	160	-	200	170	190	C	6,300	0.03	B	20	590
Lake Winona Rd.	Blackwelder Rd. to US 17	1081		County	Yes	2.25	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	910	860	880	800	800	980	-	1,030	980	1,110	C	6,300	0.18	B	100	590
Lake Winona Rd.	US 17 to CR 3	1080		County	Yes	0.15	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	n/c	180	160	160	170	170	220	-	350	290	260	C	6,300	0.04	B	20	590
Lemon Bluff Rd.	SR 415 to end of road	1111		County	No	4.60	2	2	45	E+W	RUA_UFH_2W_2L_U_0L	n/c	960	990	1,000	980	880	820	1,010	1,140	1,030	1,100	C	6,300	0.17	B	90	590
Little Brown Church Rd.	US 17 to Cowart Rd.	1120		County	No	0.65	2	2	40	E+W	RUA_UFH_2W_2L_U_0L	n/c	630	640	510	460	450	560	520	490	600	630	C	6,300	0.10	B	50	590
LPGA Blvd. (DB)	US 92 to International Golf Dr	1130		County	Yes	2.75	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	6,180	6,590	5,830	6,440	6,250	6,840	6,680	8,990	9,280	10,210	E	26,900	0.38	C	830	2,420
LPGA Blvd. (DB)	International Golf Dr to Tymber Creek R	1131		County	Yes	2.60	2	2	55	E+W	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	7,740	7,800	8,390	8,620	8,270	9,290	9,540	11,170	11,910	13,730	E	26,900	0.51	C	1,110	2,420
LPGA Blvd. (DB)	Tymber Creek Rd to Tomoka Farms Rd	1131		County	Yes	2.60	2	2	55	E+W	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	7,740	7,800	8,390	8,620	8,270	9,290	9,540	11,170	11,910	13,730	E	17,050	0.81	C	1,110	1,540
LPGA Blvd. (DB)	Tomoka Farms Rd to I-95	1133a	Yes	County	Yes	0.65	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	23,330	24,180	23,210	24,500	24,420	24,130	27,030	27,390	31,150	30,500	E	37,970	0.69	C	2,060	3,410
LPGA Blvd. (DB)	I-95 to Williamson Blvd	1133b -NEW	Yes	County	Yes	0.65	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	23,330	24,180	23,210	24,500	24,420	24,130	27,030	27,390	31,150	38,400	E	37,970	0.69	C	2,060	3,410
LPGA Blvd. (DB)	Williamson Blvd. to Clyde Morris Blvd.	1134	Yes	County	Yes	0.50	4	4	50	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	19,490	21,030	19,240	20,640	21,180	20,790	24,300	23,320	25,810	26,740	E	37,970	0.44	C	2,190	3,410
LPGA Blvd. (DB)	Clyde Morris Blvd. to Jimmy Ann Dr.	1136	Yes	County	Yes	1.10	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	14,400	13,850	14,080	15,410	15,650	15,740	17,110	18,490	18,700	21,400	E	37,970	0.59	C	1,350	3,410
LPGA Blvd. (DB)	Jimmy Ann Dr. to Derbyshire Rd.	1137	Yes	County	Yes	0.25	2	4	35	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	16,430	15,700	15,960	17,300	18,010	17,870	19,580	20,370	19,570	17,820	E	37,970	0.47	C	1,800	3,410
LPGA Blvd. (CO)	Derbyshire Rd. to SR5A/Nova Rd.	1139	Yes	County	Yes	0.55	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	12,930	13,080	11,140	13,160	14,000	14,000	16,000	16,300	13,090	10,670	E	30,420	0.35	C	1,440	2,740
LPGA Blvd. (HH)	SR5A/Nova Rd. to US 1	1141	Yes	County	Yes	1.10	2	2	30	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	9,850	10,260	9,350	9,570	9,830	9,730	9,060	10,990	9,210	10,670	E	14,040	0.76	D	890	1,270
Macy Ave.	Ohio St. to Cassadaga Rd.	1150		County	Yes	0.75	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,230	1,350	1,210	1,230	1,170	1,130	1,350	1,400	1,500	1,640	C	13,640	0.12	C	160	470
Madeline Ave. (PO)	Williamson Blvd. to Clyde Morris Blvd	PO1304		City	Yes	1.30	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	8,910	9,600	9,930	9,980	-	11,549	-	-	-	-	E	14,040	-	-	-	1,270
Madeline Ave. (PO)	Clyde Morris Blvd. to SR5A/Nova Rd.	PO1303		City	Yes	1.30	2	2	25	E+W	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	6,460	6,560	6,370	6,560	-	8,000	-	-	-	-	E	14,040	-	-	-	1,270
Madeline Ave. (PO)	SR5A/Nova Rd. to Sauls St.	PO1301		City	Yes	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	4,210	4,760	4,510	4,440	-	4,860	-	-	-	-	E	14,040	-	-	-	1,270
Main St. (Enterprise)	Jacob Brock Ave to DeBary Ave.	1174		County	Yes	0.35	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	4,880	2,830	2,920	2,660	2,370	2,370	1,830	2,340	2,750	2,430	E	13,640	0.18	C	220	1,020
Main St. (Enterprise)	DeBary Ave. to Lakeshore Dr.	1173		County	Yes	0.20	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Urban Local	2,540	-	-	-	-					-	E	13,640	-	-		
Main St. (Harbor Oaks)	Riverside Dr. to US 1	1175		County	No	0.20	2	2	25	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	480	490	470	510	-	-	-	-	-	-	E	13,640	-	-	-	1,020
Main St. (Lake Helen)	I-4 to Lakeview Dr.	1176		County	Yes	0.95	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,390	5,600	5,500	5,550	5,310	6,190	6,210	7,500	8,420	8,720	C	5,260	1.66	D	780	470
Marsh Rd.	Daugharty Rd. to Carter Rd.	1183		County	Yes	3.00	2	2	40	N+S	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	710	720	5,500	680	670	720	-	910	920	1,030	C	12,300	0.08	-	90	1,160
Marsh Rd.	Carter Rd. to US 92	1180		County	Yes	2.05	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,140	2,430	2,330	2,340	2,390	2,230	2,840	2,780	2,700	3,130	E	13,640	0.23	C	250	1,020
Mason Ave.	Williamson Blvd. to Fentress Blvd.	1190		County	Yes	0.60	2	2	45	E+W	UA_NSSRC1_2W_2L_D_WL	Minor Arterial - Urban	8,400	8,360	8,300	8,450	8,650	8,380	10,670	10,250	11,210	11,720	E	17,900	0.65	C	1,070	1,620
Mason Ave.	Fentress Blvd. to Bill France Blvd.	1191		County	Yes	0.50	2	2	40	E+W	UA_NSSRC1_2W_2L_D_WL	Minor Arterial - Urban	10,680	10,580	9,320	9,760	8,460	9,870	12,340	10,320	12,300	14,040	E	17,900	0.78	C	1,120	1,620
Mason Ave.	Bill France Blvd. to Jimmy Ann Dr.	1193		County	Yes	0.30	4	4	40	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	12,140	12,900	11,750	12,520	11,660	11,550	13,030	13,480	13,800	14,180	E	37,970	0.37	C	1,180	3,410
Mason Ave.	Jimmy Ann Dr. to SR 483/Clyde Morris B	1194		County	Yes	0.50	4	4	40	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	13,150	13,530	12,120	12,330	11,940	11,820	13,340	13,030	13,710	13,770	E	37,970	0.36	C	1,100	3,410
Maytown Rd.	New Smyrna Blvd. to Pell Rd.	1196		County	No	5.60	2	2	50	E+W	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	3,360	3,120	3,350	3,270	3,120	2,730	3,400	3,640	3,540	3,590	C	12,300	0.29	B	320	1,160
Maytown Rd.	Pell Rd. to Beacon Light Rd.	1198		County	No	12.90	2	2	45	E+W	RUA_UFH_2W_2L_U_0L	Minor Collector - Rural	670	650	730	600	700	690	780	840	730	770	C	6,300	0.12	B	80	590
Maytown Rd./Halifax Ave. (OH)	Beacon Light Rd. to US 1	790		County	Yes	1.10	2	2	35	E+W	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	1,650	1,650	1,770	1,680	1,620	1,720	1,730	2,060	1,780	1,960	C	12,300	0.16	B	170	1,160
McBride Rd.	US 17 to Lake George Rd.	1200		County	No	3.00	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	n/c	290	310	300	220	220	250	250	280	220	260	C	6,300	0.04	B	20	590
McGregor Rd.	Westside Con./Fatio to Spring Garden A	1210		County	Yes	0.70	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	-	-	1,600	1,600	1,570	1,610	-	2,010	2,040	2,390	E	13,640	0.18	C	250	1,230
McGregor Rd.	Spring Garden Ave. to US 17/92	1211		County	Yes	1.40	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	4,730	4,600	8,110	8,850	6,250	7,630	3,900	4,110	4,650	4,730	E	12,740	0.37	C	230	1,230

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
Mercers Fernery Rd.	Glenwood Rd. to SR 15A	1221		County	Yes	1.45	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	910	860	980	950	1,010	920	-	1,100	980	1,240	E	13,640	0.09	C	100	1,020
Mercers Fernery Rd.	SR 15A to US 17	1223		County	Yes	1.25	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	1,350	1,370	1,580	1,520	1,470	1,420	-	1,940	1,570	1,800	E	13,640	0.13	C	140	1,020
Midway Ave.	Williamson Blvd. to US 92	1230		County	Yes	2.00	4	4	40	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Collector - Urban	2,420	2,530	2,380	2,440	2,630	2,450	3,280	2,880	3,220	4,240	E	37,970	0.11	C	420	3,410
Minnesota Ave. (DeLand)	Grand Ave. to SR 15A	1245		County	Yes	1.35	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,670	2,670	2,650	2,850	2,800	3,440	3,340	3,610	3,500	4,100	E	13,640	0.30	C	370	1,020
Minnesota Ave. (DeLand)	SR 15A to US 17/92	1247		County	Yes	1.25	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,240	1,090	1,100	900	970	1,220	-	1,610	1,290	1,430	E	13,640	0.10	C	120	1,020
Minnesota Ave. (DeLand)	Amelia Ave. to Hill Ave	1249		County	Yes	0.75	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,280	2,170	2,300	2,110	2,060	2,080	-	2,350	2,280	2,110	E	13,640	0.15	C	180	1,020
Minnesota Ave. (DeLand)	Hill Ave. to Blue Lake Ave.	1250		County	Yes	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,840	2,680	2,770	2,650	2,520	2,680	-	2,310	2,630	3,230	E	13,640	0.24	C	280	1,020
Minnesota Ave. (DeLand)	Blue Lake Ave. to Kepler Rd.	1251		County	Yes	0.85	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	4,500	3,530	4,530	4,170	4,000	3,390	4,420	4,940	4,890	5,650	E	13,640	0.41	C	510	1,230
Minnesota Ave. (Orange City)	Sparkman Ave. to US 17/92	1241		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	1,860	1,810	1,930	1,950	2,090	2,150	-	2,010	2,450	2,680	E	13,640	0.20	C	240	1,020
Minnesota Ave. (Orange City)	US 17/92 to Leavitt Ave.	1242		County	No	0.50	2	2	25	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,400	1,470	1,360	1,390	1,410	1,380	-	1,750	1,700	1,730	E	13,640	0.13	C	150	1,020
Minnesota Ave. (Orange City)	Leavitt Ave. to SR 472	1243		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,340	1,430	1,170	1,180	1,230	1,240	-	1,420	1,650	1,470	E	13,640	0.11	C	140	1,020
New Hampshire Ave.	SR 15A to Adelle Ave	1270		County	No	0.15	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,110	2,210	2,280	2,260	2,470	2,720	-	3,040	2,490	3,220	E	13,640	0.24	C	290	1,020
New Hampshire Ave.	Adelle Ave to Clara Ave.	1271		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,540	2,480	2,630	2,780	2,760	3,070	-	3,260	3,560	3,770	E	13,640	0.28	C	300	1,020
New Hampshire Ave.	Clara Ave. to US 17/92	1272		County	No	0.25	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,640	2,640	2,790	2,850	2,830	3,180	-	3,250	3,600	4,040	E	13,640	0.30	C	330	1,020
Newmark Dr. (Deltona)	Ft Smith Blvd. to Humphrey Blvd.	DLT-100.000		City	No	1.60	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	6,060	6,900	6,900			7,848	D	10,660	0.74	D	701	960
Newmark Dr. (Deltona)	Humphrey Blvd. to Howland Blvd	DLT-100.020		City	No	0.90	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	6,370	7,160	7,160			8,090	D	10,660	0.76	D	796	960
Newmark Dr. (Deltona)	Howland Blvd. to Courtland Blvd.	DLT-100.040		City	No	0.75	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban		-	-	-	1,110	1,340	1,340			721	D	10,660	0.07	C	67	960
New York Ave. (Orange City)	Westside Pkwy/Hamilton Ave. to Sparkm	1281		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	3,750	3,850	4,230	3,880	3,990	4,190	-	5,060	4,700	4,880	E	13,640	0.36	C	440	1,020
New York Ave. (Orange City)	Sparkman Ave. to Carpenter Ave	1283		County	No	0.30	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	4,560	4,770	5,230	4,990	4,850	4,860	-	5,960	5,510	6,320	E	13,640	0.46	D	550	1,020
New York Ave. (Orange City)	Carpenter Ave. to US 17/92	1284		County	No	0.25	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	5,300	5,580	6,090	5,640	5,770	6,010	6,270	6,820	6,330	6,690	E	13,640	0.49	D	600	1,020
New York Ave. (Lake Helen)	Summit Ave. to Lakeview Dr.	1285		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	850	920	900	970	890	900	1,010	1,020	980	1,040	C	13,640	0.08	C	100	470
Normandy Blvd. (Deltona)	Graves (old Howland) to Rhode Island A	DLT-105.000		City	No	1.25	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban		-	-	-	7,100	8,140	8,140			8,262	D	12,740	0.65	C	787	1,150
Normandy Blvd. (Deltona)	Rhode Island Ave. to Elkcam Blvd.	DLT-105.000		City	No	0.50	2	2	30	N+S	UA_NSSRC2_2W_4L_D_WL	Major Collector - Urban		-	-	-	6,890	7,520	7,520			6,655	D	29,160	0.23	C	636	2,630
Normandy Blvd. (Deltona)	Elkcam Blvd. to Saxon Blvd	DLT-105.030		City	No	1.00	4	4	35	N+S	UA_NSSRC2_2W_4L_D_WL	Major Collector - Urban		-	-	-	7,530	10,850	10,850			6,052	D	29,160	0.21	C	599	2,630
Normandy Blvd. (Deltona)	Saxon Blvd. to Deltona Blvd	DLT-105.050		City	No	0.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	10,230	10,630	10,630			10,533	D	10,660	0.99	D	936	960
Normandy Blvd. (Deltona)	Deltona Blvd. to Tivoli Dr.	DLT-105.070		City	No	1.10	3	3	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	9,560	10,100	10,100			11,333	D	10,660	1.06	E	974	960
Normandy Blvd. (Deltona)	Tivoli Dr. to Providence Blvd	DLT-105.090		City	No	0.90	3	3	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	6,850	7,100	7,100			8,377	D	10,660	0.79	D	713	960
Normandy Blvd. (Deltona)	Providence Blvd. to Saxon Blvd	DLT-105.120		City	No	1.00	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban		-	-	-	7,020	7,310	7,310			11,740	D	13,990	0.84	D	1,065	1,260
Normandy Blvd. (Deltona)	Saxon Blvd. to Ft Smith Blvd	DLT-105.140		City	No	0.75	2	2	35	E+W	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban		-	-	-	10,720	11,270	11,270			17,646	D	13,990	1.26	F	1,355	1,260
Ohio Ave. (LH)	Macy Ave. to Lakeview Dr.	1320		County	Yes	0.20	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	610	710	640	730	680	650	770	760	900	800	C	13,640	0.06	C	70	470
Old Dixie Hwy.	I-95 to Old Kings Rd.	1334		County	Yes	0.60	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	7,250	7,750	7,480	7,430	7,260	7,190	8,710	9,200	8,890	9,950	E	13,640	0.73	C	800	1,230
Old Dixie Hwy.	Old Kings Rd. to Walter Boardman Ln.	1333		County	Yes	0.55	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	3,490	3,210	3,080	3,390	2,990	3,410	3,840	4,340	4,230	4,160	E	13,640	0.30	C	360	1,230
Old Dixie Hwy.	Walter Boardman Ln. to Pine Tree Dr..	1332		County	Yes	5.10	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	2,340	2,240	1,890	2,060	1,810	2,220	-	2,750	2,490	2,180	E	13,640	0.16	C	190	1,230
Old Dixie Hwy.	Pine Tree Dr. to Ingelsia	1330		County	Yes	0.50	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,970	2,170	1,710	1,890	1,710	2,240	1,950	2,390	2,040	2,470	E	13,640	0.18	C	240	1,020
Old Kings Rd.	Flagler Co. to Old Dixie Hwy.	1340		County	Yes	0.60	2	2	50	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	3,110	2,980	3,050	3,150	2,960	3,160	3,200	3,680	3,880	3,990	E	13,640	0.29	C	350	1,230
Old Mission Rd.	SR 44/Mission Dr. to Old Mission Rd	1356		County	Yes	0.60	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	n/c		1,120	1,100	1,080	1,120	1,160	1,040	1,330	1,330	1,300	E	13,640	0.10	C	120	1,230
Old New York Ave.	SR 44 to Hontoon Rd.	1360		County	Yes	1.40	2	2	40	E+W	RDA_UFH_2W_2L_U_0L	n/c	720	870	940	810	820	850	840	1,030	1,130	1,090	C	12,300	0.09	B	110	1,160
Old New York Ave.	Hontoon Rd. to Lakeview Dr.	1361		County	Yes	0.40	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	2,820	3,250	3,540	3,190	3,170	3,420	3,550	3,970	3,870	4,140	C	13,640	0.30	C	350	1,090
Old New York Ave.	Lakeview Dr. to Grand Ave.	1362		County	Yes	0.50	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	3,860	4,130	4,210	3,990	4,010	4,390	4,650	5,140	4,630	4,600	E	13,640	0.34	C	380	1,230
Old New York Ave.	Grand Ave. to SR 44	1364		County	Yes	0.91	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	2,790	2,730	2,800	2,440	2,560	2,600	3,140	3,160	3,100	2,980	E	13,640	0.22	C	260	1,230
Orange/Silver Beach Ave. (DAY)	Nova Rd. to Dr Martin Luther King Jr Blv	1370		City	No	0.75	2	2	30	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Arterial - Urban	9,980	10,930	8,500	7,970	7,980	7,480	-	-	-	-	E	14,740	-	-	-	1,330
Orange/Silver Beach Ave. (DAY)	Martin Luther King Jr Blvd. to Marion St.	1372		City	No	0.20	2	2	30	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Arterial - Urban	7,110	7,270	6,190	6,210	6,220	6,240	-	-	-	-	E	14,740	-	-	-	1,330
Orange/Silver Beach Ave. (DAY)	Marion St. to US 1	798159		City	No	0.10	4	4	30	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	6,890	7,530	6,280	6,200	6,160	6,200	8,400	8,800	9,100	7,700	E	30,420	0.25	C	686	2,740
Orange/Silver Beach Ave. (DAY)	US 1 to Beach St.	1374	Yes	County	Yes	0.20	4	4	30	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	9,780	10,660	9,870	9,370	9,330	8,950	-	-	-	-	E	30,420	-	-	-	2,740
Orange/Silver Beach Ave.	Beach St. to City Island Pkwy.	1375	Yes	County	Yes	0.20	4	4	30	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	12,460	11,430	11,130	11,440	11,740	11,470	11,060	-	-	-	E	30,420	-	-	-	2,740
Orange/Silver Beach Ave.	City Island Pkwy. to Peninsula Dr.	1710	Yes	County	Yes	0.60	2	2	30	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	10,870	10,340	10,550	10,850	10,710	10,640	10,960	-	-	-	E	14,040	-	-	-	1,270
Orange/Silver Beach Ave.	Peninsula Dr. to SR A1A	1711	Yes	County	Yes	0.30	2	2	30	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	5,120	4,500	4,590	5,070	5,220	5,000	6,000	-	-	-	E	14,040	-	-	-	1,270
Orange Camp Rd.	US 17/92 to Princeton	1380		County	Yes	0.75	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	8,730	8,850	9,020	9,640	9,080	9,320	11,480	11,800	12,370	13,170	E	14,040	0.94	D	1,160	1,270
Orange Camp Rd.	Princeton. to Blue Lake Ave.	1382		County	Yes	0.90	2	2	50	E+W	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	8,430	8,070	8,860	9,280	8,800	9,220	10,520	11,300	12,270	12,170	E	17,050	0.71	C	1,060	1,540
Orange Camp Rd.	Blue Lake Ave. to W Volusia Bltwy. (Dr M	1384		County	Yes	0.55	2	2	50	E+W	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	9,190	8,940	8,880	9,600	9,330	9,980	11,700	12,110	12,650	13,910	E	17,050	0.82	C	1,270	1,540
Orange Camp Rd.	W Volusia Bltwy. (Dr MLK Jr) to I-4	1385		County	Yes	1.00	2	2	50	E+W	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	10,280	10,730	10,910	11,300	10,870	10,700	12,020	12,050	13,080	15,040	E	17,050	0.88	C	1,390	1,540
Palm Dr.	John Anderson Dr. to SR A1A	1391		County	No	0.44	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	1,450	1,600	1,410	1,440	1,190	1,270	1,240	1,510	1,170	1,240	E	13,640	0.09	C	100	1,020
Park Ave.	Old Mission Rd. to Air Park Rd.	1409		County	Yes	0.90	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	3,960	3,770	3,670	3,800	3,930	3,810	4,490	4,420	4,280	5,140	E	13,640	0.38	C	460	1,230
Park Ave.	Air Park Rd. to US 1	1413		County	Yes	1.40	2	2	30	E+W	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban	7,400	6,960	7,490	7,070	7,040	7,120	5,460	7,460	7,640	9,030	E	14,740	0.61	C	780	1,230
Peninsula Dr. - South	Dunlawton Ave. to Marcelle Ave	1420		County	No	0.15	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	4,620	5,160	4,660	5,280	4,870	4,800	-	-	5,560	5,370	E	13,640	0.39	D	460	1,020
Peninsula Dr. - South	Marcelle Ave. to Major St.	1423		County	No	0.45	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,730	2,970	2,700	2,960	2,770	2,830	3,170	5,370	3,040	2,970	E	13,640	0.22	C	260	1,020
Peninsula Dr. - South (PI)	Major St. to Inlet Harbor Rd	1419		County	No	0.55	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	6,630	2,690	2,520	2,780	2,600	2,740	3,040	6,030	3,140	2,830	E	13,640	0.21	C	260	1,020
Peninsula Dr. - South (PI)	Inlet Harbor Rd to Beach Street	1422		City	No	3.00	2	2	25	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,220	1,510	980	1,320	-	-	-	-	1,380	1,320	E	13,640	-	-	120	1,020
Peterson Rd.	Riley Pridgeon Rd. to Emporia/Blackburr	1433		County	No	2.80	2	2	35	E+W	RUA_UFH_2W_2L_U_0L	n/c	280	320	330	310	350	290	330	400	360	370	C	6,300	0.06	B	40	590
Pineland Tr. (OB)	Airport Rd. to Harmony Ave.	1450		County	No	2.50	2	2	50	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	700	610	570	670	510	-	-	-	-	-	D	13,640	-	-	-	1,150
Pineland Tr.	Harmony Ave. to US 1	1451		County	No	2.00	2	2	50	E+W	UA_NSSRC1_2W_2L_U_0L	n/c	260	230	220	370	210	220	-	-	-	-	E	13,640	-	-	-	1,230
Pine Tree Dr.	US 1 to Addison Dr	1440		County	No	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	2,590	2,600	2,480	2,620	2,540	2,650	2,690	2,870	2,710	3,110	E	10,220	0.30	C	260	920
Pine Tree Dr.	Addison Dr. to Old Dixie Hwy	1441		County	No	1.00	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	1,740	1,420	1,250	1,300	1,750	1,540	1,750	1,880	1,760	1,870	E	10,220	0.18	C	180	920
Pioneer Tr.	SR 44 to Tomoka Farms Rd.	1461		County	Yes	4.00	2	2	50	E+W	RDA_UFH_2W_2L_U_0L	Major Collector - Rural	3,300	3,070	3,340	3,480	4,020	4,420	5,220	5,750	4,780	5,090	C	12,300	0.41	B	440	1,160
Pioneer Tr.	Tomoka Farms Rd. Airport Rd.	1464		County	Yes	1.40	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	3,310	3,660	3,700	3,510	3,670	3,960	4,360	4,660	4,830	5,180	E	13,640	0.38	C	460	1,230
Pioneer Tr.	Airport Rd. to Turnbull Bay Rd.	1465		County	Yes	2.50	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	2,860	2,710	2,720	2,610	2,830	3,040	3,730	3,960	5,020	4,960	E	13,640	0.36	C	420	1,230
Pioneer Tr.	Turnbull Bay Rd. to Sugar Mill Dr	1467		County	Yes	1.75	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,670	2,840	2,800	2,780	3,040	3,200	3,380	3,580	4,470	5,020	E	13,640	0.37	C	440	1,020
Pioneer Tr.	Sugar Mill Dr. to Williams Rd.	1471		County	Yes	1.45	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	4,360	3,920	4,230	4,280	4,710	4,960	4,970	6,880	8,130	8,300	E	13,640	0.61	C	760	1,230
Pioneer Tr.	Williams Rd. to Enterprise Ave	1473		County	Yes	1.05	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	5,830	5,300	5,240	4,910	5,150	5,570	6,010	7,040	7,810	9,390	E	13,640	0.69	C	780	1,230
Pioneer Tr.	Enterprise Ave. to Jungle Rd	1474		County	Yes	0.50	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban	8,870	8,380	8,220	7,300	7,280	8,100	8,320	7,520	8,190	8,660	E	13,640	0.63	D	680	1,020
Pioneer Tr.	Jungle Rd to Canal St.	1475		County	Yes	0.25	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,630	1,910	1,940	2,120	2,420	2,130	2,610	2,500	2,300	2,700	E	13,640	0.20	C	240	1,020
Wallace Rd.	Canal St to SR 44	1955		County	Yes	0.25	3	3	35	N+S	UA_NSSRC2_2W_2L_D_WL	Major Collector - Urban	8,260	7,700	7,550	7,540	7,600	7,660	7,350	7,710	7,230	8,180	E	14,740	0.55	D	660	1,330
Mission Dr.	SR 44 to Old Mission Rd.	1261		County	Yes	0.75	4	4	40	N+S	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	14,190	12,420	14,180	11,730	11,780	11,910	10,510	13,230	13,300	14,090	E	37,970	0.37	C	1,090	3,410
Old Mission Rd./Mission Rd.	Old Mission Rd. to Josephine St.	1354		County	Yes	0.75	4	4	40	N+S	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	12,570	12,270	11,920	11,390	11,580	11,730	11,020	12,580	13,280	12,790	E	37,970	0.34	C	1,020	3,410
Old Mission Rd.	Josephine St. to Park Ave	1353		County	Yes	1.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,250	6,920	7,230	6,280	6,360	6,420	6,820	6,970	7,070	8,420	E	10,220	0.82	D	690	1,020
Old Mission Rd.	Park Ave. to SR 442	1351		County	Yes	2.00	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	4,380	4,190	4,250	3,920	4,030	3,780	3,850	3,970	4,210	5,050	E	13,640	0.37	C	430	1,230
Plantation Oaks Blvd. (OB)	US 1 to Old Dixie Highway			County	No	1.92	0	0		E+W	UA_NSSRC2_2W_2L_U_WL	n/c	-	-	-	-	-	-	-	-	-	Now Open	E	14,040	-	-	-	-
Plaza Dr. (N. Penin.)	John Anderson Dr. to SR A1A	1481		County	No	1.00	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	190	280	370	230	370	290	250	220	190	190	E	13,640	0.01	C	20	1,020
Plymouth Ave.	Grand Ave. to Hazen Rd.	1490		County	Yes	1.00	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	1,280	1,150	1,080	1,030	1,020	1,010	-	1,290	1,120	1,180	E	13,640	-	-	100	1,230
Plymouth Ave.	Hazen Rd. to SR 15A	1491		County	Yes	0.75	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	5,790	5,830	5,760	5,120	5,560	5,990	4,640	5,600	5,380	6,140	E	13,640	0.45	C	490	1,230

* 2014 AADT's for City of Deltona Port Orange are 2015 AADT's

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
Plymouth Ave.	SR 15A to Stone St.	1493		County	Yes	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	9,970	10,320	10,050	9,380	9,070	9,200	8,060	9,620	9,160	10,330	E	13,640	0.76	D	780	1,020
Plymouth Ave.	Stone St. to Clara Ave	1495		County	Yes	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	10,780	10,460	10,490	10,040	9,560	9,820	9,510	10,500	10,020	11,310	E	13,640	0.83	E	890	1,020
Plymouth Ave.	Clara Ave. to US 17/92	1497		County	Yes	0.20	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	12,340	11,990	12,110	11,460	10,910	11,250	11,910	13,940	12,020	14,240	E	14,040	1.01	F	1,210	1,270
Plymouth Ave.	US 17/92 to Amelia Ave	1498		County	Yes	0.20	2	2	30	E+W	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	-	-	-	-	-	-	10,260	8,730	8,820	9,340	E	14,040	0.67	D	740	1,270
Plymouth Ave.	Amelia Ave. to Garfield Ave.	1500		County	Yes	0.20	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,960	7,090	6,440	5,850	5,850	5,750	5,070	6,730	6,540	7,910	E	13,640	0.58	D	640	1,020
Plymouth Ave.	Garfield Ave. to Blue Lake Rd./Jacobs D	1502		County	Yes	0.75	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,170	6,370	5,900	5,270	5,410	5,610	4,200	6,080	5,910	7,300	E	13,640	0.54	D	600	1,020
Ponce DeLeon Blvd.	CR 3 to US 17	1511		County	Yes	0.85	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	2,890	2,400	2,500	2,260	2,350	1,510	-	2,630	1,670	2,110	E	13,640	0.15	C	190	1,020
Prevatt Ave.	SR 44 to Lake Pearl Dr.	1523		County	Yes	1.80	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	4,960	4,130	4,630	4,230	4,470	4,200	4,570	5,680	5,510	4,800	E	17,050	0.28	C	450	1,540
Prevatt Ave.	Lake Pearl Dr. to Kicklighter Rd	1520		County	Yes	1.50	2	2	40	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	5,020	4,500	4,800	4,390	4,570	3,910	-	4,640	5,070	5,220	C	17,050	0.31	C	490	1,360
Providence Blvd.	Howland Blvd. to Elkcam Blvd.	1542		County	Yes	1.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	12,200	10,940	11,990	10,790	11,290	11,040	9,110	10,990	10,230	10,160	E	14,040	0.72	D	850	1,270
Providence Blvd.	Elkcam Blvd. to Ft Smith Blvd.	1541		County	Yes	0.80	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	15,160	13,630	14,680	13,460	13,070	-	13,420	14,750	13,590	13,540	E	13,640	0.99	E	1,160	1,020
Providence Blvd.	Ft Smith Blvd. to Tivoli Dr.	1539		County	Yes	0.05	4	4	35	N+S	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	20,830	17,850	19,250	17,390	17,020	17,370	17,470	19,140	18,450	16,630	E	30,420	0.55	D	1,430	2,740
Providence Blvd.	Tivoli Dr. to Saxon Blvd.	1538		County	Yes	0.80	2	2	35	N+S	UA_NSSRC2_2W_2L_D_WL	Minor Arterial - Urban	9,950	8,670	9,600	9,000	8,510	8,340	7,170	8,740	7,630	7,430	E	14,740	0.50	D	670	1,330
Providence Blvd.	Saxon Blvd. to Normandy Blvd	1535		County	Yes	0.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	9,080	8,930	9,860	9,310	8,900	8,990	8,050	8,510	8,270	7,880	E	13,640	0.58	D	680	1,020
Providence Blvd.	Normandy Blvd. to Anderson Dr.	1534		County	Yes	0.80	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	14,460	12,950	14,410	13,510	13,150	12,900	11,650	12,860	13,670	13,000	E	13,640	0.95	E	1,060	1,020
Providence Blvd.	Anderson Dr. to Doyle Rd.	1530		County	Yes	0.55	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	11,670	10,900	12,270	12,020	11,780	11,720	12,240	13,730	13,130	13,870	E	13,640	1.02	F	1,160	1,020
Raulerson Rd. # 1	US 17 to Brownlee Rd.	1550		County	No	1.20	2	2	35	E+W	RUA_UFH_2W_2L_U_0L	n/c	310	310	250	250	280	330	290	270	310	290	C	6,300	0.05	B	30	590
Raulerson Rd.	US 17 to Bunnell Rd./CR 305	1552		County	No	1.70	2	2	30	E+W	RUA_UFH_2W_2L_U_0L	n/c	320	380	250	300	300	400	330	390	370	340	C	6,300	0.05	B	30	590
Reed Canal Rd.	Clyde Morris Blvd. to SR5A/Nova Rd.	1561		County	Yes	0.80	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	5,850	5,890	5,810	6,040	5,870	6,050	5,400	6,570	7,050	6,450	E	13,640	0.47	D	530	1,020
Reed Canal Rd.	SR5A/Nova Rd. to Sauls St.	1562		County	Yes	0.65	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	10,200	9,960	9,490	9,600	8,960	9,100	8,680	8,180	9,920	9,530	E	13,640	0.70	D	810	1,020
Reed Canal Rd.	Sauls St. to US 1	1564		County	Yes	0.90	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	9,280	8,850	8,570	8,080	8,000	8,130	7,570	7,060	8,530	8,830	E	13,640	0.65	D	750	1,020
Reed Ellis Rd.	Enterprise-Osteen Rd. to SR 415	1571		County	Yes	2.10	2	2	45	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	1,510	1,470	1,510	1,510	1,640	1,630	1,860	2,120	2,380	2,600	E	13,640	0.19	C	290	1,230
Retta St.	Grand Ave. to US 17	1580		County	Yes	0.15	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	890	840	750	730	770	740	-	1,020	820	880	E	13,640	0.06	C	80	1,020
Reynolds Rd.	US 17 to SR 11	1590		County	Yes	4.40	2	2	35	E+W	RUA_UFH_2W_2L_U_0L	Minor Collector - Urban/Rural	1,450	1,410	1,160	1,250	1,240	1,360	-	1,100	1,110	1,160	E	6,300	0.18	-	110	2,030
Rhode Island Ave.	Westside Connector to Sparkman Ave	1598		County	Yes	0.45	2	2	35	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	-	4,520	5,360	5,140	5,780	6,630	2,810	6,810	7,160	8,030	E	14,740	0.54	D	540	1,330
Rhode Island Ave.	Sparkman Ave to Carpenter Ave	1599		County	Yes	0.25	2	2	35	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	-	6,360	7,000	6,480	6,890	6,720	3,630	3,260	8,510	9,800	E	14,740	0.66	D	720	1,330
Rhode Island Ave.	Carpenter Ave to US 17/92	1600		County	Yes	0.25	2	2	35	E+W	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	-	6,540	7,080	6,280	6,350	7,240	3,870	7,340	7,970	9,390	E	14,740	0.64	D	750	1,330
Rhode Island Ave. (Orange City)	US 17/92 to Veteran's Memorial Pkwy.	798112		City	No	2.80	2	2	40	E+W	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	7,060	7,280	8,990	8,790	8,650	8,270	8,800	9,200	9,600	8,100	E	13,640	0.59	D	661	1,230
Riley Pridgeon Rd.	Peterson Rd. to SR 40	1610		County	No	2.55	2	2	35	N+S	RUA_UFH_2W_2L_U_0L	n/c	430	490	480	450	450	430	410	520	490	410	C	6,300	0.07	B	30	590
River Dr.	John Anderson Dr. to SR A1A	1621		County	No	0.50	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	270	270	310	290	340	290	270	340	250	350	E	13,640	0.03	C	30	1,020
Riverside Dr. (NSB)	SR 44 (N. Causeway) to SR A1A (S. Cau	1635		City	No	0.20	2	2	25	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	3,850	2,600	3,640	3,800	-	-	4,590	4,390	-	-	E	13,640	-	-	-	1,020
Halifax/Riverside Dr. (PO)	Dunlawton Ave. to Commonwealth Ave	797068		City	No	1.55	2	2	25	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,350	1,850	1,650	1,990	850	850	850	850	1,000	1,000	E	13,640	0.07	E	n/a	1,020
Riverside Dr. (PO)	Commonwealth Ave. to Main St	1638		City	No	1.20	2	2	25	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	640	720	590	600	600	600	600	600	800	800	E	13,640	0.06	E	n/a	1,020
Samsula Dr.	Pioneer Tr. to SR 44	1651		County	Yes	2.60	2	2	45	N+S	RDA_UFH_2W_2L_U_0L	Minor Collector - Rural	1,280	1,330	1,430	1,160	1,160	1,290	1,280	1,280	1,550	1,540	C	12,300	0.13	B	150	1,150
Sandra Dr.	John Anderson Dr. to SR A1A	1661		County	No	1.00	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	250	270	270	270	250	240	260	330	270	250	E	13,640	0.02	C	20	1,020
Saxon Blvd.	US 17/92 to Enterprise Rd	1671		County	Yes	0.65	4	4	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	16,730	16,730	14,450	15,490	13,960	12,680	15,480	14,580	14,620	15,890	E	30,420	0.52	D	1,170	2,740
Saxon Blvd.	Enterprise Rd. to Veterans Memorial Pkv	1673		County	Yes	0.60	6	6	45	E+W	UA_NSSRC1_2W_6L_D_WL	Minor Arterial - Urban	34,710	32,160	30,370	30,950	27,870	26,560	28,970	31,620	31,840	35,000	E	47,560	0.54	C	1,950	4,280
Saxon Blvd.	VMP to FDOT Park & Ride	1674		County	Yes	0.30	6	6	45	E+W	UA_NSSRC1_2W_6L_D_WL	Minor Arterial - Urban	43,900	41,920	40,060	40,700	36,330	33,290	34,640	40,360	43,680	37,000	E	47,560	0.72	C	2,660	4,280
Saxon Blvd.	FDOT Park & Ride to I-4	1685		County	Yes	0.30	6	6	45	E+W	UA_NSSRC1_2W_6L_D_WL	Minor Arterial - Urban	46,860	44,590	42,380	43,180	36,440	37,850	40,100	39,570	44,320	43,280	E	37,970	1.14	F	3,260	3,410
Saxon Blvd.	I-4 to Finland Dr.	1675		County	Yes	0.35	4	4	40	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	45,960	40,660	41,210	41,200	34,420	36,480	40,540	39,790	45,090	38,020	E	37,970	1.00	F	3,140	3,410
Saxon Blvd.	Finland Dr. to Normandy Blvd.	1676		County	Yes	0.35	4	4	40	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	38,990	37,800	35,940	35,990	32,490	30,760	39,620	37,870	37,630	37,200	E	37,970	0.98	E	2,800	3,410
Saxon Blvd.	Normandy Blvd. to Tivoli Dr.	1677		County	Yes	1.25	4	4	40	E+W	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	29,890	25,550	24,160	24,000	22,010	20,320	23,960	26,030	26,320	24,650	E	37,970	0.65	C	1,930	3,410
Saxon Blvd.	Tivoli Dr. to Providence Blvd.	1679		County	Yes	0.90	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	10,560	10,200	9,720	9,610	9,980	9,430	9,580	10,910	10,220	10,470	E	13,640	0.77	D	890	1,020
Saxon Blvd.	Providence Blvd. to Normandy Blvd.	1681		County	Yes	0.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	8,540	8,210	7,590	8,270	8,150	7,370	6,330	7,610	7,810	7,290	E	13,640	0.53	D	620	1,020
Saxon Blvd.	Normandy Blvd. to Doyle Rd.	1684		County	Yes	1.00	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	5,630	5,580	5,420	5,460	5,540	5,100	4,700	5,230	5,980	5,370	E	13,640	0.39	C	490	1,230
Saxon Dr. (NSB)	3rd Ave/SR A1A to 27th Ave.	1695		County	No	1.75	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,690	5,760	5,390	5,480	5,570	5,850	5,990	6,300	6,020	6,790	E	13,640	0.50	D	550	1,020
Saxon Dr. (NSB)	27th Ave. to Hiles Blvd.	1693		County	No	1.55	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,940	2,880	2,480	2,460	2,610	2,860	3,090	3,250	2,920	3,030	E	13,640	0.22	C	230	1,020
Saxon Dr. (NSB)	Hiles Blvd. to SR A1A	1691		County	No	0.55	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	910	900	770	870	910	900	890	960	840	870	E	13,640	0.06	C	60	1,020
Shell Rd. (DeBary)	Highbanks Rd. to Sanford Ave.	798208		City	No	1.10	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,090	1,870	2,150	1,940	2,030	-	-	2,570	-	2,000	D	10,660	0.19	C	232	960
Shell Rd. (DeBary)	Sanford Ave. to Benson Junction Rd.	798208		City	No	0.70	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,450	1,460	1,510	1,490	1,410	1,600	1,800	2,030	-	2,000	D	10,660	0.19	C	232	960
Sparkman Ave.	Minnesota Ave. to New York Ave. W.	1723		County	No	0.45	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	1,140	1,160	1,150	1,120	1,100	1,060	-	1,730	1,610	1,910	E	13,640	0.14	C	190	1,020
Sparkman Ave.	New York Ave. W. to French Ave.	1722		County	No	0.75	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,600	1,650	1,670	1,540	1,530	1,400	-	2,160	2,090	2,490	E	13,640	0.18	C	210	1,020
Sparkman Ave.	French Ave. to Blue Springs Ave.	1721		County	No	0.65	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,220	2,330	2,880	2,600	2,520	2,880	-	3,340	4,940	4,510	E	13,640	0.33	C	380	1,020
Sparkman Ave.	Blue Springs Ave. to Rhode Island Ave.	1720		County	No	0.60	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	770	980	1,620	1,370	1,820	2,090	-	2,420	2,360	3,020	E	13,640	0.22	C	320	1,020
Spring Garden Ave.	Beresford Ave. to Beresford Rd. West	1732		County	Yes	0.60	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,260	1,940	2,030	2,060	1,950	1,980	-	2,080	2,120	2,250	E	13,640	0.16	C	200	1,020
Spring Garden Ave.	Beresford Rd. West to McGregor Rd.	1731		County	Yes	0.90	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,450	2,260	2,320	2,420	2,190	2,190	-	2,300	2,620	2,770	E	13,640	0.20	C	240	1,020
Spring Garden Ranch Rd.	US 17 to Aragon Ave	1740		County	Yes	0.20	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,220	2,860	2,910	3,020	2,670	2,550	-	2,540	3,180	3,120	E	13,640	0.23	C	360	1,020
Spring Garden Ranch Rd.	Aragon Ave to Arrendondo Grant/East Av	1742		County	No	1.20	2	2	35	E+W	RUA_UFH_2W_2L_U_0L	Major Collector - Urban/Rural	420	370	390	420	380	430	-	520	520	570	C	6,300	0.09	B	50	590
Spruce Creek Rd. (PO)	Dunlawton Ave. to Commonwealth Blvd.	798172		City	Yes	1.05	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,250	7,290	6,950	5,710	5,790	6,700	6,900	7,200	5,700	5,900	E	13,640	0.43	D	n/a	1,020
Spruce Creek Rd.	Commonwealth Blvd. to SR5A/Nova Rd.	1752		County	Yes	0.50	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	10,460	9,310	9,960	9,360	8,930	9,830	9,210	9,280	9,180	9,420	E	13,640	0.69	D	880	1,020
Spruce Creek Rd.	SR5A/Nova Rd. to Taylor Rd.	1751		County	Yes	0.75	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	17,650	16,760	16,350	15,350	14,670	15,090	13,420	16,000	15,910	15,310	E	37,970	0.40	C	1,350	3,410
Stone St.	Mercers Fernery Rd. to CR 92/ISB	1773		County	Yes	0.70	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	610	610	540	530	500	490	-	680	640	770	E	13,640	0.06	C	70	1,020
Stone St.	CR 92 to Plymouth Ave.	1770		County	Yes	0.80	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,690	6,210	5,540	5,270	5,240	5,200	4,210	4,520	5,160	5,160	E	13,640	0.38	C	450	1,020
Sugar Mill Dr.	Pioneer Tr. to SR 44	1781		County	Yes	1.30	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	2,520	2,450	2,370	2,450	2,760	2,980	2,830	3,020	3,320	2,930	E	13,640	0.21	C	240	1,230
Summit Ave.	SR 44 to Main St.	1791		County	Yes	2.20	2	2	50	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	4,660	5,630	5,280	4,780	4,430	4,090	4,180	4,130	2,710	4,040	E	13,640	0.30	C	310	1,230
Surfside Dr.	John Anderson Dr. to SR A1A	1801		County	No	0.35	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	330	450	350	340	300	370	350	400	330	420	E	13,640	0.03	C	40	1,020
Taylor Rd. (CO)	Tomoka Farms Rd. to Spruce Creek Blvd	1810	Yes	County	Yes	0.70	2	2	45	E+W	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other -Urban	5,800	7,510	7,170	6,890	7,110	7,400	8,910	9,200	8,220	9,060	E	17,050	0.53	C	800	1,540
Taylor Rd. (CO)	Spruce Creek Blvd. to Crane Lake Blvd.	1811	Yes	County	Yes	1.10	2	2	50	E+W	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other -Urban	10,700	10,610	9,790	9,660	9,570	10,400	11,440	11,610	10,880	11,700	E	17,050	0.69	C	1,000	1,540
Taylor Rd. (CO)	Crane Lake Blvd. to Summertree Rd.	1812	Yes	County	Yes	0.75	2	2	50	E+W	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other -Urban	13,880	14,280	14,570	14,300	14,010	14,200	15,370	15,910	16,120	17,350	E	17,050	1.02	F	1,470	1,540
Taylor Rd. (CO)	Summertree Rd. to Williamson Blvd.	1813	Yes	County	Yes	0.20	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other -Urban	16,340	14,630	15,190	14,600	13,700	14,530	15,560	16,360	15,530	16,030	E	37,970	0.42	C	1,350	3,410
Taylor Rd. (CO)	Williamson Blvd. to I-95 (at Dunlawton A	1814	Yes	County	Yes	0.15	5	5	45	E+W	UA_NSSRC1_2W_5L_D_WL	Principal Arterial - Other -Urban	33,660	36,960	36,170	38,000	35,490	38,160	40,210	41,100	41,380	40,770	E	47,560	0.86	C	3,130	4,280
Taylor Rd. (PO)	Dunlawton Ave. to Clyde Morris Blvd.	1823		County	Yes	0.55	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	12,880	12,860	12,980	12,840	12,270	12,110	12,170	13,110	14,100	14,710	E	13,640	1.08	F	1,350	1,020
Taylor Rd. (PO)	Clyde Morris Blvd. to Hensel Rd	1824		County	Yes	0.50	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	19,620	18,590	19,530	19,350	18,280	18,470	18,220	19,650	20,250	19,440	E	37,970	0.51	C	1,710	3,410
Taylor Rd. (PO)	Hensel Rd. Spruce Creek Rd.	1826		County	Yes	1.00	4	4	45	E+W	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	15,720	15,270	15,600	15,050	14,330	14,610	12,610	15,810	15,930	15,520	E	37,970	0.41	C	1,440	3,410
Taylor Rd. (DL)	US 17/92 to Stratford Dr.	1816		County	Yes	0.80	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	6,240	5,820	5,740	6,090	5,690	5,610	4,950	6,410	7,020	8,810	E	13,640	0.65	D	810	1,020
Taylor Rd. (DL)	Stratford Dr. to Blue Lake Ave.	1818		County	Yes	0.95	2	2	50	E+W	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	5,180	4,710	4,750	5,070	4,780	4,900	4,730	5,430	5,740	7,040	E	17,050	0.41	C	580	1,540
Taylor Rd. (DL)	Blue Lake Ave. to Martin Luther King Blv	1819		County	Yes	0.80	2	2	50	E+W	UA_NSSRC1_2W_2L_U_0L	Minor Arterial - Urban	4,790	4,590	4,730	4,960	4,810	5,090	5,080	5,600	5,980	7,370	E	13,640	0.54	C	620	1,230

* 2014 AADT's for City of Deltona Port Orange are 2015 AADT's

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
Taylor Rd. (NSB)	Glencoe Rd. to Mission Rd	1821		County	No	0.75	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,340	1,480	1,550	1,500	1,590	1,680	1,870	1,910	2,050	2,330	E	13,640	0.17	C	200	1,020
Tivoli Dr. (Deltona)	Normandy Blvd. to Saxon Blvd.	DLT-125.000		City	No	0.60	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-		4,620	4,620			3,990	D	11,880	0.34	C	360	960
Tivoli Dr. (Deltona)	Saxon Blvd. to Providence Blvd	DLT-125.020		City	No	0.85	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban		-	-	-	11,070	12,360	12,360			11,213	D	10,660	1.05	E	881	960
Tomoka Farms Rd.	LPGA Blvd. (north end) to Dunn Ave.	1849		County	Yes	1.90	2	2	40	N+S	UA_UFH_2W_2L_U_0L	Major Collector - Urban	3,390	3,810	3,770	4,000	-	4,660	4,970	4,810	5,430	5,610	E	24,975	0.22	B	500	2,240
Tomoka Farms Rd.	Dunn Ave. to US 92	1848		County	Yes	1.90	2	2	40	N+S	UA_UFH_2W_2L_U_0L	Major Collector - Urban	3,080	3,350	3,550	4,380	5,070	5,800	5,510	6,810	7,870	9,060	E	24,975	0.36	C	860	2,240
Tomoka Farms Rd.	US 92 to Shunz Rd.	1847		County	Yes	3.02	2	2	40	N+S	UA_UFH_2W_2L_U_0L	Minor Arterial - Urban	6,110	5,920	5,300	5,780	6,030	5,810	7,300	7,360	7,040	9,250	E	24,975	0.37	C	810	2,240
Tomoka Farms Rd.	Shunz Rd. to Townwest Blvd	1845		County	Yes	1.50	2	2	50	N+S	UA_UFH_2W_2L_U_0L	Minor Arterial - Urban	4,910	5,470	5,870	5,780	6,210	6,270	7,040	7,870	7,840	8,660	E	24,975	0.35	C	760	2,240
Tomoka Farms Rd.	Townwest Blvd to Taylor Rd.	1844		County	Yes	1.45	2	2	50	N+S	UA_UFH_2W_2L_U_0L	Minor Arterial - Urban	5,500	5,970	5,780	5,720	6,150	6,190	7,280	7,760	7,560	7,850	E	24,975	0.31	C	660	2,240
Tomoka Farms Rd.	Taylor Rd. to Pioneer Tr	1843	Yes	County	Yes	2.80	2	2	50	N+S	UA_UFH_2W_2L_U_0L	Minor Arterial - Urban	7,910	9,180	9,330	8,810	9,790	9,950	10,310	12,360	10,670	11,030	E	24,975	0.44	C	1,000	2,240
Tomoka Farms Rd.	Pioneer Tr to SR 44	1840	Yes	County	Yes	2.20	2	2	50	N+S	RDA_UFH_2W_2L_U_0L	Minor Arterial - Rural	5,000	4,700	4,510	5,110	5,260	5,420	6,260	6,520	6,190	7,580	C	12,300	0.62	C	670	1,150
Town West Blvd. (Port Orange)	Tomoka Farms Rd. to Williamson Blvd.	1850		City	No	1.59	2	2	40	E+W	UA_NSSRC1_2W_2L_D_WL	Minor Collector - Urban	14,200	3,240	3,570	3,920	4,370	4,720	5,170	5,190	5,860	7,140	E	17,900	0.40	C	630	1,620
Turnbull Bay Rd.	Pioneer Tr. to Williams Rd.	1863		County	Yes	2.90	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban/Rural	3,210	3,340	2,950	2,900	2,860	3,080	3,140	2,560	3,840	3,850	E	13,640	0.28	C	330	1,230
Turnbull Bay Rd.	Williams Rd. to Industrial Park Ave.	1865		County	Yes	1.20	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	3,140	3,350	3,080	3,100	3,140	3,050	3,140	3,540	4,140	4,270	E	13,640	0.31	C	390	1,230
Turnbull Bay Rd.	Industrial Park Ave. to US 1	1867		County	Yes	0.85	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	4,510	4,720	4,090	3,890	3,910	3,890	3,970	4,300	4,930	4,900	E	13,640	0.36	C	400	1,020
Tymber Creek Rd.	Broadway Ave./US 1 to Airport Rd	1883		County	Yes	4.20	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	1,580	1,820	1,750	1,780	1,850	1,860	1,950	2,230	2,730	2,220	E	13,640	0.16	C	200	1,230
Tymber Creek Rd.	Airport Rd. to Tymber Run	1882		County	Yes	0.90	2	2	40	N+S	UA_NSSRC1_2W_2L_U_WL	Major Collector - Urban	8,440	8,240	8,000	8,280	7,870	6,920	8,390	9,900	10,810	10,290	E	17,050	0.60	C	840	1,540
Tymber Creek Rd.	Tymber Run to SR 40	1881		County	Yes	0.50	4	4	40	N+S	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	13,470	12,320	12,880	13,400	12,670	11,610	13,150	13,280	14,720	11,520	E	17,050	0.68	C	950	1,540
Tymber Creek Rd.	SR 40 to Riverbend Rd.	1880		County	Yes	0.45	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	670	740	770	680	740	750	760	610	550	850	E	13,640	0.06	C	100	1,020
Van Ave. (DBS)	Peninsula Dr. to SR A1A	1890		County	No	0.20	2	2	25	E+W	UA_NSSRC2_2W_2L_U_0L	n/c	500	420	630	630	550	600	-	-	-	-	E	13,640	-	-	-	1,230
Volco Rd.	Cow Creek Rd. to Beacon Light Rd.	1920		County	Yes	2.50	2	2	30	N+S	RUA_UFH_2W_2L_U_0L	n/c	150	220	270	220	230	240	280	310	290	300	C	6,300	0.05	B	30	590
Volco Rd.	Beacon Light Rd. to 35th St.	1921		County	Yes	1.40	2	2	45	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban/Rural	410	400	460	420	480	460	530	560	530	530	E	13,640	0.04	C	50	1,230
Volco Rd.	35th St. to US 1	1922		County	Yes	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,820	1,420	1,860	1,840	1,930	1,800	1,920	1,790	1,730	2,130	E	13,640	0.16	C	170	1,020
Voorhis Ave.	US 17/92 to Amelia Ave.	1931		County	Yes	0.20	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	4,030	3,780	3,940	3,670	3,560	3,730	-	6,160	4,270	3,850	E	13,640	0.28	C	330	1,020
Voorhis Ave.	Amelia Ave. to Hill Ave.	1933		County	Yes	1.00	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,260	3,000	3,060	3,000	2,780	3,270	-	3,260	3,310	4,280	E	13,640	0.31	C	360	1,020
Voorhis Ave.	Hill Ave. to Blue Lake Ave.	1934		County	Yes	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,130	2,960	3,030	3,070	2,790	3,370	-	3,190	3,280	3,350	E	13,640	0.25	C	280	1,020
Voorhis Ave.	Blue Lake Ave. to SR 44	1935		County	Yes	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	3,500	3,130	3,340	3,280	3,110	3,190	3,600	3,580	3,610	4,560	E	13,640	0.33	C	350	1,020
Walter Boardman Ln.	Old Dixie Hwy. to Highbridge Rd.	1960		County	Yes	1.20	2	2	30	E+W	RDA_UFH_2W_2L_U_0L	Major Collector - Rural	2,920	2,630	2,390	2,730	2,270	2,650	2,910	3,380	2,890	3,350	C	12,300	0.27	B	270	1,150
Wayne Ave. (NSB)	Halleck St. to US 1	1970		County	Yes	1.00	2	2	30	E+W	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,400	6,430	6,390	5,970	6,010	6,660	4,670	7290	7,030	6,720	E	13,640	0.49	D	580	1,020
Westside Parkway (new/Fatio)	ex. termini south of SR 44 to Beresford A	1979		County	Yes	1.00	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	90	110	80	120	80	90	90	-	-	90	E	13,640	0.01	C	10	1,020
Westside Parkway (Fatio Rd.)	Beresford Ave. to McGregor Rd.	1978		County	Yes	2.00	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	1,500	1,370	1,450	1,470	1,460	1,520	-	1,860	1,960	2,160	E	13,640	0.16	C	210	1,020
Westside Parkway (new)	McGregor Rd. to existing Hamilton/Fatio	1977		County	Yes	2.00	0	0	40	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	-	-	-	-	-	-	-	-	-	-	-	13,640	-	-	-	-
Westside Parkway (Hamilton Ave.)	Hamilton Ave. (north end) to French Ave	1976		County	Yes	1.20	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	2,400	2,300	2,430	2,560	2,410	2,150	-	2,400	2,590	2,690	E	13,640	0.20	C	240	1,020
Westside Parkway (Lawton Ave.)	French Ave. to Rhode Island Ave.	1975		County	Yes	1.25	0	0	25	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	-	-	-	-	-	-	-	-	-	-	-	13,640	-	-	-	-
Westside Parkway (new)	Rhode Island Ave. to Debary Plantation E	1974		County	Yes	1.48	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	-	-	-	-	-	-	-	-	-	-	-	13,640	-	-	-	-
Westside Parkway (Don Smith Blv	DeBary Plantation Blvd. to Highbanks Rd	798207		County	Yes	1.2	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	1,760	1,710	1,870	1,860	1,810	-	-	1,960	-	4,800	E	13,640	0.35	C	418	1,230
Kepler Rd	Northern terminus to US 92	1040		County	No	0.60	2	2	50	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	1,510	1,360	1,560	1,460	1,430	1,400	1,550	1,530	1,500	1,560	E	13,640	0.11	C	140	1,230
W. Volusia Bltwy (Kepler Rd)	US 92 to Minnesota Ave.	1951		County	Yes	1.85	2	2	50	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	12,408	12,820	12,130	12,290	12,110	12,850	15,370	15,740	14,760	14,920	E	17,050	0.88	C	1,200	1,540
W. Volusia Bltwy (Kepler Rd)	Minnesota Ave. to SR 44	1949		County	Yes	0.75	2	2	50	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	14,160	13,890	14,310	14,480	14,110	14,000	16,270	17,240	16,250	19,650	E	17,050	1.15	F	1,660	1,540
W. Volusia Bltwy (Kepler Rd)	SR 44 to Beresford Ave. Ext.	1948		County	Yes	0.75	2	2	50	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	9,720	10,600	10,260	10,390	10,040	10,580	12,080	11,280	10,990	12,060	E	17,050	0.71	C	950	1,540
W. Volusia Bltwy (Dr MLK Jr)	Beresford Ave. Ext. to Taylor Rd.	1945		County	Yes	1.10	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	9,950	10,370	9,940	10,220	9,890	10,410	11,690	11,360	10,360	11,240	E	17,050	0.66	C	890	1,540
W. Volusia Bltwy (Dr MLK Jr)	Taylor Rd. to Orange Camp Rd.	1943		County	Yes	1.00	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	12,700	11,910	11,240	11,850	11,440	12,050	14,330	13,800	12,670	14,480	E	17,050	0.85	C	1,150	1,540
W. Volusia Bltwy (Dr MLK Jr)	Orange Camp Rd. to Cassadaga Rd.	1942		County	Yes	1.40	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	10,500	11,040	9,940	10,280	10,320	10,840	11,860	12,050	11,130	12,540	E	17,050	0.74	C	1,010	1,540
W. Volusia Bltwy (Dr MLK Jr)	Cassadaga Rd. to SR 472	1940		County	Yes	0.20	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	11,660	11,830	10,610	11,290	10,840	10,930	12,890	12,920	12,570	13,330	E	17,050	0.78	C	1,080	1,540
W. Volusia Bltwy (Kentucky Ave)	SR 472 to Graves Ave	1030		County	Yes	0.80	2	2	45	N+S	UA_NSSRC1_2W_2L_U_WL	Major Collector - Urban	8,740	9,110	7,970	9,010	9,050	9,320	10,380	10,670	10,350	10,570	E	17,050	0.62	C	950	1,540
W. Volusia Bltwy (Veteran's Memo	Graves Ave. to Rhode Island Ave.	1902		County	Yes	1.50	2	2	45	N+S	UA_NSSRC1_2W_2L_D_WL	Minor Arterial - Urban	13,860	13,050	14,100	14,830	15,510	15,510	18,510	16,430	14,420	13,400	E	17,900	0.75	C	1,120	1,620
W. Volusia Bltwy (Veteran's Memo	Rhode Island Ave. to Harley Strickland B	1901		County	Yes	1.22	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Minor Arterial - Urban	14,740	15,530	13,810	15,170	18,000	17,750	18,830	20,170	19,290	19,420	E	17,050	1.14	F	1,570	1,540
W. Volusia Bltwy (Veteran's Memo	Harley Strickland Blvd. to Saxon Blvd.	1900		County	Yes	0.38	4	4	40	N+S	UA_NSSRC1_2W_4L_D_WL	Minor Arterial - Urban	19,480	18,660	18,720	19,260	18,450	18,050	14,440	13,150	14,020	14,650	E	37,970	0.39	C	1,200	3,410
Williams Rd.	Turnbull Bay Rd. to Mooneyham Dr.	1981		County	No	0.50	2	2	35	N+S	UA_NSSRC2_2W_2L_U_0L	n/c	1,520	1,520	1,430	1,430	1,490	1,590	1,610	1,870	2,020	2,040	E	13,640	0.15	C	180	1,020
Williams Rd.	Mooneyham Dr. to Pioneer Tr.	1980		County	No	1.50	2	2	40	N+S	UA_NSSRC1_2W_2L_U_0L	n/c	1,780	1,640	1,770	1,640	1,790	1,740	1,860	2,160	2,200	2,290	E	13,640	0.17	C	210	1,230
Williamson Blvd.	SR 40 to Hand Ave.	2004		County	Yes	0.60	4	4	40	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	21,040	19,130	18,470	20,240	19,750	19,820	17,460	21,850	20,280	20,950	E	37,970	0.55	C	1,660	3,410
Williamson Blvd.	Hand Ave. to LPGA Blvd.	2001		County	Yes	2.05	2	2	50	N+S	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other - Urban	12,780	13,010	14,090	12,500	12,860	12,550	13,300	15,100	14,290	18,020	E	17,050	1.06	F	1,480	1,540
Williamson Blvd.	LPGA Blvd. to Mason Ave.	2000	Yes	County	Yes	0.35	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	14,340	14,650	13,570	14,430	14,610	14,400	16,300	17,300	16,880	18,700	E	37,970	0.49	C	1,530	3,410
Williamson Blvd.	Mason Ave. to Dunn Ave.	1999		County	Yes	0.35	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	13,780	13,210	12,750	13,390	13,770	13,830	13,220	14,040	16,010	15,570	E	37,970	0.41	C	1,270	3,410
Williamson Blvd.	Dunn Ave. to US 92	1998		County	Yes	2.35	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	15,070	15,530	13,560	14,200	13,110	13,920	15,070	17,070	17,570	18,230	E	37,970	0.48	C	1,520	3,410
Williamson Blvd.	US 92 to Midway Ave.	1997		County	Yes	0.50	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	9,120	10,390	10,170	10,490	9,900	10,280	10,710	10,060	12,150	13,710	E	37,970	0.36	C	1,240	3,410
Williamson Blvd.	Midway Ave. to Bellevue Ave. Ext.	1996		County	Yes	0.50	4	4	50	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	13,870	13,560	13,580	13,330	13,690	13,300	14,750	13,520	17,220	19,240	E	37,970	0.51	C	1,650	3,410
Williamson Blvd.	Bellevue Ave. Ext. to SR400/Beville Rd.	1994		County	Yes	1.00	4	4	50	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	14,890	15,260	14,820	15,070	15,310	14,840	16,380	19,250	19,120	23,460	E	37,970	0.62	C	1,880	3,410
Williamson Blvd.	SR400/Beville Rd. to Madeline Ave.	1993		County	Yes	1.50	2	2	45	N+S	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other - Urban	12,100	14,350	14,280	14,410	14,430	14,410	15,940	17,440	16,850	20,660	E	17,050	1.21	F	1,810	1,540
Williamson Blvd.	Madeline Ave. to Willow Run Blvd.	1992		County	Yes	1.10	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other - Urban	12,340	14,340	13,220	14,100	14,220	14,560	15,770	17,520	17,200	17,400	E	17,050	1.02	F	1,570	1,540
Williamson Blvd.	Willow Run Blvd. Townwest Blvd	1991		County	Yes	0.25	2	2	55	N+S	UA_NSSRC1_2W_2L_U_WL	Principal Arterial - Other - Urban	11,540	12,800	13,790	14,130	14,250	15,280	16,650	18,260	16,950	18,690	E	17,050	1.10	F	1,690	1,540
Williamson Blvd.	Townwest Blvd to Taylor Rd.	1990		County	Yes	2.75	4	4	55	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	10,770	14,380	14,340	17,250	16,480	16,450	18,450	20,650	18,620	21,610	E	37,970	0.57	C	1,790	3,410
Williamson Blvd.	Taylor Rd. to Spruce Creek Bridge	66		County	Yes	0.80	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	18,790	19,390	20,180	20,780	19,220	19,690	20,550	23,310	22,830	24,910	E	37,970	0.66	D	2,040	2,740
Williamson Blvd.	Spruce Creek Bridge to Airport Rd	65		County	Yes	1.00	4	4	45	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	15,760	15,180	16,410	17,070	16,200	16,190	17,430	19,250	19,650	21,300	D	35,820	0.59	D	1,750	2,630
Williamson Blvd.	Airport Rd to Pioneer Trail	1989		County	Yes	3.00	4	4	35	N+S	UA_NSSRC1_2W_4L_D_WL	Principal Arterial - Other - Urban	740	1,730	1,710	1,760	1,570	1,650	1,770	2,080	4,110	4,870	D	35,820	0.14	C	390	2,630
Willow Run Blvd. (PO)	Williamson Blvd. to Hidden Lake Dr.	798220		City	Yes	0.50	2	2	35	E+W	UA_NSSRC2_2W_2L_U_WL	Minor Collector - Urban	4,810	5,160	5,110	5,440	-	7,520	6,100	6,300	6,500	7,000	E	14,040	0.50	D	695	1,270
Willow Run Blvd. (PO)	Hidden Lake Dr. to Clyde Morris Blvd.	798220		City	Yes	0.85	2	2	35	E+W	UA_NSSRC2_2W_4L_D_WL	Minor Collector - Urban	8,200	8,140	8,230	8,510	-	10,190	6,100	6,300	6,500	7,000	E	30,420	0.23	C	695	2,740
Wilmette Ave. (OB)	SR 5A/Nova Rd to US 1	798147		City	No	1.80	2	2	35	E+W	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	6,730	8,330	8,010	9,620	6,300	7,300	7,500	7,900	8,200	8,400	E	14,040	0.60	D	n/a	1,270
Woodward Ave.	SR 44 to Euclid Ave.	2030		County	No	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	670	720	770	750	740	810	780	780	780	660	E	13,640	0.05	C	70	1,020
Woodward Ave.	Euclid Ave. to Beresford Ave.	2031		County	No	0.50	2	2	30	N+S	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	740	750	830	800	740	830	630	640	910	870	E	13,640	0.06	C	70	1,020
Yorktown Blvd. (PO)	Willow Run to Hidden Lake Dr.			City	Yes	0.50	0	0	25	N+S	UA_NSSRC2_2W_2L_U_WL	n/c	-	-	-	-	-	-	-	-	-	-	-	14,040	-	-	-	-
Yorktown Blvd. (PO)	Hidden Lake Dr. to SR 421/Dunlawton Av	PO2701		City	Yes	1.00	2	2	40	N+S	UA_NSSRC1_2W_2L_U_WL	n/c	7,640	7,250	6,920	6,780	-	10,280	-	-	-	-	E	17,050	-	-	-	1,540

Area Types

UA	= Urbanized Areas	
RDA	= Rural Developed Areas	
RUA	= Rural Undeveloped Areas	

Facility Types - Urban/Transitioning

FWIS	= Freeways - Interchange Spacing Group 1 (spacing >= 2 miles apart)
FW	= Freeways - Transitioning & Rural
UFH	= Uninterrupted Flow Highways
SSAC1	= State Signalized Arterial Class 1
SSAAC2	= State Signalized Arterial Class 2
NSSRC1	= Non-State Signalized Road Class 1
NSSRC2	= Non-State Signalized Road Class 2

Florida DOT	Centerline Miles
SIS Rds =	146
non-SIS Rds =	221
All State Rds =	367
County	
TFare Rds =	373
Total	740

Daily VMT											Centerline Miles	
Florida DOT												
SIS Rds =	5,186,090	5,253,250	5,118,011	5,126,566	5,145,738	5,277,331*	5,544,493	5,462,766	5,545,057	5,915,770	6.7%	
non-SIS Rds =	3,662,290	3,589,875	3,504,308	3,422,516	3,531,452	3,575,190	3,811,817	3,983,816	4,069,564	4,063,423	-0.2%	
All State Rds =	8,848,380	8,843,125	8,622,319	8,549,082	8,677,190	8,852,521	9,356,310	9,446,582	9,614,621	9,979,193	3.8%	
County												
TFare Rds =	2,334,590	2,343,773	2,318,300	2,338,312	2,274,916	2,311,820	2,423,255	2,600,930	2,640,960	2,775,919	5.1%	
***TOTAL* =**	11,182,970	11,186,898	10,940,619	10,887,394	10,952,106	11,164,341	11,779,564	12,047,512	12,255,581	12,755,112	4.1%	

% of Daily VMT										
Florida DOT										
SIS Rds =	46%	47%	47%	47%	47%	47%	47%	45%	45%	46%
non-SIS Rds =	33%	32%	32%	31%	32%	32%	32%	33%	33%	32%
All State Rds =	79%	79%	79%	79%	79%	79%	79%	78%	78%	78%
County										

2014 AADT's for City of Deltona Port Orange are 2015 AADT's

Volusia County 2017 Average Annual Daily Traffic & Historical Counts

Road Name	Limits (From - To)	Count Station Number	Cycle 10-2 2014 Evacuation Route	Roadway Maintaining Agency	2017 Roadway on County's Thoroughfare	Distance (in miles)	2017 No. of Lanes	2018 No. of Lanes	Posted Speed	Direction	2017 Facility Type	2010 Federal Functional Classification	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT*	2,015 AADT*	2016 AADT*	2017 AADT*	2018 AADT*	2018 Vol. Co. Allowable LOS	2018 DAILY LOS Capacity	2018 DAILY V/C Ratio	2018 DAILY LOS	2018 PM PEAK 2Way HOUR	2018 PM PEAK LOS Capacity
												TFare Rds =	21%	21%	21%	21%	21%	21%	21%	22%	22%	22%						
Facility Types - Rural Developed												**1-Year Change in Daily VMT**																
FW	= Freeways - Transitioning & Rural											**Florida DOT**																
UFH	= Uninterrupted Flow Highways											1-Yr SIS % Chg =	0.60%	1.30%	-2.57%	0.17%	0.37%	2.56%	5.06%	-1.47%	1.51%	6.69%						
IFH	= Interrupted Flow Highways											1-Yr non-SIS % Chg =	-3.08%	-1.98%	-2.38%	-2.33%	3.18%	1.24%	6.62%	4.51%	2.15%	-0.15%						
Facility Types - Rural Undeveloped												1 Yr All SR % Chg =	-0.95%	-0.06%	-2.50%	-0.85%	1.50%	2.02%	5.69%	0.96%	1.78%	3.79%						
FW	= Freeways - Transitioning & Rural											**County**																
UFH	= Uninterrupted Flow Highways											1-Yr Tfare % Chg =	-4.61%	0.39%	-1.09%	0.86%	-2.71%	1.62%	4.82%	7.33%	1.54%	5.11%						
ISIS	= Isolated Signalized Intersections											1-Yr All Significant Roads % Chg =	**-1.74%**	***0.04%***	***-2.20%***	**-0.49%**	**0.59%**	**1.94%**	**5.51%**	**2.27%**	**1.73%**	**4.08%**						
One-Way/Two-Way																												
1W	= One-way Directional Volumes											**3-Year Change in Daily VMT**																
2W	= Two-way Directional Volumes											**Florida DOT**																
Number of Lanes												3-Yr SIS % Chg =		-1.54%	-0.72%	-1.15%	-2.05%	3.11%	7.75%	3.51%	0.01%	8.29%						
2L, 4L, 5L, etc.	= Number of Roadway Lanes											3-Yr non-SIS % Chg =		-8.20%	-7.26%	-6.55%	-1.63%	2.02%	7.94%	11.43%	6.76%	2.00%						
Divided/Undivided												3-Yr All SR % Chg =		-4.36%	-3.49%	-3.38%	-1.88%	2.67%	7.83%	6.71%	2.76%	5.64%						
D	= Divided											**County**																
U	= Undivided											3-Yr Tfare % Chg =		-13.83%	-5.27%	0.16%	-2.94%	-0.28%	6.52%	12.51%	8.98%	6.73%						
												3-Yr All Significant Roads % Chg =		**-6.51%**	**-3.87%**	**-2.64%**	**-2.10%**	**2.04%**	**7.56%**	**7.91%**	**4.04%**	**5.87%**						
Left Turn Bays																												
WL	= Left Turn Bays																											
0L	= No Left Turn Bays																											

* 2014 AADT's for City of Deltona Port Orange are 2015 AADT's

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,510	1,600	**
4	Divided	*	3,420	3,580	**
6	Divided	*	5,250	5,390	**
8	Divided	*	7,090	7,210	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	660	1,330	1,410
4	Divided	*	1,310	2,920	3,040
6	Divided	*	2,090	4,500	4,590
8	Divided	*	2,880	6,060	6,130

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	260	680	1,770
50-84%	190	600	1,770	>1,770
85-100%	830	1,770	>1,770	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,420
85-100%	340	960	1,560	>1,770

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	4,120	5,540	6,700	7,190
6	6,130	8,370	10,060	11,100
8	8,230	11,100	13,390	15,010
10	10,330	14,040	16,840	18,930
12	14,450	18,880	22,030	22,860

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	770	1,530	2,170	2,990
4	Divided	3,300	4,660	5,900	6,530
6	Divided	4,950	6,990	8,840	9,790

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

TABLE 5

Generalized **Peak Hour Two-Way** Volumes for Florida's **Transitioning** and **Areas Over 5,000 Not In Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,300	1,460	**
4	Divided	*	3,060	3,200	**
6	Divided	*	4,690	4,820	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	580	1,200	1,280
4	Divided	*	890	2,590	2,850
6	Divided	*	1,440	4,040	4,280

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	140	550	1,760
50-84%	170	500	1,650	>1,760
85-100%	670	1,760	>1,760	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,410
85-100%	340	950	1,540	>1,760

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	3,970	5,190	6,200	6,460
6	5,860	7,710	9,190	9,990
8	7,660	10,230	12,170	13,500
10	9,550	12,750	15,190	17,010

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	820	1,550	2,190	2,990
4	Divided	3,170	4,460	5,660	6,260
6	Divided	4,750	6,700	8,480	9,400

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

TABLE 6

Generalized **Peak Hour Two-Way** Volumes for Florida's **Rural Undeveloped Areas** and **Developed Areas Less Than 5,000 Population**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Lanes	Median	B	C	D	E
2	Undivided	*	1,220	1,350	**
4	Divided	*	2,790	2,890	**
6	Divided	*	4,300	4,350	**

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Rural Undeveloped

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	120	190	300
50-84%	100	200	310	>1,010
85-100%	250	370	1,760	>1,760

Developed Areas

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	220	460	1,480
50-84%	170	430	1,270	>1,760
85-100%	560	1,760	>1,760	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	220	840
50-84%	*	120	780	1,390
85-100%	320	940	1,560	>1,820

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	3,020	4,510	5,490	6,300
6	4,510	6,720	8,220	9,720
8	6,040	8,970	10,960	12,970

Freeway Adjustments

Auxiliary Lanes Present in Both Directions + 1,800

UNINTERRUPTED FLOW HIGHWAYS

Rural Undeveloped

Lanes	Median	B	C	D	E
2	Undivided	440	790	1,350	2,710
4	Divided	2,440	3,820	4,840	5,500
6	Divided	3,680	5,730	7,280	8,240

Developed Areas

Lanes	Median	B	C	D	E
2	Undivided	820	1,550	2,190	2,990
4	Divided	2,460	3,860	4,970	5,660
6	Divided	3,680	5,790	7,440	8,500

Passing Lane Adjustments

Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

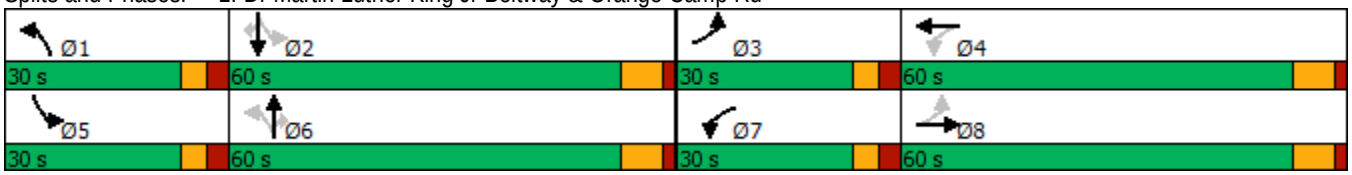
APPENDIX E: SYNCHRO OUTPUT

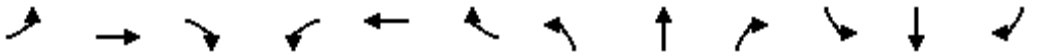
E-1: AM Peak Hour Existing Traffic Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	432	66	33	278	166	120	323	38	257	194	41
Future Volume (vph)	33	432	66	33	278	166	120	323	38	257	194	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6		6	2		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5		11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 137.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	432	66	33	278	166	120	323	38	257	194	41
Future Volume (veh/h)	33	432	66	33	278	166	120	323	38	257	194	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	35	455	62	35	293	157	126	340	27	271	204	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	3	3	3
Cap, veh/h	216	524	71	179	376	201	424	411	348	361	531	450
Arrive On Green	0.03	0.33	0.33	0.03	0.33	0.33	0.07	0.22	0.22	0.14	0.29	0.29
Sat Flow, veh/h	1739	1573	214	1753	1128	604	1753	1841	1560	1767	1856	1572
Grp Volume(v), veh/h	35	0	517	35	0	450	126	340	27	271	204	32
Grp Sat Flow(s),veh/h/ln	1739	0	1787	1753	0	1732	1753	1841	1560	1767	1856	1572
Q Serve(g_s), s	1.3	0.0	27.6	1.3	0.0	23.8	5.5	17.9	1.4	11.4	9.0	1.5
Cycle Q Clear(g_c), s	1.3	0.0	27.6	1.3	0.0	23.8	5.5	17.9	1.4	11.4	9.0	1.5
Prop In Lane	1.00		0.12	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	0	596	179	0	577	424	411	348	361	531	450
V/C Ratio(X)	0.16	0.00	0.87	0.20	0.00	0.78	0.30	0.83	0.08	0.75	0.38	0.07
Avail Cap(c_a), veh/h	564	0	922	530	0	894	699	950	805	527	958	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	31.8	24.9	0.0	30.5	27.1	37.6	31.2	25.7	29.1	26.5
Incr Delay (d2), s/veh	0.3	0.0	6.9	0.5	0.0	3.3	0.4	6.0	0.1	3.5	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	17.8	1.0	0.0	14.8	3.9	12.8	0.9	8.2	6.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.2	0.0	38.8	25.4	0.0	33.9	27.5	43.6	31.4	29.2	29.8	26.5
LnGrp LOS	C	A	D	C	A	C	C	D	C	C	C	C
Approach Vol, veh/h		552			485			493			507	
Approach Delay, s/veh		37.8			33.3			38.8			29.3	
Approach LOS		D			C			D			C	

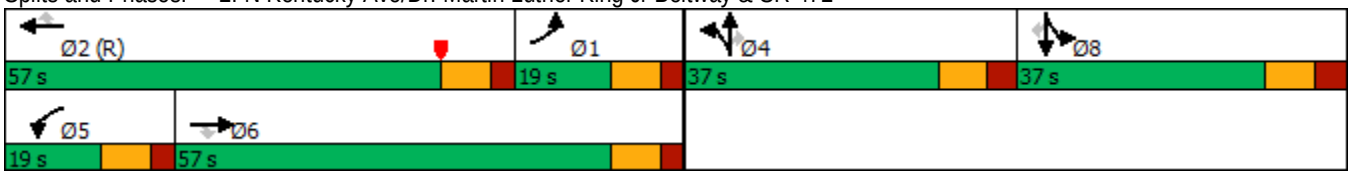
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	36.6	9.6	41.4	20.5	30.2	9.6	41.4
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	7.5	11.0	3.3	25.8	13.4	19.9	3.3	29.6
Green Ext Time (p_c), s	0.2	1.7	0.0	3.9	0.5	2.8	0.0	4.3

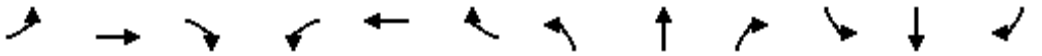
Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	892	76	95	1057	249	140	145	50	148	182	33
Future Volume (vph)	25	892	76	95	1057	249	140	145	50	148	182	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	15.8	15.8	15.8	16.4	16.4	16.4
Total Split (s)	19.0	57.0	57.0	19.0	57.0	57.0	37.0	37.0	37.0	37.0	37.0	37.0
Total Split (%)	12.7%	38.0%	38.0%	12.7%	38.0%	38.0%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3		8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 93 (62%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	892	76	95	1057	249	140	145	50	148	182	33
Future Volume (veh/h)	25	892	76	95	1057	249	140	145	50	148	182	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	28	1014	56	108	1201	174	159	165	0	168	207	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	8	8	8	5	5	5	4	4	4	4	4	4
Cap, veh/h	208	1272	567	124	1126	502	166	172		233	244	
Arrive On Green	0.12	0.38	0.38	0.02	0.11	0.11	0.19	0.19	0.00	0.13	0.13	0.00
Sat Flow, veh/h	1697	3385	1510	1739	3469	1547	882	915	1560	1753	1841	1560
Grp Volume(v), veh/h	28	1014	56	108	1201	174	324	0	0	168	207	0
Grp Sat Flow(s),veh/h/ln	1697	1692	1510	1739	1735	1547	1797	0	1560	1753	1841	1560
Q Serve(g_s), s	2.2	40.0	3.6	9.3	48.7	15.6	26.8	0.0	0.0	13.8	16.5	0.0
Cycle Q Clear(g_c), s	2.2	40.0	3.6	9.3	48.7	15.6	26.8	0.0	0.0	13.8	16.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.49		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	1272	567	124	1126	502	338	0		233	244	
V/C Ratio(X)	0.13	0.80	0.10	0.87	1.07	0.35	0.96	0.00		0.72	0.85	
Avail Cap(c_a), veh/h	208	1272	567	124	1126	502	338	0		323	339	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	0.98	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.7	41.7	30.3	72.5	67.0	52.2	60.3	0.0	0.0	62.4	63.6	0.0
Incr Delay (d2), s/veh	0.3	3.8	0.1	39.8	44.6	1.6	37.9	0.0	0.0	6.4	15.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	23.3	2.3	9.2	39.6	10.6	21.9	0.0	0.0	10.5	13.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	45.5	30.4	112.3	111.6	53.8	98.2	0.0	0.0	68.8	78.9	0.0
LnGrp LOS	E	D	C	F	F	D	F	A		E	E	
Approach Vol, veh/h		1098			1483			324	A		375	A
Approach Delay, s/veh		45.1			104.9			98.2			74.4	
Approach LOS		D			F			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.7	57.0		37.0	19.0	64.7		29.3				
Change Period (Y+Rc), s	* 8.3	* 8.3		* 8.8	* 8.3	* 8.3		9.4				
Max Green Setting (Gmax), s	* 11	* 49		* 28	* 11	* 49		27.6				
Max Q Clear Time (g_c+I1), s	4.2	50.7		28.8	11.3	42.0		18.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.1		1.4				

Intersection Summary			
HCM 6th Ctrl Delay		80.7	
HCM 6th LOS		F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

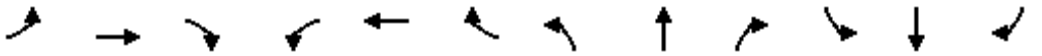
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	373	782	857	1213	0	0	0	0	129	0	132
Future Volume (vph)	0	373	782	857	1213	0	0	0	0	129	0	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	1		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		40.0	40.0	80.0	120.0					30.0		30.0
Total Split (%)		26.7%	26.7%	53.3%	80.0%					20.0%		20.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lead	Lead	Lag								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 138 (92%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	373	782	857	1213	0	0	0	0	129	0	132
Future Volume (veh/h)	0	373	782	857	1213	0	0	0	0	129	0	132
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1856	1856	0				1870	0	1870
Adj Flow Rate, veh/h	0	419	0	963	1363	0				145	0	37
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	5	5	3	3	0				2	0	2
Cap, veh/h	0	498		1150	2968	0				199	0	91
Arrive On Green	0.00	0.14	0.00	0.65	0.84	0.00				0.06	0.00	0.06
Sat Flow, veh/h	0	3561	1547	1767	3618	0				3456	0	1585
Grp Volume(v), veh/h	0	419	0	963	1363	0				145	0	37
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1767	1763	0				1728	0	1585
Q Serve(g_s), s	0.0	17.6	0.0	62.7	15.0	0.0				6.2	0.0	3.4
Cycle Q Clear(g_c), s	0.0	17.6	0.0	62.7	15.0	0.0				6.2	0.0	3.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	498		1150	2968	0				199	0	91
V/C Ratio(X)	0.00	0.84		0.84	0.46	0.00				0.73	0.00	0.41
Avail Cap(c_a), veh/h	0	761		1150	2968	0				507	0	232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.47	0.00	0.63	0.63	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	62.6	0.0	20.1	3.1	0.0				69.5	0.0	68.2
Incr Delay (d2), s/veh	0.0	8.1	0.0	3.6	0.3	0.0				5.1	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	11.3	0.0	30.3	5.6	0.0				5.1	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	70.7	0.0	23.7	3.4	0.0				74.6	0.0	71.1
LnGrp LOS	A	E		C	A	A				E	A	E
Approach Vol, veh/h		419	A		2326						182	
Approach Delay, s/veh		70.7			11.8						73.9	
Approach LOS		E			B						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		133.4			104.7	28.6		16.6				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		112.9			72.9	32.9		22.0				
Max Q Clear Time (g_c+I1), s		17.0			64.7	19.6		8.2				
Green Ext Time (p_c), s		13.2			2.6	1.9		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		24.1
HCM 6th LOS		C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	369	124	0	2062	578	157
Future Volume (vph)	369	124	0	2062	578	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		620	1000		0	1000
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	50			50	45	
Link Distance (ft)	1685			1452	1185	
Travel Time (s)	23.0			19.8	18.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	8%	8%	4%	4%	7%	7%
Shared Lane Traffic (%)						
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	4	
Permitted Phases		2				4
Detector Phase	2	2		6	4	4
Switch Phase						
Minimum Initial (s)	17.0	17.0		7.0	7.0	7.0
Minimum Split (s)	24.5	24.5		14.2	14.2	14.2
Total Split (s)	96.0	96.0		96.0	54.0	54.0
Total Split (%)	64.0%	64.0%		64.0%	36.0%	36.0%
Yellow Time (s)	5.5	5.5		4.8	4.8	4.8
All-Red Time (s)	2.0	2.0		2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.2	7.2	7.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 74 (49%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: I-4 EB & SR 472





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	369	124	0	2062	578	157
Future Volume (veh/h)	369	124	0	2062	578	157
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1781	1781	0	1841	1796	1796
Adj Flow Rate, veh/h	405	0	0	2266	635	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	8	8	0	4	7	7
Cap, veh/h	2004		0	2975	731	
Arrive On Green	1.00	0.00	0.00	0.59	0.22	0.00
Sat Flow, veh/h	3474	1510	0	5356	3319	1522
Grp Volume(v), veh/h	405	0	0	2266	635	0
Grp Sat Flow(s),veh/h/ln	1692	1510	0	1675	1659	1522
Q Serve(g_s), s	0.0	0.0	0.0	50.3	27.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	50.3	27.7	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2004		0	2975	731	
V/C Ratio(X)	0.20		0.00	0.76	0.87	
Avail Cap(c_a), veh/h	2004		0	2975	1035	
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.00	0.00	0.50	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	22.7	56.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.0	6.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	23.4	17.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.1	0.0	0.0	23.7	63.2	0.0
LnGrp LOS	A		A	C	E	
Approach Vol, veh/h	405	A		2266	635	A
Approach Delay, s/veh	0.1			23.7	63.2	
Approach LOS	A			C	E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		96.3		40.2		96.3
Change Period (Y+Rc), s		7.5		* 7.2		* 7.5
Max Green Setting (Gmax), s		88.5		* 47		* 89
Max Q Clear Time (g_c+I1), s		2.0		29.7		52.3
Green Ext Time (p_c), s		3.8		3.4		29.3

Intersection Summary		
HCM 6th Ctrl Delay		28.4
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

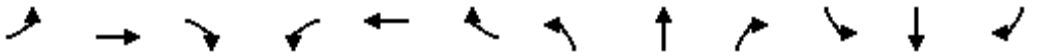
Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	29	32	119	33	98	6	781	60	65	1020	8
Future Volume (vph)	22	29	32	119	33	98	6	781	60	65	1020	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	245		0	280		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		329			1113			2670			998	
Travel Time (s)		9.0			25.3			45.5			17.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	Split	NA		Split	NA		Perm	NA		pm+pt	NA	
Protected Phases	8	8		4	4			6		5	2	
Permitted Phases							6			2		
Detector Phase	8	8		4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	15.7	15.7		15.9	15.9		22.3	22.3		12.2	22.3	
Total Split (s)	25.0	25.0		30.0	30.0		75.0	75.0		20.0	95.0	
Total Split (%)	16.7%	16.7%		20.0%	20.0%		50.0%	50.0%		13.3%	63.3%	
Yellow Time (s)	3.4	3.4		3.8	3.8		4.5	4.5		4.4	4.5	
All-Red Time (s)	2.3	2.3		2.1	2.1		2.8	2.8		2.8	2.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		5.9	5.9		7.3	7.3		7.2	7.3	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Min	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 24 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: US 17/92 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	29	32	119	33	98	6	781	60	65	1020	8
Future Volume (veh/h)	22	29	32	119	33	98	6	781	60	65	1020	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	24	32	20	129	36	53	7	849	58	71	1109	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	7	7	7
Cap, veh/h	113	68	43	158	60	89	339	2113	144	407	2504	18
Arrive On Green	0.06	0.06	0.06	0.09	0.09	0.09	0.64	0.64	0.64	0.03	0.72	0.72
Sat Flow, veh/h	1767	1068	667	1767	678	998	492	3295	225	1711	3473	25
Grp Volume(v), veh/h	24	0	52	129	0	89	7	447	460	71	545	572
Grp Sat Flow(s),veh/h/ln	1767	0	1735	1767	0	1676	492	1735	1785	1711	1706	1792
Q Serve(g_s), s	1.9	0.0	4.3	10.8	0.0	7.7	0.9	18.7	18.7	2.0	19.6	19.6
Cycle Q Clear(g_c), s	1.9	0.0	4.3	10.8	0.0	7.7	8.6	18.7	18.7	2.0	19.6	19.6
Prop In Lane	1.00		0.38	1.00		0.60	1.00		0.13	1.00		0.01
Lane Grp Cap(c), veh/h	113	0	111	158	0	149	339	1113	1145	407	1230	1292
V/C Ratio(X)	0.21	0.00	0.47	0.82	0.00	0.60	0.02	0.40	0.40	0.17	0.44	0.44
Avail Cap(c_a), veh/h	227	0	223	284	0	269	339	1113	1145	499	1230	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.6	0.0	67.8	67.1	0.0	65.7	12.8	13.0	13.0	9.3	8.6	8.6
Incr Delay (d2), s/veh	0.9	0.0	3.1	9.9	0.0	3.8	0.1	1.1	1.1	0.2	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	3.7	9.1	0.0	6.2	0.2	11.8	12.0	1.3	11.4	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	0.0	70.8	77.1	0.0	69.5	12.9	14.1	14.0	9.5	9.7	9.7
LnGrp LOS	E	A	E	E	A	E	B	B	B	A	A	A
Approach Vol, veh/h		76			218			914			1188	
Approach Delay, s/veh		69.8			74.0			14.1			9.7	
Approach LOS		E			E			B			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		115.4		19.3	11.9	103.5		15.3				
Change Period (Y+Rc), s		* 7.3		* 5.9	* 7.2	* 7.3		5.7				
Max Green Setting (Gmax), s		* 88		* 24	* 13	* 68		19.3				
Max Q Clear Time (g_c+I1), s		21.6		12.8	4.0	20.7		6.3				
Green Ext Time (p_c), s		8.9		0.6	0.1	6.6		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		19.1
HCM 6th LOS		B

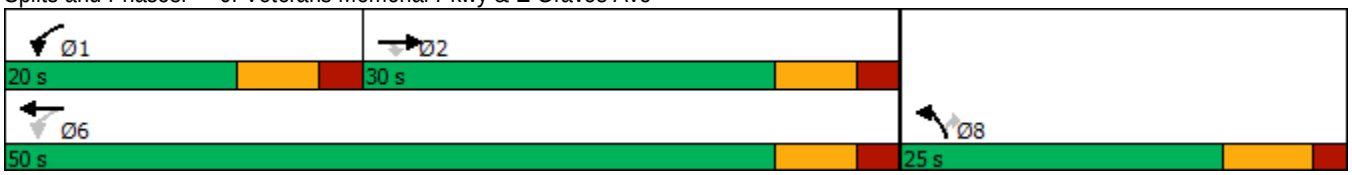
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	173	33	534	235	29	211
Future Volume (vph)	173	33	534	235	29	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	6%	12%	12%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases		2	6			8
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	7.0
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	14.0
Total Split (s)	30.0	30.0	20.0	50.0	25.0	25.0
Total Split (%)	40.0%	40.0%	26.7%	66.7%	33.3%	33.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	5.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 54.9	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	173	33	534	235	29	211
Future Volume (veh/h)	173	33	534	235	29	211
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1722	1722
Adj Flow Rate, veh/h	188	15	580	255	32	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	12	12
Cap, veh/h	378	321	696	1066	239	213
Arrive On Green	0.21	0.21	0.25	0.59	0.15	0.15
Sat Flow, veh/h	1811	1535	1725	1811	1640	1459
Grp Volume(v), veh/h	188	15	580	255	32	165
Grp Sat Flow(s),veh/h/ln	1811	1535	1725	1811	1640	1459
Q Serve(g_s), s	4.8	0.4	13.0	3.6	0.9	5.7
Cycle Q Clear(g_c), s	4.8	0.4	13.0	3.6	0.9	5.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	378	321	696	1066	239	213
V/C Ratio(X)	0.50	0.05	0.83	0.24	0.13	0.78
Avail Cap(c_a), veh/h	791	670	696	1478	560	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	16.6	11.3	5.2	19.6	21.7
Incr Delay (d2), s/veh	1.4	0.1	8.6	0.2	0.3	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	0.2	8.7	1.4	0.5	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.8	16.7	19.9	5.4	19.9	27.6
LnGrp LOS	B	B	B	A	B	C
Approach Vol, veh/h	203			835	197	
Approach Delay, s/veh	19.6			15.4	26.4	
Approach LOS	B			B	C	

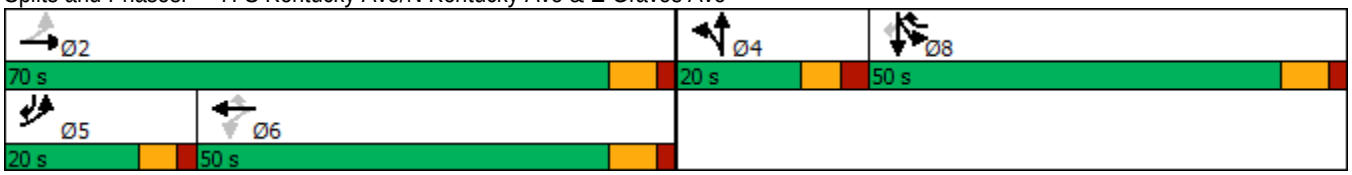
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	20.0	18.0				38.0	14.7
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	13.0	23.0				43.0	18.0
Max Q Clear Time (g_c+I1), s	15.0	6.8				5.6	7.7
Green Ext Time (p_c), s	0.0	1.2				2.1	0.4

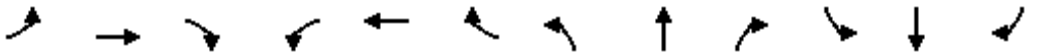
Intersection Summary	
HCM 6th Ctrl Delay	17.9
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	244	5	7	471	173	17	12	5	70	6	310
Future Volume (vph)	126	244	5	7	471	173	17	12	5	70	6	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			3280			535			4220	
Travel Time (s)		26.0			49.7			14.6			63.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	11%	11%	11%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6	8	4	4		8	8	5
Permitted Phases	2			6		6						8
Detector Phase	5	2		6	6	8	4	4		8	8	5
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	5.0
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	11.0
Total Split (s)	20.0	70.0		50.0	50.0	50.0	20.0	20.0		50.0	50.0	20.0
Total Split (%)	14.3%	50.0%		35.7%	35.7%	35.7%	14.3%	14.3%		35.7%	35.7%	14.3%
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	6.0
Lead/Lag	Lead			Lag	Lag							Lead
Lead-Lag Optimize?	Yes			Yes	Yes							Yes
Recall Mode	None	Min		Min	Min	None	None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 89.2	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	244	5	7	471	173	17	12	5	70	6	310
Future Volume (veh/h)	126	244	5	7	471	173	17	12	5	70	6	310
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	145	280	6	8	541	156	20	14	3	80	7	195
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	11	11	4	4	4	2	2	2	6	6	6
Cap, veh/h	291	881	19	487	669	802	49	34	7	259	272	348
Arrive On Green	0.08	0.52	0.52	0.36	0.36	0.36	0.05	0.05	0.05	0.15	0.15	0.15
Sat Flow, veh/h	1654	1694	36	1076	1841	1560	971	679	146	1725	1811	1535
Grp Volume(v), veh/h	145	0	286	8	541	156	37	0	0	80	7	195
Grp Sat Flow(s),veh/h/ln	1654	0	1730	1076	1841	1560	1796	0	0	1725	1811	1535
Q Serve(g_s), s	3.9	0.0	7.1	0.4	19.9	4.1	1.5	0.0	0.0	3.1	0.2	8.5
Cycle Q Clear(g_c), s	3.9	0.0	7.1	0.4	19.9	4.1	1.5	0.0	0.0	3.1	0.2	8.5
Prop In Lane	1.00		0.02	1.00		1.00	0.54		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	291	0	900	487	669	802	90	0	0	259	272	348
V/C Ratio(X)	0.50	0.00	0.32	0.02	0.81	0.19	0.41	0.00	0.00	0.31	0.03	0.56
Avail Cap(c_a), veh/h	473	0	1450	711	1053	1127	311	0	0	987	1036	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	0.0	10.4	15.3	21.6	9.9	34.6	0.0	0.0	28.5	27.2	25.7
Incr Delay (d2), s/veh	1.3	0.0	0.3	0.0	3.6	0.2	3.0	0.0	0.0	0.7	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	0.0	4.1	0.1	12.8	3.1	1.3	0.0	0.0	2.2	0.2	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	0.0	10.7	15.4	25.1	10.0	37.6	0.0	0.0	29.1	27.3	27.1
LnGrp LOS	B	A	B	B	C	B	D	A	A	C	C	C
Approach Vol, veh/h		431			705			37			282	
Approach Delay, s/veh		12.8			21.7			37.6			27.7	
Approach LOS		B			C			D			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		46.1		10.8	11.8	34.3		18.3				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		63.0		13.0	14.0	43.0		43.0				
Max Q Clear Time (g_c+I1), s		9.1		3.5	5.9	21.9		10.5				
Green Ext Time (p_c), s		2.5		0.1	0.2	5.4		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			20.6									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	237	123	75	351	284	233
Future Volume (vph)	237	123	75	351	284	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		630	400		200	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	3280			551	7065	
Travel Time (s)	49.7			8.3	107.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	10%	5%	5%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		5.0	12.0	7.0	7.0
Minimum Split (s)	19.0		12.0	19.0	13.0	13.0
Total Split (s)	45.0		20.0	65.0	25.0	25.0
Total Split (%)	50.0%		22.2%	72.2%	27.8%	27.8%
Yellow Time (s)	5.0		5.0	5.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0		7.0	7.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	Min		None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 53.4	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	237	123	75	351	284	233
Future Volume (veh/h)	237	123	75	351	284	233
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1826	1826	1870	1870
Adj Flow Rate, veh/h	258	134	82	382	309	107
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	5	5	2	2
Cap, veh/h	566	285	436	892	401	357
Arrive On Green	0.26	0.26	0.07	0.49	0.23	0.23
Sat Flow, veh/h	2231	1079	1739	1826	1781	1585
Grp Volume(v), veh/h	199	193	82	382	309	107
Grp Sat Flow(s),veh/h/ln	1664	1558	1739	1826	1781	1585
Q Serve(g_s), s	4.5	4.7	1.4	6.2	7.4	2.6
Cycle Q Clear(g_c), s	4.5	4.7	1.4	6.2	7.4	2.6
Prop In Lane		0.69	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	439	411	436	892	401	357
V/C Ratio(X)	0.45	0.47	0.19	0.43	0.77	0.30
Avail Cap(c_a), veh/h	1391	1302	810	2329	744	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	14.1	9.8	7.5	16.5	14.6
Incr Delay (d2), s/veh	1.0	1.2	0.2	0.5	3.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	2.5	0.7	2.7	4.8	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.0	15.3	10.0	8.0	19.7	15.1
LnGrp LOS	B	B	A	A	B	B
Approach Vol, veh/h	392			464	416	
Approach Delay, s/veh	15.1			8.3	18.5	
Approach LOS	B			A	B	

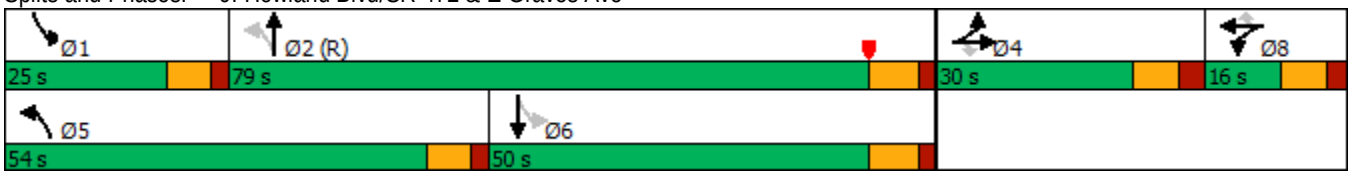
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		29.2		16.2	10.2	19.0
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		58.0		19.0	13.0	38.0
Max Q Clear Time (g_c+I1), s		8.2		9.4	3.4	6.7
Green Ext Time (p_c), s		3.5		0.9	0.1	3.3

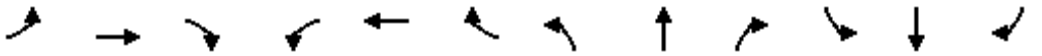
Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	29	175	19	32	122	319	1559	11	48	431	39
Future Volume (vph)	258	29	175	19	32	122	319	1559	11	48	431	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			363			1064			1452	
Travel Time (s)		12.6			8.3			16.1			19.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	8%	8%	8%
Shared Lane Traffic (%)	45%											
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0		7.0	17.0	
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.5	12.0	24.5		14.0	24.5	
Total Split (s)	30.0	30.0	30.0	16.0	16.0	16.0	54.0	79.0		25.0	50.0	
Total Split (%)	20.0%	20.0%	20.0%	10.7%	10.7%	10.7%	36.0%	52.7%		16.7%	33.3%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5		5.0	5.5	
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.5	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.5	7.0	7.5		7.0	7.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	C-Min		None	Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 82 (55%), Referenced to phase 2:NBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	29	175	19	32	122	319	1559	11	48	431	39
Future Volume (veh/h)	258	29	175	19	32	122	319	1559	11	48	431	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	303	0	0	21	35	133	347	1695	11	52	468	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	4	4	4	3	3	3	8	8	8
Cap, veh/h	358	0		99	104	88	648	2129	14	269	1646	130
Arrive On Green	0.10	0.00	0.00	0.06	0.06	0.06	0.24	1.00	1.00	0.05	0.52	0.52
Sat Flow, veh/h	3450	0	1535	1753	1841	1560	1767	3591	23	1697	3178	250
Grp Volume(v), veh/h	303	0	0	21	35	133	347	832	874	52	249	256
Grp Sat Flow(s),veh/h/ln	1725	0	1535	1753	1841	1560	1767	1763	1851	1697	1692	1736
Q Serve(g_s), s	12.9	0.0	0.0	1.7	2.7	8.5	14.5	0.0	0.0	2.1	12.4	12.5
Cycle Q Clear(g_c), s	12.9	0.0	0.0	1.7	2.7	8.5	14.5	0.0	0.0	2.1	12.4	12.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.14
Lane Grp Cap(c), veh/h	358	0		99	104	88	648	1045	1098	269	877	899
V/C Ratio(X)	0.85	0.00		0.21	0.34	1.50	0.54	0.80	0.80	0.19	0.28	0.29
Avail Cap(c_a), veh/h	506	0		99	104	88	987	1045	1098	393	877	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	0.41	0.41	0.41	0.98	0.98	0.98
Uniform Delay (d), s/veh	66.1	0.0	0.0	67.6	68.0	70.8	10.9	0.0	0.0	14.7	20.4	20.4
Incr Delay (d2), s/veh	9.1	0.0	0.0	1.0	1.9	276.9	0.4	2.7	2.6	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.2	0.0	0.0	1.4	2.4	17.1	6.1	1.4	1.4	1.4	8.4	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.2	0.0	0.0	68.6	69.9	347.6	11.3	2.7	2.6	15.0	20.7	20.7
LnGrp LOS	E	A		E	E	F	B	A	A	B	C	C
Approach Vol, veh/h		303	A		189			2053			557	
Approach Delay, s/veh		75.2			265.2			4.1			20.2	
Approach LOS		E			F			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	96.4		23.6	25.3	85.2		16.0				
Change Period (Y+Rc), s	7.0	7.5		8.0	7.0	7.5		7.5				
Max Green Setting (Gmax), s	18.0	71.5		22.0	47.0	42.5		8.5				
Max Q Clear Time (g_c+I1), s	4.1	2.0		14.9	16.5	14.5		10.5				
Green Ext Time (p_c), s	0.1	32.2		0.6	1.8	4.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Notes

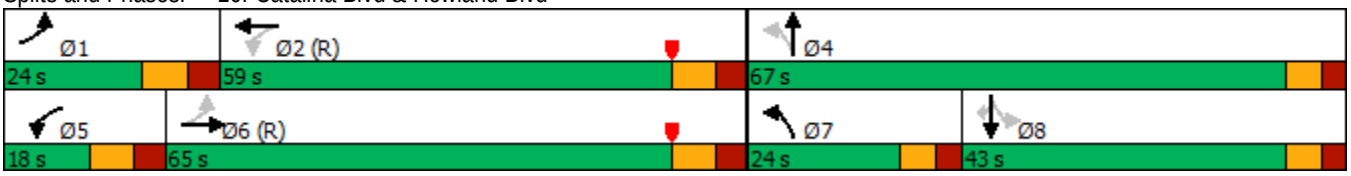
User approved volume balancing among the lanes for turning movement.

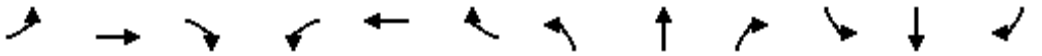
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	379	20	26	1027	9	104	23	13	39	35	535
Future Volume (vph)	106	379	20	26	1027	9	104	23	13	39	35	535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6019			1895			1021			5049	
Travel Time (s)		91.2			28.7			23.2			98.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases	6			2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	24.0	65.0		18.0	59.0		24.0	67.0		43.0	43.0	43.0
Total Split (%)	16.0%	43.3%		12.0%	39.3%		16.0%	44.7%		28.7%	28.7%	28.7%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	379	20	26	1027	9	104	23	13	39	35	535
Future Volume (veh/h)	106	379	20	26	1027	9	104	23	13	39	35	535
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1841	1841	1841	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	112	399	20	27	1081	9	109	24	9	41	37	251
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	4	4	4	4	4	4	2	2	2
Cap, veh/h	271	1756	88	532	1806	15	331	366	137	291	331	280
Arrive On Green	0.05	0.53	0.53	0.02	0.51	0.51	0.06	0.29	0.29	0.18	0.18	0.18
Sat Flow, veh/h	1711	3308	165	1753	3554	30	1753	1276	479	1376	1870	1585
Grp Volume(v), veh/h	112	205	214	27	532	558	109	0	33	41	37	251
Grp Sat Flow(s),veh/h/ln	1711	1706	1766	1753	1749	1835	1753	0	1755	1376	1870	1585
Q Serve(g_s), s	4.7	9.6	9.7	1.1	32.2	32.2	7.4	0.0	2.1	3.8	2.5	23.2
Cycle Q Clear(g_c), s	4.7	9.6	9.7	1.1	32.2	32.2	7.4	0.0	2.1	3.8	2.5	23.2
Prop In Lane	1.00		0.09	1.00		0.02	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	271	906	938	532	889	933	331	0	503	291	331	280
V/C Ratio(X)	0.41	0.23	0.23	0.05	0.60	0.60	0.33	0.00	0.07	0.14	0.11	0.90
Avail Cap(c_a), veh/h	371	906	938	603	889	933	419	0	702	378	449	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.73	0.73	0.73	1.00	0.00	1.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	20.5	18.8	18.8	16.9	26.1	26.1	44.7	0.0	38.9	52.4	51.8	60.4
Incr Delay (d2), s/veh	0.9	0.5	0.5	0.0	2.2	2.1	0.6	0.0	0.1	0.2	0.1	15.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	6.9	7.1	0.8	18.6	19.4	6.0	0.0	1.6	2.4	2.1	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	19.3	19.3	16.9	28.2	28.1	45.2	0.0	39.0	52.6	52.0	75.9
LnGrp LOS	C	B	B	B	C	C	D	A	D	D	D	E
Approach Vol, veh/h		531			1117			142			329	
Approach Delay, s/veh		19.7			27.9			43.8			70.3	
Approach LOS		B			C			D			E	

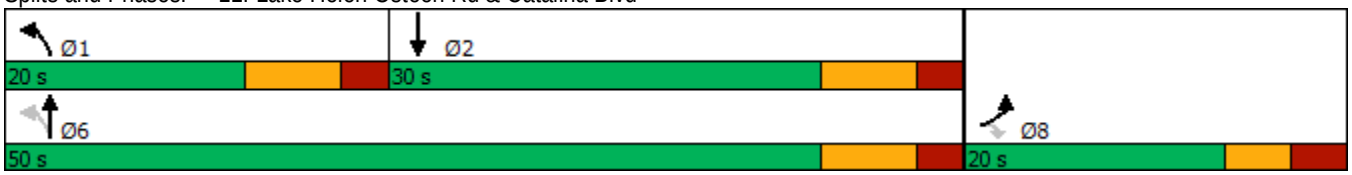
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	84.7		50.0	11.9	88.1	16.5	33.5				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	50.5		60.0	9.5	56.5	17.0	36.0				
Max Q Clear Time (g_c+I1), s	6.7	34.2		4.1	3.1	11.7	9.4	25.2				
Green Ext Time (p_c), s	0.1	8.1		0.2	0.0	3.6	0.1	1.3				

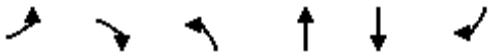
Intersection Summary												
HCM 6th Ctrl Delay			33.5									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	34	73	410	282	83	160
Future Volume (vph)	34	73	410	282	83	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	185	0	240			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			45	45	
Link Distance (ft)	5049			5467	741	
Travel Time (s)	98.4			82.8	11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	8		1	6	2	
Permitted Phases		8	6			
Detector Phase	8	8	1	6	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	
Minimum Split (s)	11.5	11.5	12.5	22.5	22.5	
Total Split (s)	20.0	20.0	20.0	50.0	30.0	
Total Split (%)	28.6%	28.6%	28.6%	71.4%	42.9%	
Yellow Time (s)	3.5	3.5	5.0	5.0	5.0	
All-Red Time (s)	3.0	3.0	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	7.5	7.5	7.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	Min	Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 54.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 11: Lake Helen Osteen Rd & Catalina Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	73	410	282	83	160
Future Volume (veh/h)	34	73	410	282	83	160
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1826	1826
Adj Flow Rate, veh/h	38	12	456	313	92	156
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	5	5
Cap, veh/h	89	80	725	1247	185	313
Arrive On Green	0.05	0.05	0.21	0.67	0.30	0.30
Sat Flow, veh/h	1781	1585	1781	1870	608	1032
Grp Volume(v), veh/h	38	12	456	313	0	248
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	0	1640
Q Serve(g_s), s	1.0	0.4	7.6	3.3	0.0	6.1
Cycle Q Clear(g_c), s	1.0	0.4	7.6	3.3	0.0	6.1
Prop In Lane	1.00	1.00	1.00			0.63
Lane Grp Cap(c), veh/h	89	80	725	1247	0	498
V/C Ratio(X)	0.42	0.15	0.63	0.25	0.00	0.50
Avail Cap(c_a), veh/h	486	433	799	1608	0	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.8	22.5	7.7	3.3	0.0	14.1
Incr Delay (d2), s/veh	6.7	1.8	2.2	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.3	3.6	0.8	0.0	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.5	24.3	9.9	3.5	0.0	15.8
LnGrp LOS	C	C	A	A	A	B
Approach Vol, veh/h	50			769	248	
Approach Delay, s/veh	28.2			7.3	15.8	
Approach LOS	C			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.0	22.5				40.5	9.0
Change Period (Y+Rc), s	7.5	7.5				7.5	6.5
Max Green Setting (Gmax), s	12.5	22.5				42.5	13.5
Max Q Clear Time (g_c+I1), s	9.6	8.1				5.3	3.0
Green Ext Time (p_c), s	0.9	2.0				3.7	0.1

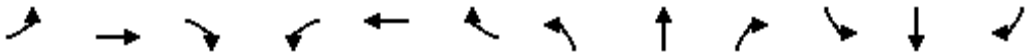
Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	300	189	28	738	0	230	0	19	1	0	2
Future Volume (vph)	0	300	189	28	738	0	230	0	19	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			638	
Travel Time (s)		28.7			22.0			170.9			14.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	9%	9%	5%	5%	5%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	85.0	85.0	85.0	20.0	105.0		25.0	50.0		25.0	25.0	
Total Split (%)	54.8%	54.8%	54.8%	12.9%	67.7%		16.1%	32.3%		16.1%	16.1%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	300	189	28	738	0	230	0	19	1	0	2
Future Volume (veh/h)	0	300	189	28	738	0	230	0	19	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1767	1767	1826	1826	1826	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	0	316	167	29	777	0	242	0	5	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	5	5	5	3	3	3	2	2	2
Cap, veh/h	46	1181	1001	617	1345	0	291	0	272	44	0	9
Arrive On Green	0.00	0.67	0.67	0.02	0.74	0.00	0.12	0.00	0.17	0.01	0.00	0.01
Sat Flow, veh/h	656	1767	1497	1739	1826	0	1767	0	1572	746	0	746
Grp Volume(v), veh/h	0	316	167	29	777	0	242	0	5	2	0	0
Grp Sat Flow(s),veh/h/ln	656	1767	1497	1739	1826	0	1767	0	1572	1493	0	0
Q Serve(g_s), s	0.0	11.2	6.5	0.8	30.2	0.0	18.0	0.0	0.4	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.2	6.5	0.8	30.2	0.0	18.0	0.0	0.4	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.50		0.50
Lane Grp Cap(c), veh/h	46	1181	1001	617	1345	0	291	0	272	52	0	0
V/C Ratio(X)	0.00	0.27	0.17	0.05	0.58	0.00	0.83	0.00	0.02	0.04	0.00	0.00
Avail Cap(c_a), veh/h	46	1181	1001	723	1345	0	291	0	436	208	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.98	0.98	1.00	1.00	0.00	0.86	0.00	0.86	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.4	9.6	7.5	9.4	0.0	66.3	0.0	53.2	75.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.0	1.8	0.0	16.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	7.5	3.9	0.5	16.7	0.0	15.8	0.0	0.3	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.5	9.7	7.5	11.2	0.0	82.7	0.0	53.2	76.1	0.0	0.0
LnGrp LOS	A	B	A	A	B	A	F	A	D	E	A	A
Approach Vol, veh/h		483			806			247			2	
Approach Delay, s/veh		10.2			11.0			82.1			76.1	
Approach LOS		B			B			F			E	

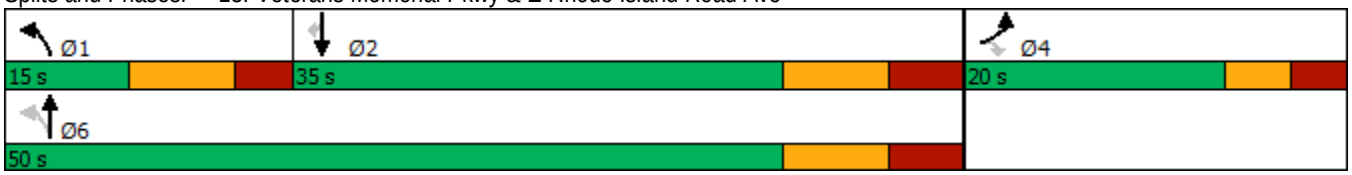
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		121.2		33.8	10.6	110.6	25.0	8.8				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		98.0		43.0	13.0	78.0	18.0	18.0				
Max Q Clear Time (g_c+I1), s		32.2		2.4	2.8	13.2	20.0	2.2				
Green Ext Time (p_c), s		9.7		0.0	0.0	3.8	0.0	0.0				

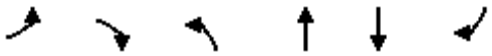
Intersection Summary												
HCM 6th Ctrl Delay			22.3									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	97	158	180	179	493	210
Future Volume (vph)	97	158	180	179	493	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	5%	5%	5%	5%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	13.5	13.5	13.5	20.5	20.5	20.5
Total Split (s)	20.0	20.0	15.0	50.0	35.0	35.0
Total Split (%)	28.6%	28.6%	21.4%	71.4%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 63.9	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	158	180	179	493	210
Future Volume (veh/h)	97	158	180	179	493	210
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1826	1826	1826	1826
Adj Flow Rate, veh/h	110	77	205	203	560	239
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	5	5	5	5
Cap, veh/h	205	182	353	1111	656	556
Arrive On Green	0.12	0.12	0.10	0.61	0.36	0.36
Sat Flow, veh/h	1781	1585	1739	1826	1826	1547
Grp Volume(v), veh/h	110	77	205	203	560	239
Grp Sat Flow(s),veh/h/ln	1781	1585	1739	1826	1826	1547
Q Serve(g_s), s	3.4	2.6	3.9	2.8	16.4	6.8
Cycle Q Clear(g_c), s	3.4	2.6	3.9	2.8	16.4	6.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	205	182	353	1111	656	556
V/C Ratio(X)	0.54	0.42	0.58	0.18	0.85	0.43
Avail Cap(c_a), veh/h	416	370	370	1278	805	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	23.8	12.3	5.0	17.1	14.1
Incr Delay (d2), s/veh	2.2	1.6	2.1	0.1	7.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	1.7	2.2	1.1	10.8	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.3	25.4	14.4	5.1	24.7	14.6
LnGrp LOS	C	C	B	A	C	B
Approach Vol, veh/h	187			408	799	
Approach Delay, s/veh	25.9			9.7	21.7	
Approach LOS	C			A	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.4	30.3		13.2		44.7
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	6.5	25.5		13.5		40.5
Max Q Clear Time (g_c+I1), s	5.9	18.4		5.4		4.8
Green Ext Time (p_c), s	0.0	2.4		0.3		1.0

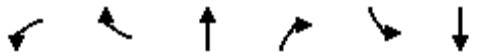
Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	324	213	188	93	64	141
Future Volume (vph)	324	213	188	93	64	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2590
Travel Time (s)	153.9		100.1			39.2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	6%	6%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	20.0	20.0	35.0		15.0	50.0
Total Split (%)	28.6%	28.6%	50.0%		21.4%	71.4%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 47.6	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	324	213	188	93	64	141
Future Volume (veh/h)	324	213	188	93	64	141
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1811	1811
Adj Flow Rate, veh/h	345	131	200	61	68	150
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	6	6
Cap, veh/h	422	376	701	208	483	1606
Arrive On Green	0.24	0.24	0.26	0.26	0.06	0.47
Sat Flow, veh/h	1767	1572	2773	795	1725	3532
Grp Volume(v), veh/h	345	131	130	131	68	150
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1712	1725	1721
Q Serve(g_s), s	8.5	3.2	2.7	2.8	1.2	1.1
Cycle Q Clear(g_c), s	8.5	3.2	2.7	2.8	1.2	1.1
Prop In Lane	1.00	1.00		0.46	1.00	
Lane Grp Cap(c), veh/h	422	376	461	448	483	1606
V/C Ratio(X)	0.82	0.35	0.28	0.29	0.14	0.09
Avail Cap(c_a), veh/h	520	463	1076	1046	694	3265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	14.5	13.5	13.5	9.8	6.8
Incr Delay (d2), s/veh	8.2	0.6	0.3	0.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.8	5.4	1.7	1.7	0.6	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.7	15.0	13.8	13.9	9.9	6.8
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h	476		261			218
Approach Delay, s/veh	22.0		13.9			7.8
Approach LOS	C		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.4		17.5	9.4	19.0
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 44		13.5	8.5	28.0
Max Q Clear Time (g_c+I1), s		3.1		10.5	3.2	4.8
Green Ext Time (p_c), s		0.9		0.5	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	105	59	7	254	125	5
Future Volume (vph)	105	59	7	254	125	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	30	
Link Distance (ft)	7900			4491	5182	
Travel Time (s)	153.9			87.5	117.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	5%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	105	59	7	254	125	5
Future Vol, veh/h	105	59	7	254	125	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	5	5	3	3	3	3
Mvmt Flow	117	66	8	282	139	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	183	0	448	150
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	298	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1386	-	567	894
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	751	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1386	-	563	894
Mov Cap-2 Maneuver	-	-	-	-	563	-
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	746	-

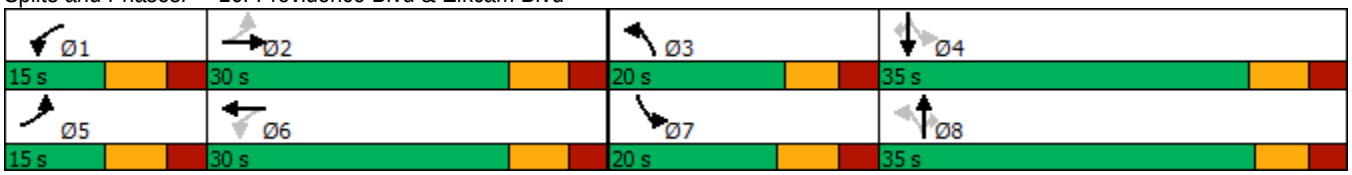
Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	571	-	-	1386	-
HCM Lane V/C Ratio	0.253	-	-	0.006	-
HCM Control Delay (s)	13.4	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	80	20	124	152	73	19	256	94	38	182	27
Future Volume (vph)	45	80	20	124	152	73	19	256	94	38	182	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	225		0	235		365	220		295
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		4491			6416			3965			8772	
Travel Time (s)		87.5			125.0			77.2			170.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	12.5	13.5		12.5	13.5		12.0	13.0	13.0	12.5	13.5	13.5
Total Split (s)	15.0	30.0		15.0	30.0		20.0	35.0	35.0	20.0	35.0	35.0
Total Split (%)	15.0%	30.0%		15.0%	30.0%		20.0%	35.0%	35.0%	20.0%	35.0%	35.0%
Yellow Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.5	7.5		7.0	7.0	7.0	7.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 68.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 16: Providence Blvd & Elkcam Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	80	20	124	152	73	19	256	94	38	182	27
Future Volume (veh/h)	45	80	20	124	152	73	19	256	94	38	182	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	48	85	14	132	162	57	20	272	47	40	194	14
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	3	3	3	5	5	5	7	7	7
Cap, veh/h	275	208	34	388	229	81	334	386	327	272	427	362
Arrive On Green	0.05	0.13	0.13	0.09	0.17	0.17	0.02	0.21	0.21	0.04	0.24	0.24
Sat Flow, veh/h	1753	1541	254	1767	1311	461	1739	1826	1547	1711	1796	1522
Grp Volume(v), veh/h	48	0	99	132	0	219	20	272	47	40	194	14
Grp Sat Flow(s),veh/h/ln	1753	0	1795	1767	0	1772	1739	1826	1547	1711	1796	1522
Q Serve(g_s), s	1.3	0.0	2.9	3.6	0.0	6.6	0.5	7.9	1.4	1.0	5.3	0.4
Cycle Q Clear(g_c), s	1.3	0.0	2.9	3.6	0.0	6.6	0.5	7.9	1.4	1.0	5.3	0.4
Prop In Lane	1.00		0.14	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	0	242	388	0	310	334	386	327	272	427	362
V/C Ratio(X)	0.17	0.00	0.41	0.34	0.00	0.71	0.06	0.70	0.14	0.15	0.45	0.04
Avail Cap(c_a), veh/h	423	0	708	467	0	699	689	896	760	576	866	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	22.6	18.8	0.0	22.2	17.0	20.8	18.3	16.9	18.6	16.7
Incr Delay (d2), s/veh	0.3	0.0	1.6	0.5	0.0	4.2	0.1	3.3	0.3	0.2	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	2.2	2.5	0.0	5.1	0.3	6.0	0.9	0.7	3.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	24.2	19.3	0.0	26.4	17.1	24.2	18.6	17.1	19.7	16.8
LnGrp LOS	C	A	C	B	A	C	B	C	B	B	B	B
Approach Vol, veh/h		147			351			339			248	
Approach Delay, s/veh		22.9			23.7			23.0			19.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	15.2	8.4	21.1	10.2	17.5	9.8	19.6
Change Period (Y+Rc), s	7.5	7.5	7.0	7.5	7.5	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	7.5	22.5	13.0	27.5	7.5	22.5	12.5	* 28
Max Q Clear Time (g_c+I1), s	5.6	4.9	2.5	7.3	3.3	8.6	3.0	9.9
Green Ext Time (p_c), s	0.1	0.5	0.0	1.4	0.0	1.3	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

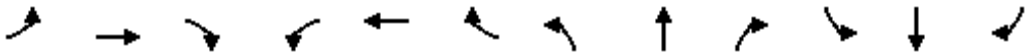
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	56	19	351	92	104	19	182	84	36	281	5
Future Volume (vph)	8	56	19	351	92	104	19	182	84	36	281	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	440		0	200		0	221		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35			35	
Link Distance (ft)		5182			627			919			3965	
Travel Time (s)		117.8			12.2			17.9			77.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	8%	8%	8%	4%	4%	4%	8%	8%	8%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0	12.0	5.0	12.0	
Minimum Split (s)	14.0	14.0		13.5	13.5		18.5	18.5	18.5	13.0	20.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0	35.0	20.0	55.0	
Total Split (%)	35.3%	35.3%		35.3%	35.3%		41.2%	41.2%	41.2%	23.5%	64.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.5	4.5	
All-Red Time (s)	3.0	3.0		2.5	2.5		2.5	2.5	2.5	3.5	3.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		6.5	6.5		6.5	6.5	6.5	8.0	8.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Min	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 58.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 17: Providence Blvd & Fort Smith Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	56	19	351	92	104	19	182	84	36	281	5
Future Volume (veh/h)	8	56	19	351	92	104	19	182	84	36	281	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1841	1841	1841	1781	1781	1781	1841	1841	1841
Adj Flow Rate, veh/h	9	61	11	382	100	77	21	198	55	39	305	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	4	4	4	8	8	8	4	4	4
Cap, veh/h	448	523	94	553	343	264	335	369	313	314	696	11
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.21	0.21	0.21	0.04	0.39	0.39
Sat Flow, veh/h	1150	1469	265	1307	964	743	1019	1781	1510	1753	1806	30
Grp Volume(v), veh/h	9	0	72	382	0	177	21	198	55	39	0	310
Grp Sat Flow(s),veh/h/ln	1150	0	1734	1307	0	1707	1019	1781	1510	1753	0	1835
Q Serve(g_s), s	0.3	0.0	1.6	16.1	0.0	4.3	1.0	5.7	1.7	0.9	0.0	7.2
Cycle Q Clear(g_c), s	4.6	0.0	1.6	17.7	0.0	4.3	1.0	5.7	1.7	0.9	0.0	7.2
Prop In Lane	1.00		0.15	1.00		0.44	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	448	0	617	553	0	607	335	369	313	314	0	707
V/C Ratio(X)	0.02	0.00	0.12	0.69	0.00	0.29	0.06	0.54	0.18	0.12	0.00	0.44
Avail Cap(c_a), veh/h	495	0	688	618	0	692	625	876	743	607	0	1489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	12.5	18.5	0.0	13.4	18.6	20.5	18.9	15.8	0.0	13.2
Incr Delay (d2), s/veh	0.0	0.0	0.1	2.9	0.0	0.3	0.1	1.7	0.4	0.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.0	8.1	0.0	2.7	0.4	4.2	1.1	0.6	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	0.0	12.6	21.4	0.0	13.7	18.7	22.2	19.3	16.0	0.0	13.8
LnGrp LOS	B	A	B	C	A	B	B	C	B	B	A	B
Approach Vol, veh/h		81			559			274			349	
Approach Delay, s/veh		12.9			18.9			21.4			14.0	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.3	20.0		27.6		30.3		27.6				
Change Period (Y+Rc), s	8.0	* 8		7.0		8.0		* 7				
Max Green Setting (Gmax), s	12.0	* 29		23.0		47.0		* 24				
Max Q Clear Time (g_c+I1), s	2.9	7.7		6.6		9.2		19.7				
Green Ext Time (p_c), s	0.0	1.9		0.3		2.8		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		17.7	
HCM 6th LOS		B	

Notes

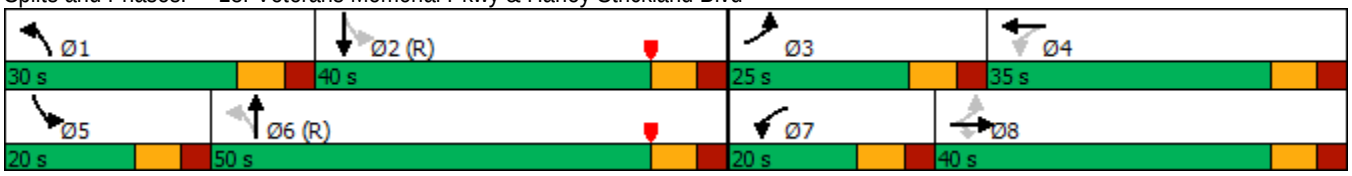
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

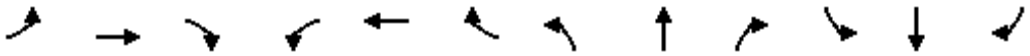
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	21	72	36	30	37	126	247	4	57	356	194
Future Volume (vph)	72	21	72	36	30	37	126	247	4	57	356	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	235		235	250		0	435		0	340		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		642			673			1923			1581	
Travel Time (s)		10.9			15.3			32.8			26.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	3	8	8	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	16.0		5.0	16.0	
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5		12.5	23.5		12.5	23.5	
Total Split (s)	25.0	40.0	40.0	20.0	35.0		30.0	50.0		20.0	40.0	
Total Split (%)	19.2%	30.8%	30.8%	15.4%	26.9%		23.1%	38.5%		15.4%	30.8%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 40 (31%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 18: Veterans Memorial Pkwy & Harley Strickland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	21	72	36	30	37	126	247	4	57	356	194
Future Volume (veh/h)	72	21	72	36	30	37	126	247	4	57	356	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1796	1796	1796	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	80	23	21	40	33	15	140	274	3	63	396	190
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	7	7	7	5	5	5	4	4	4
Cap, veh/h	188	147	124	176	62	28	568	2201	24	761	1413	669
Arrive On Green	0.06	0.08	0.08	0.03	0.05	0.05	0.05	0.63	0.63	0.03	0.61	0.61
Sat Flow, veh/h	1767	1856	1572	1711	1169	531	1739	3515	38	1753	2303	1091
Grp Volume(v), veh/h	80	23	21	40	0	48	140	135	142	63	300	286
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1711	0	1701	1739	1735	1819	1753	1749	1644
Q Serve(g_s), s	5.5	1.5	1.6	2.9	0.0	3.6	3.9	4.1	4.1	1.7	10.4	10.6
Cycle Q Clear(g_c), s	5.5	1.5	1.6	2.9	0.0	3.6	3.9	4.1	4.1	1.7	10.4	10.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.02	1.00		0.66
Lane Grp Cap(c), veh/h	188	147	124	176	0	91	568	1086	1139	761	1073	1009
V/C Ratio(X)	0.43	0.16	0.17	0.23	0.00	0.53	0.25	0.12	0.12	0.08	0.28	0.28
Avail Cap(c_a), veh/h	328	464	393	290	0	360	787	1086	1139	869	1073	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	55.8	55.9	56.0	0.0	59.9	8.7	9.9	9.9	8.4	11.7	11.8
Incr Delay (d2), s/veh	1.5	0.5	0.6	0.7	0.0	4.7	0.2	0.2	0.2	0.0	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	1.3	1.2	2.3	0.0	3.0	2.5	2.8	2.9	1.1	7.3	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	56.3	56.5	56.6	0.0	64.6	8.8	10.0	10.0	8.4	12.4	12.5
LnGrp LOS	E	E	E	E	A	E	A	B	B	A	B	B
Approach Vol, veh/h		124			88			417			649	
Approach Delay, s/veh		55.9			61.0			9.6			12.0	
Approach LOS		E			E			A			B	

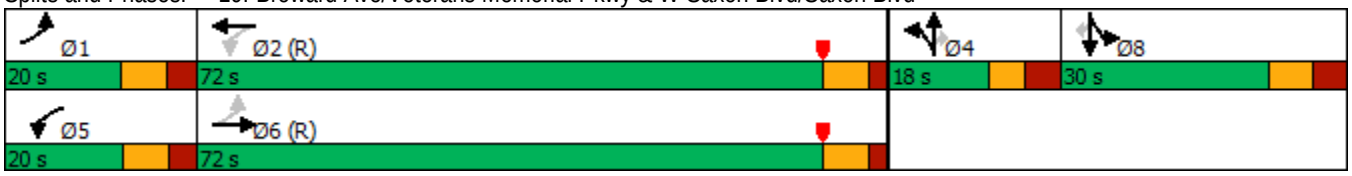
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	87.3	14.7	14.4	12.0	88.9	11.3	17.8
Change Period (Y+Rc), s	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max Green Setting (Gmax), s	22.5	32.5	17.5	27.5	12.5	42.5	12.5	32.5
Max Q Clear Time (g_c+I1), s	5.9	12.6	7.5	5.6	3.7	6.1	4.9	3.6
Green Ext Time (p_c), s	0.3	4.7	0.1	0.2	0.1	2.3	0.0	0.1

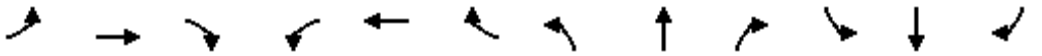
Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	575	12	112	1059	391	48	52	67	256	43	134
Future Volume (vph)	122	575	12	112	1059	391	48	52	67	256	43	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)										42%		
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	6			2					4			8
Detector Phase	1	6		5	2		4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	15.3	15.3	15.3
Total Split (s)	20.0	72.0		20.0	72.0		18.0	18.0	18.0	30.0	30.0	30.0
Total Split (%)	14.3%	51.4%		14.3%	51.4%		12.9%	12.9%	12.9%	21.4%	21.4%	21.4%
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.5	4.5	4.5
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	8.3	8.3	8.3
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 18 (13%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	575	12	112	1059	391	48	52	67	256	43	134
Future Volume (veh/h)	122	575	12	112	1059	391	48	52	67	256	43	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1856	1856	1856	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	131	618	9	120	1139	418	52	56	19	308	0	61
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	5	5	5
Cap, veh/h	318	2954	43	544	2119	777	88	93	79	371	0	165
Arrive On Green	0.05	0.58	0.58	0.09	1.00	1.00	0.05	0.05	0.05	0.11	0.00	0.11
Sat Flow, veh/h	1739	5062	74	1767	3652	1340	1781	1870	1585	3478	0	1547
Grp Volume(v), veh/h	131	405	222	120	1053	504	52	56	19	308	0	61
Grp Sat Flow(s),veh/h/ln	1739	1662	1813	1767	1689	1614	1781	1870	1585	1739	0	1547
Q Serve(g_s), s	4.3	8.1	8.1	4.0	0.0	0.0	4.0	4.1	1.6	12.2	0.0	5.1
Cycle Q Clear(g_c), s	4.3	8.1	8.1	4.0	0.0	0.0	4.0	4.1	1.6	12.2	0.0	5.1
Prop In Lane	1.00		0.04	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	1939	1058	544	1960	937	88	93	79	371	0	165
V/C Ratio(X)	0.41	0.21	0.21	0.22	0.54	0.54	0.59	0.60	0.24	0.83	0.00	0.37
Avail Cap(c_a), veh/h	389	1939	1058	622	1960	937	134	140	119	539	0	240
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00	0.96	0.00	0.96
Uniform Delay (d), s/veh	10.6	13.8	13.8	10.4	0.0	0.0	65.1	65.2	64.0	61.3	0.0	58.2
Incr Delay (d2), s/veh	0.9	0.2	0.5	0.2	0.9	1.9	6.1	6.2	1.6	6.9	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	5.4	6.0	2.5	0.5	0.9	3.6	3.8	1.2	9.5	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.5	14.1	14.3	10.6	0.9	1.9	71.2	71.3	65.6	68.1	0.0	59.5
LnGrp LOS	B	B	B	B	A	A	E	E	E	E	A	E
Approach Vol, veh/h		758			1677			127			369	
Approach Delay, s/veh		13.7			1.9			70.4			66.7	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	88.1		14.4	13.8	88.5		23.2				
Change Period (Y+Rc), s	7.9	6.8		7.5	7.8	6.8		8.3				
Max Green Setting (Gmax), s	12.1	65.2		10.5	12.2	65.2		21.7				
Max Q Clear Time (g_c+I1), s	6.3	2.0		6.1	6.0	10.1		14.2				
Green Ext Time (p_c), s	0.1	15.5		0.1	0.1	4.0		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		16.1	
HCM 6th LOS		B	

Notes

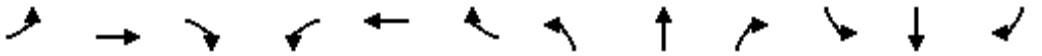
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	951	44	83	1613	21	48	1	82	10	4	8
Future Volume (vph)	17	951	44	83	1613	21	48	1	82	10	4	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	365		0	390		0	105		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1867			487			266			246	
Travel Time (s)		28.3			7.4			6.0			5.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.7	17.9		12.8	17.9		14.6	14.6		14.6	14.6	
Total Split (s)	18.0	102.0		20.0	104.0		18.0	18.0		18.0	18.0	
Total Split (%)	12.9%	72.9%		14.3%	74.3%		12.9%	12.9%		12.9%	12.9%	
Yellow Time (s)	4.8	4.9		4.9	4.9		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.9	2.0		2.9	2.0		3.4	3.4		3.4	3.4	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.7	6.9		7.8	6.9		7.6	7.6			7.6	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 21 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: FDOT Park & Ride & Saxon Blvd





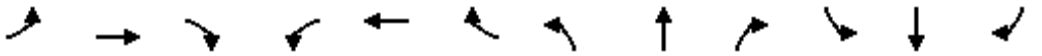
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	951	44	83	1613	21	48	1	82	10	4	8
Future Volume (veh/h)	17	951	44	83	1613	21	48	1	82	10	4	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1841	1841	1841	1826	1826	1826
Adj Flow Rate, veh/h	19	1069	46	93	1812	23	54	1	16	11	4	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	5	5	5
Cap, veh/h	245	3713	160	489	3961	50	123	4	72	79	25	8
Arrive On Green	0.04	1.00	1.00	0.03	0.77	0.77	0.05	0.05	0.05	0.05	0.05	0.05
Sat Flow, veh/h	1739	4900	211	1753	5114	65	1388	93	1481	747	519	169
Grp Volume(v), veh/h	19	725	390	93	1187	648	54	0	17	17	0	0
Grp Sat Flow(s),veh/h/ln	1739	1662	1788	1753	1675	1829	1388	0	1574	1435	0	0
Q Serve(g_s), s	0.3	0.0	0.0	1.6	17.3	17.3	3.2	0.0	1.5	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.6	17.3	17.3	4.9	0.0	1.5	1.7	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.04	1.00		0.94	0.65		0.12
Lane Grp Cap(c), veh/h	245	2518	1355	489	2594	1416	123	0	76	112	0	0
V/C Ratio(X)	0.08	0.29	0.29	0.19	0.46	0.46	0.44	0.00	0.22	0.15	0.00	0.00
Avail Cap(c_a), veh/h	340	2518	1355	581	2594	1416	159	0	117	150	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	3.2	5.5	5.5	65.6	0.0	64.1	64.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.5	0.2	0.6	1.1	2.4	0.0	1.5	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.2	0.3	0.8	8.7	9.5	3.6	0.0	1.1	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	0.3	0.5	3.4	6.1	6.6	68.0	0.0	65.5	64.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	A	A
Approach Vol, veh/h		1134			1928			71			17	
Approach Delay, s/veh		0.4			6.1			67.4			64.7	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	115.3		14.4	12.7	113.0		14.4				
Change Period (Y+Rc), s	* 7.7	6.9		7.6	7.8	6.9		7.6				
Max Green Setting (Gmax), s	* 10	97.1		10.4	12.2	95.1		10.4				
Max Q Clear Time (g_c+I1), s	2.3	19.3		6.9	3.6	2.0		3.7				
Green Ext Time (p_c), s	0.0	34.3		0.0	0.1	14.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		5.8
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	606	295	0	1710	563	0	0	303	0	0	482
Future Volume (vph)	0	606	295	0	1710	563	0	0	303	0	0	482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	9%	9%	9%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	606	295	0	1710	563	0	0	303	0	0	482
Future Vol, veh/h	0	606	295	0	1710	563	0	0	303	0	0	482
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Stop
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	9	9	9	5	5	5
Mvmt Flow	0	638	311	0	1800	593	0	0	319	0	0	507

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	-	-	0			-	-	900
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	-	-	-			-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	-	-	-			-	-	3.35
Pot Cap-1 Maneuver	0	-	0	0	-	0			0	0	543
Stage 1	0	-	0	0	-	0			0	0	-
Stage 2	0	-	0	0	-	0			0	0	-
Platoon blocked, %		-			-						1
Mov Cap-1 Maneuver	-	-	-	-	-	-			-	0	543
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	51.7
HCM LOS			F

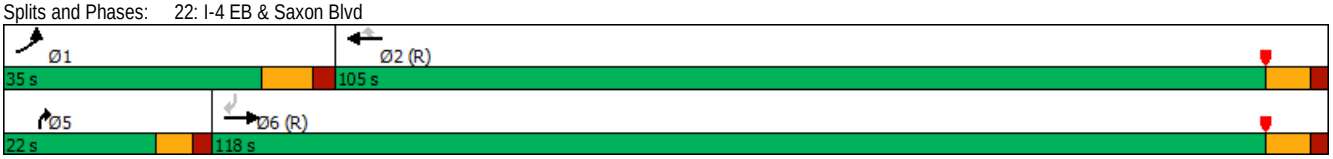
Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	543
HCM Lane V/C Ratio	-	-	0.934
HCM Control Delay (s)	-	-	51.7
HCM Lane LOS	-	-	F
HCM 95th %tile Q(veh)	-	-	11.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	624	0	0	1783	354	0	0	192	0	0	341
Future Volume (vph)	288	624	0	0	1783	354	0	0	192	0	0	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		2	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1253			900			503	
Travel Time (s)		24.2			19.0			13.6			7.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	320	693	0	0	1981	393	0	0	213	0	0	379
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	35.0	118.0			105.0	105.0			22.0			118.0
Total Split (%)	25.0%	84.3%			75.0%	75.0%			15.7%			84.3%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	0.92	0.17			0.81	0.35			0.30			0.25
Control Delay	84.0	1.6			9.8	3.9			1.1			0.4
Queue Delay	0.0	0.0			0.0	0.0			0.0			0.0
Total Delay	84.0	1.6			9.8	3.9			1.1			0.4
Queue Length 50th (ft)	241	13			321	49			0			0
Queue Length 95th (ft)	#495	52			m323	m50			0			0
Internal Link Dist (ft)		1519			1173			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	346	4196			2482	1147			852			1501
Starvation Cap Reductn	0	0			0	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	0.92	0.17			0.80	0.34			0.25			0.25

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 104 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 22: I-4 EB & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	624	0	0	1783	354	0	0	192	0	0	341
Future Volume (vph)	288	624	0	0	1783	354	0	0	192	0	0	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.91			0.95	1.00			0.88			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1687	4848			3539	1583			2656			1565
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1687	4848			3539	1583			2656			1565
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	320	693	0	0	1981	393	0	0	213	0	0	379
RTOR Reduction (vph)	0	0	0	0	0	38	0	0	204	0	0	51
Lane Group Flow (vph)	320	693	0	0	1981	355	0	0	9	0	0	328
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	28.8	121.2			96.7	96.7			6.0			121.2
Effective Green, g (s)	28.8	121.2			96.7	96.7			6.0			121.2
Actuated g/C Ratio	0.21	0.87			0.69	0.69			0.04			0.87
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	347	4196			2444	1093			113			1354
v/s Ratio Prot	c0.19	0.14			c0.56				0.00			
v/s Ratio Perm						0.22						0.21
v/c Ratio	0.92	0.17			0.81	0.32			0.08			0.24
Uniform Delay, d1	54.5	1.5			15.2	8.6			64.4			1.6
Progression Factor	0.94	1.04			0.58	0.65			1.00			1.00
Incremental Delay, d2	29.0	0.1			0.8	0.2			0.3			0.4
Delay (s)	80.5	1.6			9.6	5.8			64.7			2.0
Level of Service	F	A			A	A			E			A
Approach Delay (s)		26.5			9.0			64.7			2.0	
Approach LOS		C			A			E			A	

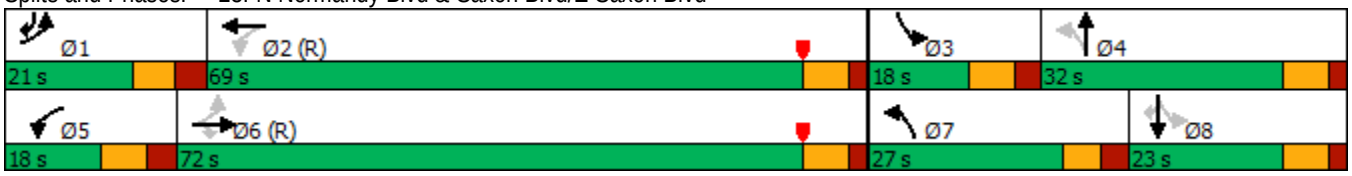
Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	81.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

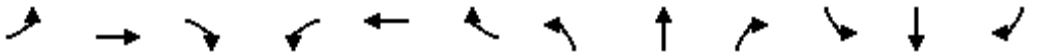
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	365	91	29	1175	45	215	107	18	51	130	436
Future Volume (vph)	106	365	91	29	1175	45	215	107	18	51	130	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	0		385
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1861			7172			3746			5140	
Travel Time (s)		31.7			122.3			73.0			100.1	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	8%	8%	8%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6		6	2			4			8		8
Detector Phase	1	6	6	5	2		7	4		3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		5.0	10.0		5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9		11.8	16.9		12.5	16.9	12.6
Total Split (s)	21.0	72.0	72.0	18.0	69.0		27.0	32.0		18.0	23.0	21.0
Total Split (%)	15.0%	51.4%	51.4%	12.9%	49.3%		19.3%	22.9%		12.9%	16.4%	15.0%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9		4.0	4.8		4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0		2.8	2.1		2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9		6.8	6.9		7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 48 (34%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	365	91	29	1175	45	215	107	18	51	130	436
Future Volume (veh/h)	106	365	91	29	1175	45	215	107	18	51	130	436
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	122	420	58	33	1351	46	247	123	16	59	149	335
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	8	8	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	205	1758	784	554	1747	59	324	331	43	265	215	263
Arrive On Green	0.10	1.00	1.00	0.03	0.50	0.50	0.13	0.21	0.21	0.04	0.12	0.12
Sat Flow, veh/h	1697	3385	1510	1781	3506	119	1767	1609	209	1781	1870	1585
Grp Volume(v), veh/h	122	420	58	33	684	713	247	0	139	59	149	335
Grp Sat Flow(s),veh/h/ln	1697	1692	1510	1781	1777	1849	1767	0	1818	1781	1870	1585
Q Serve(g_s), s	5.0	0.0	0.0	1.3	44.0	44.1	16.7	0.0	9.2	4.1	10.7	16.1
Cycle Q Clear(g_c), s	5.0	0.0	0.0	1.3	44.0	44.1	16.7	0.0	9.2	4.1	10.7	16.1
Prop In Lane	1.00		1.00	1.00		0.06	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	205	1758	784	554	885	921	324	0	374	265	215	263
V/C Ratio(X)	0.60	0.24	0.07	0.06	0.77	0.77	0.76	0.00	0.37	0.22	0.69	1.28
Avail Cap(c_a), veh/h	281	1758	784	634	885	921	341	0	374	329	215	263
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.57	0.57	0.57	0.97	0.00	0.97	0.85	0.85	0.85
Uniform Delay (d), s/veh	24.1	0.0	0.0	16.2	28.6	28.7	44.9	0.0	47.8	51.8	59.6	58.4
Incr Delay (d2), s/veh	2.7	0.3	0.2	0.0	3.8	3.7	9.0	0.0	0.8	0.4	8.7	146.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.4	0.1	0.1	0.9	24.3	25.2	12.7	0.0	7.6	3.3	9.2	29.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	0.3	0.2	16.2	32.4	32.4	53.9	0.0	48.7	52.2	68.2	205.3
LnGrp LOS	C	A	A	B	C	C	D	A	D	D	E	F
Approach Vol, veh/h		600			1430			386			543	
Approach Delay, s/veh		5.7			32.0			52.0			151.0	
Approach LOS		A			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	76.7	13.0	35.7	11.7	79.6	25.7	23.0
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 13	62.1	* 11	25.1	* 9.9	65.1	* 20	16.1
Max Q Clear Time (g_c+I1), s	7.0	46.1	6.1	11.2	3.3	2.0	18.7	18.1
Green Ext Time (p_c), s	0.1	10.6	0.0	0.7	0.0	4.6	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	51.1
HCM 6th LOS	D

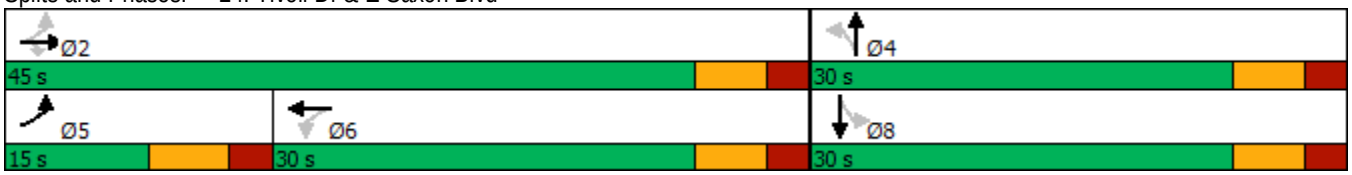
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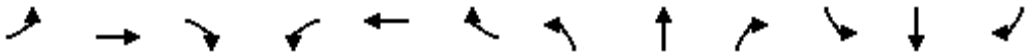
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	207	118	6	468	3	57	51	9	8	98	326
Future Volume (vph)	141	207	118	6	468	3	57	51	9	8	98	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390		0	120		0	265		0	150		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			30			30	
Link Distance (ft)		7172			644			704			1081	
Travel Time (s)		122.3			12.5			16.0			24.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	5	2	2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0	11.0	11.0	11.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	12.0	17.5	17.5	17.5	17.5		11.5	11.5		11.5	11.5	
Total Split (s)	15.0	45.0	45.0	30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	20.0%	60.0%	60.0%	40.0%	40.0%		40.0%	40.0%		40.0%	40.0%	
Yellow Time (s)	4.5	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	6.5	6.5	6.5	6.5		6.5	6.5		6.5	6.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min	Min	Min	Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 63.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 24: Tivoli Dr & E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	207	118	6	468	3	57	51	9	8	98	326
Future Volume (veh/h)	141	207	118	6	468	3	57	51	9	8	98	326
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1841	1841	1841	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	153	225	19	7	509	3	62	55	10	9	107	178
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	4	4	4	5	5	5	4	4	4
Cap, veh/h	327	982	832	490	602	4	223	377	69	414	156	259
Arrive On Green	0.08	0.53	0.53	0.33	0.33	0.33	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1767	1856	1572	1118	1828	11	1068	1503	273	1315	621	1033
Grp Volume(v), veh/h	153	225	19	7	0	512	62	0	65	9	0	285
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1118	0	1839	1068	0	1777	1315	0	1655
Q Serve(g_s), s	3.1	3.8	0.3	0.2	0.0	15.3	3.3	0.0	1.7	0.3	0.0	9.2
Cycle Q Clear(g_c), s	3.1	3.8	0.3	0.2	0.0	15.3	12.5	0.0	1.7	2.0	0.0	9.2
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.15	1.00		0.62
Lane Grp Cap(c), veh/h	327	982	832	490	0	606	223	0	445	414	0	415
V/C Ratio(X)	0.47	0.23	0.02	0.01	0.00	0.85	0.28	0.00	0.15	0.02	0.00	0.69
Avail Cap(c_a), veh/h	424	1211	1026	567	0	732	381	0	708	608	0	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.0	7.4	6.6	13.4	0.0	18.4	25.7	0.0	17.2	18.0	0.0	20.0
Incr Delay (d2), s/veh	1.0	0.2	0.0	0.0	0.0	8.5	0.7	0.0	0.1	0.0	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	2.1	0.2	0.1	0.0	11.4	1.5	0.0	1.2	0.2	0.0	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	7.6	6.6	13.4	0.0	26.8	26.3	0.0	17.3	18.0	0.0	22.0
LnGrp LOS	B	A	A	B	A	C	C	A	B	B	A	C
Approach Vol, veh/h		397			519			127			294	
Approach Delay, s/veh		10.1			26.7			21.7			21.9	
Approach LOS		B			C			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		37.7		21.3	11.8	25.9		21.3				
Change Period (Y+Rc), s		6.5		6.5	7.0	6.5		6.5				
Max Green Setting (Gmax), s		38.5		23.5	8.0	23.5		23.5				
Max Q Clear Time (g_c+I1), s		5.8		14.5	5.1	17.3		11.2				
Green Ext Time (p_c), s		1.9		0.3	0.1	2.2		1.4				

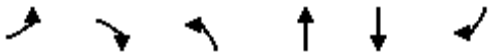
Intersection Summary												
HCM 6th Ctrl Delay			20.2									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	135	71	274	144	58	214
Future Volume (vph)	135	71	274	144	58	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	230			350
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			30	35	
Link Distance (ft)	908			839	3746	
Travel Time (s)	17.7			19.1	73.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	3.0	10.0	10.0	10.0
Minimum Split (s)	10.0	10.0	9.5	16.5	17.0	17.0
Total Split (s)	20.0	20.0	15.0	40.0	25.0	25.0
Total Split (%)	33.3%	33.3%	25.0%	66.7%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 44.5	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 25: N Normandy Blvd & Deltona Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	135	71	274	144	58	214
Future Volume (veh/h)	135	71	274	144	58	214
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	144	25	291	153	62	74
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	200	178	725	1039	456	386
Arrive On Green	0.11	0.11	0.16	0.56	0.25	0.25
Sat Flow, veh/h	1753	1560	1753	1841	1841	1560
Grp Volume(v), veh/h	144	25	291	153	62	74
Grp Sat Flow(s),veh/h/ln	1753	1560	1753	1841	1841	1560
Q Serve(g_s), s	3.2	0.6	4.4	1.6	1.1	1.5
Cycle Q Clear(g_c), s	3.2	0.6	4.4	1.6	1.1	1.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	200	178	725	1039	456	386
V/C Ratio(X)	0.72	0.14	0.40	0.15	0.14	0.19
Avail Cap(c_a), veh/h	607	541	820	1526	820	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	16.1	7.4	4.2	11.8	12.0
Incr Delay (d2), s/veh	3.6	0.3	0.3	0.1	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	2.1	0.6	0.6	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.9	16.4	7.7	4.2	12.0	12.2
LnGrp LOS	C	B	A	A	B	B
Approach Vol, veh/h	169			444	136	
Approach Delay, s/veh	20.3			6.5	12.1	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		29.8		10.6	12.8	17.0
Change Period (Y+Rc), s		* 7		6.0	6.5	7.0
Max Green Setting (Gmax), s		* 34		14.0	8.5	18.0
Max Q Clear Time (g_c+I1), s		3.6		5.2	6.4	3.5
Green Ext Time (p_c), s		0.9		0.2	0.2	0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

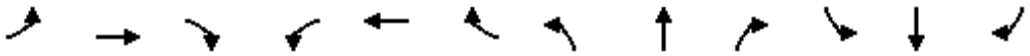
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	711	63	70	2001	70	63	8	68	64	23	143
Future Volume (vph)	67	711	63	70	2001	70	63	8	68	64	23	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1064			1326			740			687	
Travel Time (s)		16.1			20.1			16.8			15.6	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	7%	7%	7%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	25.0	90.0	90.0	25.0	90.0		35.0	35.0		35.0	35.0	
Total Split (%)	16.7%	60.0%	60.0%	16.7%	60.0%		23.3%	23.3%		23.3%	23.3%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 82 (55%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	711	63	70	2001	70	63	8	68	64	23	143
Future Volume (veh/h)	67	711	63	70	2001	70	63	8	68	64	23	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1856	1856	1856
Adj Flow Rate, veh/h	68	718	64	71	2021	71	64	8	69	65	23	144
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	3	3	3
Cap, veh/h	228	2258	1007	483	2244	78	127	26	228	207	36	228
Arrive On Green	0.03	0.64	0.64	0.06	1.00	1.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1767	3526	1572	1781	3503	122	1170	161	1386	1312	221	1385
Grp Volume(v), veh/h	68	718	64	71	1019	1073	64	0	77	65	0	167
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1781	1777	1848	1170	0	1547	1312	0	1606
Q Serve(g_s), s	2.0	13.8	2.3	2.1	0.0	0.0	8.1	0.0	6.6	6.9	0.0	14.5
Cycle Q Clear(g_c), s	2.0	13.8	2.3	2.1	0.0	0.0	22.6	0.0	6.6	13.4	0.0	14.5
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.90	1.00		0.86
Lane Grp Cap(c), veh/h	228	2258	1007	483	1138	1184	127	0	255	207	0	265
V/C Ratio(X)	0.30	0.32	0.06	0.15	0.90	0.91	0.50	0.00	0.30	0.31	0.00	0.63
Avail Cap(c_a), veh/h	367	2258	1007	623	1138	1184	149	0	284	231	0	294
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.40	0.40	0.40	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.4	12.2	10.1	8.8	0.0	0.0	69.0	0.0	55.1	61.0	0.0	58.4
Incr Delay (d2), s/veh	0.7	0.3	0.1	0.1	4.9	5.2	3.0	0.0	0.7	0.9	0.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	8.9	1.4	1.3	2.8	3.1	4.6	0.0	4.7	4.2	0.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.1	12.5	10.2	8.9	4.9	5.2	72.0	0.0	55.7	61.8	0.0	62.1
LnGrp LOS	A	B	B	A	A	A	E	A	E	E	A	E
Approach Vol, veh/h		850			2163			141			232	
Approach Delay, s/veh		12.1			5.2			63.1			62.0	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	104.6		32.2	13.2	104.6		32.2				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	16.5	81.5		27.5	16.5	81.5		27.5				
Max Q Clear Time (g_c+I1), s	4.0	2.0		24.6	4.1	15.8		16.5				
Green Ext Time (p_c), s	0.1	52.5		0.1	0.1	8.4		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		13.2	
HCM 6th LOS		B	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	711	201	181	2284	232	78
Future Volume (vph)	711	201	181	2284	232	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1326			6019	1205	
Travel Time (s)	20.1			91.2	23.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	60.0		45.0	105.0	45.0	
Total Split (%)	40.0%		30.0%	70.0%	30.0%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 78 (52%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	711	201	181	2284	232	78
Future Volume (veh/h)	711	201	181	2284	232	78
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1856	1900
Adj Flow Rate, veh/h	741	209	189	2379	162	167
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	0
Cap, veh/h	1824	514	529	2743	214	195
Arrive On Green	1.00	1.00	0.05	0.77	0.12	0.12
Sat Flow, veh/h	2830	772	1781	3647	1767	1610
Grp Volume(v), veh/h	481	469	189	2379	162	167
Grp Sat Flow(s),veh/h/ln	1777	1731	1781	1777	1767	1610
Q Serve(g_s), s	0.0	0.0	4.8	69.3	13.3	15.3
Cycle Q Clear(g_c), s	0.0	0.0	4.8	69.3	13.3	15.3
Prop In Lane		0.45	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1184	1154	529	2743	214	195
V/C Ratio(X)	0.41	0.41	0.36	0.87	0.76	0.85
Avail Cap(c_a), veh/h	1184	1154	875	2743	442	403
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.48	0.48	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	6.2	11.8	63.7	64.6
Incr Delay (d2), s/veh	1.0	1.0	0.2	2.0	5.3	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	0.6	3.0	27.6	10.4	19.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.0	1.0	6.4	13.8	69.1	74.7
LnGrp LOS	A	A	A	B	E	E
Approach Vol, veh/h	950			2568	329	
Approach Delay, s/veh	1.0			13.2	71.9	
Approach LOS	A			B	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		124.3		25.7	15.8	108.5
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		96.5		37.5	36.5	51.5
Max Q Clear Time (g_c+I1), s		71.3		17.3	6.8	2.0
Green Ext Time (p_c), s		23.1		1.0	0.5	10.5

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

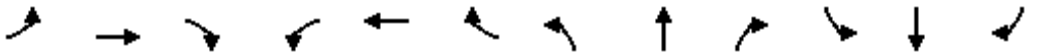
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	603	15	26	1886	5	152	33	17	38	15	448
Future Volume (vph)	73	603	15	26	1886	5	152	33	17	38	15	448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1253			1861			896			728	
Travel Time (s)		21.4			28.2			20.4			16.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	18.0	91.0		18.0	91.0		31.0	31.0		31.0	31.0	31.0
Total Split (%)	12.9%	65.0%		12.9%	65.0%		22.1%	22.1%		22.1%	22.1%	22.1%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 78 (56%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	603	15	26	1886	5	152	33	17	38	15	448
Future Volume (veh/h)	73	603	15	26	1886	5	152	33	17	38	15	448
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	648	16	28	2028	5	163	35	18	41	16	482
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	3337	82	42	2276	6	166	210	108	207	74	285
Arrive On Green	0.11	1.00	1.00	0.05	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1767	5085	125	1781	3637	9	900	1164	599	905	411	1585
Grp Volume(v), veh/h	78	430	234	28	990	1043	163	0	53	57	0	482
Grp Sat Flow(s),veh/h/ln	1767	1689	1833	1781	1777	1869	900	0	1763	1316	0	1585
Q Serve(g_s), s	6.0	0.0	0.0	2.2	0.0	0.0	17.9	0.0	3.6	3.8	0.0	25.2
Cycle Q Clear(g_c), s	6.0	0.0	0.0	2.2	0.0	0.0	25.2	0.0	3.6	7.3	0.0	25.2
Prop In Lane	1.00		0.07	1.00		0.00	1.00		0.34	0.72		1.00
Lane Grp Cap(c), veh/h	97	2216	1203	42	1112	1170	166	0	317	281	0	285
V/C Ratio(X)	0.80	0.19	0.19	0.66	0.89	0.89	0.98	0.00	0.17	0.20	0.00	1.69
Avail Cap(c_a), veh/h	141	2216	1203	141	1112	1170	166	0	317	281	0	285
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.33	0.33	0.33	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.6	0.0	0.0	66.1	0.0	0.0	63.7	0.0	48.5	50.7	0.0	57.4
Incr Delay (d2), s/veh	18.5	0.2	0.4	5.8	4.0	3.9	63.7	0.0	0.4	0.5	0.0	325.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	0.1	0.2	1.8	2.2	2.3	13.7	0.0	2.9	3.2	0.0	56.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.1	0.2	0.4	71.9	4.0	3.9	127.3	0.0	48.9	51.2	0.0	382.4
LnGrp LOS	F	A	A	E	A	A	F	A	D	D	A	F
Approach Vol, veh/h		742			2061			216			539	
Approach Delay, s/veh		8.6			4.9			108.1			347.4	
Approach LOS		A			A			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	98.8		31.0	14.5	94.5		31.0				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	84.1		* 25	11.2	84.1		* 25				
Max Q Clear Time (g_c+I1), s	4.2	2.0		27.2	8.0	2.0		27.2				
Green Ext Time (p_c), s	0.0	6.9		0.0	0.0	50.4		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		63.8	
HCM 6th LOS		E	

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Arterial Level of Service: EB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FDOT Park & Ride	II	45	33.9	5.7	39.6	0.35	32.1	B
I-4 EB	II	45	37.1	1.6	38.7	0.40	36.8	A
Finland Dr	II	40	26.1	9.4	35.5	0.24	24.1	C
N Normandy Blvd	II	40	34.9	16.1	51.0	0.35	24.9	C
Total	II		132.0	32.8	164.8	1.34	29.2	B

Arterial Level of Service: WB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Finland Dr	II	45	33.8	19.2	53.0	0.35	23.9	C
I-4 EB	II	45	24.7	9.8	34.5	0.24	24.8	C
FDOT Park & Ride	II	45	37.1	4.1	41.2	0.40	34.5	B
Veterans Memorial Pk	II	45	33.9	13.4	47.3	0.35	26.9	C
Total	II		129.5	46.5	176.0	1.34	27.4	C

Arterial Level of Service: EB SR 472/Howland Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
N Kentucky Ave	I	55	17.7	57.3	75.0	0.18	8.8	F
I-4 WB	I	55	36.3	24.1	60.4	0.55	33.0	C
I-4 EB	I	50	30.3	11.7	42.0	0.32	27.4	C
E Graves Ave	I	50	26.1	18.5	44.6	0.28	22.2	D
Forest Edge Dr	I	45	21.0	5.3	26.3	0.20	27.6	C
Wolf Pack Run	I	45	26.1	8.4	34.5	0.25	26.2	D
Total	I		157.5	125.3	282.8	1.78	22.7	D

Arterial Level of Service: WB SR 472/Howland Blvd

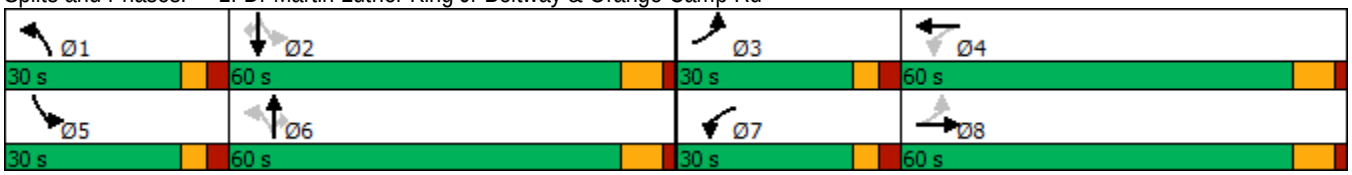
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Forest Edge Dr	I	45	26.1	17.2	43.3	0.25	20.9	E
E Graves Ave	I	45	21.0	18.2	39.2	0.20	18.5	E
I-4 EB	I	50	26.1	15.8	41.9	0.28	23.6	D
I-4 WB	I	50	30.3	5.3	35.6	0.32	32.3	C
Dr. Martin Luther Ki	I	55	36.3	46.9	83.2	0.55	24.0	D
Total	I		139.8	103.4	243.2	1.60	23.7	D

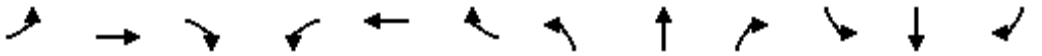
E-2: AM Peak Hour Future Year Background Traffic Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	590	108	58	408	244	176	468	57	287	235	46
Future Volume (vph)	45	590	108	58	408	244	176	468	57	287	235	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6		6	2		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5		11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 159.4	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	590	108	58	408	244	176	468	57	287	235	46
Future Volume (veh/h)	45	590	108	58	408	244	176	468	57	287	235	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	47	621	107	61	429	239	185	493	47	302	247	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	3	3	3
Cap, veh/h	97	529	91	106	392	219	465	538	456	324	638	541
Arrive On Green	0.03	0.35	0.35	0.03	0.35	0.35	0.09	0.29	0.29	0.14	0.34	0.34
Sat Flow, veh/h	1739	1517	261	1753	1111	619	1753	1841	1560	1767	1856	1572
Grp Volume(v), veh/h	47	0	728	61	0	668	185	493	47	302	247	37
Grp Sat Flow(s),veh/h/ln	1739	0	1779	1753	0	1729	1753	1841	1560	1767	1856	1572
Q Serve(g_s), s	2.6	0.0	52.5	3.4	0.0	53.2	11.0	39.0	3.3	18.8	15.2	2.4
Cycle Q Clear(g_c), s	2.6	0.0	52.5	3.4	0.0	53.2	11.0	39.0	3.3	18.8	15.2	2.4
Prop In Lane	1.00		0.15	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	97	0	620	106	0	611	465	538	456	324	638	541
V/C Ratio(X)	0.48	0.00	1.17	0.57	0.00	1.09	0.40	0.92	0.10	0.93	0.39	0.07
Avail Cap(c_a), veh/h	319	0	620	321	0	611	583	642	544	352	647	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	49.1	39.0	0.0	48.7	32.5	51.5	38.9	40.0	37.4	33.2
Incr Delay (d2), s/veh	3.7	0.0	94.6	4.8	0.0	64.4	0.6	17.1	0.1	30.1	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.0	54.2	2.8	0.0	45.0	8.1	27.1	2.3	15.8	11.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	0.0	143.7	43.8	0.0	113.1	33.1	68.7	39.0	70.1	38.0	33.3
LnGrp LOS	D	A	F	D	A	F	C	E	D	E	D	C
Approach Vol, veh/h		775			729			725			586	
Approach Delay, s/veh		137.6			107.3			57.7			54.2	
Approach LOS		F			F			E			D	

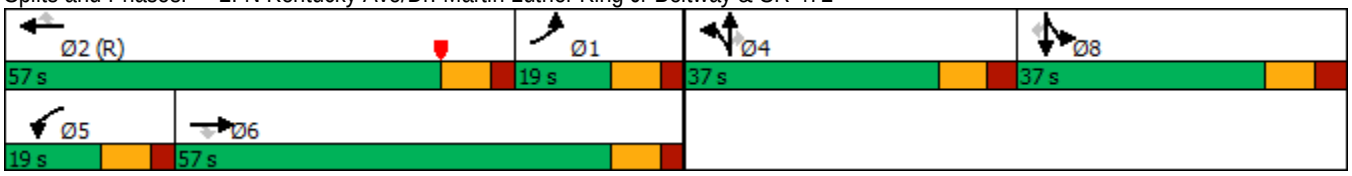
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	59.3	10.8	60.7	27.6	51.5	11.5	60.0
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	13.0	17.2	4.6	55.2	20.8	41.0	5.4	54.5
Green Ext Time (p_c), s	0.3	2.1	0.1	0.0	0.2	3.0	0.1	0.0

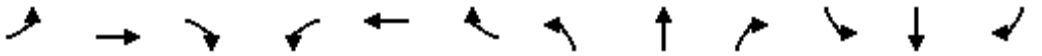
Intersection Summary	
HCM 6th Ctrl Delay	91.8
HCM 6th LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	946	166	118	1199	283	190	189	64	214	319	48
Future Volume (vph)	27	946	166	118	1199	283	190	189	64	214	319	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	15.8	15.8	15.8	16.4	16.4	16.4
Total Split (s)	19.0	57.0	57.0	19.0	57.0	57.0	37.0	37.0	37.0	37.0	37.0	37.0
Total Split (%)	12.7%	38.0%	38.0%	12.7%	38.0%	38.0%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3		8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 93 (62%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	946	166	118	1199	283	190	189	64	214	319	48
Future Volume (veh/h)	27	946	166	118	1199	283	190	189	64	214	319	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	31	1075	159	134	1362	213	216	215	0	243	362	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	8	8	8	5	5	5	4	4	4	4	4	4
Cap, veh/h	121	1099	490	124	1126	502	169	168		323	339	
Arrive On Green	0.07	0.32	0.32	0.02	0.11	0.11	0.19	0.19	0.00	0.18	0.18	0.00
Sat Flow, veh/h	1697	3385	1510	1739	3469	1547	900	896	1560	1753	1841	1560
Grp Volume(v), veh/h	31	1075	159	134	1362	213	431	0	0	243	362	0
Grp Sat Flow(s),veh/h/ln	1697	1692	1510	1739	1735	1547	1796	0	1560	1753	1841	1560
Q Serve(g_s), s	2.6	47.1	11.9	10.7	48.7	19.3	28.2	0.0	0.0	19.7	27.6	0.0
Cycle Q Clear(g_c), s	2.6	47.1	11.9	10.7	48.7	19.3	28.2	0.0	0.0	19.7	27.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.50		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	1099	490	124	1126	502	338	0		323	339	
V/C Ratio(X)	0.26	0.98	0.32	1.08	1.21	0.42	1.28	0.00		0.75	1.07	
Avail Cap(c_a), veh/h	121	1099	490	124	1126	502	338	0		323	339	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	0.74	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.9	50.1	38.2	73.2	67.0	53.8	60.9	0.0	0.0	58.0	61.2	0.0
Incr Delay (d2), s/veh	1.1	22.0	0.5	92.5	100.6	1.9	140.6	0.0	0.0	10.3	68.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	30.1	7.8	12.4	53.2	12.3	37.2	0.0	0.0	14.4	26.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.0	72.1	38.8	165.8	167.5	55.8	201.5	0.0	0.0	68.2	129.6	0.0
LnGrp LOS	E	E	D	F	F	E	F	A		E	F	
Approach Vol, veh/h		1265			1709			431	A		605	A
Approach Delay, s/veh		67.8			153.5			201.5			104.9	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	57.0		37.0	19.0	57.0		37.0				
Change Period (Y+Rc), s	* 8.3	* 8.3		* 8.8	* 8.3	* 8.3		9.4				
Max Green Setting (Gmax), s	* 11	* 49		* 28	* 11	* 49		27.6				
Max Q Clear Time (g_c+I1), s	4.6	50.7		30.2	12.7	49.1		29.6				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	124.3	
HCM 6th LOS	F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

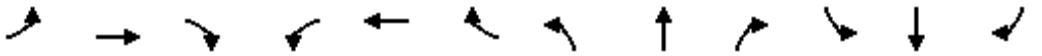
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	429	896	1076	1512	0	0	0	0	171	0	158
Future Volume (vph)	0	429	896	1076	1512	0	0	0	0	171	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	1		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		40.0	40.0	80.0	120.0					30.0		30.0
Total Split (%)		26.7%	26.7%	53.3%	80.0%					20.0%		20.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lead	Lead	Lag								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 138 (92%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	429	896	1076	1512	0	0	0	0	171	0	158
Future Volume (veh/h)	0	429	896	1076	1512	0	0	0	0	171	0	158
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1856	1856	0				1870	0	1870
Adj Flow Rate, veh/h	0	482	0	1209	1699	0				192	0	67
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	5	5	3	3	0				2	0	2
Cap, veh/h	0	561		1092	2916	0				249	0	114
Arrive On Green	0.00	0.16	0.00	0.62	0.83	0.00				0.07	0.00	0.07
Sat Flow, veh/h	0	3561	1547	1767	3618	0				3456	0	1585
Grp Volume(v), veh/h	0	482	0	1209	1699	0				192	0	67
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1767	1763	0				1728	0	1585
Q Serve(g_s), s	0.0	20.3	0.0	92.7	24.1	0.0				8.2	0.0	6.1
Cycle Q Clear(g_c), s	0.0	20.3	0.0	92.7	24.1	0.0				8.2	0.0	6.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	561		1092	2916	0				249	0	114
V/C Ratio(X)	0.00	0.86		1.11	0.58	0.00				0.77	0.00	0.59
Avail Cap(c_a), veh/h	0	761		1092	2916	0				507	0	232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.30	0.00	0.34	0.34	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	61.2	0.0	28.6	4.3	0.0				68.4	0.0	67.4
Incr Delay (d2), s/veh	0.0	5.4	0.0	53.3	0.3	0.0				5.0	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	11.8	0.0	63.4	8.1	0.0				6.7	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	66.6	0.0	82.0	4.6	0.0				73.4	0.0	72.1
LnGrp LOS	A	E		F	A	A				E	A	E
Approach Vol, veh/h		482	A		2908						259	
Approach Delay, s/veh		66.6			36.8						73.1	
Approach LOS		E			D						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		131.2			99.8	31.4		18.8				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		112.9			72.9	32.9		22.0				
Max Q Clear Time (g_c+I1), s		26.1			94.7	22.3		10.2				
Green Ext Time (p_c), s		20.8			0.0	2.0		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

Notes

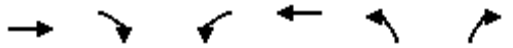
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	474	151	0	2649	618	215
Future Volume (vph)	474	151	0	2649	618	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		620	1000		0	1000
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	50			50	45	
Link Distance (ft)	1685			1446	1185	
Travel Time (s)	23.0			19.7	18.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	8%	8%	4%	4%	7%	7%
Shared Lane Traffic (%)						
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	4	
Permitted Phases		2				4
Detector Phase	2	2		6	4	4
Switch Phase						
Minimum Initial (s)	17.0	17.0		7.0	7.0	7.0
Minimum Split (s)	24.5	24.5		14.2	14.2	14.2
Total Split (s)	96.0	96.0		96.0	54.0	54.0
Total Split (%)	64.0%	64.0%		64.0%	36.0%	36.0%
Yellow Time (s)	5.5	5.5		4.8	4.8	4.8
All-Red Time (s)	2.0	2.0		2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.2	7.2	7.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 74 (49%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: I-4 EB & SR 472





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	474	151	0	2649	618	215
Future Volume (veh/h)	474	151	0	2649	618	215
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1781	1781	0	1841	1796	1796
Adj Flow Rate, veh/h	521	0	0	2911	679	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	8	8	0	4	7	7
Cap, veh/h	2004		0	2975	775	
Arrive On Green	1.00	0.00	0.00	0.59	0.23	0.00
Sat Flow, veh/h	3474	1510	0	5356	3319	1522
Grp Volume(v), veh/h	521	0	0	2911	679	0
Grp Sat Flow(s),veh/h/ln	1692	1510	0	1675	1659	1522
Q Serve(g_s), s	0.0	0.0	0.0	84.3	29.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	84.3	29.6	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2004		0	2975	775	
V/C Ratio(X)	0.26		0.00	0.98	0.88	
Avail Cap(c_a), veh/h	2004		0	2975	1035	
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.00	0.00	0.09	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	29.7	55.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.0	7.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	33.8	18.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.1	0.0	0.0	31.7	62.9	0.0
LnGrp LOS	A		A	C	E	
Approach Vol, veh/h	521	A		2911	679	A
Approach Delay, s/veh	0.1			31.7	62.9	
Approach LOS	A			C	E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		96.3		42.2		96.3
Change Period (Y+Rc), s		7.5		* 7.2		* 7.5
Max Green Setting (Gmax), s		88.5		* 47		* 89
Max Q Clear Time (g_c+I1), s		2.0		31.6		86.3
Green Ext Time (p_c), s		5.1		3.5		2.5

Intersection Summary		
HCM 6th Ctrl Delay		32.9
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

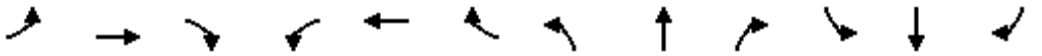
Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	45	38	136	40	111	6	825	63	67	1052	8
Future Volume (vph)	26	45	38	136	40	111	6	825	63	67	1052	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	245		0	280		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		329			1113			2670			998	
Travel Time (s)		9.0			25.3			45.5			17.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	Split	NA		Split	NA		Perm	NA		pm+pt	NA	
Protected Phases	8	8		4	4			6		5	2	
Permitted Phases							6			2		
Detector Phase	8	8		4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	15.7	15.7		15.9	15.9		22.3	22.3		12.2	22.3	
Total Split (s)	25.0	25.0		30.0	30.0		75.0	75.0		20.0	95.0	
Total Split (%)	16.7%	16.7%		20.0%	20.0%		50.0%	50.0%		13.3%	63.3%	
Yellow Time (s)	3.4	3.4		3.8	3.8		4.5	4.5		4.4	4.5	
All-Red Time (s)	2.3	2.3		2.1	2.1		2.8	2.8		2.8	2.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		5.9	5.9		7.3	7.3		7.2	7.3	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Min	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 24 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: US 17/92 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	45	38	136	40	111	6	825	63	67	1052	8
Future Volume (veh/h)	26	45	38	136	40	111	6	825	63	67	1052	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	28	49	26	148	43	67	7	897	61	73	1143	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	7	7	7
Cap, veh/h	116	75	40	177	66	102	317	2071	141	378	2459	17
Arrive On Green	0.07	0.07	0.07	0.10	0.10	0.10	0.63	0.63	0.63	0.03	0.71	0.71
Sat Flow, veh/h	1767	1141	605	1767	654	1019	477	3296	224	1711	3474	24
Grp Volume(v), veh/h	28	0	75	148	0	110	7	472	486	73	561	590
Grp Sat Flow(s),veh/h/ln	1767	0	1747	1767	0	1672	477	1735	1786	1711	1706	1792
Q Serve(g_s), s	2.3	0.0	6.3	12.3	0.0	9.5	1.0	20.9	20.9	2.2	21.5	21.5
Cycle Q Clear(g_c), s	2.3	0.0	6.3	12.3	0.0	9.5	10.5	20.9	20.9	2.2	21.5	21.5
Prop In Lane	1.00		0.35	1.00		0.61	1.00		0.13	1.00		0.01
Lane Grp Cap(c), veh/h	116	0	115	177	0	168	317	1090	1122	378	1208	1269
V/C Ratio(X)	0.24	0.00	0.65	0.83	0.00	0.66	0.02	0.43	0.43	0.19	0.46	0.46
Avail Cap(c_a), veh/h	227	0	225	284	0	269	317	1090	1122	469	1208	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.5	0.0	68.4	66.3	0.0	65.0	14.4	14.2	14.2	10.4	9.5	9.5
Incr Delay (d2), s/veh	1.1	0.0	6.1	11.1	0.0	4.3	0.1	1.3	1.2	0.2	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	5.5	10.2	0.0	7.7	0.2	13.0	13.3	1.5	12.4	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	0.0	74.5	77.4	0.0	69.3	14.6	15.5	15.5	10.6	10.8	10.8
LnGrp LOS	E	A	E	E	A	E	B	B	B	B	B	B
Approach Vol, veh/h		103			258			965			1224	
Approach Delay, s/veh		72.6			73.9			15.5			10.8	
Approach LOS		E			E			B			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		113.5		20.9	12.0	101.5		15.6				
Change Period (Y+Rc), s		* 7.3		* 5.9	* 7.2	* 7.3		5.7				
Max Green Setting (Gmax), s		* 88		* 24	* 13	* 68		19.3				
Max Q Clear Time (g_c+I1), s		23.5		14.3	4.2	22.9		8.3				
Green Ext Time (p_c), s		9.4		0.7	0.1	7.1		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		21.4
HCM 6th LOS		C

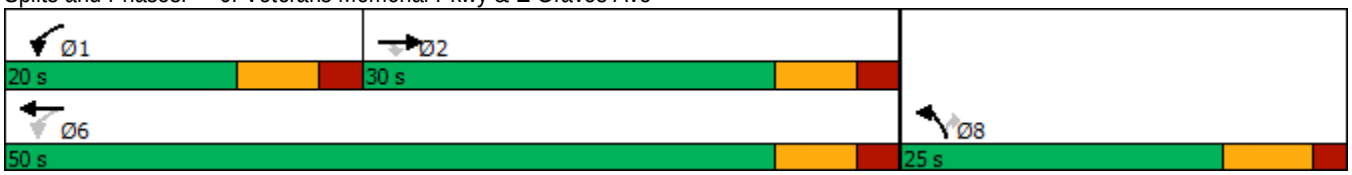
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	214	36	824	361	58	501
Future Volume (vph)	214	36	824	361	58	501
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	6%	12%	12%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases		2	6			8
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	7.0
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	14.0
Total Split (s)	30.0	30.0	20.0	50.0	25.0	25.0
Total Split (%)	40.0%	40.0%	26.7%	66.7%	33.3%	33.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	5.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 58.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	214	36	824	361	58	501
Future Volume (veh/h)	214	36	824	361	58	501
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1722	1722
Adj Flow Rate, veh/h	233	18	896	392	63	481
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	12	12
Cap, veh/h	318	270	529	892	468	416
Arrive On Green	0.18	0.18	0.21	0.49	0.29	0.29
Sat Flow, veh/h	1811	1535	1725	1811	1640	1459
Grp Volume(v), veh/h	233	18	896	392	63	481
Grp Sat Flow(s),veh/h/ln	1811	1535	1725	1811	1640	1459
Q Serve(g_s), s	7.7	0.6	13.0	8.8	1.8	18.0
Cycle Q Clear(g_c), s	7.7	0.6	13.0	8.8	1.8	18.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	318	270	529	892	468	416
V/C Ratio(X)	0.73	0.07	1.69	0.44	0.13	1.16
Avail Cap(c_a), veh/h	660	560	529	1234	468	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	21.7	18.2	10.4	16.8	22.5
Incr Delay (d2), s/veh	4.6	0.1	320.8	0.5	0.1	93.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	0.4	79.8	5.0	1.1	24.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.2	21.8	339.0	10.8	16.9	116.3
LnGrp LOS	C	C	F	B	B	F
Approach Vol, veh/h	251			1288	544	
Approach Delay, s/veh	28.6			239.1	104.8	
Approach LOS	C			F	F	

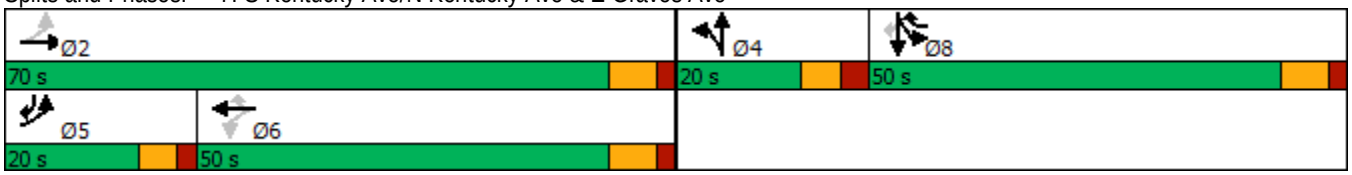
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	20.0	18.1				38.1	25.0
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	13.0	23.0				43.0	18.0
Max Q Clear Time (g_c+I1), s	15.0	9.7				10.8	20.0
Green Ext Time (p_c), s	0.0	1.4				3.4	0.0

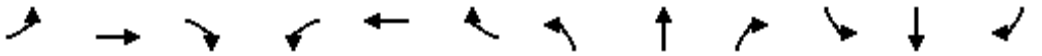
Intersection Summary	
HCM 6th Ctrl Delay	178.7
HCM 6th LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	242	581	10	13	820	330	17	12	5	234	7	369
Future Volume (vph)	242	581	10	13	820	330	17	12	5	234	7	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			2360			535			4220	
Travel Time (s)		26.0			35.8			14.6			63.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	11%	11%	11%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6	8	4	4		8	8	5
Permitted Phases	2			6		6						8
Detector Phase	5	2		6	6	8	4	4		8	8	5
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	5.0
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	11.0
Total Split (s)	20.0	70.0		50.0	50.0	50.0	20.0	20.0		50.0	50.0	20.0
Total Split (%)	14.3%	50.0%		35.7%	35.7%	35.7%	14.3%	14.3%		35.7%	35.7%	14.3%
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	6.0
Lead/Lag	Lead			Lag	Lag							Lead
Lead-Lag Optimize?	Yes			Yes	Yes							Yes
Recall Mode	None	Min		Min	Min	None	None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 114.1	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	581	10	13	820	330	17	12	5	234	7	369
Future Volume (veh/h)	242	581	10	13	820	330	17	12	5	234	7	369
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	278	668	11	15	943	336	20	14	3	269	8	263
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	11	11	4	4	4	2	2	2	6	6	6
Cap, veh/h	279	987	16	297	728	904	42	29	6	318	334	481
Arrive On Green	0.13	0.58	0.58	0.40	0.40	0.40	0.04	0.04	0.04	0.18	0.18	0.18
Sat Flow, veh/h	1654	1704	28	749	1841	1560	971	679	146	1725	1811	1535
Grp Volume(v), veh/h	278	0	679	15	943	336	37	0	0	269	8	263
Grp Sat Flow(s),veh/h/ln	1654	0	1732	749	1841	1560	1796	0	0	1725	1811	1535
Q Serve(g_s), s	13.9	0.0	29.5	1.5	43.0	12.5	2.2	0.0	0.0	16.4	0.4	15.4
Cycle Q Clear(g_c), s	13.9	0.0	29.5	11.1	43.0	12.5	2.2	0.0	0.0	16.4	0.4	15.4
Prop In Lane	1.00		0.02	1.00		1.00	0.54		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	279	0	1003	297	728	904	78	0	0	318	334	481
V/C Ratio(X)	1.00	0.00	0.68	0.05	1.30	0.37	0.48	0.00	0.00	0.85	0.02	0.55
Avail Cap(c_a), veh/h	279	0	1003	297	728	904	215	0	0	682	716	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	15.8	26.6	32.9	12.2	50.8	0.0	0.0	42.9	36.3	31.0
Incr Delay (d2), s/veh	52.8	0.0	2.1	0.1	143.3	0.4	4.5	0.0	0.0	6.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.0	0.0	16.2	0.5	68.2	10.5	2.0	0.0	0.0	11.7	0.3	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.6	0.0	17.9	26.7	176.2	12.6	55.3	0.0	0.0	49.0	36.4	31.9
LnGrp LOS	F	A	B	C	F	B	E	A	A	D	D	C
Approach Vol, veh/h		957			1294			37			540	
Approach Delay, s/veh		37.9			132.0			55.3			40.5	
Approach LOS		D			F			E			D	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		70.0		11.7	20.0	50.0		27.1				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		63.0		13.0	14.0	43.0		43.0				
Max Q Clear Time (g_c+I1), s		31.5		4.2	15.9	45.0		18.4				
Green Ext Time (p_c), s		7.1		0.1	0.0	0.0		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			81.7									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	514	540	397	702	423	353
Future Volume (vph)	514	540	397	702	423	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		545	570		200	1000
Storage Lanes		2	2		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	920			551	7065	
Travel Time (s)	13.9			8.3	107.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	10%	5%	5%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases		6				4
Detector Phase	6	6	5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	5.0	12.0	7.0	7.0
Minimum Split (s)	19.0	19.0	12.0	19.0	13.0	13.0
Total Split (s)	45.0	45.0	20.0	65.0	25.0	25.0
Total Split (%)	50.0%	50.0%	22.2%	72.2%	27.8%	27.8%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 77.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	514	540	397	702	423	353
Future Volume (veh/h)	514	540	397	702	423	353
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1826	1826	1870	1870
Adj Flow Rate, veh/h	559	587	432	763	460	238
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	5	5	2	2
Cap, veh/h	1392	621	491	2227	379	593
Arrive On Green	0.42	0.42	0.15	0.64	0.21	0.21
Sat Flow, veh/h	3416	1485	3374	3561	1781	2790
Grp Volume(v), veh/h	559	587	432	763	460	238
Grp Sat Flow(s),veh/h/ln	1664	1485	1687	1735	1781	1395
Q Serve(g_s), s	10.5	34.0	11.2	9.0	19.0	6.6
Cycle Q Clear(g_c), s	10.5	34.0	11.2	9.0	19.0	6.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1392	621	491	2227	379	593
V/C Ratio(X)	0.40	0.95	0.88	0.34	1.21	0.40
Avail Cap(c_a), veh/h	1415	631	491	2251	379	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	25.0	37.4	7.3	35.2	30.3
Incr Delay (d2), s/veh	0.3	23.3	16.8	0.1	118.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.7	20.8	9.4	4.8	30.4	9.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	48.3	54.2	7.5	153.9	30.7
LnGrp LOS	B	D	D	A	F	C
Approach Vol, veh/h	1146			1195	698	
Approach Delay, s/veh	33.7			24.4	111.9	
Approach LOS	C			C	F	

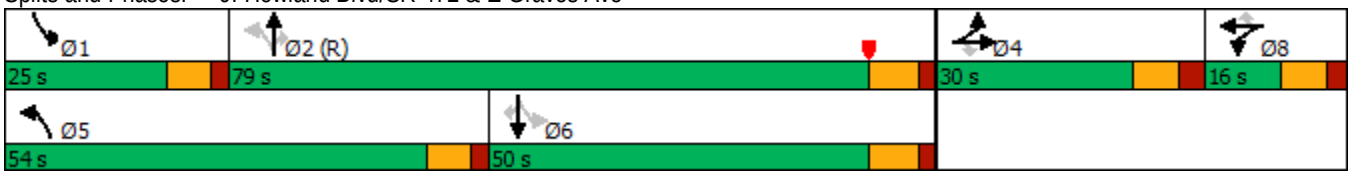
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		64.4		25.0	20.0	44.4
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		58.0		19.0	13.0	38.0
Max Q Clear Time (g_c+I1), s		11.0		21.0	13.2	36.0
Green Ext Time (p_c), s		8.4		0.0	0.0	1.4

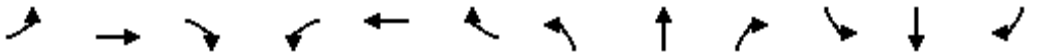
Intersection Summary	
HCM 6th Ctrl Delay	48.0
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	421	243	328	209	238	314	493	1747	202	260	628	134
Future Volume (vph)	421	243	328	209	238	314	493	1747	202	260	628	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		330
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			363			1064			1446	
Travel Time (s)		12.6			8.3			16.1			19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	8%	8%	8%
Shared Lane Traffic (%)	23%											
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0	17.0	7.0	17.0	17.0
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.5	12.0	24.5	24.5	14.0	24.5	24.5
Total Split (s)	30.0	30.0	30.0	16.0	16.0	16.0	54.0	79.0	79.0	25.0	50.0	50.0
Total Split (%)	20.0%	20.0%	20.0%	10.7%	10.7%	10.7%	36.0%	52.7%	52.7%	16.7%	33.3%	33.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.5	7.0	7.5	7.5	7.0	7.5	7.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	C-Min	C-Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 82 (55%), Referenced to phase 2:NBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	243	328	209	238	314	493	1747	202	260	628	134
Future Volume (veh/h)	421	243	328	209	238	314	493	1747	202	260	628	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	361	400	0	227	259	341	536	1899	219	283	683	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	4	4	4	3	3	3	8	8	8
Cap, veh/h	253	266		193	104	88	934	1890	843	437	1640	731
Arrive On Green	0.15	0.15	0.00	0.06	0.06	0.06	0.22	1.00	1.00	0.06	0.48	0.48
Sat Flow, veh/h	1725	1811	1535	3401	1841	1560	3428	3526	1572	3291	3385	1510
Grp Volume(v), veh/h	361	400	0	227	259	341	536	1899	219	283	683	141
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1700	1841	1560	1714	1763	1572	1646	1692	1510
Q Serve(g_s), s	22.0	22.0	0.0	8.5	8.5	8.5	11.6	80.4	0.0	6.4	19.6	8.0
Cycle Q Clear(g_c), s	22.0	22.0	0.0	8.5	8.5	8.5	11.6	80.4	0.0	6.4	19.6	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	266		193	104	88	934	1890	843	437	1640	731
V/C Ratio(X)	1.43	1.51		1.18	2.48	3.86	0.57	1.00	0.26	0.65	0.42	0.19
Avail Cap(c_a), veh/h	253	266		193	104	88	1623	1890	843	633	1640	731
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.09	0.09	0.09	0.96	0.96	0.96
Uniform Delay (d), s/veh	64.0	64.0	0.0	70.8	70.8	70.8	14.1	0.0	0.0	19.6	25.0	22.0
Incr Delay (d2), s/veh	213.6	246.3	0.0	121.0	695.1	1312.9	0.1	7.3	0.1	1.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	37.8	43.4	0.0	11.8	38.2	54.7	4.4	2.6	0.0	4.4	12.1	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	277.6	310.3	0.0	191.7	765.9	1383.6	14.2	7.3	0.1	21.2	25.2	22.2
LnGrp LOS	F	F		F	F	F	B	F	A	C	C	C
Approach Vol, veh/h		761	A		827			2654			1107	
Approach Delay, s/veh		294.8			863.0			8.1			23.8	
Approach LOS		F			F			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.1	87.9		30.0	23.8	80.2		16.0				
Change Period (Y+Rc), s	7.0	7.5		8.0	7.0	7.5		7.5				
Max Green Setting (Gmax), s	18.0	71.5		22.0	47.0	42.5		8.5				
Max Q Clear Time (g_c+I1), s	8.4	82.4		24.0	13.6	21.6		10.5				
Green Ext Time (p_c), s	0.6	0.0		0.0	3.2	6.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		184.3	
HCM 6th LOS		F	

Notes

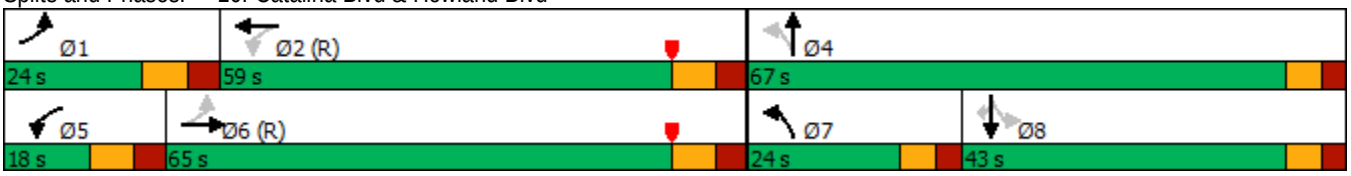
User approved volume balancing among the lanes for turning movement.

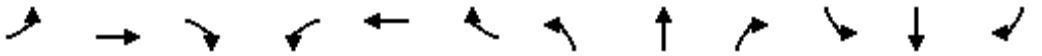
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	665	39	33	1338	11	124	23	13	40	36	594
Future Volume (vph)	192	665	39	33	1338	11	124	23	13	40	36	594
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6019			1895			1021			5049	
Travel Time (s)		91.2			28.7			23.2			98.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases	6			2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	24.0	65.0		18.0	59.0		24.0	67.0		43.0	43.0	43.0
Total Split (%)	16.0%	43.3%		12.0%	39.3%		16.0%	44.7%		28.7%	28.7%	28.7%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	665	39	33	1338	11	124	23	13	40	36	594
Future Volume (veh/h)	192	665	39	33	1338	11	124	23	13	40	36	594
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1841	1841	1841	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	202	700	40	35	1408	12	131	24	9	42	38	313
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	4	4	4	4	4	4	2	2	2
Cap, veh/h	223	1587	91	336	1467	13	372	422	158	341	399	338
Arrive On Green	0.10	0.48	0.48	0.03	0.41	0.41	0.07	0.33	0.33	0.21	0.21	0.21
Sat Flow, veh/h	1711	3282	187	1753	3554	30	1753	1276	479	1376	1870	1585
Grp Volume(v), veh/h	202	364	376	35	693	727	131	0	33	42	38	313
Grp Sat Flow(s),veh/h/ln	1711	1706	1763	1753	1749	1835	1753	0	1755	1376	1870	1585
Q Serve(g_s), s	12.4	21.0	21.0	1.7	57.8	57.8	8.5	0.0	1.9	3.7	2.4	29.0
Cycle Q Clear(g_c), s	12.4	21.0	21.0	1.7	57.8	57.8	8.5	0.0	1.9	3.7	2.4	29.0
Prop In Lane	1.00		0.11	1.00		0.02	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	223	825	852	336	722	758	372	0	580	341	399	338
V/C Ratio(X)	0.91	0.44	0.44	0.10	0.96	0.96	0.35	0.00	0.06	0.12	0.10	0.93
Avail Cap(c_a), veh/h	235	825	852	402	722	758	446	0	702	378	449	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.47	0.47	0.47	1.00	0.00	1.00	0.54	0.54	0.54
Uniform Delay (d), s/veh	44.4	25.4	25.4	24.5	42.8	42.8	40.1	0.0	34.2	47.9	47.4	57.8
Incr Delay (d2), s/veh	25.6	1.1	1.1	0.1	15.1	14.7	0.6	0.0	0.0	0.1	0.1	17.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.1	12.5	12.8	1.3	32.8	34.2	6.8	0.0	1.5	2.3	2.1	17.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	26.6	26.5	24.6	57.9	57.5	40.7	0.0	34.3	48.0	47.5	75.5
LnGrp LOS	E	C	C	C	E	E	D	A	C	D	D	E
Approach Vol, veh/h		942			1455			164			393	
Approach Delay, s/veh		35.9			56.9			39.4			69.9	
Approach LOS		D			E			D			E	

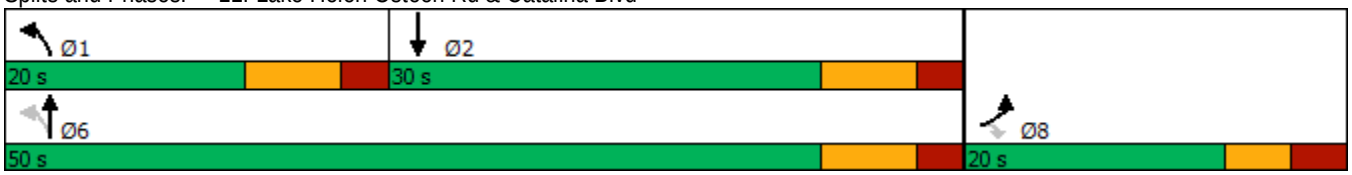
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.9	70.4		56.6	12.3	81.0	17.6	39.0				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	50.5		60.0	9.5	56.5	17.0	36.0				
Max Q Clear Time (g_c+I1), s	14.4	59.8		3.9	3.7	23.0	10.5	31.0				
Green Ext Time (p_c), s	0.1	0.0		0.2	0.0	6.9	0.2	1.0				

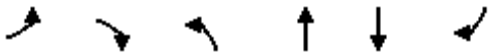
Intersection Summary			
HCM 6th Ctrl Delay		51.0	
HCM 6th LOS		D	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	37	81	492	319	85	173
Future Volume (vph)	37	81	492	319	85	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	185	0	240			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			45	45	
Link Distance (ft)	5049			5467	741	
Travel Time (s)	98.4			82.8	11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	8		1	6	2	
Permitted Phases		8	6			
Detector Phase	8	8	1	6	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	
Minimum Split (s)	11.5	11.5	12.5	22.5	22.5	
Total Split (s)	20.0	20.0	20.0	50.0	30.0	
Total Split (%)	28.6%	28.6%	28.6%	71.4%	42.9%	
Yellow Time (s)	3.5	3.5	5.0	5.0	5.0	
All-Red Time (s)	3.0	3.0	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	7.5	7.5	7.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	Min	Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 55.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 11: Lake Helen Osteen Rd & Catalina Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	81	492	319	85	173
Future Volume (veh/h)	37	81	492	319	85	173
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1826	1826
Adj Flow Rate, veh/h	41	21	547	354	94	170
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	5	5
Cap, veh/h	102	90	732	1256	169	306
Arrive On Green	0.06	0.06	0.24	0.67	0.29	0.29
Sat Flow, veh/h	1781	1585	1781	1870	583	1054
Grp Volume(v), veh/h	41	21	547	354	0	264
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	0	1636
Q Serve(g_s), s	1.1	0.7	9.9	4.0	0.0	7.0
Cycle Q Clear(g_c), s	1.1	0.7	9.9	4.0	0.0	7.0
Prop In Lane	1.00	1.00	1.00			0.64
Lane Grp Cap(c), veh/h	102	90	732	1256	0	475
V/C Ratio(X)	0.40	0.23	0.75	0.28	0.00	0.56
Avail Cap(c_a), veh/h	466	415	743	1540	0	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	23.3	8.6	3.4	0.0	15.5
Incr Delay (d2), s/veh	5.4	2.8	5.0	0.3	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	0.5	5.6	1.0	0.0	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.9	26.0	13.6	3.7	0.0	17.7
LnGrp LOS	C	C	B	A	A	B
Approach Vol, veh/h	62			901	264	
Approach Delay, s/veh	27.9			9.7	17.7	
Approach LOS	C			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	19.7	22.5				42.2	9.4
Change Period (Y+Rc), s	7.5	7.5				7.5	6.5
Max Green Setting (Gmax), s	12.5	22.5				42.5	13.5
Max Q Clear Time (g_c+I1), s	11.9	9.0				6.0	3.1
Green Ext Time (p_c), s	0.2	2.1				4.2	0.2

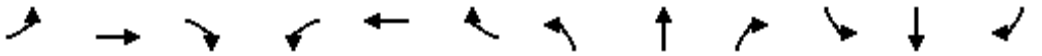
Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	464	283	35	986	0	275	0	22	1	0	2
Future Volume (vph)	0	464	283	35	986	0	275	0	22	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			638	
Travel Time (s)		28.7			22.0			170.9			14.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	9%	9%	5%	5%	5%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	85.0	85.0	85.0	20.0	105.0		25.0	50.0		25.0	25.0	
Total Split (%)	54.8%	54.8%	54.8%	12.9%	67.7%		16.1%	32.3%		16.1%	16.1%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	464	283	35	986	0	275	0	22	1	0	2
Future Volume (veh/h)	0	464	283	35	986	0	275	0	22	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1767	1767	1826	1826	1826	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	0	488	266	37	1038	0	289	0	8	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	5	5	5	3	3	3	2	2	2
Cap, veh/h	46	1169	991	460	1338	0	297	0	278	46	1	12
Arrive On Green	0.00	0.66	0.66	0.03	0.73	0.00	0.12	0.00	0.18	0.02	0.00	0.02
Sat Flow, veh/h	513	1767	1497	1739	1826	0	1767	0	1572	692	61	753
Grp Volume(v), veh/h	0	488	266	37	1038	0	289	0	8	2	0	0
Grp Sat Flow(s),veh/h/ln	513	1767	1497	1739	1826	0	1767	0	1572	1507	0	0
Q Serve(g_s), s	0.0	20.0	11.3	1.0	54.6	0.0	18.0	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.0	11.3	1.0	54.6	0.0	18.0	0.0	0.7	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.50		0.50
Lane Grp Cap(c), veh/h	46	1169	991	460	1338	0	297	0	278	59	0	0
V/C Ratio(X)	0.00	0.42	0.27	0.08	0.78	0.00	0.97	0.00	0.03	0.03	0.00	0.00
Avail Cap(c_a), veh/h	46	1169	991	561	1338	0	297	0	436	208	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00	0.83	0.00	0.83	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.3	10.8	8.8	12.8	0.0	67.6	0.0	52.8	75.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.2	0.1	4.5	0.0	40.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	11.7	6.8	0.7	28.3	0.0	20.6	0.0	0.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.5	11.0	8.8	17.3	0.0	107.9	0.0	52.8	75.4	0.0	0.0
LnGrp LOS	A	B	B	A	B	A	F	A	D	E	A	A
Approach Vol, veh/h		754			1075			297			2	
Approach Delay, s/veh		12.0			17.0			106.4			75.4	
Approach LOS		B			B			F			E	

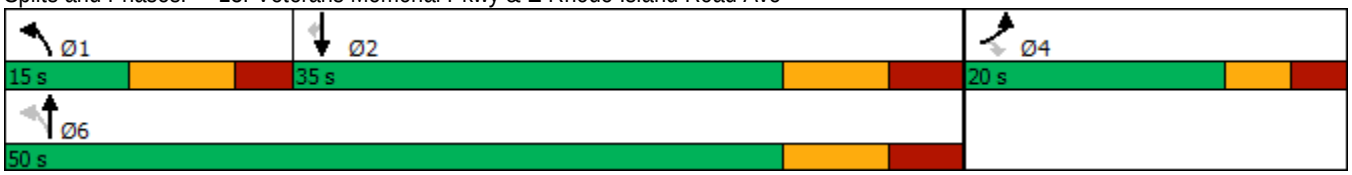
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		120.6		34.4	11.0	109.6	25.0	9.4				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		98.0		43.0	13.0	78.0	18.0	18.0				
Max Q Clear Time (g_c+I1), s		56.6		2.7	3.0	22.0	20.0	2.2				
Green Ext Time (p_c), s		15.6		0.0	0.0	6.6	0.0	0.0				

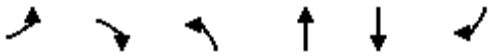
Intersection Summary												
HCM 6th Ctrl Delay			27.8									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	177	196	398	414	669	296
Future Volume (vph)	177	196	398	414	669	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	5%	5%	5%	5%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	13.5	13.5	13.5	20.5	20.5	20.5
Total Split (s)	20.0	20.0	15.0	50.0	35.0	35.0
Total Split (%)	28.6%	28.6%	21.4%	71.4%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 68.2	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	177	196	398	414	669	296
Future Volume (veh/h)	177	196	398	414	669	296
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1826	1826	1826	1826
Adj Flow Rate, veh/h	201	120	452	470	760	336
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	5	5	5	5
Cap, veh/h	258	229	280	1119	705	597
Arrive On Green	0.14	0.14	0.10	0.61	0.39	0.39
Sat Flow, veh/h	1781	1585	1739	1826	1826	1547
Grp Volume(v), veh/h	201	120	452	470	760	336
Grp Sat Flow(s),veh/h/ln	1781	1585	1739	1826	1826	1547
Q Serve(g_s), s	7.2	4.6	6.5	8.9	25.5	11.2
Cycle Q Clear(g_c), s	7.2	4.6	6.5	8.9	25.5	11.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	258	229	280	1119	705	597
V/C Ratio(X)	0.78	0.52	1.61	0.42	1.08	0.56
Avail Cap(c_a), veh/h	364	324	280	1119	705	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	26.1	16.0	6.7	20.3	15.9
Incr Delay (d2), s/veh	6.9	1.8	292.1	0.3	57.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	3.1	38.2	3.9	28.4	6.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.1	28.0	308.2	6.9	77.3	17.1
LnGrp LOS	C	C	F	A	F	B
Approach Vol, veh/h	321			922	1096	
Approach Delay, s/veh	31.8			154.6	58.8	
Approach LOS	C			F	E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	35.0		16.1		50.0
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	6.5	25.5		13.5		40.5
Max Q Clear Time (g_c+I1), s	8.5	27.5		9.2		10.9
Green Ext Time (p_c), s	0.0	0.0		0.4		2.7

Intersection Summary	
HCM 6th Ctrl Delay	92.9
HCM 6th LOS	F

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	381	335	485	95	86	216
Future Volume (vph)	381	335	485	95	86	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2590
Travel Time (s)	153.9		100.1			39.2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	6%	6%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	20.0	20.0	35.0		15.0	50.0
Total Split (%)	28.6%	28.6%	50.0%		21.4%	71.4%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 54.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	381	335	485	95	86	216
Future Volume (veh/h)	381	335	485	95	86	216
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1811	1811
Adj Flow Rate, veh/h	405	260	516	63	91	230
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	6	6
Cap, veh/h	467	416	803	98	360	1580
Arrive On Green	0.26	0.26	0.25	0.25	0.07	0.46
Sat Flow, veh/h	1767	1572	3257	385	1725	3532
Grp Volume(v), veh/h	405	260	287	292	91	230
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1786	1725	1721
Q Serve(g_s), s	10.7	7.1	7.1	7.1	1.7	1.9
Cycle Q Clear(g_c), s	10.7	7.1	7.1	7.1	1.7	1.9
Prop In Lane	1.00	1.00		0.22	1.00	
Lane Grp Cap(c), veh/h	467	416	447	453	360	1580
V/C Ratio(X)	0.87	0.63	0.64	0.65	0.25	0.15
Avail Cap(c_a), veh/h	488	434	1010	1023	534	3063
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	15.8	16.3	16.3	11.3	7.7
Incr Delay (d2), s/veh	14.7	2.6	1.5	1.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.4	10.6	4.7	4.8	0.9	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.9	18.5	17.8	17.8	11.7	7.7
LnGrp LOS	C	B	B	B	B	A
Approach Vol, veh/h	665		579			321
Approach Delay, s/veh	26.6		17.8			8.8
Approach LOS	C		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		29.4		19.4	10.0	19.4
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 44		13.5	8.5	28.0
Max Q Clear Time (g_c+I1), s		3.9		12.7	3.7	9.1
Green Ext Time (p_c), s		1.4		0.2	0.1	3.3

Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	130	78	8	308	166	5
Future Volume (vph)	130	78	8	308	166	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	30	
Link Distance (ft)	7900			4491	5182	
Travel Time (s)	153.9			87.5	117.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	5%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	130	78	8	308	166	5
Future Vol, veh/h	130	78	8	308	166	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	5	5	3	3	3	3
Mvmt Flow	144	87	9	342	184	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	231	0	548	188
Stage 1	-	-	-	-	188	-
Stage 2	-	-	-	-	360	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1331	-	496	851
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	704	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1331	-	492	851
Mov Cap-2 Maneuver	-	-	-	-	492	-
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	698	-

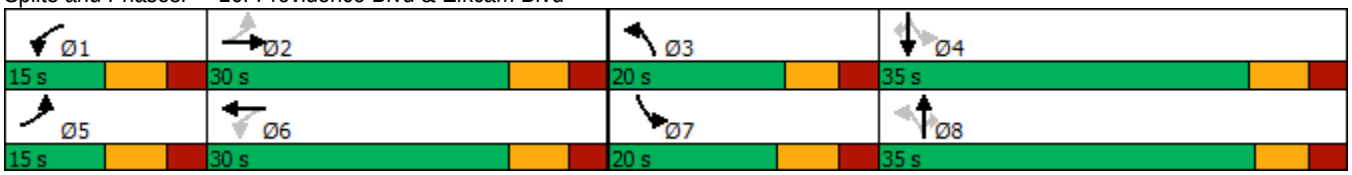
Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	16.6
HCM LOS			C

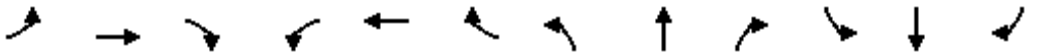
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	498	-	-	1331	-
HCM Lane V/C Ratio	0.382	-	-	0.007	-
HCM Control Delay (s)	16.6	-	-	7.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.8	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	88	24	126	155	74	31	287	106	46	218	43
Future Volume (vph)	52	88	24	126	155	74	31	287	106	46	218	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	225		0	235		365	220		295
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		4491			6416			3965			8772	
Travel Time (s)		87.5			125.0			77.2			170.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	12.5	13.5		12.5	13.5		12.0	13.0	13.0	12.5	13.5	13.5
Total Split (s)	15.0	30.0		15.0	30.0		20.0	35.0	35.0	20.0	35.0	35.0
Total Split (%)	15.0%	30.0%		15.0%	30.0%		20.0%	35.0%	35.0%	20.0%	35.0%	35.0%
Yellow Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.5	7.5		7.0	7.0	7.0	7.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 70.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 16: Providence Blvd & Elkcam Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	88	24	126	155	74	31	287	106	46	218	43
Future Volume (veh/h)	52	88	24	126	155	74	31	287	106	46	218	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	55	94	19	134	165	58	33	305	60	49	232	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	3	3	3	5	5	5	7	7	7
Cap, veh/h	271	204	41	374	229	80	331	418	354	272	447	379
Arrive On Green	0.05	0.14	0.14	0.09	0.17	0.17	0.04	0.23	0.23	0.05	0.25	0.25
Sat Flow, veh/h	1753	1486	300	1767	1312	461	1739	1826	1547	1711	1796	1522
Grp Volume(v), veh/h	55	0	113	134	0	223	33	305	60	49	232	31
Grp Sat Flow(s),veh/h/ln	1753	0	1787	1767	0	1773	1739	1826	1547	1711	1796	1522
Q Serve(g_s), s	1.6	0.0	3.5	3.8	0.0	7.1	0.9	9.3	1.9	1.3	6.7	0.9
Cycle Q Clear(g_c), s	1.6	0.0	3.5	3.8	0.0	7.1	0.9	9.3	1.9	1.3	6.7	0.9
Prop In Lane	1.00		0.17	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	0	245	374	0	309	331	418	354	272	447	379
V/C Ratio(X)	0.20	0.00	0.46	0.36	0.00	0.72	0.10	0.73	0.17	0.18	0.52	0.08
Avail Cap(c_a), veh/h	402	0	670	441	0	665	646	852	722	549	823	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	23.8	19.6	0.0	23.4	16.8	21.4	18.5	17.0	19.4	17.3
Incr Delay (d2), s/veh	0.4	0.0	1.9	0.6	0.0	4.5	0.1	3.5	0.3	0.3	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	0.0	2.7	2.7	0.0	5.6	0.6	7.1	1.1	0.9	4.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	25.8	20.2	0.0	27.9	16.9	24.9	18.9	17.3	20.8	17.4
LnGrp LOS	C	A	C	C	A	C	B	C	B	B	C	B
Approach Vol, veh/h		168			357			398			312	
Approach Delay, s/veh		24.2			25.0			23.3			19.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	15.7	9.1	22.4	10.5	18.0	10.3	21.2
Change Period (Y+Rc), s	7.5	7.5	7.0	7.5	7.5	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	7.5	22.5	13.0	27.5	7.5	22.5	12.5	* 28
Max Q Clear Time (g_c+I1), s	5.8	5.5	2.9	8.7	3.6	9.1	3.3	11.3
Green Ext Time (p_c), s	0.0	0.6	0.0	1.8	0.0	1.3	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

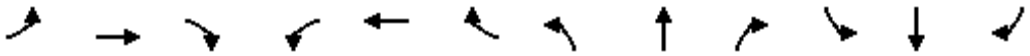
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	64	21	438	143	130	29	186	86	41	320	6
Future Volume (vph)	8	64	21	438	143	130	29	186	86	41	320	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	440		0	200		0	221		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35			35	
Link Distance (ft)		5182			627			919			3965	
Travel Time (s)		117.8			12.2			17.9			77.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	8%	8%	8%	4%	4%	4%	8%	8%	8%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0	12.0	5.0	12.0	
Minimum Split (s)	14.0	14.0		13.5	13.5		18.5	18.5	18.5	13.0	20.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0	35.0	20.0	55.0	
Total Split (%)	35.3%	35.3%		35.3%	35.3%		41.2%	41.2%	41.2%	23.5%	64.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.5	4.5	
All-Red Time (s)	3.0	3.0		2.5	2.5		2.5	2.5	2.5	3.5	3.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		6.5	6.5		6.5	6.5	6.5	8.0	8.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Min	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 61.5	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 17: Providence Blvd & Fort Smith Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	64	21	438	143	130	29	186	86	41	320	6
Future Volume (veh/h)	8	64	21	438	143	130	29	186	86	41	320	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1841	1841	1841	1781	1781	1781	1841	1841	1841
Adj Flow Rate, veh/h	9	70	13	476	155	105	32	202	57	45	348	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	4	4	4	8	8	8	4	4	4
Cap, veh/h	410	561	104	575	393	266	309	349	296	297	666	13
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.20	0.20	0.20	0.04	0.37	0.37
Sat Flow, veh/h	1066	1461	271	1294	1023	693	977	1781	1510	1753	1798	36
Grp Volume(v), veh/h	9	0	83	476	0	260	32	202	57	45	0	355
Grp Sat Flow(s),veh/h/ln	1066	0	1733	1294	0	1716	977	1781	1510	1753	0	1834
Q Serve(g_s), s	0.4	0.0	1.9	21.6	0.0	6.7	1.7	6.3	1.9	1.2	0.0	9.2
Cycle Q Clear(g_c), s	7.1	0.0	1.9	23.5	0.0	6.7	1.7	6.3	1.9	1.2	0.0	9.2
Prop In Lane	1.00		0.16	1.00		0.40	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	410	0	666	575	0	659	309	349	296	297	0	680
V/C Ratio(X)	0.02	0.00	0.12	0.83	0.00	0.39	0.10	0.58	0.19	0.15	0.00	0.52
Avail Cap(c_a), veh/h	410	0	666	575	0	659	573	830	703	565	0	1409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	12.2	20.2	0.0	13.7	20.4	22.3	20.5	17.2	0.0	15.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	9.8	0.0	0.4	0.2	2.1	0.4	0.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	1.2	12.0	0.0	4.2	0.7	4.7	1.2	0.8	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	0.0	12.3	30.0	0.0	14.1	20.6	24.4	21.0	17.4	0.0	15.9
LnGrp LOS	B	A	B	C	A	B	C	C	C	B	A	B
Approach Vol, veh/h		92			736			291			400	
Approach Delay, s/veh		12.7			24.4			23.3			16.1	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.7	20.0		30.5		30.7		30.5				
Change Period (Y+Rc), s	8.0	* 8		7.0		8.0		* 7				
Max Green Setting (Gmax), s	12.0	* 29		23.0		47.0		* 24				
Max Q Clear Time (g_c+I1), s	3.2	8.3		9.1		11.2		25.5				
Green Ext Time (p_c), s	0.0	2.0		0.3		3.3		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		21.3
HCM 6th LOS		C

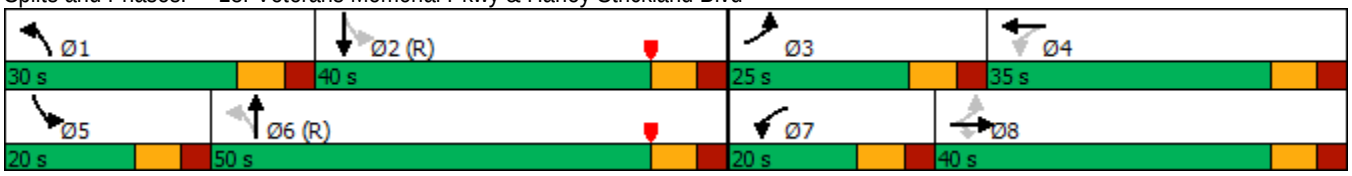
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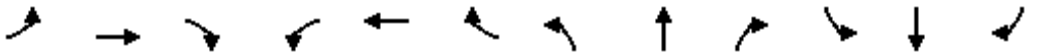
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	25	106	36	30	37	141	265	4	100	627	341
Future Volume (vph)	88	25	106	36	30	37	141	265	4	100	627	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	235		235	250		0	435		0	340		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		642			673			1923			1581	
Travel Time (s)		10.9			15.3			32.8			26.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	3	8	8	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	16.0		5.0	16.0	
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5		12.5	23.5		12.5	23.5	
Total Split (s)	25.0	40.0	40.0	20.0	35.0		30.0	50.0		20.0	40.0	
Total Split (%)	19.2%	30.8%	30.8%	15.4%	26.9%		23.1%	38.5%		15.4%	30.8%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 40 (31%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 18: Veterans Memorial Pkwy & Harley Strickland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	25	106	36	30	37	141	265	4	100	627	341
Future Volume (veh/h)	88	25	106	36	30	37	141	265	4	100	627	341
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1796	1796	1796	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	98	28	59	40	33	15	157	294	3	111	697	353
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	7	7	7	5	5	5	4	4	4
Cap, veh/h	207	168	142	173	63	29	365	2144	22	737	1341	679
Arrive On Green	0.07	0.09	0.09	0.03	0.05	0.05	0.05	0.61	0.61	0.04	0.60	0.60
Sat Flow, veh/h	1767	1856	1572	1711	1169	531	1739	3518	36	1753	2247	1137
Grp Volume(v), veh/h	98	28	59	40	0	48	157	145	152	111	542	508
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1711	0	1701	1739	1735	1819	1753	1749	1636
Q Serve(g_s), s	6.7	1.8	4.6	2.9	0.0	3.6	4.5	4.6	4.6	3.2	23.6	23.6
Cycle Q Clear(g_c), s	6.7	1.8	4.6	2.9	0.0	3.6	4.5	4.6	4.6	3.2	23.6	23.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.02	1.00		0.70
Lane Grp Cap(c), veh/h	207	168	142	173	0	91	365	1057	1109	737	1044	976
V/C Ratio(X)	0.47	0.17	0.42	0.23	0.00	0.53	0.43	0.14	0.14	0.15	0.52	0.52
Avail Cap(c_a), veh/h	329	464	393	288	0	360	574	1057	1109	835	1044	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.71	0.71	0.71	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	54.6	55.9	55.9	0.0	59.9	11.8	10.8	10.8	9.2	15.3	15.3
Incr Delay (d2), s/veh	1.7	0.5	1.9	0.7	0.0	4.6	0.6	0.2	0.2	0.1	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	1.5	3.4	2.3	0.0	3.0	3.0	3.2	3.3	2.1	14.4	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	55.1	57.8	56.6	0.0	64.5	12.4	11.0	11.0	9.3	17.2	17.3
LnGrp LOS	E	E	E	E	A	E	B	B	B	A	B	B
Approach Vol, veh/h		185			88			454			1161	
Approach Delay, s/veh		55.9			60.9			11.5			16.5	
Approach LOS		E			E			B			B	

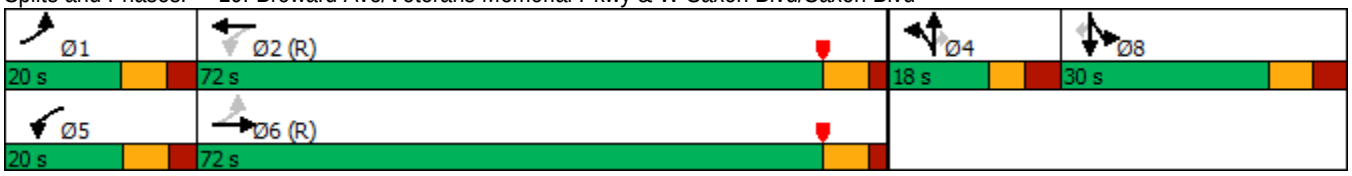
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	85.1	16.1	14.5	12.7	86.7	11.3	19.3
Change Period (Y+Rc), s	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max Green Setting (Gmax), s	22.5	32.5	17.5	27.5	12.5	42.5	12.5	32.5
Max Q Clear Time (g_c+I1), s	6.5	25.6	8.7	5.6	5.2	6.6	4.9	6.6
Green Ext Time (p_c), s	0.3	4.4	0.1	0.2	0.1	2.4	0.0	0.3

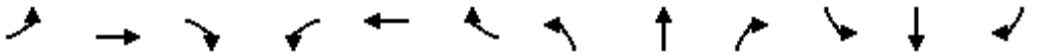
Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	657	12	130	1249	461	49	53	68	291	46	143
Future Volume (vph)	127	657	12	130	1249	461	49	53	68	291	46	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)										43%		
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	6			2					4			8
Detector Phase	1	6		5	2		4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	15.3	15.3	15.3
Total Split (s)	20.0	72.0		20.0	72.0		18.0	18.0	18.0	30.0	30.0	30.0
Total Split (%)	14.3%	51.4%		14.3%	51.4%		12.9%	12.9%	12.9%	21.4%	21.4%	21.4%
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.5	4.5	4.5
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	8.3	8.3	8.3
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 18 (13%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	657	12	130	1249	461	49	53	68	291	46	143
Future Volume (veh/h)	127	657	12	130	1249	461	49	53	68	291	46	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1856	1856	1856	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	137	706	9	140	1343	494	53	57	20	348	0	71
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	5	5	5
Cap, veh/h	274	2870	37	500	2072	756	88	93	79	410	0	183
Arrive On Green	0.05	0.57	0.57	0.10	1.00	1.00	0.05	0.05	0.05	0.12	0.00	0.12
Sat Flow, veh/h	1739	5073	65	1767	3658	1335	1781	1870	1585	3478	0	1547
Grp Volume(v), veh/h	137	462	253	140	1239	598	53	57	20	348	0	71
Grp Sat Flow(s),veh/h/ln	1739	1662	1814	1767	1689	1615	1781	1870	1585	1739	0	1547
Q Serve(g_s), s	4.6	9.8	9.8	4.8	0.0	0.0	4.1	4.2	1.7	13.7	0.0	5.9
Cycle Q Clear(g_c), s	4.6	9.8	9.8	4.8	0.0	0.0	4.1	4.2	1.7	13.7	0.0	5.9
Prop In Lane	1.00		0.04	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	1880	1026	500	1913	915	88	93	79	410	0	183
V/C Ratio(X)	0.50	0.25	0.25	0.28	0.65	0.65	0.60	0.61	0.25	0.85	0.00	0.39
Avail Cap(c_a), veh/h	341	1880	1026	567	1913	915	134	140	119	539	0	240
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	0.81	0.00	0.81
Uniform Delay (d), s/veh	11.3	15.3	15.3	11.1	0.0	0.0	65.2	65.2	64.0	60.5	0.0	57.1
Incr Delay (d2), s/veh	1.4	0.3	0.6	0.2	1.4	2.9	6.3	6.4	1.7	7.9	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	6.6	7.3	3.0	0.7	1.3	3.6	3.9	1.3	10.2	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.7	15.6	15.9	11.3	1.4	2.9	71.5	71.6	65.7	68.4	0.0	58.2
LnGrp LOS	B	B	B	B	A	A	E	E	E	E	A	E
Approach Vol, veh/h		852			1977			130			419	
Approach Delay, s/veh		15.3			2.5			70.7			66.7	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.6	86.1		14.5	14.7	86.0		24.8				
Change Period (Y+Rc), s	7.9	6.8		7.5	7.8	6.8		8.3				
Max Green Setting (Gmax), s	12.1	65.2		10.5	12.2	65.2		21.7				
Max Q Clear Time (g_c+I1), s	6.6	2.0		6.2	6.8	11.8		15.7				
Green Ext Time (p_c), s	0.1	21.1		0.1	0.1	4.7		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		16.3	
HCM 6th LOS		B	

Notes

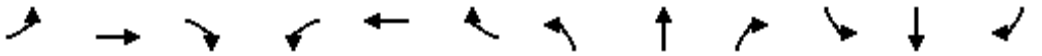
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1318	58	98	1915	24	49	1	84	10	4	8
Future Volume (vph)	22	1318	58	98	1915	24	49	1	84	10	4	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	365		0	390		0	105		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1867			487			266			246	
Travel Time (s)		28.3			7.4			6.0			5.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.7	17.9		12.8	17.9		14.6	14.6		14.6	14.6	
Total Split (s)	18.0	102.0		20.0	104.0		18.0	18.0		18.0	18.0	
Total Split (%)	12.9%	72.9%		14.3%	74.3%		12.9%	12.9%		12.9%	12.9%	
Yellow Time (s)	4.8	4.9		4.9	4.9		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.9	2.0		2.9	2.0		3.4	3.4		3.4	3.4	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.7	6.9		7.8	6.9		7.6	7.6			7.6	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 21 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: FDOT Park & Ride & Saxon Blvd





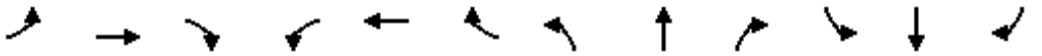
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1318	58	98	1915	24	49	1	84	10	4	8
Future Volume (veh/h)	22	1318	58	98	1915	24	49	1	84	10	4	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1841	1841	1841	1826	1826	1826
Adj Flow Rate, veh/h	25	1481	62	110	2152	26	55	1	18	11	4	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	5	5	5
Cap, veh/h	197	3713	155	363	3943	48	124	4	73	78	25	8
Arrive On Green	0.04	1.00	1.00	0.04	0.77	0.77	0.05	0.05	0.05	0.05	0.05	0.05
Sat Flow, veh/h	1739	4907	205	1753	5118	62	1388	83	1490	724	508	164
Grp Volume(v), veh/h	25	1003	540	110	1408	770	55	0	19	17	0	0
Grp Sat Flow(s),veh/h/ln	1739	1662	1789	1753	1675	1830	1388	0	1573	1396	0	0
Q Serve(g_s), s	0.4	0.0	0.0	1.9	23.3	23.3	3.1	0.0	1.6	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	1.9	23.3	23.3	5.0	0.0	1.6	1.9	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.03	1.00		0.95	0.65		0.12
Lane Grp Cap(c), veh/h	197	2515	1354	363	2581	1410	124	0	77	110	0	0
V/C Ratio(X)	0.13	0.40	0.40	0.30	0.55	0.55	0.44	0.00	0.25	0.15	0.00	0.00
Avail Cap(c_a), veh/h	286	2515	1354	454	2581	1410	159	0	117	148	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.2	0.0	0.0	3.2	6.4	6.4	65.6	0.0	64.1	64.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.8	0.5	0.8	1.5	2.5	0.0	1.7	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.3	0.6	1.0	11.1	12.3	3.7	0.0	1.2	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	0.4	0.8	3.7	7.2	7.9	68.1	0.0	65.8	64.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	A	A
Approach Vol, veh/h		1568			2288			74			17	
Approach Delay, s/veh		0.7			7.3			67.5			64.7	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	114.8		14.4	12.7	112.9		14.4				
Change Period (Y+Rc), s	* 7.7	6.9		7.6	7.8	6.9		7.6				
Max Green Setting (Gmax), s	* 10	97.1		10.4	12.2	95.1		10.4				
Max Q Clear Time (g_c+I1), s	2.4	25.3		7.0	3.9	2.0		3.9				
Green Ext Time (p_c), s	0.0	44.6		0.0	0.1	25.5		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		6.0
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	926	414	0	1977	649	0	0	333	0	0	505
Future Volume (vph)	0	926	414	0	1977	649	0	0	333	0	0	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	9%	9%	9%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	926	414	0	1977	649	0	0	333	0	0	505
Future Vol, veh/h	0	926	414	0	1977	649	0	0	333	0	0	505
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Stop
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	9	9	9	5	5	5
Mvmt Flow	0	975	436	0	2081	683	0	0	351	0	0	532

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	-	-	0			-	-	1041
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	-	-	-			-	-	7
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	-	-	-			-	-	3.35
Pot Cap-1 Maneuver	0	-	0	0	-	0			0	0	*700
Stage 1	0	-	0	0	-	0			0	0	-
Stage 2	0	-	0	0	-	0			0	0	-
Platoon blocked, %		-			-						1
Mov Cap-1 Maneuver	-	-	-	-	-	-			-	0	*700
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	24.5
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	700
HCM Lane V/C Ratio	-	-	0.759
HCM Control Delay (s)	-	-	24.5
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	7.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Future Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		2	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1253			900			503	
Travel Time (s)		24.2			19.0			13.6			7.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	430	1037	0	0	2160	429	0	0	264	0	0	416
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	35.0	118.0			105.0	105.0			22.0			118.0
Total Split (%)	25.0%	84.3%			75.0%	75.0%			15.7%			84.3%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	1.31	0.25			0.87	0.38			0.59			0.28
Control Delay	202.3	2.5			11.0	4.7			6.7			0.5
Queue Delay	0.0	0.0			0.8	0.0			0.0			0.0
Total Delay	202.3	2.5			11.8	4.7			6.7			0.5
Queue Length 50th (ft)	~509	60			400	60			0			0
Queue Length 95th (ft)	#729	90			m293	m55			6			0
Internal Link Dist (ft)		1519			1173			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	328	4191			2482	1135			610			1500
Starvation Cap Reductn	0	0			112	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	1.31	0.25			0.91	0.38			0.43			0.28

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 104 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 22: I-4 EB & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Future Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.91			0.95	1.00			0.88			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1687	4848			3539	1583			2656			1565
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1687	4848			3539	1583			2656			1565
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	430	1037	0	0	2160	429	0	0	264	0	0	416
RTOR Reduction (vph)	0	0	0	0	0	25	0	0	252	0	0	56
Lane Group Flow (vph)	430	1037	0	0	2160	404	0	0	12	0	0	360
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	27.3	121.0			98.2	98.2			6.2			121.0
Effective Green, g (s)	27.3	121.0			98.2	98.2			6.2			121.0
Actuated g/C Ratio	0.20	0.86			0.70	0.70			0.04			0.86
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	328	4190			2482	1110			117			1352
v/s Ratio Prot	c0.25	0.21			c0.61				0.00			
v/s Ratio Perm						0.26						0.23
v/c Ratio	1.31	0.25			0.87	0.36			0.10			0.27
Uniform Delay, d1	56.4	1.6			16.0	8.4			64.2			1.7
Progression Factor	0.97	1.41			0.63	0.69			1.00			1.00
Incremental Delay, d2	159.6	0.1			0.4	0.1			0.4			0.5
Delay (s)	214.5	2.5			10.6	5.9			64.6			2.2
Level of Service	F	A			B	A			E			A
Approach Delay (s)		64.6			9.8			64.6			2.2	
Approach LOS		E			A			E			A	

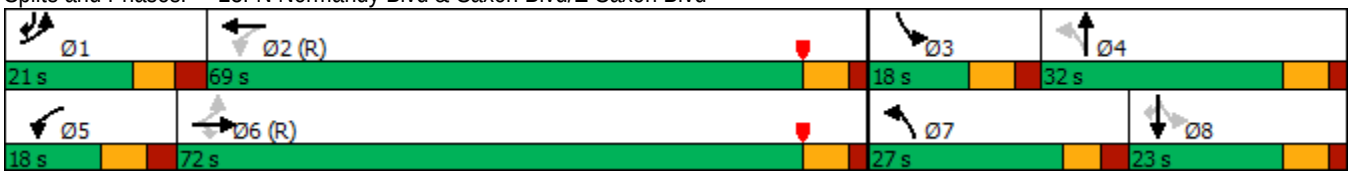
Intersection Summary			
HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

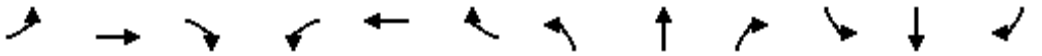
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	244	451	113	30	1199	140	219	165	18	75	147	472
Future Volume (vph)	244	451	113	30	1199	140	219	165	18	75	147	472
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	0		385
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1861			7172			3746			5140	
Travel Time (s)		31.7			122.3			73.0			100.1	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	8%	8%	8%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6		6	2			4			8		8
Detector Phase	1	6	6	5	2		7	4		3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		5.0	10.0		5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9		11.8	16.9		12.5	16.9	12.6
Total Split (s)	21.0	72.0	72.0	18.0	69.0		27.0	32.0		18.0	23.0	21.0
Total Split (%)	15.0%	51.4%	51.4%	12.9%	49.3%		19.3%	22.9%		12.9%	16.4%	15.0%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9		4.0	4.8		4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0		2.8	2.1		2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9		6.8	6.9		7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 48 (34%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	451	113	30	1199	140	219	165	18	75	147	472
Future Volume (veh/h)	244	451	113	30	1199	140	219	165	18	75	147	472
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	280	518	83	34	1378	155	252	190	16	86	169	377
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	8	8	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	225	1749	780	467	1453	162	317	325	27	254	215	334
Arrive On Green	0.19	1.00	1.00	0.03	0.45	0.45	0.14	0.19	0.19	0.05	0.12	0.12
Sat Flow, veh/h	1697	3385	1510	1781	3222	360	1767	1688	142	1781	1870	1585
Grp Volume(v), veh/h	280	518	83	34	756	777	252	0	206	86	169	377
Grp Sat Flow(s),veh/h/ln	1697	1692	1510	1781	1777	1806	1767	0	1830	1781	1870	1585
Q Serve(g_s), s	13.4	0.0	0.0	1.4	56.9	58.1	17.1	0.0	14.3	5.9	12.3	16.1
Cycle Q Clear(g_c), s	13.4	0.0	0.0	1.4	56.9	58.1	17.1	0.0	14.3	5.9	12.3	16.1
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	225	1749	780	467	801	814	317	0	352	254	215	334
V/C Ratio(X)	1.24	0.30	0.11	0.07	0.94	0.95	0.80	0.00	0.59	0.34	0.79	1.13
Avail Cap(c_a), veh/h	225	1749	780	546	801	814	330	0	352	291	215	334
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.49	0.49	0.49	0.96	0.00	0.96	0.74	0.74	0.74
Uniform Delay (d), s/veh	37.4	0.0	0.0	19.5	36.7	37.1	45.0	0.0	51.5	50.8	60.3	55.3
Incr Delay (d2), s/veh	139.8	0.4	0.3	0.0	12.4	13.6	11.9	0.0	2.9	0.6	14.0	82.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	24.0	0.2	0.1	1.1	32.3	33.7	13.2	0.0	11.1	4.8	10.3	27.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	177.2	0.4	0.3	19.5	49.1	50.7	56.9	0.0	54.4	51.3	74.2	137.7
LnGrp LOS	F	A	A	B	D	D	E	A	D	D	E	F
Approach Vol, veh/h		881			1567			458			632	
Approach Delay, s/veh		56.6			49.2			55.7			109.0	
Approach LOS		E			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	70.0	15.2	33.8	11.8	79.3	26.0	23.0
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 13	62.1	* 11	25.1	* 9.9	65.1	* 20	16.1
Max Q Clear Time (g_c+I1), s	15.4	60.1	7.9	16.3	3.4	2.0	19.1	18.1
Green Ext Time (p_c), s	0.0	1.8	0.0	0.9	0.0	6.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.6
HCM 6th LOS	E

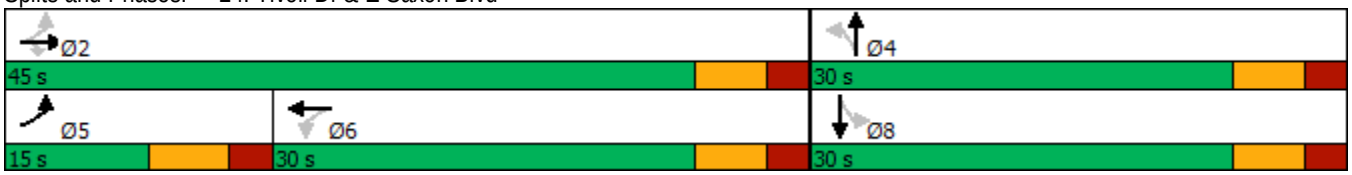
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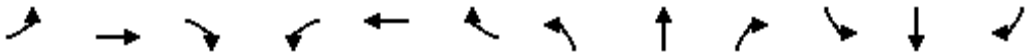
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	220	122	6	515	3	68	52	9	8	100	333
Future Volume (vph)	144	220	122	6	515	3	68	52	9	8	100	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390		0	120		0	265		0	150		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			30			30	
Link Distance (ft)		7172			644			704			1081	
Travel Time (s)		122.3			12.5			16.0			24.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	5	2	2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0	11.0	11.0	11.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	12.0	17.5	17.5	17.5	17.5		11.5	11.5		11.5	11.5	
Total Split (s)	15.0	45.0	45.0	30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	20.0%	60.0%	60.0%	40.0%	40.0%		40.0%	40.0%		40.0%	40.0%	
Yellow Time (s)	4.5	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	6.5	6.5	6.5	6.5		6.5	6.5		6.5	6.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min	Min	Min	Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 65.2	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 24: Tivoli Dr & E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	220	122	6	515	3	68	52	9	8	100	333
Future Volume (veh/h)	144	220	122	6	515	3	68	52	9	8	100	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1841	1841	1841	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	157	239	24	7	560	3	74	57	10	9	109	186
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	4	4	4	5	5	5	4	4	4
Cap, veh/h	299	988	838	489	626	3	222	398	70	421	161	275
Arrive On Green	0.08	0.53	0.53	0.34	0.34	0.34	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1767	1856	1572	1099	1829	10	1058	1513	265	1313	611	1042
Grp Volume(v), veh/h	157	239	24	7	0	563	74	0	67	9	0	295
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1099	0	1839	1058	0	1778	1313	0	1653
Q Serve(g_s), s	3.4	4.4	0.5	0.3	0.0	18.5	4.3	0.0	1.8	0.3	0.0	10.2
Cycle Q Clear(g_c), s	3.4	4.4	0.5	0.3	0.0	18.5	14.5	0.0	1.8	2.2	0.0	10.2
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.15	1.00		0.63
Lane Grp Cap(c), veh/h	299	988	838	489	0	629	222	0	468	421	0	435
V/C Ratio(X)	0.52	0.24	0.03	0.01	0.00	0.89	0.33	0.00	0.14	0.02	0.00	0.68
Avail Cap(c_a), veh/h	378	1121	950	518	0	678	334	0	656	559	0	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.4	8.0	7.1	13.9	0.0	19.9	27.5	0.0	18.0	18.8	0.0	21.0
Incr Delay (d2), s/veh	1.4	0.2	0.0	0.0	0.0	14.3	0.9	0.0	0.1	0.0	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	2.5	0.2	0.1	0.0	14.5	2.0	0.0	1.3	0.2	0.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	8.2	7.1	13.9	0.0	34.2	28.4	0.0	18.1	18.8	0.0	22.9
LnGrp LOS	B	A	A	B	A	C	C	A	B	B	A	C
Approach Vol, veh/h		420			570			141			304	
Approach Delay, s/veh		11.0			33.9			23.5			22.8	
Approach LOS		B			C			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		40.4		23.3	12.1	28.3		23.3				
Change Period (Y+Rc), s		6.5		6.5	7.0	6.5		6.5				
Max Green Setting (Gmax), s		38.5		23.5	8.0	23.5		23.5				
Max Q Clear Time (g_c+I1), s		6.4		16.5	5.4	20.5		12.2				
Green Ext Time (p_c), s		2.1		0.3	0.1	1.3		1.4				

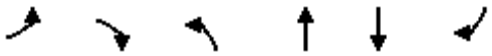
Intersection Summary												
HCM 6th Ctrl Delay			23.8									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	166	72	280	165	64	225
Future Volume (vph)	166	72	280	165	64	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	230			350
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			30	35	
Link Distance (ft)	908			839	3746	
Travel Time (s)	17.7			19.1	73.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	3.0	10.0	10.0	10.0
Minimum Split (s)	10.0	10.0	9.5	16.5	17.0	17.0
Total Split (s)	20.0	20.0	15.0	40.0	25.0	25.0
Total Split (%)	33.3%	33.3%	25.0%	66.7%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 45.4	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 25: N Normandy Blvd & Deltona Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	166	72	280	165	64	225
Future Volume (veh/h)	166	72	280	165	64	225
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	177	26	298	176	68	85
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	239	213	706	1018	439	372
Arrive On Green	0.14	0.14	0.16	0.55	0.24	0.24
Sat Flow, veh/h	1753	1560	1753	1841	1841	1560
Grp Volume(v), veh/h	177	26	298	176	68	85
Grp Sat Flow(s),veh/h/ln	1753	1560	1753	1841	1841	1560
Q Serve(g_s), s	4.1	0.6	4.8	2.0	1.2	1.8
Cycle Q Clear(g_c), s	4.1	0.6	4.8	2.0	1.2	1.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	239	213	706	1018	439	372
V/C Ratio(X)	0.74	0.12	0.42	0.17	0.15	0.23
Avail Cap(c_a), veh/h	586	521	782	1472	791	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	15.9	7.9	4.6	12.6	12.8
Incr Delay (d2), s/veh	3.3	0.2	0.3	0.1	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	1.0	2.4	0.9	0.8	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	16.1	8.2	4.7	12.8	13.1
LnGrp LOS	C	B	A	A	B	B
Approach Vol, veh/h	203			474	153	
Approach Delay, s/veh	20.1			6.9	13.0	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		30.2		11.7	13.2	17.0
Change Period (Y+Rc), s		* 7		6.0	6.5	7.0
Max Green Setting (Gmax), s		* 34		14.0	8.5	18.0
Max Q Clear Time (g_c+I1), s		4.0		6.1	6.8	3.8
Green Ext Time (p_c), s		1.0		0.2	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

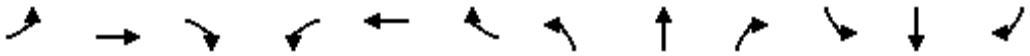
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	1078	93	83	2528	83	64	8	69	65	23	146
Future Volume (vph)	98	1078	93	83	2528	83	64	8	69	65	23	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1064			1326			740			687	
Travel Time (s)		16.1			20.1			16.8			15.6	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	7%	7%	7%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	25.0	90.0	90.0	25.0	90.0		35.0	35.0		35.0	35.0	
Total Split (%)	16.7%	60.0%	60.0%	16.7%	60.0%		23.3%	23.3%		23.3%	23.3%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 82 (55%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	1078	93	83	2528	83	64	8	69	65	23	146
Future Volume (veh/h)	98	1078	93	83	2528	83	64	8	69	65	23	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1856	1856	1856
Adj Flow Rate, veh/h	99	1089	94	84	2554	84	65	8	70	66	23	147
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	3	3	3
Cap, veh/h	122	2246	1002	331	2204	72	128	27	232	209	36	232
Arrive On Green	0.04	0.64	0.64	0.04	0.83	0.83	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1767	3526	1572	1781	3512	115	1167	159	1388	1311	217	1388
Grp Volume(v), veh/h	99	1089	94	84	1285	1353	65	0	78	66	0	170
Grp Sat Flow(s),veh/h/ln	1767	1763	1572	1781	1777	1850	1167	0	1546	1311	0	1606
Q Serve(g_s), s	4.2	24.3	3.5	2.5	94.2	94.2	8.2	0.0	6.6	7.0	0.0	14.8
Cycle Q Clear(g_c), s	4.2	24.3	3.5	2.5	94.2	94.2	23.0	0.0	6.6	13.6	0.0	14.8
Prop In Lane	1.00		1.00	1.00		0.06	1.00		0.90	1.00		0.86
Lane Grp Cap(c), veh/h	122	2246	1002	331	1115	1161	128	0	259	209	0	269
V/C Ratio(X)	0.81	0.48	0.09	0.25	1.15	1.17	0.51	0.00	0.30	0.32	0.00	0.63
Avail Cap(c_a), veh/h	242	2246	1002	469	1115	1161	147	0	284	230	0	294
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.09	0.09	0.09	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.8	14.3	10.5	11.1	12.4	12.4	68.9	0.0	54.8	60.7	0.0	58.2
Incr Delay (d2), s/veh	9.0	0.5	0.1	0.0	69.6	75.3	3.1	0.0	0.6	0.9	0.0	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.8	13.5	2.1	1.4	44.6	48.9	4.6	0.0	4.8	4.3	0.0	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.8	14.8	10.6	11.1	82.0	87.7	72.0	0.0	55.4	61.6	0.0	62.0
LnGrp LOS	D	B	B	B	F	F	E	A	E	E	A	E
Approach Vol, veh/h		1282			2722			143			236	
Approach Delay, s/veh		17.6			82.6			62.9			61.9	
Approach LOS		B			F			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.7	102.7		32.6	13.3	104.1		32.6				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	16.5	81.5		27.5	16.5	81.5		27.5				
Max Q Clear Time (g_c+I1), s	6.2	96.2		25.0	4.5	26.3		16.8				
Green Ext Time (p_c), s	0.1	0.0		0.1	0.1	15.2		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		61.9
HCM 6th LOS		E

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1053	289	215	2852	237	80
Future Volume (vph)	1053	289	215	2852	237	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1326			6019	1205	
Travel Time (s)	20.1			91.2	23.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	60.0		45.0	105.0	45.0	
Total Split (%)	40.0%		30.0%	70.0%	30.0%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 78 (52%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1053	289	215	2852	237	80
Future Volume (veh/h)	1053	289	215	2852	237	80
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1856	1900
Adj Flow Rate, veh/h	1097	301	224	2971	165	171
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	0
Cap, veh/h	1811	493	402	2734	219	200
Arrive On Green	1.00	1.00	0.06	0.77	0.12	0.12
Sat Flow, veh/h	2855	751	1781	3647	1767	1610
Grp Volume(v), veh/h	702	696	224	2971	165	171
Grp Sat Flow(s),veh/h/ln	1777	1735	1781	1777	1767	1610
Q Serve(g_s), s	0.0	0.0	5.9	115.4	13.5	15.6
Cycle Q Clear(g_c), s	0.0	0.0	5.9	115.4	13.5	15.6
Prop In Lane		0.43	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1166	1138	402	2734	219	200
V/C Ratio(X)	0.60	0.61	0.56	1.09	0.75	0.86
Avail Cap(c_a), veh/h	1166	1138	735	2734	442	403
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	6.5	17.3	63.5	64.4
Incr Delay (d2), s/veh	2.1	2.2	0.1	39.7	5.2	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	1.2	2.7	59.4	10.5	20.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	2.1	2.2	6.6	57.0	68.7	74.5
LnGrp LOS	A	A	A	F	E	E
Approach Vol, veh/h	1398			3195	336	
Approach Delay, s/veh	2.1			53.4	71.6	
Approach LOS	A			D	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.9		26.1	17.0	106.9
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		96.5		37.5	36.5	51.5
Max Q Clear Time (g_c+I1), s		117.4		17.6	7.9	2.0
Green Ext Time (p_c), s		0.0		1.0	0.6	19.8

Intersection Summary	
HCM 6th Ctrl Delay	40.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

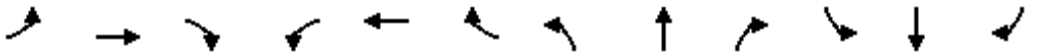
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	834	18	29	2070	5	155	34	17	39	15	457
Future Volume (vph)	87	834	18	29	2070	5	155	34	17	39	15	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1253			1861			896			728	
Travel Time (s)		21.4			28.2			20.4			16.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	18.0	91.0		18.0	91.0		31.0	31.0		31.0	31.0	31.0
Total Split (%)	12.9%	65.0%		12.9%	65.0%		22.1%	22.1%		22.1%	22.1%	22.1%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 78 (56%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	834	18	29	2070	5	155	34	17	39	15	457
Future Volume (veh/h)	87	834	18	29	2070	5	155	34	17	39	15	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	897	19	31	2226	5	167	37	18	42	16	491
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	3344	71	45	2241	5	164	214	104	207	72	285
Arrive On Green	0.13	1.00	1.00	0.05	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1767	5105	108	1781	3638	8	892	1188	578	903	401	1585
Grp Volume(v), veh/h	94	593	323	31	1087	1144	167	0	55	58	0	491
Grp Sat Flow(s),veh/h/ln	1767	1689	1836	1781	1777	1869	892	0	1766	1304	0	1585
Q Serve(g_s), s	7.3	0.0	0.0	2.4	0.0	0.0	17.6	0.0	3.7	3.9	0.0	25.2
Cycle Q Clear(g_c), s	7.3	0.0	0.0	2.4	0.0	0.0	25.2	0.0	3.7	7.6	0.0	25.2
Prop In Lane	1.00		0.06	1.00		0.00	1.00		0.33	0.72		1.00
Lane Grp Cap(c), veh/h	114	2212	1203	45	1095	1151	164	0	318	279	0	285
V/C Ratio(X)	0.82	0.27	0.27	0.70	0.99	0.99	1.02	0.00	0.17	0.21	0.00	1.72
Avail Cap(c_a), veh/h	141	2212	1203	141	1095	1151	164	0	318	279	0	285
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.14	0.14	0.14	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.2	0.0	0.0	66.0	0.0	0.0	64.0	0.0	48.6	50.9	0.0	57.4
Incr Delay (d2), s/veh	25.3	0.3	0.5	2.7	8.7	8.6	75.6	0.0	0.4	0.5	0.0	338.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	0.2	0.3	1.7	3.6	3.8	14.5	0.0	3.0	3.3	0.0	57.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.5	0.3	0.5	68.7	8.7	8.6	139.5	0.0	48.9	51.4	0.0	396.2
LnGrp LOS	F	A	A	E	A	A	F	A	D	D	A	F
Approach Vol, veh/h		1010			2262			222			549	
Approach Delay, s/veh		8.3			9.4			117.1			359.8	
Approach LOS		A			A			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	98.6		31.0	15.8	93.2		31.0				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	84.1		* 25	11.2	84.1		* 25				
Max Q Clear Time (g_c+I1), s	4.4	2.0		27.2	9.3	2.0		27.2				
Green Ext Time (p_c), s	0.0	10.6		0.0	0.0	60.2		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		62.6
HCM 6th LOS		E

Notes

User approved pedestrian interval to be less than phase max green.

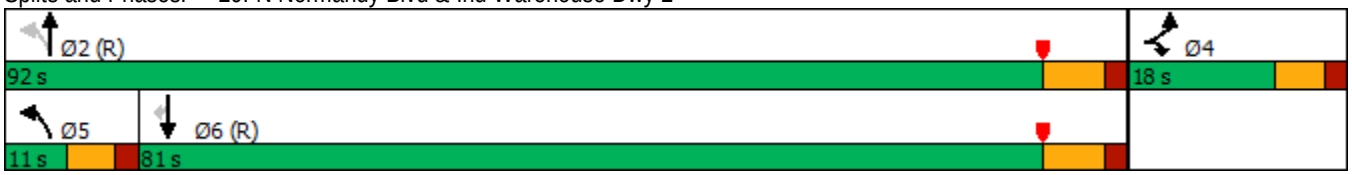
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

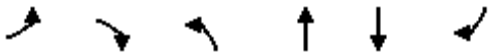
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	0	74	760	515	257
Future Volume (vph)	1	0	74	760	515	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	100			100
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			45	45	
Link Distance (ft)	382			379	2474	
Travel Time (s)	8.7			5.7	37.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Turn Type	Prot	Prot	pm+pt	NA	NA	Perm
Protected Phases	4	4	5	2	6	
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	25.0	25.0	25.0
Total Split (s)	18.0	18.0	11.0	92.0	81.0	81.0
Total Split (%)	16.4%	16.4%	10.0%	83.6%	73.6%	73.6%
Yellow Time (s)	4.0	4.0	4.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	7.0	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 100 (91%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2





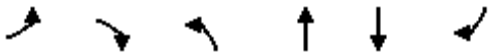
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	0	74	760	515	257
Future Volume (veh/h)	1	0	74	760	515	257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	80	826	560	279
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	5	2	593	1647	1467	1243
Arrive On Green	0.00	0.00	0.04	0.88	0.78	0.78
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1	0	80	826	560	279
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	0.0	0.0	0.8	10.4	10.1	5.1
Cycle Q Clear(g_c), s	0.0	0.0	0.8	10.4	10.1	5.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	5	2	593	1647	1467	1243
V/C Ratio(X)	0.21	0.00	0.13	0.50	0.38	0.22
Avail Cap(c_a), veh/h	377	173	600	1647	1467	1243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.62	0.62
Uniform Delay (d), s/veh	54.9	0.0	2.2	1.4	3.6	3.1
Incr Delay (d2), s/veh	20.8	0.0	0.1	1.1	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.2	1.1	4.7	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	75.7	0.0	2.3	2.5	4.1	3.4
LnGrp LOS	E	A	A	A	A	A
Approach Vol, veh/h	1			906	839	
Approach Delay, s/veh	75.7			2.5	3.9	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.8		6.2	10.6	93.3
Change Period (Y+Rc), s		7.0		6.0	6.0	7.0
Max Green Setting (Gmax), s		85.0		12.0	5.0	74.0
Max Q Clear Time (g_c+I1), s		12.4		2.0	2.8	12.1
Green Ext Time (p_c), s		6.7		0.0	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	148	906	380	34
Future Volume (vph)	0	1	148	906	380	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	0	1	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			45	45	
Link Distance (ft)	387			367	379	
Travel Time (s)	8.8			5.6	5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

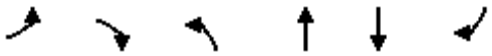
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	148	906	380	34
Future Vol, veh/h	0	1	148	906	380	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	161	985	413	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	432	450	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	624	1110	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	624	1110	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1110	-	624	-	-
HCM Lane V/C Ratio	0.145	-	0.002	-	-
HCM Control Delay (s)	8.8	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	29	1054	381	29
Future Volume (vph)	0	0	29	1054	381	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			45	45	
Link Distance (ft)	374			4073	367	
Travel Time (s)	8.5			61.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	29	1054	381	29
Future Vol, veh/h	0	0	29	1054	381	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	32	1146	414	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1640	430	446	0	-	0
Stage 1	430	-	-	-	-	-
Stage 2	1210	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	110	625	1114	-	-	-
Stage 1	656	-	-	-	-	-
Stage 2	282	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	107	625	1114	-	-	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	637	-	-	-	-	-
Stage 2	282	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.2	0
HCM LOS	A		

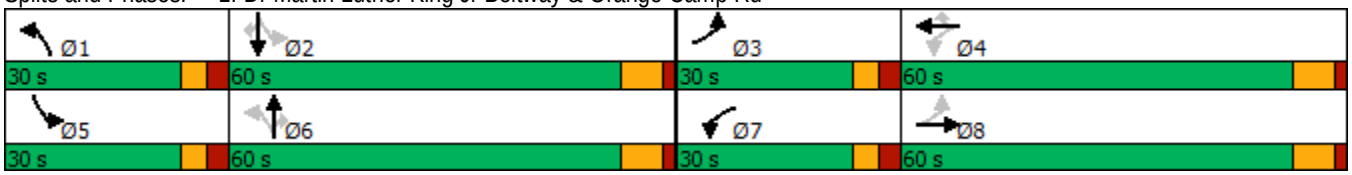
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1114	-	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-	-
HCM Control Delay (s)	8.3	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

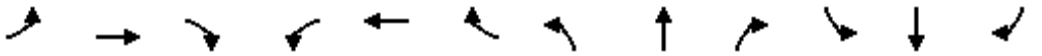
E-3: AM Peak Hour Future Year Background Traffic Conditions with Improvements

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	590	108	58	408	244	176	468	57	287	235	46
Future Volume (vph)	45	590	108	58	408	244	176	468	57	287	235	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4		4	6		6	2		2
Detector Phase	3	8		7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0	7.0	5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5	14.5	11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 146.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	590	108	58	408	244	176	468	57	287	235	46
Future Volume (veh/h)	45	590	108	58	408	244	176	468	57	287	235	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	47	621	107	61	429	239	185	493	47	302	247	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	3	3	3
Cap, veh/h	252	795	137	184	953	425	497	566	480	352	654	554
Arrive On Green	0.03	0.27	0.27	0.04	0.27	0.27	0.09	0.31	0.31	0.14	0.35	0.35
Sat Flow, veh/h	1739	2960	509	1753	3497	1560	1753	1841	1560	1767	1856	1572
Grp Volume(v), veh/h	47	363	365	61	429	239	185	493	47	302	247	37
Grp Sat Flow(s),veh/h/ln	1739	1735	1734	1753	1749	1560	1753	1841	1560	1767	1856	1572
Q Serve(g_s), s	2.2	21.8	21.8	2.8	11.4	14.8	8.0	28.4	2.4	12.8	11.2	1.8
Cycle Q Clear(g_c), s	2.2	21.8	21.8	2.8	11.4	14.8	8.0	28.4	2.4	12.8	11.2	1.8
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	466	466	184	953	425	497	566	480	352	654	554
V/C Ratio(X)	0.19	0.78	0.78	0.33	0.45	0.56	0.37	0.87	0.10	0.86	0.38	0.07
Avail Cap(c_a), veh/h	556	811	811	484	1636	730	704	861	730	481	868	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	38.0	38.0	30.3	33.9	35.1	22.9	36.8	27.8	25.6	27.2	24.1
Incr Delay (d2), s/veh	0.4	4.0	4.1	1.1	0.5	1.7	0.5	7.7	0.1	11.0	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	14.2	14.3	2.1	8.2	9.4	5.6	19.0	1.6	9.8	8.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	42.0	42.1	31.3	34.4	36.8	23.3	44.5	27.9	36.6	27.7	24.2
LnGrp LOS	C	D	D	C	C	D	C	D	C	D	C	C
Approach Vol, veh/h		775			729			725			586	
Approach Delay, s/veh		41.3			34.9			38.0			32.1	
Approach LOS		D			C			D			C	

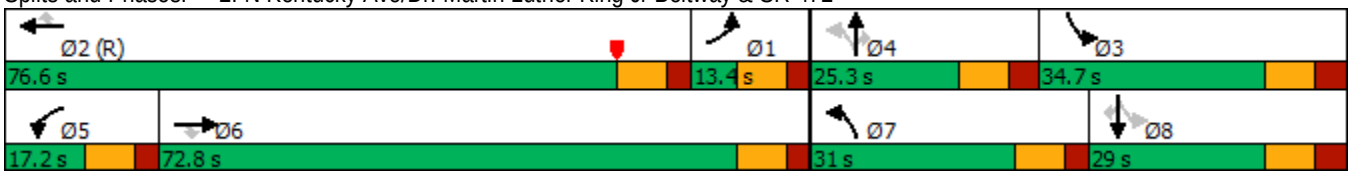
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	47.0	10.3	38.1	21.8	42.0	10.8	37.7
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	10.0	13.2	4.2	16.8	14.8	30.4	4.8	23.8
Green Ext Time (p_c), s	0.4	2.1	0.1	5.4	0.6	4.1	0.1	6.3

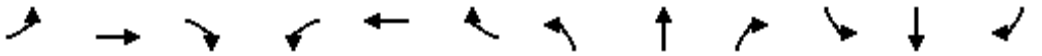
Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	946	166	118	1199	283	190	189	64	214	319	48
Future Volume (vph)	27	946	166	118	1199	283	190	189	64	214	319	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	5.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	13.3	15.8	15.8	16.4	16.4	16.4
Total Split (s)	13.4	72.8	72.8	17.2	76.6	76.6	31.0	25.3	25.3	34.7	29.0	29.0
Total Split (%)	8.9%	48.5%	48.5%	11.5%	51.1%	51.1%	20.7%	16.9%	16.9%	23.1%	19.3%	19.3%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 93 (62%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	946	166	118	1199	283	190	189	64	214	319	48
Future Volume (veh/h)	27	946	166	118	1199	283	190	189	64	214	319	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	31	1075	159	134	1362	213	216	215	0	243	362	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	8	8	8	5	5	5	4	4	4	4	4	4
Cap, veh/h	126	1570	700	178	1534	684	286	273		352	416	
Arrive On Green	0.07	0.46	0.46	0.02	0.15	0.15	0.14	0.08	0.00	0.17	0.12	0.00
Sat Flow, veh/h	1697	3385	1510	3374	3469	1547	1753	3497	1560	1753	3497	1560
Grp Volume(v), veh/h	31	1075	159	134	1362	213	216	215	0	243	362	0
Grp Sat Flow(s),veh/h/ln	1697	1692	1510	1687	1735	1547	1753	1749	1560	1753	1749	1560
Q Serve(g_s), s	2.6	37.4	9.5	5.9	57.8	18.5	18.2	9.1	0.0	15.2	15.3	0.0
Cycle Q Clear(g_c), s	2.6	37.4	9.5	5.9	57.8	18.5	18.2	9.1	0.0	15.2	15.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	1570	700	178	1534	684	286	273		352	416	
V/C Ratio(X)	0.25	0.68	0.23	0.75	0.89	0.31	0.76	0.79		0.69	0.87	
Avail Cap(c_a), veh/h	126	1570	700	200	1580	705	313	385		352	457	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	0.83	0.83	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.4	31.6	24.1	72.7	60.4	43.6	63.8	67.9	0.0	56.1	64.9	0.0
Incr Delay (d2), s/veh	1.0	1.4	0.2	10.0	6.1	0.9	7.8	7.3	0.0	6.3	16.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	21.1	5.9	5.1	35.6	11.8	13.0	7.4	0.0	13.8	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.4	33.0	24.3	82.7	66.5	44.5	71.6	75.2	0.0	62.3	81.1	0.0
LnGrp LOS	E	C	C	F	E	D	E	E		E	F	
Approach Vol, veh/h		1265			1709			431	A		605	A
Approach Delay, s/veh		32.7			65.0			73.4			73.6	
Approach LOS		C			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	74.6	35.4	20.5	16.2	77.9	28.6	27.2
Change Period (Y+Rc), s	* 8.3	* 8.3	* 9.4	* 8.8	* 8.3	* 8.3	* 8.3	* 9.4
Max Green Setting (Gmax), s	* 5.1	* 68	* 25	* 17	* 8.9	* 65	* 23	* 20
Max Q Clear Time (g_c+I1), s	4.6	59.8	17.2	11.1	7.9	39.4	20.2	17.3
Green Ext Time (p_c), s	0.0	6.6	0.6	0.7	0.0	11.3	0.1	0.6

Intersection Summary	
HCM 6th Ctrl Delay	57.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

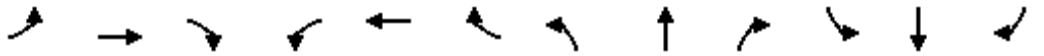
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	429	896	1076	1512	0	0	0	0	171	0	158
Future Volume (vph)	0	429	896	1076	1512	0	0	0	0	171	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	2		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		40.0	40.0	80.0	120.0					30.0		30.0
Total Split (%)		26.7%	26.7%	53.3%	80.0%					20.0%		20.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lead	Lead	Lag								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 138 (92%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	429	896	1076	1512	0	0	0	0	171	0	158
Future Volume (veh/h)	0	429	896	1076	1512	0	0	0	0	171	0	158
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1856	1856	0				1870	0	1870
Adj Flow Rate, veh/h	0	482	0	1209	1699	0				192	0	67
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	5	5	3	3	0				2	0	2
Cap, veh/h	0	561		2119	2916	0				249	0	114
Arrive On Green	0.00	0.16	0.00	0.62	0.83	0.00				0.07	0.00	0.07
Sat Flow, veh/h	0	3561	1547	3428	3618	0				3456	0	1585
Grp Volume(v), veh/h	0	482	0	1209	1699	0				192	0	67
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1714	1763	0				1728	0	1585
Q Serve(g_s), s	0.0	20.3	0.0	31.2	24.1	0.0				8.2	0.0	6.1
Cycle Q Clear(g_c), s	0.0	20.3	0.0	31.2	24.1	0.0				8.2	0.0	6.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	561		2119	2916	0				249	0	114
V/C Ratio(X)	0.00	0.86		0.57	0.58	0.00				0.77	0.00	0.59
Avail Cap(c_a), veh/h	0	761		2119	2916	0				507	0	232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.62	0.00	0.34	0.34	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	61.2	0.0	16.9	4.3	0.0				68.4	0.0	67.4
Incr Delay (d2), s/veh	0.0	10.4	0.0	0.1	0.3	0.0				5.0	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.4	0.0	14.6	8.1	0.0				6.7	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	71.6	0.0	17.0	4.6	0.0				73.4	0.0	72.1
LnGrp LOS	A	E		B	A	A				E	A	E
Approach Vol, veh/h		482	A		2908						259	
Approach Delay, s/veh		71.6			9.8						73.1	
Approach LOS		E			A						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		131.2			99.8	31.4		18.8				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		112.9			72.9	32.9		22.0				
Max Q Clear Time (g_c+I1), s		26.1			33.2	22.3		10.2				
Green Ext Time (p_c), s		20.8			5.3	2.0		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		22.4
HCM 6th LOS		C

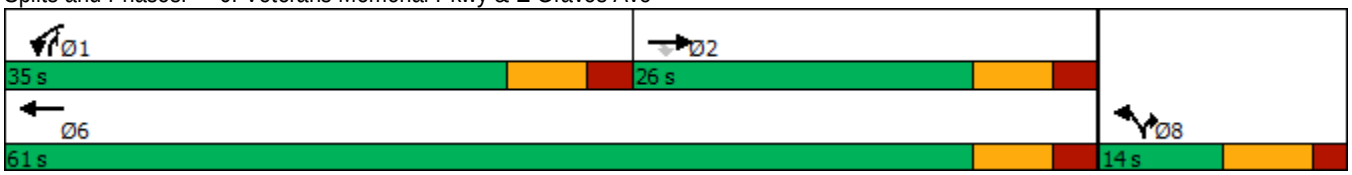
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	214	36	824	361	58	501
Future Volume (vph)	214	36	824	361	58	501
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	2		1	2
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	6%	12%	12%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8 1
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	
Total Split (s)	26.0	26.0	35.0	61.0	14.0	
Total Split (%)	34.7%	34.7%	46.7%	81.3%	18.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 66.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	214	36	824	361	58	501
Future Volume (veh/h)	214	36	824	361	58	501
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1722	1722
Adj Flow Rate, veh/h	233	18	896	392	63	481
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	12	12
Cap, veh/h	343	291	1100	1156	198	1154
Arrive On Green	0.19	0.19	0.33	0.64	0.12	0.12
Sat Flow, veh/h	1811	1535	3346	1811	1640	2569
Grp Volume(v), veh/h	233	18	896	392	63	481
Grp Sat Flow(s),veh/h/ln	1811	1535	1673	1811	1640	1284
Q Serve(g_s), s	7.0	0.6	14.3	5.8	2.0	7.0
Cycle Q Clear(g_c), s	7.0	0.6	14.3	5.8	2.0	7.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	343	291	1100	1156	198	1154
V/C Ratio(X)	0.68	0.06	0.81	0.34	0.32	0.42
Avail Cap(c_a), veh/h	592	502	1613	1684	198	1154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	19.3	17.9	4.8	23.4	10.8
Incr Delay (d2), s/veh	3.3	0.1	2.1	0.2	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	0.3	8.3	2.2	1.3	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.2	19.4	20.0	5.1	24.3	11.1
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	251			1288	544	
Approach Delay, s/veh	24.8			15.5	12.6	
Approach LOS	C			B	B	

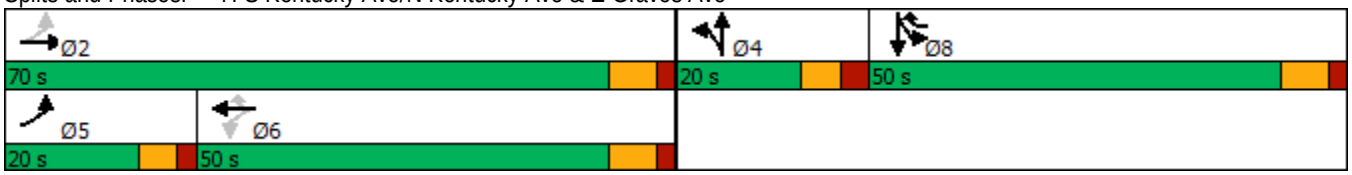
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	26.1	18.0				44.1	14.0
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	28.0	19.0				54.0	7.0
Max Q Clear Time (g_c+I1), s	16.3	9.0				7.8	9.0
Green Ext Time (p_c), s	2.8	1.2				3.6	0.0

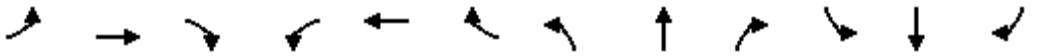
Intersection Summary	
HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	242	581	10	13	820	330	17	12	5	234	7	369
Future Volume (vph)	242	581	10	13	820	330	17	12	5	234	7	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			2360			535			4220	
Travel Time (s)		26.0			35.8			14.6			63.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	11%	11%	11%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	
Protected Phases	5	2			6	8	4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		6	6	8	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	
Total Split (s)	20.0	70.0		50.0	50.0	50.0	20.0	20.0		50.0	50.0	
Total Split (%)	14.3%	50.0%		35.7%	35.7%	35.7%	14.3%	14.3%		35.7%	35.7%	
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min		Min	Min	None	None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 98.5	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	581	10	13	820	330	17	12	5	234	7	369
Future Volume (veh/h)	242	581	10	13	820	330	17	12	5	234	7	369
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	278	668	11	15	943	336	20	14	3	269	8	263
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	11	11	4	4	4	2	2	2	6	6	6
Cap, veh/h	320	1775	29	334	1228	880	43	30	7	712	10	319
Arrive On Green	0.12	0.53	0.53	0.35	0.35	0.35	0.04	0.04	0.04	0.21	0.21	0.21
Sat Flow, veh/h	1654	3323	55	749	3497	1560	971	679	146	3346	46	1496
Grp Volume(v), veh/h	278	332	347	15	943	336	37	0	0	269	0	271
Grp Sat Flow(s),veh/h/ln	1654	1650	1727	749	1749	1560	1796	0	0	1673	0	1542
Q Serve(g_s), s	10.3	11.8	11.8	1.3	24.2	12.1	2.0	0.0	0.0	6.9	0.0	16.9
Cycle Q Clear(g_c), s	10.3	11.8	11.8	1.3	24.2	12.1	2.0	0.0	0.0	6.9	0.0	16.9
Prop In Lane	1.00		0.03	1.00		1.00	0.54		0.08	1.00		0.97
Lane Grp Cap(c), veh/h	320	881	922	334	1228	880	80	0	0	712	0	328
V/C Ratio(X)	0.87	0.38	0.38	0.04	0.77	0.38	0.46	0.00	0.00	0.38	0.00	0.83
Avail Cap(c_a), veh/h	346	1031	1079	391	1491	997	231	0	0	1427	0	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	13.7	13.7	21.7	29.1	12.2	47.0	0.0	0.0	34.0	0.0	37.9
Incr Delay (d2), s/veh	19.3	0.4	0.4	0.1	2.3	0.4	4.1	0.0	0.0	0.3	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	7.2	7.6	0.4	15.0	10.5	1.8	0.0	0.0	4.9	0.0	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.8	14.1	14.1	21.7	31.4	12.6	51.0	0.0	0.0	34.3	0.0	43.2
LnGrp LOS	D	B	B	C	C	B	D	A	A	C	A	D
Approach Vol, veh/h		957			1294			37			540	
Approach Delay, s/veh		21.8			26.4			51.0			38.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		60.9		11.5	18.4	42.4		28.5				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		63.0		13.0	14.0	43.0		43.0				
Max Q Clear Time (g_c+I1), s		13.8		4.0	12.3	26.2		18.9				
Green Ext Time (p_c), s		6.5		0.1	0.1	9.3		2.5				

Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	514	540	397	702	423	353
Future Volume (vph)	514	540	397	702	423	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		545	330		200	200
Storage Lanes		2	2		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	920			551	7065	
Travel Time (s)	13.9			8.3	107.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	10%	5%	5%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	6	4	5	2	4	
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0	7.0	5.0	12.0	7.0	7.0
Minimum Split (s)	19.0	13.0	12.0	19.0	13.0	13.0
Total Split (s)	45.0	25.0	20.0	65.0	25.0	25.0
Total Split (%)	50.0%	27.8%	22.2%	72.2%	27.8%	27.8%
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	6.0	7.0	7.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	Min	None	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 67.5	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	514	540	397	702	423	353
Future Volume (veh/h)	514	540	397	702	423	353
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1826	1826	1870	1870
Adj Flow Rate, veh/h	559	587	432	763	460	238
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	5	5	2	2
Cap, veh/h	1093	1347	551	2096	646	522
Arrive On Green	0.33	0.33	0.16	0.60	0.19	0.19
Sat Flow, veh/h	3416	2613	3374	3561	3456	2790
Grp Volume(v), veh/h	559	587	432	763	460	238
Grp Sat Flow(s),veh/h/ln	1664	1306	1687	1735	1728	1395
Q Serve(g_s), s	8.4	8.7	7.7	6.9	7.8	4.7
Cycle Q Clear(g_c), s	8.4	8.7	7.7	6.9	7.8	4.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1093	1347	551	2096	646	522
V/C Ratio(X)	0.51	0.44	0.78	0.36	0.71	0.46
Avail Cap(c_a), veh/h	2031	2083	704	3231	1054	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	9.4	25.0	6.3	23.7	22.5
Incr Delay (d2), s/veh	0.5	0.3	4.4	0.2	1.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.0	5.6	5.5	3.0	5.3	6.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.4	9.7	29.4	6.4	25.2	23.1
LnGrp LOS	B	A	C	A	C	C
Approach Vol, veh/h	1146			1195	698	
Approach Delay, s/veh	13.5			14.7	24.5	
Approach LOS	B			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.6		17.6	17.2	27.4
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		58.0		19.0	13.0	38.0
Max Q Clear Time (g_c+I1), s		8.9		9.8	9.7	10.7
Green Ext Time (p_c), s		8.4		1.9	0.5	9.7

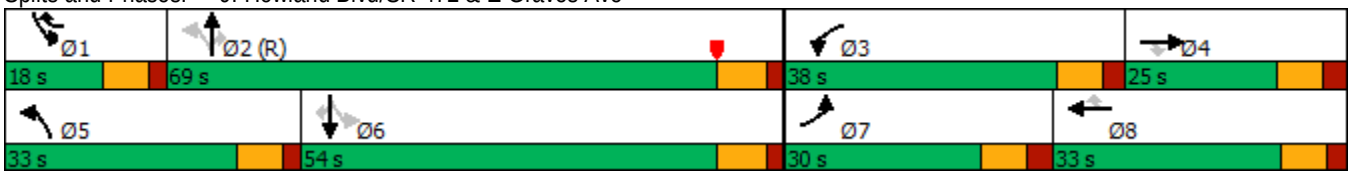
Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

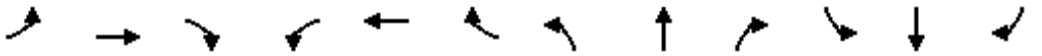
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	421	243	328	209	238	314	493	1747	202	260	628	134
Future Volume (vph)	421	243	328	209	238	314	493	1747	202	260	628	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		330
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			363			1064			1446	
Travel Time (s)		12.6			8.3			16.1			19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	8%	8%	8%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0	17.0	7.0	17.0	17.0
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.0	12.0	24.5	24.5	14.0	24.5	24.5
Total Split (s)	30.0	25.0	25.0	38.0	33.0	18.0	33.0	69.0	69.0	18.0	54.0	54.0
Total Split (%)	20.0%	16.7%	16.7%	25.3%	22.0%	12.0%	22.0%	46.0%	46.0%	12.0%	36.0%	36.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.0	7.0	7.5	7.5	7.0	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	C-Min	C-Min	None	Min	Min

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 82 (55%), Referenced to phase 2:NBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	243	328	209	238	314	493	1747	202	260	628	134
Future Volume (veh/h)	421	243	328	209	238	314	493	1747	202	260	628	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	458	264	0	227	259	341	536	1899	219	283	683	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	4	4	4	3	3	3	8	8	8
Cap, veh/h	491	428		284	313	372	845	2086	647	373	1723	535
Arrive On Green	0.15	0.24	0.00	0.08	0.17	0.17	0.25	0.82	0.82	0.07	0.35	0.35
Sat Flow, veh/h	3346	1811	1535	3401	1841	1560	3428	5066	1572	3291	4863	1510
Grp Volume(v), veh/h	458	264	0	227	259	341	536	1899	219	283	683	141
Grp Sat Flow(s),veh/h/ln	1673	1811	1535	1700	1841	1560	1714	1689	1572	1646	1621	1510
Q Serve(g_s), s	20.3	19.5	0.0	9.8	20.4	25.5	14.8	39.7	5.1	8.1	15.8	10.0
Cycle Q Clear(g_c), s	20.3	19.5	0.0	9.8	20.4	25.5	14.8	39.7	5.1	8.1	15.8	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	491	428		284	313	372	845	2086	647	373	1723	535
V/C Ratio(X)	0.93	0.62		0.80	0.83	0.92	0.63	0.91	0.34	0.76	0.40	0.26
Avail Cap(c_a), veh/h	491	428		692	313	372	1009	2086	647	390	1723	535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.52	0.52	0.52	0.96	0.96	0.96
Uniform Delay (d), s/veh	63.3	51.2	0.0	67.5	60.1	55.7	21.1	11.3	8.2	34.7	36.4	34.5
Incr Delay (d2), s/veh	25.0	2.7	0.0	5.1	16.6	27.1	0.7	4.1	0.7	7.8	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.6	14.2	0.0	8.0	16.4	21.8	7.3	8.0	2.9	6.4	10.1	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.3	53.8	0.0	72.6	76.7	82.8	21.8	15.4	9.0	42.5	36.6	34.8
LnGrp LOS	F	D		E	E	F	C	B	A	D	D	C
Approach Vol, veh/h		722	A		827			2654			1107	
Approach Delay, s/veh		75.7			78.1			16.2			37.9	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	69.3	20.0	43.5	25.8	60.7	30.0	33.5
Change Period (Y+Rc), s	7.0	7.5	7.5	8.0	7.0	7.5	8.0	* 8
Max Green Setting (Gmax), s	11.0	61.5	30.5	17.0	26.0	46.5	22.0	* 26
Max Q Clear Time (g_c+I1), s	10.1	41.7	11.8	21.5	16.8	17.8	22.3	27.5
Green Ext Time (p_c), s	0.1	16.3	0.7	0.0	2.0	7.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	38.4
HCM 6th LOS	D

Notes

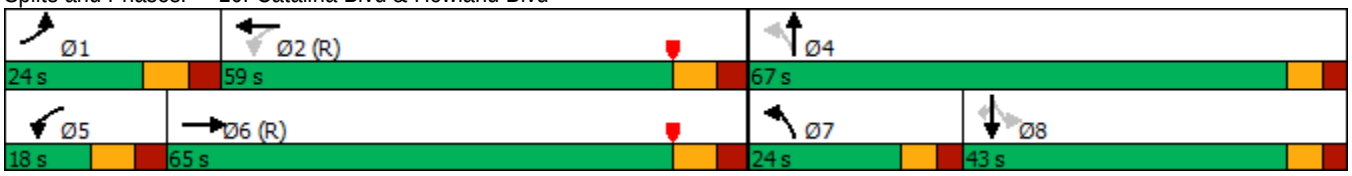
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

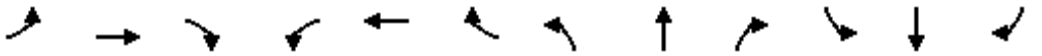
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	665	39	33	1338	11	124	23	13	40	36	594
Future Volume (vph)	192	665	39	33	1338	11	124	23	13	40	36	594
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6019			1895			1021			5049	
Travel Time (s)		91.2			28.7			23.2			98.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases				2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	24.0	65.0		18.0	59.0		24.0	67.0		43.0	43.0	43.0
Total Split (%)	16.0%	43.3%		12.0%	39.3%		16.0%	44.7%		28.7%	28.7%	28.7%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	665	39	33	1338	11	124	23	13	40	36	594
Future Volume (veh/h)	192	665	39	33	1338	11	124	23	13	40	36	594
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1841	1841	1841	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	202	700	40	35	1408	12	131	24	9	42	38	313
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	4	4	4	4	4	4	2	2	2
Cap, veh/h	249	1587	91	336	1543	13	372	422	158	341	399	338
Arrive On Green	0.07	0.48	0.48	0.03	0.43	0.43	0.07	0.33	0.33	0.21	0.21	0.21
Sat Flow, veh/h	3319	3282	187	1753	3554	30	1753	1276	479	1376	1870	1585
Grp Volume(v), veh/h	202	364	376	35	693	727	131	0	33	42	38	313
Grp Sat Flow(s),veh/h/ln	1659	1706	1763	1753	1749	1835	1753	0	1755	1376	1870	1585
Q Serve(g_s), s	9.0	21.0	21.0	1.7	55.7	55.7	8.5	0.0	1.9	3.7	2.4	29.0
Cycle Q Clear(g_c), s	9.0	21.0	21.0	1.7	55.7	55.7	8.5	0.0	1.9	3.7	2.4	29.0
Prop In Lane	1.00		0.11	1.00		0.02	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	249	825	852	336	759	797	372	0	580	341	399	338
V/C Ratio(X)	0.81	0.44	0.44	0.10	0.91	0.91	0.35	0.00	0.06	0.12	0.10	0.93
Avail Cap(c_a), veh/h	343	825	852	402	759	797	446	0	702	378	449	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.47	0.47	0.47	1.00	0.00	1.00	0.54	0.54	0.54
Uniform Delay (d), s/veh	68.3	25.4	25.4	23.0	39.7	39.8	40.1	0.0	34.2	47.9	47.4	57.8
Incr Delay (d2), s/veh	9.0	1.5	1.5	0.1	9.3	9.0	0.6	0.0	0.0	0.1	0.1	17.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	13.2	13.6	1.2	30.5	31.8	6.8	0.0	1.5	2.3	2.1	17.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.3	26.9	26.9	23.0	49.1	48.8	40.7	0.0	34.3	48.0	47.5	75.5
LnGrp LOS	E	C	C	C	D	D	D	A	C	D	D	E
Approach Vol, veh/h		942			1455			164			393	
Approach Delay, s/veh		37.7			48.3			39.4			69.9	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.7	73.6		56.6	12.3	81.0	17.6	39.0				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	50.5		60.0	9.5	56.5	17.0	36.0				
Max Q Clear Time (g_c+I1), s	11.0	57.7		3.9	3.7	23.0	10.5	31.0				
Green Ext Time (p_c), s	0.2	0.0		0.2	0.0	6.9	0.2	1.0				

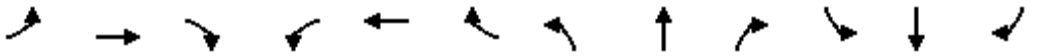
Intersection Summary												
HCM 6th Ctrl Delay			47.3									
HCM 6th LOS			D									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	464	283	35	986	0	275	0	22	1	0	2
Future Volume (vph)	0	464	283	35	986	0	275	0	22	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			638	
Travel Time (s)		28.7			22.0			170.9			14.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	9%	9%	5%	5%	5%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	85.0	85.0	85.0	20.0	105.0		25.0	50.0		25.0	25.0	
Total Split (%)	54.8%	54.8%	54.8%	12.9%	67.7%		16.1%	32.3%		16.1%	16.1%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	464	283	35	986	0	275	0	22	1	0	2
Future Volume (veh/h)	0	464	283	35	986	0	275	0	22	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1767	1767	1826	1826	1826	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	0	488	266	37	1038	0	289	0	8	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	5	5	5	3	3	3	2	2	2
Cap, veh/h	46	2221	991	510	1338	0	297	0	278	46	1	12
Arrive On Green	0.00	0.66	0.66	0.03	0.73	0.00	0.12	0.00	0.18	0.02	0.00	0.02
Sat Flow, veh/h	513	3357	1497	1739	1826	0	1767	0	1572	692	61	753
Grp Volume(v), veh/h	0	488	266	37	1038	0	289	0	8	2	0	0
Grp Sat Flow(s),veh/h/ln	513	1678	1497	1739	1826	0	1767	0	1572	1507	0	0
Q Serve(g_s), s	0.0	8.9	11.3	1.0	54.6	0.0	18.0	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.9	11.3	1.0	54.6	0.0	18.0	0.0	0.7	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.50		0.50
Lane Grp Cap(c), veh/h	46	2221	991	510	1338	0	297	0	278	59	0	0
V/C Ratio(X)	0.00	0.22	0.27	0.07	0.78	0.00	0.97	0.00	0.03	0.03	0.00	0.00
Avail Cap(c_a), veh/h	46	2221	991	611	1338	0	297	0	436	208	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00	0.83	0.00	0.83	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.4	10.8	7.5	12.8	0.0	67.6	0.0	52.8	75.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.2	0.1	4.5	0.0	40.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	5.7	6.8	0.6	28.3	0.0	20.6	0.0	0.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.4	11.0	7.6	17.3	0.0	107.9	0.0	52.8	75.4	0.0	0.0
LnGrp LOS	A	B	B	A	B	A	F	A	D	E	A	A
Approach Vol, veh/h		754			1075			297			2	
Approach Delay, s/veh		10.6			17.0			106.4			75.4	
Approach LOS		B			B			F			E	

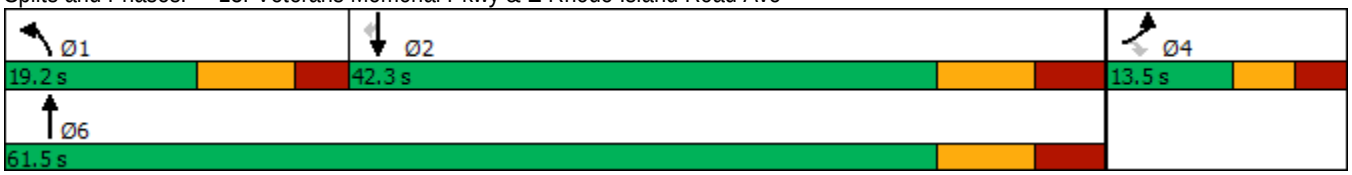
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		120.6		34.4	11.0	109.6	25.0	9.4				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		98.0		43.0	13.0	78.0	18.0	18.0				
Max Q Clear Time (g_c+I1), s		56.6		2.7	3.0	13.3	20.0	2.2				
Green Ext Time (p_c), s		15.6		0.0	0.0	6.8	0.0	0.0				

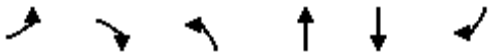
Intersection Summary												
HCM 6th Ctrl Delay			27.3									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	177	196	398	414	669	296
Future Volume (vph)	177	196	398	414	669	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	5%	5%	5%	5%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	13.5	13.5	13.5	20.5	20.5	20.5
Total Split (s)	13.5	13.5	19.2	61.5	42.3	42.3
Total Split (%)	18.0%	18.0%	25.6%	82.0%	56.4%	56.4%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 74.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	177	196	398	414	669	296
Future Volume (veh/h)	177	196	398	414	669	296
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1826	1826	1826	1826
Adj Flow Rate, veh/h	201	120	452	470	760	336
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	5	5	5	5
Cap, veh/h	324	148	483	1264	795	674
Arrive On Green	0.09	0.09	0.14	0.69	0.44	0.44
Sat Flow, veh/h	3456	1585	3374	1826	1826	1547
Grp Volume(v), veh/h	201	120	452	470	760	336
Grp Sat Flow(s),veh/h/ln	1728	1585	1687	1826	1826	1547
Q Serve(g_s), s	4.2	5.5	9.9	8.0	30.1	11.7
Cycle Q Clear(g_c), s	4.2	5.5	9.9	8.0	30.1	11.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	324	148	483	1264	795	674
V/C Ratio(X)	0.62	0.81	0.94	0.37	0.96	0.50
Avail Cap(c_a), veh/h	324	148	483	1271	801	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	33.2	31.7	4.8	20.4	15.2
Incr Delay (d2), s/veh	3.6	27.2	25.8	0.2	21.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.3	5.6	9.2	3.1	21.5	6.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.2	60.4	57.5	4.9	42.1	15.8
LnGrp LOS	D	E	E	A	D	B
Approach Vol, veh/h	321			922	1096	
Approach Delay, s/veh	45.2			30.7	34.0	
Approach LOS	D			C	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.2	42.0		13.5		61.2
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	10.7	32.8		7.0		52.0
Max Q Clear Time (g_c+I1), s	11.9	32.1		7.5		10.0
Green Ext Time (p_c), s	0.0	0.4		0.0		2.8

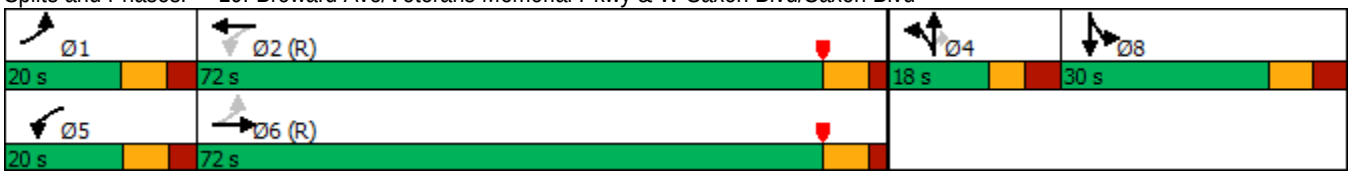
Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	657	12	130	1249	461	49	53	68	291	46	143
Future Volume (vph)	127	657	12	130	1249	461	49	53	68	291	46	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	6			2					4			
Detector Phase	1	6		5	2		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	15.3	15.3	
Total Split (s)	20.0	72.0		20.0	72.0		18.0	18.0	18.0	30.0	30.0	
Total Split (%)	14.3%	51.4%		14.3%	51.4%		12.9%	12.9%	12.9%	21.4%	21.4%	
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.5	4.5	
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.8	3.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	8.3	8.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 18 (13%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd



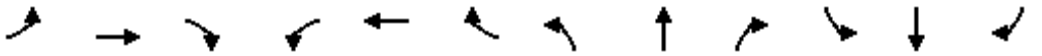
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	657	12	130	1249	461	49	53	68	291	46	143
Future Volume (veh/h)	127	657	12	130	1249	461	49	53	68	291	46	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1856	1856	1856	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	137	706	9	140	1343	494	53	57	20	313	49	71
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	5	5	5
Cap, veh/h	275	2900	37	505	2094	764	88	93	79	379	76	110
Arrive On Green	0.05	0.57	0.57	0.10	1.00	1.00	0.05	0.05	0.05	0.11	0.11	0.11
Sat Flow, veh/h	1739	5073	65	1767	3658	1335	1781	1870	1585	3374	674	976
Grp Volume(v), veh/h	137	462	253	140	1239	598	53	57	20	313	0	120
Grp Sat Flow(s),veh/h/ln	1739	1662	1814	1767	1689	1615	1781	1870	1585	1687	0	1650
Q Serve(g_s), s	4.6	9.7	9.7	4.7	0.0	0.0	4.1	4.2	1.7	12.7	0.0	9.7
Cycle Q Clear(g_c), s	4.6	9.7	9.7	4.7	0.0	0.0	4.1	4.2	1.7	12.7	0.0	9.7
Prop In Lane	1.00		0.04	1.00		0.83	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	275	1900	1037	505	1933	925	88	93	79	379	0	186
V/C Ratio(X)	0.50	0.24	0.24	0.28	0.64	0.65	0.60	0.61	0.25	0.82	0.00	0.65
Avail Cap(c_a), veh/h	343	1900	1037	572	1933	925	134	140	119	523	0	256
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	0.81	0.00	0.81
Uniform Delay (d), s/veh	11.0	14.9	14.9	10.8	0.0	0.0	65.2	65.2	64.0	60.8	0.0	59.5
Incr Delay (d2), s/veh	1.4	0.3	0.6	0.2	1.3	2.8	6.3	6.4	1.7	6.2	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	6.5	7.2	2.9	0.6	1.3	3.6	3.9	1.3	9.2	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	15.2	15.5	11.0	1.3	2.8	71.5	71.6	65.7	67.0	0.0	62.5
LnGrp LOS	B	B	B	B	A	A	E	E	E	E	A	E
Approach Vol, veh/h		852			1977			130			433	
Approach Delay, s/veh		14.8			2.5			70.7			65.8	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.6	86.9		14.5	14.7	86.8		24.0				
Change Period (Y+Rc), s	7.9	6.8		7.5	7.8	6.8		8.3				
Max Green Setting (Gmax), s	12.1	65.2		10.5	12.2	65.2		21.7				
Max Q Clear Time (g_c+I1), s	6.6	2.0		6.2	6.7	11.7		14.7				
Green Ext Time (p_c), s	0.1	21.1		0.1	0.1	4.7		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		16.3
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Volume (vph)	0	926	414	0	1977	649	0	0	333	0	0	505
Future Volume (vph)	0	926	414	0	1977	649	0	0	333	0	0	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	9%	9%	9%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	926	414	0	1977	649	0	0	333	0	0	505
Future Vol, veh/h	0	926	414	0	1977	649	0	0	333	0	0	505
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Free
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	9	9	9	5	5	5
Mvmt Flow	0	975	436	0	2081	683	0	0	351	0	0	532

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	-	-	0			-	-	-
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	-	-	-			-	-	-
Pot Cap-1 Maneuver	0	-	0	0	-	0			0	0	0
Stage 1	0	-	0	0	-	0			0	0	0
Stage 2	0	-	0	0	-	0			0	0	0
Platoon blocked, %		-			-						
Mov Cap-1 Maneuver	-	-	-	-	-	-			-	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

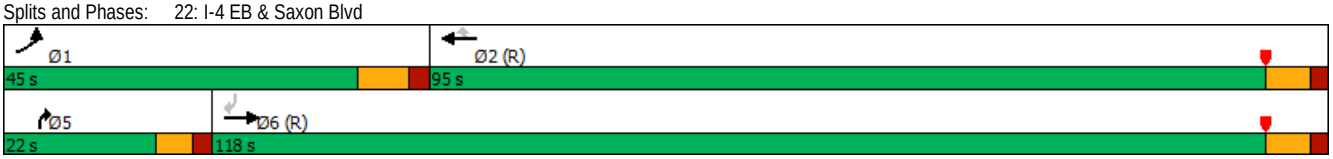
Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Future Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		3	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1253			900			503	
Travel Time (s)		24.2			19.0			13.6			7.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	430	1037	0	0	2160	429	0	0	264	0	0	416
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	45.0	118.0			95.0	95.0			22.0			118.0
Total Split (%)	32.1%	84.3%			67.9%	67.9%			15.7%			84.3%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	0.97	0.20			0.96	0.41			0.46			0.28
Control Delay	85.5	2.2			23.3	4.7			2.6			0.5
Queue Delay	0.0	0.0			0.0	0.0			0.0			0.0
Total Delay	85.5	2.2			23.3	4.7			2.6			0.5
Queue Length 50th (ft)	365	39			1097	43			0			0
Queue Length 95th (ft)	#611	67			#1204	m56			0			0
Internal Link Dist (ft)		1519			1173			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	449	5287			2241	1050			791			1501
Starvation Cap Reductn	0	0			0	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	0.96	0.20			0.96	0.41			0.33			0.28

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 104 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 22: I-4 EB & Saxon Blvd





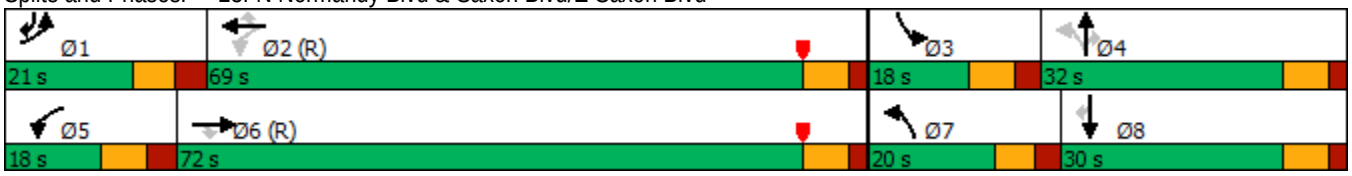
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Future Volume (vph)	387	933	0	0	1944	386	0	0	238	0	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.86			0.95	1.00			0.76			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1687	6108			3539	1583			3441			1565
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1687	6108			3539	1583			3441			1565
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	430	1037	0	0	2160	429	0	0	264	0	0	416
RTOR Reduction (vph)	0	0	0	0	0	47	0	0	253	0	0	56
Lane Group Flow (vph)	430	1037	0	0	2160	382	0	0	11	0	0	360
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	36.8	121.2			88.7	88.7			6.0			121.2
Effective Green, g (s)	36.8	121.2			88.7	88.7			6.0			121.2
Actuated g/C Ratio	0.26	0.87			0.63	0.63			0.04			0.87
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	443	5287			2242	1002			147			1354
v/s Ratio Prot	c0.25	0.17			c0.61				0.00			
v/s Ratio Perm						0.24						0.23
v/c Ratio	0.97	0.20			0.96	0.38			0.08			0.27
Uniform Delay, d1	51.1	1.5			24.1	12.4			64.3			1.6
Progression Factor	0.99	1.42			0.60	0.47			1.00			1.00
Incremental Delay, d2	34.5	0.1			7.8	0.6			0.2			0.5
Delay (s)	85.0	2.2			22.3	6.5			64.6			2.1
Level of Service	F	A			C	A			E			A
Approach Delay (s)		26.5			19.7			64.6			2.1	
Approach LOS		C			B			E			A	

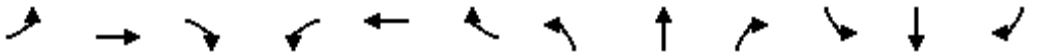
Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	244	451	113	30	1199	140	219	165	18	75	147	472
Future Volume (vph)	244	451	113	30	1199	140	219	165	18	75	147	472
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	300		385
Storage Lanes	2		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1861			7172			3746			5140	
Travel Time (s)		31.7			122.3			73.0			100.1	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	8%	8%	8%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6	2		2	4		4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9	21.9	11.8	16.9	16.9	12.5	16.9	12.6
Total Split (s)	21.0	72.0	72.0	18.0	69.0	69.0	20.0	32.0	32.0	18.0	30.0	21.0
Total Split (%)	15.0%	51.4%	51.4%	12.9%	49.3%	49.3%	14.3%	22.9%	22.9%	12.9%	21.4%	15.0%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9	4.9	4.0	4.8	4.8	4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0	2.0	2.8	2.1	2.1	2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9	6.9	6.8	6.9	6.9	7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 48 (34%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	451	113	30	1199	140	219	165	18	75	147	472
Future Volume (veh/h)	244	451	113	30	1199	140	219	165	18	75	147	472
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	280	518	83	34	1378	155	252	190	16	86	169	377
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	8	8	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	315	1725	769	423	1576	703	288	401	340	131	309	413
Arrive On Green	0.06	0.34	0.34	0.03	0.44	0.44	0.09	0.22	0.22	0.04	0.17	0.17
Sat Flow, veh/h	3291	3385	1510	1781	3554	1585	1767	1856	1572	3456	1870	1585
Grp Volume(v), veh/h	280	518	83	34	1378	155	252	190	16	86	169	377
Grp Sat Flow(s),veh/h/ln	1646	1692	1510	1781	1777	1585	1767	1856	1572	1728	1870	1585
Q Serve(g_s), s	11.8	15.7	5.3	1.4	49.3	8.4	13.2	12.5	1.1	3.4	11.6	23.1
Cycle Q Clear(g_c), s	11.8	15.7	5.3	1.4	49.3	8.4	13.2	12.5	1.1	3.4	11.6	23.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1725	769	423	1576	703	288	401	340	131	309	413
V/C Ratio(X)	0.89	0.30	0.11	0.08	0.87	0.22	0.87	0.47	0.05	0.65	0.55	0.91
Avail Cap(c_a), veh/h	315	1725	769	502	1576	703	288	401	340	259	309	413
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.49	0.49	0.49	0.96	0.96	0.96	0.74	0.74	0.74
Uniform Delay (d), s/veh	64.8	27.8	24.3	20.2	35.4	24.0	47.4	47.9	43.4	66.4	53.7	50.2
Incr Delay (d2), s/veh	24.3	0.4	0.3	0.0	3.7	0.4	23.7	1.2	0.1	4.1	1.9	19.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.1	11.1	3.6	1.1	26.7	5.3	7.7	9.8	0.8	2.9	9.0	20.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.1	28.2	24.6	20.3	39.1	24.4	71.1	49.1	43.5	70.5	55.6	69.9
LnGrp LOS	F	C	C	C	D	C	E	D	D	E	E	E
Approach Vol, veh/h		881			1567			458			632	
Approach Delay, s/veh		47.2			37.2			61.0			66.1	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	69.0	12.8	37.2	11.8	78.2	20.0	30.0
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 13	62.1	* 11	25.1	* 9.9	65.1	* 13	23.1
Max Q Clear Time (g_c+I1), s	13.8	51.3	5.4	14.5	3.4	17.7	15.2	25.1
Green Ext Time (p_c), s	0.0	8.2	0.1	1.0	0.0	5.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

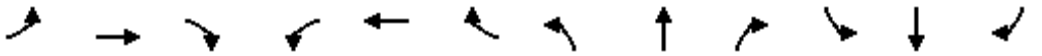
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	1078	93	83	2528	83	64	8	69	65	23	146
Future Volume (vph)	98	1078	93	83	2528	83	64	8	69	65	23	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1064			1326			740			687	
Travel Time (s)		16.1			20.1			16.8			15.6	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	7%	7%	7%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	16.0	88.0	88.0	16.0	88.0		46.0	46.0		46.0	46.0	
Total Split (%)	10.7%	58.7%	58.7%	10.7%	58.7%		30.7%	30.7%		30.7%	30.7%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 82 (55%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	1078	93	83	2528	83	64	8	69	65	23	146
Future Volume (veh/h)	98	1078	93	83	2528	83	64	8	69	65	23	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1856	1856	1856
Adj Flow Rate, veh/h	99	1089	94	84	2554	84	65	8	70	66	23	147
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	3	3	3
Cap, veh/h	178	3217	999	359	3222	105	131	27	235	212	37	235
Arrive On Green	0.03	0.64	0.64	0.06	1.00	1.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1767	5066	1572	1781	5079	166	1167	159	1388	1311	217	1388
Grp Volume(v), veh/h	99	1089	94	84	1706	932	65	0	78	66	0	170
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1781	1702	1841	1167	0	1546	1311	0	1606
Q Serve(g_s), s	3.0	15.0	3.5	2.5	0.0	0.0	8.2	0.0	6.6	7.0	0.0	14.8
Cycle Q Clear(g_c), s	3.0	15.0	3.5	2.5	0.0	0.0	23.0	0.0	6.6	13.6	0.0	14.8
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.90	1.00		0.86
Lane Grp Cap(c), veh/h	178	3217	999	359	2160	1168	131	0	262	212	0	272
V/C Ratio(X)	0.56	0.34	0.09	0.23	0.79	0.80	0.50	0.00	0.30	0.31	0.00	0.63
Avail Cap(c_a), veh/h	208	3217	999	391	2160	1168	233	0	397	327	0	412
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.56	0.56	0.56	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.8	12.7	10.6	9.3	0.0	0.0	68.6	0.0	54.5	60.4	0.0	57.9
Incr Delay (d2), s/veh	2.3	0.2	0.2	0.2	1.7	3.3	2.9	0.0	0.6	0.8	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	9.0	2.2	1.6	0.9	1.9	4.6	0.0	4.8	4.3	0.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.1	13.0	10.8	9.5	1.7	3.3	71.4	0.0	55.1	61.3	0.0	60.2
LnGrp LOS	B	B	B	A	A	A	E	A	E	E	A	E
Approach Vol, veh/h		1282			2722			143			236	
Approach Delay, s/veh		12.7			2.5			62.5			60.5	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	103.7		32.9	13.3	103.8		32.9				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	7.5	79.5		38.5	7.5	79.5		38.5				
Max Q Clear Time (g_c+I1), s	5.0	2.0		25.0	4.5	17.0		16.8				
Green Ext Time (p_c), s	0.0	61.3		0.5	0.0	14.9		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			10.6									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1053	289	215	2852	237	80
Future Volume (vph)	1053	289	215	2852	237	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1326			6019	1205	
Travel Time (s)	20.1			91.2	23.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	85.0		30.0	115.0	35.0	
Total Split (%)	56.7%		20.0%	76.7%	23.3%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 78 (52%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1053	289	215	2852	237	80
Future Volume (veh/h)	1053	289	215	2852	237	80
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1856	1900
Adj Flow Rate, veh/h	1097	301	224	2971	165	171
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	0
Cap, veh/h	2623	720	401	3936	217	197
Arrive On Green	1.00	1.00	0.06	0.77	0.12	0.12
Sat Flow, veh/h	4153	1093	1781	5274	1767	1610
Grp Volume(v), veh/h	937	461	224	2971	165	171
Grp Sat Flow(s),veh/h/ln	1702	1674	1781	1702	1767	1610
Q Serve(g_s), s	0.0	0.0	5.9	47.8	13.6	15.6
Cycle Q Clear(g_c), s	0.0	0.0	5.9	47.8	13.6	15.6
Prop In Lane		0.65	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2241	1102	401	3936	217	197
V/C Ratio(X)	0.42	0.42	0.56	0.75	0.76	0.87
Avail Cap(c_a), veh/h	2241	1102	557	3936	324	295
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	6.4	9.4	63.7	64.6
Incr Delay (d2), s/veh	0.6	1.1	0.1	0.1	5.8	15.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.6	2.7	16.1	10.6	20.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.6	1.1	6.5	9.6	69.5	80.5
LnGrp LOS	A	A	A	A	E	F
Approach Vol, veh/h	1398			3195	336	
Approach Delay, s/veh	0.7			9.3	75.1	
Approach LOS	A			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		124.1		25.9	16.9	107.2
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		106.5		27.5	21.5	76.5
Max Q Clear Time (g_c+I1), s		49.8		17.6	7.9	2.0
Green Ext Time (p_c), s		52.5		0.7	0.5	20.8

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

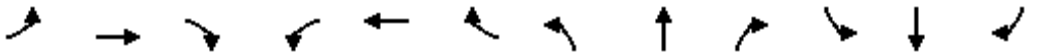
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	834	18	29	2070	5	155	34	17	39	15	457
Future Volume (vph)	87	834	18	29	2070	5	155	34	17	39	15	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1253			1861			896			728	
Travel Time (s)		21.4			28.2			20.4			16.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	18.0	70.0		18.0	70.0		52.0	52.0		52.0	52.0	52.0
Total Split (%)	12.9%	50.0%		12.9%	50.0%		37.1%	37.1%		37.1%	37.1%	37.1%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 78 (56%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	834	18	29	2070	5	155	34	17	39	15	457
Future Volume (veh/h)	87	834	18	29	2070	5	155	34	17	39	15	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	897	19	31	2226	5	167	37	18	42	16	491
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	2617	55	45	2492	6	300	383	186	362	131	511
Arrive On Green	0.13	1.00	1.00	0.03	0.63	0.63	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1767	5105	108	1781	5260	12	892	1188	578	987	407	1585
Grp Volume(v), veh/h	94	593	323	31	1440	791	167	0	55	58	0	491
Grp Sat Flow(s),veh/h/ln	1767	1689	1836	1781	1702	1868	892	0	1766	1394	0	1585
Q Serve(g_s), s	7.3	0.0	0.0	2.4	50.1	50.2	23.2	0.0	3.0	3.0	0.0	42.6
Cycle Q Clear(g_c), s	7.3	0.0	0.0	2.4	50.1	50.2	29.3	0.0	3.0	6.1	0.0	42.6
Prop In Lane	1.00		0.06	1.00		0.01	1.00		0.33	0.72		1.00
Lane Grp Cap(c), veh/h	114	1731	941	45	1612	885	300	0	570	494	0	511
V/C Ratio(X)	0.82	0.34	0.34	0.70	0.89	0.89	0.56	0.00	0.10	0.12	0.00	0.96
Avail Cap(c_a), veh/h	141	1731	941	141	1612	885	307	0	583	505	0	523
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.28	0.28	0.28	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.2	0.0	0.0	67.1	22.9	22.9	44.8	0.0	33.2	34.6	0.0	46.6
Incr Delay (d2), s/veh	25.8	0.5	1.0	5.4	2.5	4.4	2.7	0.0	0.1	0.1	0.0	29.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	0.2	0.5	2.1	20.0	22.3	9.2	0.0	2.4	2.6	0.0	28.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.9	0.5	1.0	72.5	25.4	27.3	47.5	0.0	33.3	34.7	0.0	76.1
LnGrp LOS	F	A	A	E	C	C	D	A	C	C	A	E
Approach Vol, veh/h		1010			2262			222			549	
Approach Delay, s/veh		8.6			26.7			44.0			71.7	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	78.7		50.9	15.8	73.2		50.9				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	63.1		* 46	11.2	63.1		* 46				
Max Q Clear Time (g_c+I1), s	4.4	2.0		44.6	9.3	52.2		31.3				
Green Ext Time (p_c), s	0.0	10.5		0.6	0.0	9.9		1.4				

Intersection Summary		
HCM 6th Ctrl Delay		29.2
HCM 6th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

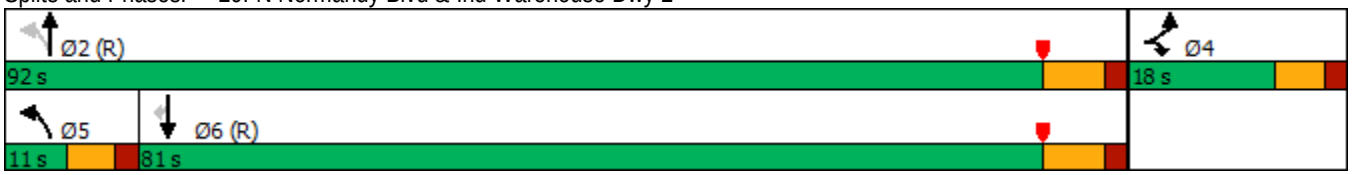
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

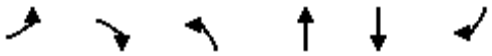
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	0	74	760	515	257
Future Volume (vph)	1	0	74	760	515	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	100			100
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			45	45	
Link Distance (ft)	556			340	2487	
Travel Time (s)	12.6			5.2	37.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Turn Type	Prot	Prot	pm+pt	NA	NA	Perm
Protected Phases	4	4	5	2	6	
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	25.0	25.0	25.0
Total Split (s)	18.0	18.0	11.0	92.0	81.0	81.0
Total Split (%)	16.4%	16.4%	10.0%	83.6%	73.6%	73.6%
Yellow Time (s)	4.0	4.0	4.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	7.0	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 100 (91%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2

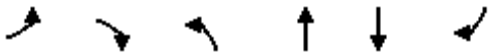




Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	0	74	760	515	257
Future Volume (veh/h)	1	0	74	760	515	257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	80	826	560	279
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	5	2	627	3129	2787	1243
Arrive On Green	0.00	0.00	0.04	0.88	0.78	0.78
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	1	0	80	826	560	279
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	0.0	0.0	0.8	4.0	4.4	5.1
Cycle Q Clear(g_c), s	0.0	0.0	0.8	4.0	4.4	5.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	5	2	627	3129	2787	1243
V/C Ratio(X)	0.21	0.00	0.13	0.26	0.20	0.22
Avail Cap(c_a), veh/h	377	173	634	3129	2787	1243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.86	0.86
Uniform Delay (d), s/veh	54.9	0.0	1.6	1.0	3.0	3.1
Incr Delay (d2), s/veh	20.8	0.0	0.1	0.2	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.2	0.2	1.9	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	75.7	0.0	1.7	1.2	3.2	3.5
LnGrp LOS	E	A	A	A	A	A
Approach Vol, veh/h	1			906	839	
Approach Delay, s/veh	75.7			1.3	3.3	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.8		6.2	10.6	93.3
Change Period (Y+Rc), s		7.0		6.0	6.0	7.0
Max Green Setting (Gmax), s		85.0		12.0	5.0	74.0
Max Q Clear Time (g_c+I1), s		6.0		2.0	2.8	7.1
Green Ext Time (p_c), s		6.2		0.0	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	2.3
HCM 6th LOS	A



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	148	906	380	34
Future Volume (vph)	0	1	148	906	380	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	0	1	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			45	45	
Link Distance (ft)	552			379	340	
Travel Time (s)	12.5			5.7	5.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

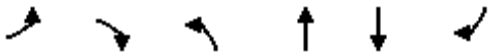
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	148	906	380	34
Future Vol, veh/h	0	1	148	906	380	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	161	985	413	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	225	450	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	778	1107	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	778	1107	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1107	-	778	-	-
HCM Lane V/C Ratio	0.145	-	0.001	-	-
HCM Control Delay (s)	8.8	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	29	1054	381	29
Future Volume (vph)	0	0	29	1054	381	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			45	45	
Link Distance (ft)	543			4007	379	
Travel Time (s)	12.3			60.7	5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	29	1054	381	29
Future Vol, veh/h	0	0	29	1054	381	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	32	1146	414	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1067	223	446	0	-	0
Stage 1	430	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	217	780	1111	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	211	780	1111	-	-	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	489	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1111	-	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-	-
HCM Control Delay (s)	8.3	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Arterial Level of Service: EB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FDOT Park & Ride	II	45	33.9	6.0	39.9	0.35	31.9	B
I-4 EB	II	45	37.1	2.2	39.3	0.40	36.2	A
Finland Dr	II	40	26.1	15.8	41.9	0.24	20.4	D
N Normandy Blvd	II	40	34.9	34.8	69.7	0.35	18.2	D
Total	II		132.0	58.8	190.8	1.34	25.3	C

Arterial Level of Service: WB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Finland Dr	II	45	33.8	24.1	57.9	0.35	21.9	D
I-4 EB	II	45	24.7	23.3	48.0	0.24	17.8	D
FDOT Park & Ride	II	45	37.1	4.6	41.7	0.40	34.1	B
Veterans Memorial Pk	II	45	33.9	14.6	48.5	0.35	26.2	C
Total	II		129.5	66.6	196.1	1.34	24.6	C

Arterial Level of Service: EB SR 472/Howland Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
N Kentucky Ave	I	55	17.7	38.5	56.2	0.18	11.7	F
I-4 WB	I	55	36.3	24.1	60.4	0.55	33.0	C
I-4 EB	I	50	30.3	22.9	53.2	0.32	21.6	D
E Graves Ave	I	50	27.4	36.0	63.4	0.27	15.6	F
Forest Edge Dr	I	45	21.0	8.2	29.2	0.20	24.8	D
Wolf Pack Run	I	45	26.1	16.4	42.5	0.25	21.3	D
Total	I		158.8	146.1	304.9	1.78	21.0	D

Arterial Level of Service: WB SR 472/Howland Blvd

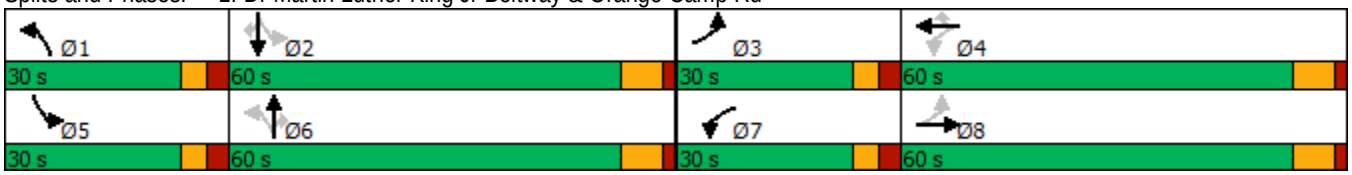
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Forest Edge Dr	I	45	26.1	18.2	44.3	0.25	20.4	E
E Graves Ave	I	45	21.0	39.6	60.6	0.20	12.0	F
I-4 EB	I	50	27.4	31.4	58.8	0.27	16.8	E
I-4 WB	I	50	30.3	7.8	38.1	0.32	30.2	C
Dr. Martin Luther Ki	I	55	36.3	32.9	69.2	0.55	28.8	C
Total	I		141.1	129.9	271.0	1.60	21.3	D

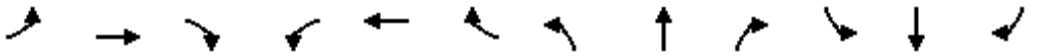
E-4: AM Peak Hour Buildout Traffic Conditions (with Background Improvement)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	590	116	66	408	244	179	471	59	287	243	46
Future Volume (vph)	45	590	116	66	408	244	179	471	59	287	243	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4		4	6		6	2		2
Detector Phase	3	8		7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0	7.0	5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5	14.5	11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 150.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	590	116	66	408	244	179	471	59	287	243	46
Future Volume (veh/h)	45	590	116	66	408	244	179	471	59	287	243	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	47	621	115	69	429	239	188	496	49	302	256	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	3	3	3
Cap, veh/h	254	790	146	187	972	433	490	567	481	348	652	553
Arrive On Green	0.03	0.27	0.27	0.04	0.28	0.28	0.09	0.31	0.31	0.14	0.35	0.35
Sat Flow, veh/h	1739	2923	540	1753	3497	1560	1753	1841	1560	1767	1856	1572
Grp Volume(v), veh/h	47	368	368	69	429	239	188	496	49	302	256	37
Grp Sat Flow(s),veh/h/ln	1739	1735	1729	1753	1749	1560	1753	1841	1560	1767	1856	1572
Q Serve(g_s), s	2.2	22.5	22.6	3.2	11.6	15.0	8.3	29.3	2.6	13.0	11.9	1.8
Cycle Q Clear(g_c), s	2.2	22.5	22.6	3.2	11.6	15.0	8.3	29.3	2.6	13.0	11.9	1.8
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	469	467	187	972	433	490	567	481	348	652	553
V/C Ratio(X)	0.18	0.79	0.79	0.37	0.44	0.55	0.38	0.87	0.10	0.87	0.39	0.07
Avail Cap(c_a), veh/h	552	794	791	474	1601	714	687	843	714	470	849	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	38.8	38.8	30.7	34.1	35.3	23.3	37.6	28.3	26.2	28.0	24.7
Incr Delay (d2), s/veh	0.3	4.1	4.2	1.2	0.4	1.6	0.5	8.3	0.1	12.3	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	14.7	14.7	2.5	8.3	9.5	5.8	19.6	1.7	10.2	8.7	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	42.9	43.0	32.0	34.5	36.9	23.8	45.9	28.5	38.5	28.5	24.8
LnGrp LOS	C	D	D	C	C	D	C	D	C	D	C	C
Approach Vol, veh/h		783			737			733			595	
Approach Delay, s/veh		42.1			35.0			39.0			33.3	
Approach LOS		D			D			D			C	

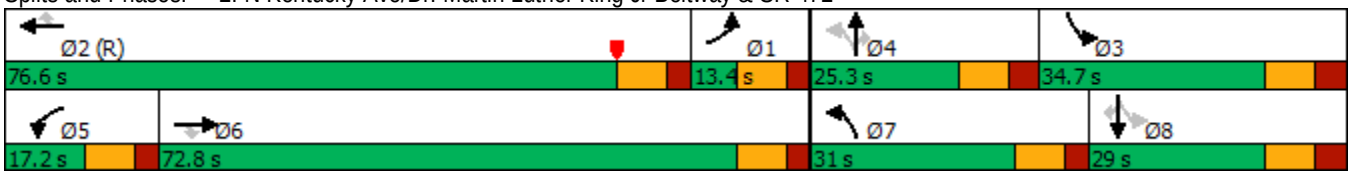
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	47.8	10.4	39.4	22.1	42.8	11.3	38.5
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	10.3	13.9	4.2	17.0	15.0	31.3	5.2	24.6
Green Ext Time (p_c), s	0.4	2.2	0.1	5.4	0.5	4.1	0.1	6.4

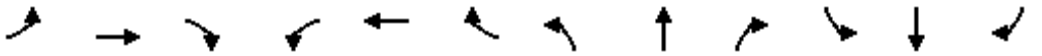
Intersection Summary	
HCM 6th Ctrl Delay	37.7
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	946	206	118	1199	283	206	198	70	218	343	48
Future Volume (vph)	27	946	206	118	1199	283	206	198	70	218	343	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	8%	8%	8%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	5.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	13.3	15.8	15.8	16.4	16.4	16.4
Total Split (s)	13.4	72.8	72.8	17.2	76.6	76.6	31.0	25.3	25.3	34.7	29.0	29.0
Total Split (%)	8.9%	48.5%	48.5%	11.5%	51.1%	51.1%	20.7%	16.9%	16.9%	23.1%	19.3%	19.3%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 93 (62%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	946	206	118	1199	283	206	198	70	218	343	48
Future Volume (veh/h)	27	946	206	118	1199	283	206	198	70	218	343	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1826	1826	1826	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	31	1075	204	134	1362	213	234	225	0	248	390	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	8	8	8	5	5	5	4	4	4	4	4	4
Cap, veh/h	99	1516	676	178	1534	684	303	283		375	438	
Arrive On Green	0.06	0.45	0.45	0.02	0.15	0.15	0.15	0.08	0.00	0.19	0.13	0.00
Sat Flow, veh/h	1697	3385	1510	3374	3469	1547	1753	3497	1560	1753	3497	1560
Grp Volume(v), veh/h	31	1075	204	134	1362	213	234	225	0	248	390	0
Grp Sat Flow(s),veh/h/ln	1697	1692	1510	1687	1735	1547	1753	1749	1560	1753	1749	1560
Q Serve(g_s), s	2.6	38.5	12.9	5.9	57.8	18.5	19.7	9.5	0.0	15.3	16.5	0.0
Cycle Q Clear(g_c), s	2.6	38.5	12.9	5.9	57.8	18.5	19.7	9.5	0.0	15.3	16.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	99	1516	676	178	1534	684	303	283		375	438	
V/C Ratio(X)	0.31	0.71	0.30	0.75	0.89	0.31	0.77	0.80		0.66	0.89	
Avail Cap(c_a), veh/h	99	1516	676	200	1580	705	313	385		375	457	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	0.79	0.79	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.7	33.5	26.4	72.7	60.4	43.6	63.1	67.7	0.0	54.4	64.6	0.0
Incr Delay (d2), s/veh	1.8	1.7	0.4	10.0	6.1	0.9	8.9	7.7	0.0	4.8	19.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	21.8	8.0	5.1	35.6	11.8	13.9	7.6	0.0	13.7	13.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	35.2	26.8	82.7	66.5	44.5	72.0	75.4	0.0	59.2	83.7	0.0
LnGrp LOS	E	D	C	F	E	D	E	E		E	F	
Approach Vol, veh/h		1310			1709			459	A		638	A
Approach Delay, s/veh		34.7			65.0			73.7			74.2	
Approach LOS		C			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	74.6	37.4	20.9	16.2	75.5	30.1	28.2
Change Period (Y+Rc), s	* 8.3	* 8.3	* 9.4	* 8.8	* 8.3	* 8.3	* 8.3	* 9.4
Max Green Setting (Gmax), s	* 5.1	* 68	* 25	* 17	* 8.9	* 65	* 23	* 20
Max Q Clear Time (g_c+I1), s	4.6	59.8	17.3	11.5	7.9	40.5	21.7	18.5
Green Ext Time (p_c), s	0.0	6.6	0.7	0.7	0.0	11.3	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	57.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

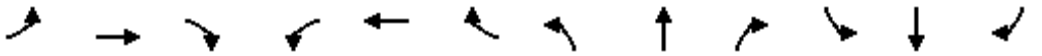
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	433	902	1076	1514	0	0	0	0	232	0	158
Future Volume (vph)	0	433	902	1076	1514	0	0	0	0	232	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	2		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		40.0	40.0	80.0	120.0					30.0		30.0
Total Split (%)		26.7%	26.7%	53.3%	80.0%					20.0%		20.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lead	Lead	Lag								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 138 (92%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	433	902	1076	1514	0	0	0	0	232	0	158
Future Volume (veh/h)	0	433	902	1076	1514	0	0	0	0	232	0	158
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1826	1826	1856	1856	0				1870	0	1870
Adj Flow Rate, veh/h	0	487	0	1209	1701	0				261	0	67
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	5	5	3	3	0				2	0	2
Cap, veh/h	0	566		2045	2845	0				319	0	146
Arrive On Green	0.00	0.16	0.00	0.60	0.81	0.00				0.09	0.00	0.09
Sat Flow, veh/h	0	3561	1547	3428	3618	0				3456	0	1585
Grp Volume(v), veh/h	0	487	0	1209	1701	0				261	0	67
Grp Sat Flow(s),veh/h/ln	0	1735	1547	1714	1763	0				1728	0	1585
Q Serve(g_s), s	0.0	20.5	0.0	33.0	27.0	0.0				11.1	0.0	6.0
Cycle Q Clear(g_c), s	0.0	20.5	0.0	33.0	27.0	0.0				11.1	0.0	6.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	566		2045	2845	0				319	0	146
V/C Ratio(X)	0.00	0.86		0.59	0.60	0.00				0.82	0.00	0.46
Avail Cap(c_a), veh/h	0	761		2045	2845	0				507	0	232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.62	0.00	0.34	0.34	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	61.1	0.0	18.9	5.4	0.0				66.8	0.0	64.5
Incr Delay (d2), s/veh	0.0	10.4	0.0	0.2	0.3	0.0				5.7	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.5	0.0	15.6	9.7	0.0				8.8	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	71.5	0.0	19.0	5.7	0.0				72.5	0.0	66.7
LnGrp LOS	A	E		B	A	A				E	A	E
Approach Vol, veh/h		487	A		2910						328	
Approach Delay, s/veh		71.5			11.2						71.3	
Approach LOS		E			B						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		128.2			96.6	31.6		21.8				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		112.9			72.9	32.9		22.0				
Max Q Clear Time (g_c+I1), s		29.0			35.0	22.5		13.1				
Green Ext Time (p_c), s		20.8			5.3	2.0		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		24.4
HCM 6th LOS		C

Notes

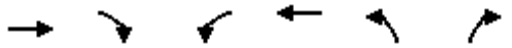
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	539	151	0	2656	618	235
Future Volume (vph)	539	151	0	2656	618	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		620	1000		0	1000
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	50			50	45	
Link Distance (ft)	1685			1453	1185	
Travel Time (s)	23.0			19.8	18.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	8%	8%	4%	4%	7%	7%
Shared Lane Traffic (%)						
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	4	
Permitted Phases		2				4
Detector Phase	2	2		6	4	4
Switch Phase						
Minimum Initial (s)	17.0	17.0		7.0	7.0	7.0
Minimum Split (s)	24.5	24.5		14.2	14.2	14.2
Total Split (s)	96.0	96.0		96.0	54.0	54.0
Total Split (%)	64.0%	64.0%		64.0%	36.0%	36.0%
Yellow Time (s)	5.5	5.5		4.8	4.8	4.8
All-Red Time (s)	2.0	2.0		2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.2	7.2	7.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 74 (49%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: I-4 EB & SR 472





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	539	151	0	2656	618	235
Future Volume (veh/h)	539	151	0	2656	618	235
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1781	1781	0	1841	1796	1796
Adj Flow Rate, veh/h	592	0	0	2919	679	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	8	8	0	4	7	7
Cap, veh/h	2004		0	2975	775	
Arrive On Green	1.00	0.00	0.00	0.59	0.23	0.00
Sat Flow, veh/h	3474	1510	0	5356	3319	1522
Grp Volume(v), veh/h	592	0	0	2919	679	0
Grp Sat Flow(s),veh/h/ln	1692	1510	0	1675	1659	1522
Q Serve(g_s), s	0.0	0.0	0.0	84.8	29.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	84.8	29.6	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2004		0	2975	775	
V/C Ratio(X)	0.30		0.00	0.98	0.88	
Avail Cap(c_a), veh/h	2004		0	2975	1035	
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.00	0.00	0.33	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	29.8	55.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	6.1	7.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	37.7	18.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.1	0.0	0.0	35.9	62.9	0.0
LnGrp LOS	A		A	D	E	
Approach Vol, veh/h	592	A		2919	679	A
Approach Delay, s/veh	0.1			35.9	62.9	
Approach LOS	A			D	E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		96.3		42.2		96.3
Change Period (Y+Rc), s		7.5		* 7.2		* 7.5
Max Green Setting (Gmax), s		88.5		* 47		* 89
Max Q Clear Time (g_c+I1), s		2.0		31.6		86.8
Green Ext Time (p_c), s		6.0		3.5		2.0

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

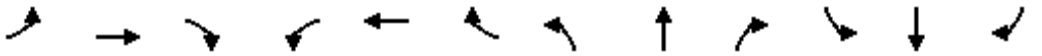
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	45	38	138	40	111	6	825	67	67	1052	8
Future Volume (vph)	26	45	38	138	40	111	6	825	67	67	1052	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	245		0	280		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		329			1113			2670			998	
Travel Time (s)		9.0			25.3			45.5			17.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	Split	NA		Split	NA		Perm	NA		pm+pt	NA	
Protected Phases	8	8		4	4			6		5	2	
Permitted Phases							6			2		
Detector Phase	8	8		4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	15.7	15.7		15.9	15.9		22.3	22.3		12.2	22.3	
Total Split (s)	25.0	25.0		30.0	30.0		75.0	75.0		20.0	95.0	
Total Split (%)	16.7%	16.7%		20.0%	20.0%		50.0%	50.0%		13.3%	63.3%	
Yellow Time (s)	3.4	3.4		3.8	3.8		4.5	4.5		4.4	4.5	
All-Red Time (s)	2.3	2.3		2.1	2.1		2.8	2.8		2.8	2.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		5.9	5.9		7.3	7.3		7.2	7.3	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Min	C-Min		None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 24 (16%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 5: US 17/92 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	45	38	138	40	111	6	825	67	67	1052	8
Future Volume (veh/h)	26	45	38	138	40	111	6	825	67	67	1052	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	28	49	26	150	43	67	7	897	66	73	1143	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	7	7	7
Cap, veh/h	116	75	40	179	66	103	316	2054	151	375	2456	17
Arrive On Green	0.07	0.07	0.07	0.10	0.10	0.10	0.63	0.63	0.63	0.03	0.71	0.71
Sat Flow, veh/h	1767	1141	605	1767	654	1019	477	3276	241	1711	3474	24
Grp Volume(v), veh/h	28	0	75	150	0	110	7	475	488	73	561	590
Grp Sat Flow(s),veh/h/ln	1767	0	1747	1767	0	1672	477	1735	1783	1711	1706	1792
Q Serve(g_s), s	2.3	0.0	6.3	12.5	0.0	9.5	1.0	21.1	21.1	2.2	21.6	21.6
Cycle Q Clear(g_c), s	2.3	0.0	6.3	12.5	0.0	9.5	10.6	21.1	21.1	2.2	21.6	21.6
Prop In Lane	1.00		0.35	1.00		0.61	1.00		0.14	1.00		0.01
Lane Grp Cap(c), veh/h	116	0	115	179	0	170	316	1088	1118	375	1206	1267
V/C Ratio(X)	0.24	0.00	0.65	0.84	0.00	0.65	0.02	0.44	0.44	0.19	0.47	0.47
Avail Cap(c_a), veh/h	227	0	225	284	0	269	316	1088	1118	467	1206	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.5	0.0	68.4	66.2	0.0	64.8	14.5	14.4	14.4	10.5	9.6	9.6
Incr Delay (d2), s/veh	1.1	0.0	6.1	11.6	0.0	4.1	0.1	1.3	1.2	0.3	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	5.5	10.3	0.0	7.6	0.2	13.1	13.4	1.5	12.4	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	0.0	74.5	77.8	0.0	68.9	14.7	15.6	15.6	10.7	10.9	10.8
LnGrp LOS	E	A	E	E	A	E	B	B	B	B	B	B
Approach Vol, veh/h		103			260			970			1224	
Approach Delay, s/veh		72.6			74.0			15.6			10.9	
Approach LOS		E			E			B			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		113.3		21.1	12.0	101.4		15.6				
Change Period (Y+Rc), s		* 7.3		* 5.9	* 7.2	* 7.3		5.7				
Max Green Setting (Gmax), s		* 88		* 24	* 13	* 68		19.3				
Max Q Clear Time (g_c+I1), s		23.6		14.5	4.2	23.1		8.3				
Green Ext Time (p_c), s		9.4		0.7	0.1	7.1		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		21.6
HCM 6th LOS		C

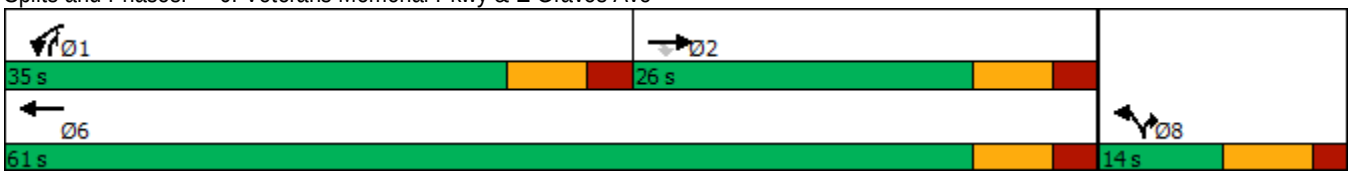
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	234	36	827	369	58	509
Future Volume (vph)	234	36	827	369	58	509
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	2		1	2
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	6%	12%	12%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8 1
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	
Total Split (s)	26.0	26.0	35.0	61.0	14.0	
Total Split (%)	34.7%	34.7%	46.7%	81.3%	18.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 67.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	234	36	827	369	58	509
Future Volume (veh/h)	234	36	827	369	58	509
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1722	1722
Adj Flow Rate, veh/h	254	18	899	401	63	489
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	6	12	12
Cap, veh/h	343	290	1102	1157	197	1155
Arrive On Green	0.19	0.19	0.33	0.64	0.12	0.12
Sat Flow, veh/h	1811	1535	3346	1811	1640	2569
Grp Volume(v), veh/h	254	18	899	401	63	489
Grp Sat Flow(s),veh/h/ln	1811	1535	1673	1811	1640	1284
Q Serve(g_s), s	7.7	0.6	14.3	6.0	2.0	7.0
Cycle Q Clear(g_c), s	7.7	0.6	14.3	6.0	2.0	7.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	343	290	1102	1157	197	1155
V/C Ratio(X)	0.74	0.06	0.82	0.35	0.32	0.42
Avail Cap(c_a), veh/h	592	501	1611	1682	197	1155
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	19.3	17.9	4.9	23.4	10.9
Incr Delay (d2), s/veh	4.5	0.1	2.2	0.3	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	0.3	8.4	2.2	1.3	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.7	19.5	20.0	5.1	24.3	11.1
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	272			1300	552	
Approach Delay, s/veh	26.2			15.4	12.6	
Approach LOS	C			B	B	

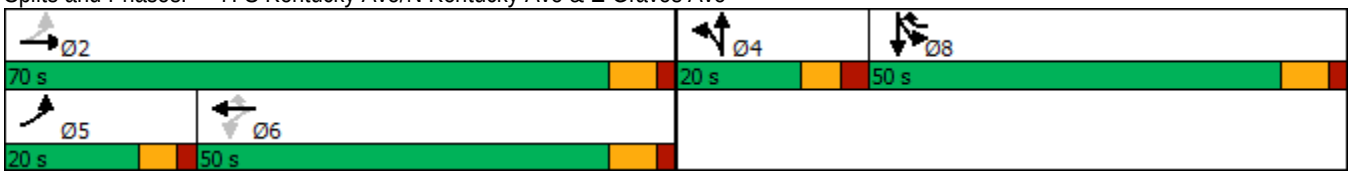
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	26.2	18.0				44.2	14.0
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	28.0	19.0				54.0	7.0
Max Q Clear Time (g_c+I1), s	16.3	9.7				8.0	9.0
Green Ext Time (p_c), s	2.8	1.3				3.7	0.0

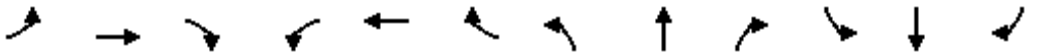
Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	242	609	10	16	831	361	17	12	13	299	7	369
Future Volume (vph)	242	609	10	16	831	361	17	12	13	299	7	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			2324			535			4220	
Travel Time (s)		26.0			35.2			14.6			63.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	11%	11%	11%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	
Protected Phases	5	2			6	8	4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		6	6	8	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	
Total Split (s)	20.0	70.0		50.0	50.0	50.0	20.0	20.0		50.0	50.0	
Total Split (%)	14.3%	50.0%		35.7%	35.7%	35.7%	14.3%	14.3%		35.7%	35.7%	
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min		Min	Min	None	None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 105.6	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	609	10	16	831	361	17	12	13	299	7	369
Future Volume (veh/h)	242	609	10	16	831	361	17	12	13	299	7	369
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1841	1841	1841	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	278	700	11	18	955	372	20	14	12	344	8	263
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	11	11	4	4	4	2	2	2	6	6	6
Cap, veh/h	314	1771	28	325	1231	883	38	26	23	717	10	321
Arrive On Green	0.12	0.53	0.53	0.35	0.35	0.35	0.05	0.05	0.05	0.21	0.21	0.21
Sat Flow, veh/h	1654	3325	52	727	3497	1560	761	533	457	3346	46	1496
Grp Volume(v), veh/h	278	347	364	18	955	372	46	0	0	344	0	271
Grp Sat Flow(s),veh/h/ln	1654	1650	1728	727	1749	1560	1750	0	0	1673	0	1542
Q Serve(g_s), s	10.6	12.9	12.9	1.7	25.1	14.0	2.6	0.0	0.0	9.3	0.0	17.3
Cycle Q Clear(g_c), s	10.6	12.9	12.9	1.7	25.1	14.0	2.6	0.0	0.0	9.3	0.0	17.3
Prop In Lane	1.00		0.03	1.00		1.00	0.43		0.26	1.00		0.97
Lane Grp Cap(c), veh/h	314	879	920	325	1231	883	87	0	0	717	0	330
V/C Ratio(X)	0.88	0.40	0.40	0.06	0.78	0.42	0.53	0.00	0.00	0.48	0.00	0.82
Avail Cap(c_a), veh/h	336	1007	1054	372	1456	984	220	0	0	1393	0	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.2	14.3	14.3	22.2	29.8	12.8	47.9	0.0	0.0	35.5	0.0	38.7
Incr Delay (d2), s/veh	22.4	0.4	0.4	0.1	2.6	0.5	4.9	0.0	0.0	0.5	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.5	7.9	8.2	0.5	15.6	11.9	2.3	0.0	0.0	6.6	0.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.6	14.7	14.7	22.3	32.4	13.2	52.8	0.0	0.0	36.0	0.0	43.7
LnGrp LOS	D	B	B	C	C	B	D	A	A	D	A	D
Approach Vol, veh/h		989			1345			46			615	
Approach Delay, s/veh		23.1			27.0			52.8			39.4	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		62.0		12.1	18.7	43.3		29.1				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		63.0		13.0	14.0	43.0		43.0				
Max Q Clear Time (g_c+I1), s		14.9		4.6	12.6	27.1		19.3				
Green Ext Time (p_c), s		6.9		0.1	0.1	9.2		2.8				

Intersection Summary												
HCM 6th Ctrl Delay			28.6									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	514	641	547	702	468	400
Future Volume (vph)	514	641	547	702	468	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		545	330		200	200
Storage Lanes		2	2		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	956			1150	1746	
Travel Time (s)	14.5			17.4	26.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	10%	5%	5%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	6	4	5	2	4	
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0	7.0	5.0	12.0	7.0	7.0
Minimum Split (s)	19.0	13.0	12.0	19.0	13.0	13.0
Total Split (s)	45.0	25.0	20.0	65.0	25.0	25.0
Total Split (%)	50.0%	27.8%	22.2%	72.2%	27.8%	27.8%
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	6.0	7.0	7.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	Min	None	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 69.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	514	641	547	702	468	400
Future Volume (veh/h)	514	641	547	702	468	400
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1826	1826	1870	1870
Adj Flow Rate, veh/h	559	697	595	763	509	289
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	5	5	2	2
Cap, veh/h	1133	1396	619	2160	671	541
Arrive On Green	0.34	0.34	0.18	0.62	0.19	0.19
Sat Flow, veh/h	3416	2613	3374	3561	3456	2790
Grp Volume(v), veh/h	559	697	595	763	509	289
Grp Sat Flow(s),veh/h/ln	1664	1306	1687	1735	1728	1395
Q Serve(g_s), s	9.4	12.0	12.4	7.5	9.9	6.6
Cycle Q Clear(g_c), s	9.4	12.0	12.4	7.5	9.9	6.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1133	1396	619	2160	671	541
V/C Ratio(X)	0.49	0.50	0.96	0.35	0.76	0.53
Avail Cap(c_a), veh/h	1785	1908	619	2839	926	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	10.5	28.7	6.5	27.0	25.7
Incr Delay (d2), s/veh	0.5	0.4	26.8	0.1	2.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.8	8.1	11.1	3.5	7.0	8.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.0	10.9	55.5	6.6	29.4	26.5
LnGrp LOS	B	B	E	A	C	C
Approach Vol, veh/h	1256			1358	798	
Approach Delay, s/veh	14.5			28.0	28.4	
Approach LOS	B			C	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		51.1		19.8	20.0	31.1
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		58.0		19.0	13.0	38.0
Max Q Clear Time (g_c+I1), s		9.5		11.9	14.4	14.0
Green Ext Time (p_c), s		8.4		1.9	0.0	10.1

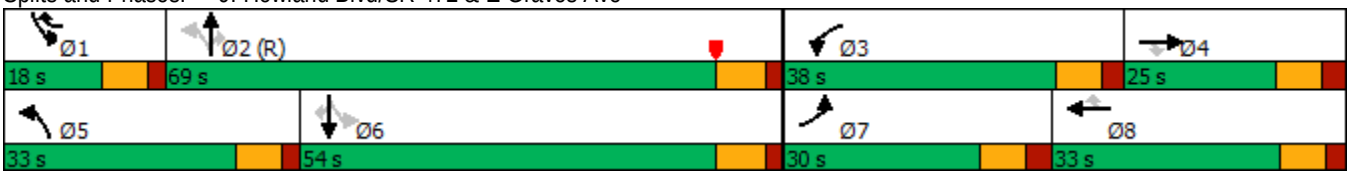
Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

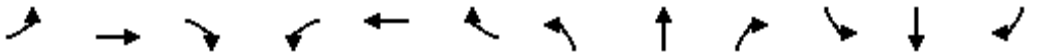
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	443	246	350	209	246	314	550	1747	202	260	628	219
Future Volume (vph)	443	246	350	209	246	314	550	1747	202	260	628	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		330
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		1150			363			1044			1453	
Travel Time (s)		22.4			8.3			15.8			19.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	8%	8%	8%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0	17.0	7.0	17.0	17.0
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.0	12.0	24.5	24.5	14.0	24.5	24.5
Total Split (s)	30.0	25.0	25.0	38.0	33.0	18.0	33.0	69.0	69.0	18.0	54.0	54.0
Total Split (%)	20.0%	16.7%	16.7%	25.3%	22.0%	12.0%	22.0%	46.0%	46.0%	12.0%	36.0%	36.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.0	7.0	7.5	7.5	7.0	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	C-Min	C-Min	None	Min	Min

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 82 (55%), Referenced to phase 2:NBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	443	246	350	209	246	314	550	1747	202	260	628	219
Future Volume (veh/h)	443	246	350	209	246	314	550	1747	202	260	628	219
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1856	1856	1856	1781	1781	1781
Adj Flow Rate, veh/h	482	267	0	227	267	341	598	1899	219	283	683	233
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	6	4	4	4	3	3	3	8	8	8
Cap, veh/h	491	428		284	313	373	848	2080	646	375	1654	514
Arrive On Green	0.15	0.24	0.00	0.08	0.17	0.17	0.28	0.82	0.82	0.07	0.34	0.34
Sat Flow, veh/h	3346	1811	1535	3401	1841	1560	3428	5066	1572	3291	4863	1510
Grp Volume(v), veh/h	482	267	0	227	267	341	598	1899	219	283	683	233
Grp Sat Flow(s),veh/h/ln	1673	1811	1535	1700	1841	1560	1714	1689	1572	1646	1621	1510
Q Serve(g_s), s	21.5	19.8	0.0	9.8	21.1	25.5	17.0	40.2	5.2	8.3	16.2	18.1
Cycle Q Clear(g_c), s	21.5	19.8	0.0	9.8	21.1	25.5	17.0	40.2	5.2	8.3	16.2	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	491	428		284	313	373	848	2080	646	375	1654	514
V/C Ratio(X)	0.98	0.62		0.80	0.85	0.91	0.71	0.91	0.34	0.75	0.41	0.45
Avail Cap(c_a), veh/h	491	428		692	313	373	963	2080	646	388	1654	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	1.00	1.00	1.00	0.49	0.49	0.49	0.95	0.95	0.95
Uniform Delay (d), s/veh	63.8	51.3	0.0	67.5	60.4	55.5	21.3	11.5	8.4	35.4	38.0	38.6
Incr Delay (d2), s/veh	32.4	2.3	0.0	5.1	19.8	26.2	1.2	4.0	0.7	7.6	0.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.4	13.8	0.0	8.0	17.2	21.7	7.9	8.0	2.9	6.5	10.3	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.2	53.6	0.0	72.6	80.2	81.8	22.5	15.5	9.1	42.9	38.2	39.5
LnGrp LOS	F	D		E	F	F	C	B	A	D	D	D
Approach Vol, veh/h		749	A		835			2716			1199	
Approach Delay, s/veh		81.0			78.8			16.5			39.6	
Approach LOS		F			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	69.1	20.0	43.5	28.0	58.5	30.0	33.5
Change Period (Y+Rc), s	7.0	7.5	7.5	8.0	7.0	7.5	8.0	* 8
Max Green Setting (Gmax), s	11.0	61.5	30.5	17.0	26.0	46.5	22.0	* 26
Max Q Clear Time (g_c+I1), s	10.3	42.2	11.8	21.8	19.0	20.1	23.5	27.5
Green Ext Time (p_c), s	0.1	16.0	0.7	0.0	1.9	7.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.8
HCM 6th LOS	D

Notes

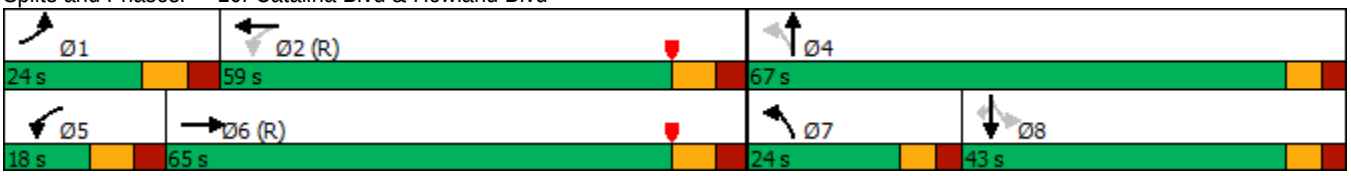
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

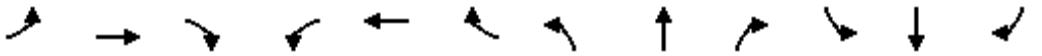
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	674	42	33	1362	11	132	23	13	40	36	610
Future Volume (vph)	198	674	42	33	1362	11	132	23	13	40	36	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6063			1895			1021			5049	
Travel Time (s)		91.9			28.7			23.2			98.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases				2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	24.0	65.0		18.0	59.0		24.0	67.0		43.0	43.0	43.0
Total Split (%)	16.0%	43.3%		12.0%	39.3%		16.0%	44.7%		28.7%	28.7%	28.7%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	674	42	33	1362	11	132	23	13	40	36	610
Future Volume (veh/h)	198	674	42	33	1362	11	132	23	13	40	36	610
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1841	1841	1841	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	208	709	43	35	1434	12	139	24	9	42	38	330
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	4	4	4	4	4	4	2	2	2
Cap, veh/h	254	1541	93	320	1494	12	383	438	164	354	416	353
Arrive On Green	0.08	0.47	0.47	0.03	0.42	0.42	0.07	0.34	0.34	0.22	0.22	0.22
Sat Flow, veh/h	3319	3269	198	1753	3554	30	1753	1276	479	1376	1870	1585
Grp Volume(v), veh/h	208	370	382	35	705	741	139	0	33	42	38	330
Grp Sat Flow(s),veh/h/ln	1659	1706	1761	1753	1749	1835	1753	0	1755	1376	1870	1585
Q Serve(g_s), s	9.3	21.9	22.0	1.7	58.8	58.8	8.9	0.0	1.9	3.7	2.4	30.7
Cycle Q Clear(g_c), s	9.3	21.9	22.0	1.7	58.8	58.8	8.9	0.0	1.9	3.7	2.4	30.7
Prop In Lane	1.00		0.11	1.00		0.02	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	254	805	830	320	735	772	383	0	602	354	416	353
V/C Ratio(X)	0.82	0.46	0.46	0.11	0.96	0.96	0.36	0.00	0.05	0.12	0.09	0.94
Avail Cap(c_a), veh/h	343	805	830	386	735	772	453	0	702	378	449	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.44	0.44	0.44	1.00	0.00	1.00	0.50	0.50	0.50
Uniform Delay (d), s/veh	68.2	26.7	26.8	24.2	42.2	42.2	38.9	0.0	33.0	46.8	46.3	57.2
Incr Delay (d2), s/veh	9.7	1.7	1.6	0.1	14.3	13.9	0.6	0.0	0.0	0.1	0.1	18.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.4	13.8	14.1	1.3	32.9	34.4	7.1	0.0	1.5	2.3	2.1	18.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.9	28.4	28.4	24.3	56.5	56.2	39.5	0.0	33.0	46.9	46.3	75.7
LnGrp LOS	E	C	C	C	E	E	D	A	C	D	D	E
Approach Vol, veh/h		960			1481			172			410	
Approach Delay, s/veh		39.1			55.6			38.2			70.0	
Approach LOS		D			E			D			E	

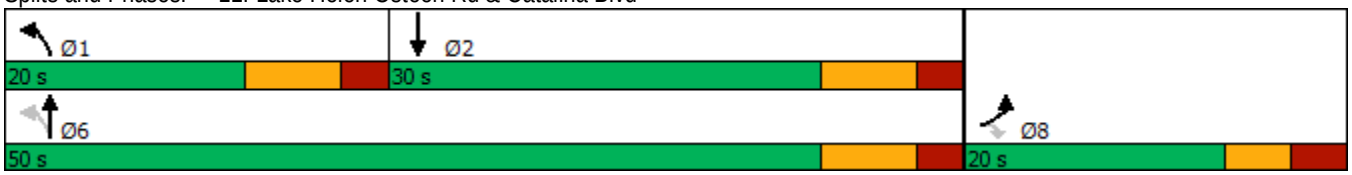
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	71.6		58.4	12.3	79.2	18.0	40.4				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	15.5	50.5		60.0	9.5	56.5	17.0	36.0				
Max Q Clear Time (g_c+I1), s	11.3	60.8		3.9	3.7	24.0	10.9	32.7				
Green Ext Time (p_c), s	0.2	0.0		0.2	0.0	7.0	0.2	0.7				

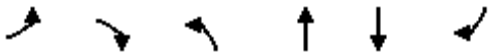
Intersection Summary			
HCM 6th Ctrl Delay		51.3	
HCM 6th LOS		D	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	39	86	504	319	85	177
Future Volume (vph)	39	86	504	319	85	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	185	0	240			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			45	45	
Link Distance (ft)	5049			5467	741	
Travel Time (s)	98.4			82.8	11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	8		1	6	2	
Permitted Phases		8	6			
Detector Phase	8	8	1	6	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	
Minimum Split (s)	11.5	11.5	12.5	22.5	22.5	
Total Split (s)	20.0	20.0	20.0	50.0	30.0	
Total Split (%)	28.6%	28.6%	28.6%	71.4%	42.9%	
Yellow Time (s)	3.5	3.5	5.0	5.0	5.0	
All-Red Time (s)	3.0	3.0	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	7.5	7.5	7.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	Min	Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 55.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 11: Lake Helen Osteen Rd & Catalina Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	39	86	504	319	85	177
Future Volume (veh/h)	39	86	504	319	85	177
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1826	1826
Adj Flow Rate, veh/h	43	27	560	354	94	175
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	5	5
Cap, veh/h	109	97	727	1254	164	306
Arrive On Green	0.06	0.06	0.24	0.67	0.29	0.29
Sat Flow, veh/h	1781	1585	1781	1870	571	1063
Grp Volume(v), veh/h	43	27	560	354	0	269
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	0	1634
Q Serve(g_s), s	1.2	0.8	10.4	4.0	0.0	7.3
Cycle Q Clear(g_c), s	1.2	0.8	10.4	4.0	0.0	7.3
Prop In Lane	1.00	1.00	1.00			0.65
Lane Grp Cap(c), veh/h	109	97	727	1254	0	470
V/C Ratio(X)	0.40	0.28	0.77	0.28	0.00	0.57
Avail Cap(c_a), veh/h	461	411	729	1525	0	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	23.4	8.8	3.5	0.0	15.8
Incr Delay (d2), s/veh	4.9	3.3	5.9	0.3	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	0.7	6.1	1.1	0.0	4.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.4	26.7	14.7	3.8	0.0	18.2
LnGrp LOS	C	C	B	A	A	B
Approach Vol, veh/h	70			914	269	
Approach Delay, s/veh	27.8			10.5	18.2	
Approach LOS	C			B	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	19.9	22.5				42.4	9.7
Change Period (Y+Rc), s	7.5	7.5				7.5	6.5
Max Green Setting (Gmax), s	12.5	22.5				42.5	13.5
Max Q Clear Time (g_c+I1), s	12.4	9.3				6.0	3.2
Green Ext Time (p_c), s	0.0	2.1				4.2	0.2

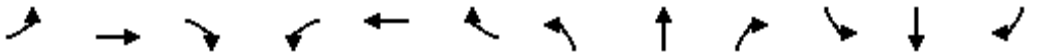
Intersection Summary			
HCM 6th Ctrl Delay		13.1	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	473	283	35	1010	0	275	0	22	1	0	2
Future Volume (vph)	0	473	283	35	1010	0	275	0	22	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			638	
Travel Time (s)		28.7			22.0			170.9			14.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	9%	9%	5%	5%	5%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	85.0	85.0	85.0	20.0	105.0		25.0	50.0		25.0	25.0	
Total Split (%)	54.8%	54.8%	54.8%	12.9%	67.7%		16.1%	32.3%		16.1%	16.1%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	473	283	35	1010	0	275	0	22	1	0	2
Future Volume (veh/h)	0	473	283	35	1010	0	275	0	22	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1767	1767	1826	1826	1826	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	0	498	266	37	1063	0	289	0	8	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	5	5	5	3	3	3	2	2	2
Cap, veh/h	46	2221	991	505	1338	0	297	0	278	46	1	12
Arrive On Green	0.00	0.66	0.66	0.03	0.73	0.00	0.12	0.00	0.18	0.02	0.00	0.02
Sat Flow, veh/h	501	3357	1497	1739	1826	0	1767	0	1572	692	61	753
Grp Volume(v), veh/h	0	498	266	37	1063	0	289	0	8	2	0	0
Grp Sat Flow(s),veh/h/ln	501	1678	1497	1739	1826	0	1767	0	1572	1507	0	0
Q Serve(g_s), s	0.0	9.1	11.3	1.0	57.8	0.0	18.0	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.1	11.3	1.0	57.8	0.0	18.0	0.0	0.7	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.50		0.50
Lane Grp Cap(c), veh/h	46	2221	991	505	1338	0	297	0	278	59	0	0
V/C Ratio(X)	0.00	0.22	0.27	0.07	0.79	0.00	0.97	0.00	0.03	0.03	0.00	0.00
Avail Cap(c_a), veh/h	46	2221	991	606	1338	0	297	0	436	208	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.84	0.84	1.00	1.00	0.00	0.83	0.00	0.83	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.4	10.8	7.5	13.3	0.0	67.6	0.0	52.8	75.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.2	0.1	4.9	0.0	40.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	5.8	6.8	0.6	29.8	0.0	20.6	0.0	0.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.5	11.0	7.6	18.2	0.0	107.9	0.0	52.8	75.4	0.0	0.0
LnGrp LOS	A	B	B	A	B	A	F	A	D	E	A	A
Approach Vol, veh/h		764			1100			297			2	
Approach Delay, s/veh		10.6			17.9			106.4			75.4	
Approach LOS		B			B			F			E	

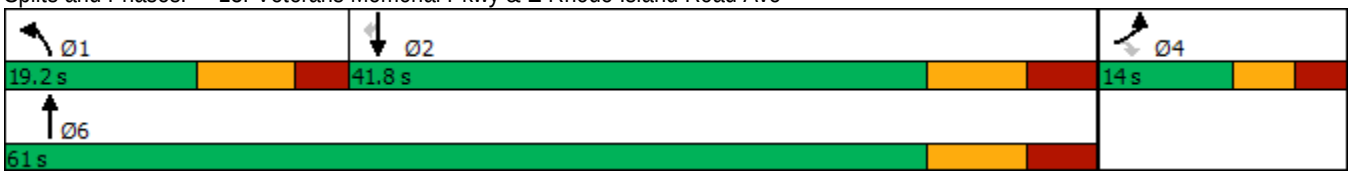
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		120.6		34.4	11.0	109.6	25.0	9.4				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		98.0		43.0	13.0	78.0	18.0	18.0				
Max Q Clear Time (g_c+I1), s		59.8		2.7	3.0	13.3	20.0	2.2				
Green Ext Time (p_c), s		15.9		0.0	0.0	6.9	0.0	0.0				

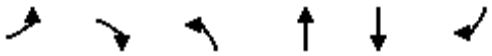
Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	181	196	398	418	671	298
Future Volume (vph)	181	196	398	418	671	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	5%	5%	5%	5%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	14.0	14.0	13.5	20.5	20.5	20.5
Total Split (s)	14.0	14.0	19.2	61.0	41.8	41.8
Total Split (%)	18.7%	18.7%	25.6%	81.3%	55.7%	55.7%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 74.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	181	196	398	418	671	298
Future Volume (veh/h)	181	196	398	418	671	298
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1826	1826	1826	1826
Adj Flow Rate, veh/h	206	120	452	475	762	339
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	5	5	5	5
Cap, veh/h	346	159	481	1254	786	666
Arrive On Green	0.10	0.10	0.14	0.69	0.43	0.43
Sat Flow, veh/h	3456	1585	3374	1826	1826	1547
Grp Volume(v), veh/h	206	120	452	475	762	339
Grp Sat Flow(s),veh/h/ln	1728	1585	1687	1826	1826	1547
Q Serve(g_s), s	4.3	5.5	9.9	8.3	30.6	12.0
Cycle Q Clear(g_c), s	4.3	5.5	9.9	8.3	30.6	12.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	346	159	481	1254	786	666
V/C Ratio(X)	0.60	0.76	0.94	0.38	0.97	0.51
Avail Cap(c_a), veh/h	346	159	481	1254	786	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	32.9	31.8	5.0	20.9	15.6
Incr Delay (d2), s/veh	2.8	18.7	26.5	0.2	24.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.3	5.1	9.3	3.3	22.5	6.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.1	51.6	58.3	5.2	45.5	16.2
LnGrp LOS	D	D	E	A	D	B
Approach Vol, veh/h	326			927	1101	
Approach Delay, s/veh	41.1			31.1	36.5	
Approach LOS	D			C	D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.2	41.8		14.0		61.0
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	10.7	32.3		7.5		51.5
Max Q Clear Time (g_c+I1), s	11.9	32.6		7.5		10.3
Green Ext Time (p_c), s	0.0	0.0		0.0		2.8

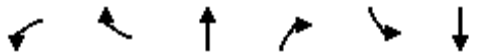
Intersection Summary		
HCM 6th Ctrl Delay		35.0
HCM 6th LOS		D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	381	371	630	95	100	272
Future Volume (vph)	381	371	630	95	100	272
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2590
Travel Time (s)	153.9		100.1			39.2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	6%	6%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	20.0	20.0	35.0		15.0	50.0
Total Split (%)	28.6%	28.6%	50.0%		21.4%	71.4%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 58.5	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	381	371	630	95	100	272
Future Volume (veh/h)	381	371	630	95	100	272
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1811	1811
Adj Flow Rate, veh/h	405	299	670	63	106	289
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	6	6
Cap, veh/h	448	399	965	91	343	1695
Arrive On Green	0.25	0.25	0.30	0.30	0.07	0.49
Sat Flow, veh/h	1767	1572	3350	306	1725	3532
Grp Volume(v), veh/h	405	299	362	371	106	289
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1800	1725	1721
Q Serve(g_s), s	11.8	9.3	9.7	9.7	2.1	2.5
Cycle Q Clear(g_c), s	11.8	9.3	9.7	9.7	2.1	2.5
Prop In Lane	1.00	1.00		0.17	1.00	
Lane Grp Cap(c), veh/h	448	399	522	533	343	1695
V/C Ratio(X)	0.90	0.75	0.69	0.70	0.31	0.17
Avail Cap(c_a), veh/h	448	399	927	947	490	2812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	18.3	16.6	16.6	11.5	7.5
Incr Delay (d2), s/veh	21.4	7.7	1.7	1.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.1	1.5	6.4	6.6	1.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.6	26.0	18.3	18.2	12.0	7.5
LnGrp LOS	D	C	B	B	B	A
Approach Vol, veh/h	704		733			395
Approach Delay, s/veh	34.4		18.2			8.7
Approach LOS	C		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		33.2		20.0	10.5	22.8
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 44		13.5	8.5	28.0
Max Q Clear Time (g_c+I1), s		4.5		13.8	4.1	11.7
Green Ext Time (p_c), s		1.8		0.0	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	135	84	8	320	182	5
Future Volume (vph)	135	84	8	320	182	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	30	
Link Distance (ft)	7900			4491	5182	
Travel Time (s)	153.9			87.5	117.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	5%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	84	8	320	182	5
Future Vol, veh/h	135	84	8	320	182	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	5	5	3	3	3	3
Mvmt Flow	150	93	9	356	202	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	243	0	571	197
Stage 1	-	-	-	-	197	-
Stage 2	-	-	-	-	374	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1317	-	481	842
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	693	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1317	-	477	842
Mov Cap-2 Maneuver	-	-	-	-	477	-
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	687	-

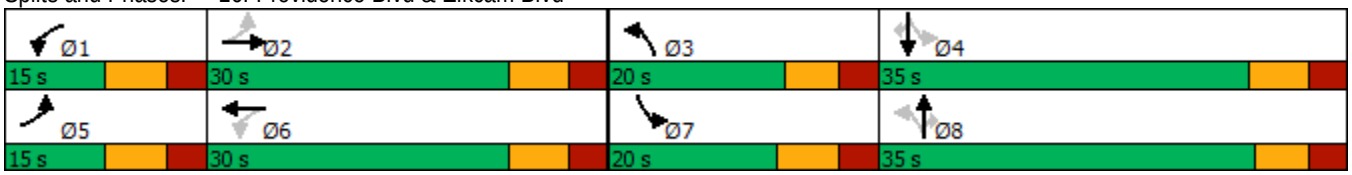
Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	18
HCM LOS			C

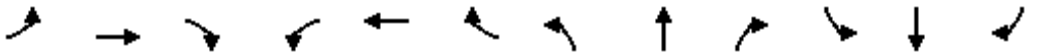
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	483	-	-	1317	-
HCM Lane V/C Ratio	0.43	-	-	0.007	-
HCM Control Delay (s)	18	-	-	7.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	90	26	126	159	74	35	287	106	46	218	43
Future Volume (vph)	52	90	26	126	159	74	35	287	106	46	218	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	225		0	235		365	220		295
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		4491			6416			3965			8772	
Travel Time (s)		87.5			125.0			77.2			170.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	5%	5%	5%	7%	7%	7%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	12.5	13.5		12.5	13.5		12.0	13.0	13.0	12.5	13.5	13.5
Total Split (s)	15.0	30.0		15.0	30.0		20.0	35.0	35.0	20.0	35.0	35.0
Total Split (%)	15.0%	30.0%		15.0%	30.0%		20.0%	35.0%	35.0%	20.0%	35.0%	35.0%
Yellow Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.5	7.5		7.0	7.0	7.0	7.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 70.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 16: Providence Blvd & Elkcam Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	90	26	126	159	74	35	287	106	46	218	43
Future Volume (veh/h)	52	90	26	126	159	74	35	287	106	46	218	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	55	96	21	134	169	58	37	305	60	49	232	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	3	3	3	5	5	5	7	7	7
Cap, veh/h	270	204	45	373	233	80	332	418	354	271	441	373
Arrive On Green	0.05	0.14	0.14	0.09	0.18	0.18	0.04	0.23	0.23	0.05	0.25	0.25
Sat Flow, veh/h	1753	1463	320	1767	1321	453	1739	1826	1547	1711	1796	1522
Grp Volume(v), veh/h	55	0	117	134	0	227	37	305	60	49	232	31
Grp Sat Flow(s),veh/h/ln	1753	0	1783	1767	0	1774	1739	1826	1547	1711	1796	1522
Q Serve(g_s), s	1.6	0.0	3.6	3.8	0.0	7.3	1.0	9.3	1.9	1.3	6.7	0.9
Cycle Q Clear(g_c), s	1.6	0.0	3.6	3.8	0.0	7.3	1.0	9.3	1.9	1.3	6.7	0.9
Prop In Lane	1.00		0.18	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	0	248	373	0	313	332	418	354	271	441	373
V/C Ratio(X)	0.20	0.00	0.47	0.36	0.00	0.73	0.11	0.73	0.17	0.18	0.53	0.08
Avail Cap(c_a), veh/h	401	0	666	439	0	663	640	849	720	547	821	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	23.9	19.6	0.0	23.4	16.8	21.5	18.6	17.0	19.7	17.5
Incr Delay (d2), s/veh	0.4	0.0	2.0	0.6	0.0	4.5	0.1	3.5	0.3	0.3	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	0.0	2.8	2.7	0.0	5.7	0.6	7.2	1.2	0.9	4.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	25.8	20.2	0.0	27.9	17.0	25.0	18.9	17.4	21.1	17.6
LnGrp LOS	C	A	C	C	A	C	B	C	B	B	C	B
Approach Vol, veh/h		172			361			402			312	
Approach Delay, s/veh		24.3			25.1			23.3			20.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	15.9	9.3	22.3	10.5	18.1	10.3	21.3
Change Period (Y+Rc), s	7.5	7.5	7.0	7.5	7.5	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	7.5	22.5	13.0	27.5	7.5	22.5	12.5	* 28
Max Q Clear Time (g_c+I1), s	5.8	5.6	3.0	8.7	3.6	9.3	3.3	11.3
Green Ext Time (p_c), s	0.0	0.7	0.0	1.8	0.0	1.3	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

Notes

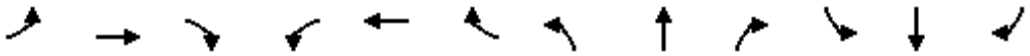
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	69	23	438	155	130	33	186	86	41	320	6
Future Volume (vph)	8	69	23	438	155	130	33	186	86	41	320	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	440		0	200		0	221		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35			35	
Link Distance (ft)		5182			627			919			3965	
Travel Time (s)		117.8			12.2			17.9			77.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	8%	8%	8%	4%	4%	4%	8%	8%	8%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0	12.0	5.0	12.0	
Minimum Split (s)	14.0	14.0		13.5	13.5		18.5	18.5	18.5	13.0	20.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0	35.0	20.0	55.0	
Total Split (%)	35.3%	35.3%		35.3%	35.3%		41.2%	41.2%	41.2%	23.5%	64.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.5	4.5	
All-Red Time (s)	3.0	3.0		2.5	2.5		2.5	2.5	2.5	3.5	3.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		6.5	6.5		6.5	6.5	6.5	8.0	8.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Min	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 61.5	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 17: Providence Blvd & Fort Smith Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	69	23	438	155	130	33	186	86	41	320	6
Future Volume (veh/h)	8	69	23	438	155	130	33	186	86	41	320	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1841	1841	1841	1781	1781	1781	1841	1841	1841
Adj Flow Rate, veh/h	9	75	15	476	168	105	36	202	57	45	348	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	8	8	8	4	4	4	8	8	8	4	4	4
Cap, veh/h	400	554	111	568	407	254	309	349	296	297	666	13
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.20	0.20	0.20	0.04	0.37	0.37
Sat Flow, veh/h	1054	1441	288	1286	1059	662	977	1781	1510	1753	1798	36
Grp Volume(v), veh/h	9	0	90	476	0	273	36	202	57	45	0	355
Grp Sat Flow(s),veh/h/ln	1054	0	1730	1286	0	1722	977	1781	1510	1753	0	1834
Q Serve(g_s), s	0.4	0.0	2.1	21.4	0.0	7.1	1.9	6.3	1.9	1.2	0.0	9.2
Cycle Q Clear(g_c), s	7.5	0.0	2.1	23.5	0.0	7.1	1.9	6.3	1.9	1.2	0.0	9.2
Prop In Lane	1.00		0.17	1.00		0.38	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	400	0	664	568	0	661	309	349	296	297	0	680
V/C Ratio(X)	0.02	0.00	0.14	0.84	0.00	0.41	0.12	0.58	0.19	0.15	0.00	0.52
Avail Cap(c_a), veh/h	400	0	664	568	0	661	573	830	703	565	0	1409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	12.2	20.4	0.0	13.8	20.5	22.3	20.5	17.2	0.0	15.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	10.6	0.0	0.4	0.2	2.1	0.4	0.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	1.3	12.2	0.0	4.4	0.7	4.7	1.2	0.8	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	0.0	12.3	31.1	0.0	14.2	20.8	24.4	21.0	17.4	0.0	15.9
LnGrp LOS	B	A	B	C	A	B	C	C	C	B	A	B
Approach Vol, veh/h		99			749			295			400	
Approach Delay, s/veh		12.7			24.9			23.3			16.1	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.7	20.0		30.5		30.7		30.5				
Change Period (Y+Rc), s	8.0	* 8		7.0		8.0		* 7				
Max Green Setting (Gmax), s	12.0	* 29		23.0		47.0		* 24				
Max Q Clear Time (g_c+I1), s	3.2	8.3		9.5		11.2		25.5				
Green Ext Time (p_c), s	0.0	2.0		0.3		3.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		21.5	
HCM 6th LOS		C	

Notes

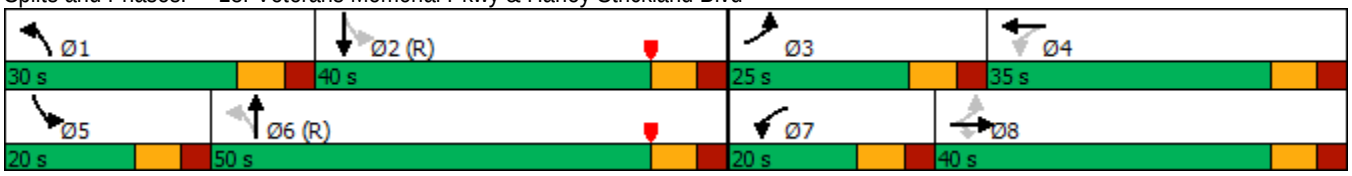
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

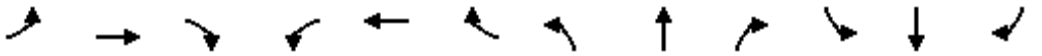
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	25	110	36	30	37	143	267	4	100	631	341
Future Volume (vph)	88	25	110	36	30	37	143	267	4	100	631	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	235		235	250		0	435		0	340		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		642			673			1923			1581	
Travel Time (s)		10.9			15.3			32.8			26.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	3	8	8	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	16.0		5.0	16.0	
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5		12.5	23.5		12.5	23.5	
Total Split (s)	25.0	40.0	40.0	20.0	35.0		30.0	50.0		20.0	40.0	
Total Split (%)	19.2%	30.8%	30.8%	15.4%	26.9%		23.1%	38.5%		15.4%	30.8%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 40 (31%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 18: Veterans Memorial Pkwy & Harley Strickland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	25	110	36	30	37	143	267	4	100	631	341
Future Volume (veh/h)	88	25	110	36	30	37	143	267	4	100	631	341
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1796	1796	1796	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	98	28	63	40	33	15	159	297	3	111	701	353
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	7	7	7	5	5	5	4	4	4
Cap, veh/h	207	168	142	173	63	29	364	2144	22	735	1343	676
Arrive On Green	0.07	0.09	0.09	0.03	0.05	0.05	0.05	0.61	0.61	0.04	0.60	0.60
Sat Flow, veh/h	1767	1856	1572	1711	1169	531	1739	3519	36	1753	2252	1133
Grp Volume(v), veh/h	98	28	63	40	0	48	159	146	154	111	544	510
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1711	0	1701	1739	1735	1820	1753	1749	1637
Q Serve(g_s), s	6.7	1.8	4.9	2.9	0.0	3.6	4.6	4.7	4.7	3.2	23.7	23.7
Cycle Q Clear(g_c), s	6.7	1.8	4.9	2.9	0.0	3.6	4.6	4.7	4.7	3.2	23.7	23.7
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.02	1.00		0.69
Lane Grp Cap(c), veh/h	207	168	142	173	0	91	364	1057	1108	735	1043	976
V/C Ratio(X)	0.47	0.17	0.44	0.23	0.00	0.53	0.44	0.14	0.14	0.15	0.52	0.52
Avail Cap(c_a), veh/h	329	464	393	287	0	360	573	1057	1108	833	1043	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.71	0.71	0.71	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	54.6	56.0	55.9	0.0	59.9	11.9	10.8	10.8	9.2	15.4	15.4
Incr Delay (d2), s/veh	1.7	0.5	2.2	0.7	0.0	4.6	0.6	0.2	0.2	0.1	1.9	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	1.5	3.6	2.3	0.0	3.0	3.0	3.2	3.4	2.1	14.5	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	55.1	58.2	56.6	0.0	64.5	12.5	11.0	11.0	9.3	17.2	17.4
LnGrp LOS	E	E	E	E	A	E	B	B	B	A	B	B
Approach Vol, veh/h		189			88			459			1165	
Approach Delay, s/veh		56.1			60.9			11.5			16.6	
Approach LOS		E			E			B			B	

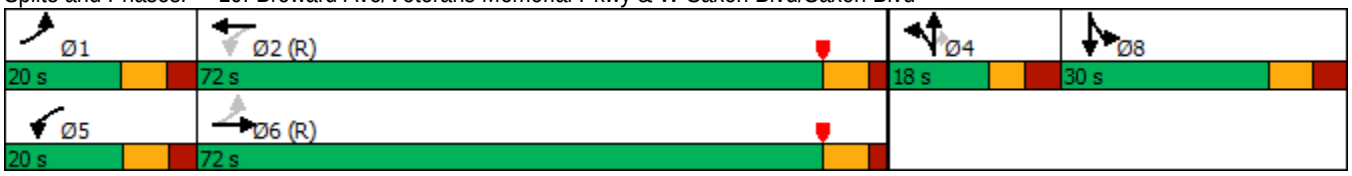
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	85.0	16.1	14.5	12.7	86.7	11.3	19.3
Change Period (Y+Rc), s	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max Green Setting (Gmax), s	22.5	32.5	17.5	27.5	12.5	42.5	12.5	32.5
Max Q Clear Time (g_c+I1), s	6.6	25.7	8.7	5.6	5.2	6.7	4.9	6.9
Green Ext Time (p_c), s	0.3	4.3	0.1	0.2	0.1	2.5	0.0	0.3

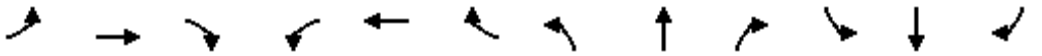
Intersection Summary	
HCM 6th Ctrl Delay	21.3
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	673	12	132	1255	464	49	53	72	299	46	143
Future Volume (vph)	127	673	12	132	1255	464	49	53	72	299	46	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	6			2					4			
Detector Phase	1	6		5	2		4	4	4	8	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	15.3	15.3	
Total Split (s)	20.0	72.0		20.0	72.0		18.0	18.0	18.0	30.0	30.0	
Total Split (%)	14.3%	51.4%		14.3%	51.4%		12.9%	12.9%	12.9%	21.4%	21.4%	
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.5	4.5	
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.8	3.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	8.3	8.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 18 (13%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	673	12	132	1255	464	49	53	72	299	46	143
Future Volume (veh/h)	127	673	12	132	1255	464	49	53	72	299	46	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1856	1856	1856	1870	1870	1870	1826	1826	1826
Adj Flow Rate, veh/h	137	724	9	142	1349	497	53	57	24	322	49	71
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	3	3	3	2	2	2	5	5	5
Cap, veh/h	274	2884	36	496	2082	761	89	93	79	388	77	112
Arrive On Green	0.05	0.57	0.57	0.10	1.00	1.00	0.05	0.05	0.05	0.12	0.12	0.12
Sat Flow, veh/h	1739	5075	63	1767	3656	1336	1781	1870	1585	3374	674	976
Grp Volume(v), veh/h	137	474	259	142	1245	601	53	57	24	322	0	120
Grp Sat Flow(s),veh/h/ln	1739	1662	1815	1767	1689	1615	1781	1870	1585	1687	0	1650
Q Serve(g_s), s	4.6	10.0	10.1	4.9	0.0	0.0	4.1	4.2	2.0	13.1	0.0	9.7
Cycle Q Clear(g_c), s	4.6	10.0	10.1	4.9	0.0	0.0	4.1	4.2	2.0	13.1	0.0	9.7
Prop In Lane	1.00		0.03	1.00		0.83	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	274	1889	1031	496	1923	920	89	93	79	388	0	190
V/C Ratio(X)	0.50	0.25	0.25	0.29	0.65	0.65	0.60	0.61	0.30	0.83	0.00	0.63
Avail Cap(c_a), veh/h	341	1889	1031	562	1923	920	134	140	119	523	0	256
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.79	0.79	0.79	1.00	1.00	1.00	0.80	0.00	0.80
Uniform Delay (d), s/veh	11.2	15.2	15.2	11.0	0.0	0.0	65.1	65.2	64.2	60.6	0.0	59.1
Incr Delay (d2), s/veh	1.4	0.3	0.6	0.2	1.3	2.9	6.3	6.4	2.1	6.6	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	6.7	7.5	3.0	0.6	1.3	3.6	3.9	1.6	9.4	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.6	15.5	15.8	11.2	1.3	2.9	71.5	71.6	66.3	67.2	0.0	61.9
LnGrp LOS	B	B	B	B	A	A	E	E	E	E	A	E
Approach Vol, veh/h		870			1988			134			442	
Approach Delay, s/veh		15.1			2.5			70.6			65.8	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.6	86.5		14.5	14.8	86.4		24.4				
Change Period (Y+Rc), s	7.9	6.8		7.5	7.8	6.8		8.3				
Max Green Setting (Gmax), s	12.1	65.2		10.5	12.2	65.2		21.7				
Max Q Clear Time (g_c+I1), s	6.6	2.0		6.2	6.9	12.1		15.1				
Green Ext Time (p_c), s	0.1	21.3		0.2	0.1	4.8		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		16.5	
HCM 6th LOS		B	

Notes

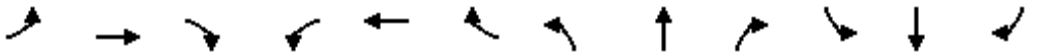
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1346	58	98	1926	24	49	1	84	10	4	8
Future Volume (vph)	22	1346	58	98	1926	24	49	1	84	10	4	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	365		0	390		0	105		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1867			487			266			246	
Travel Time (s)		28.3			7.4			6.0			5.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.7	17.9		12.8	17.9		14.6	14.6		14.6	14.6	
Total Split (s)	18.0	102.0		20.0	104.0		18.0	18.0		18.0	18.0	
Total Split (%)	12.9%	72.9%		14.3%	74.3%		12.9%	12.9%		12.9%	12.9%	
Yellow Time (s)	4.8	4.9		4.9	4.9		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.9	2.0		2.9	2.0		3.4	3.4		3.4	3.4	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.7	6.9		7.8	6.9		7.6	7.6			7.6	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 21 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: FDOT Park & Ride & Saxon Blvd





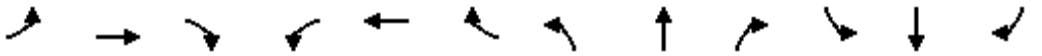
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1346	58	98	1926	24	49	1	84	10	4	8
Future Volume (veh/h)	22	1346	58	98	1926	24	49	1	84	10	4	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1841	1841	1841	1826	1826	1826
Adj Flow Rate, veh/h	25	1512	62	110	2164	26	55	1	18	11	4	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	5	5	5
Cap, veh/h	195	3717	152	356	3944	47	124	4	73	78	25	8
Arrive On Green	0.04	1.00	1.00	0.04	0.77	0.77	0.05	0.05	0.05	0.05	0.05	0.05
Sat Flow, veh/h	1739	4911	201	1753	5118	61	1388	83	1490	724	508	164
Grp Volume(v), veh/h	25	1023	551	110	1416	774	55	0	19	17	0	0
Grp Sat Flow(s),veh/h/ln	1739	1662	1790	1753	1675	1830	1388	0	1573	1396	0	0
Q Serve(g_s), s	0.4	0.0	0.0	1.9	23.5	23.6	3.1	0.0	1.6	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	1.9	23.5	23.6	5.0	0.0	1.6	1.9	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.03	1.00		0.95	0.65		0.12
Lane Grp Cap(c), veh/h	195	2515	1354	356	2581	1410	124	0	77	110	0	0
V/C Ratio(X)	0.13	0.41	0.41	0.31	0.55	0.55	0.44	0.00	0.25	0.15	0.00	0.00
Avail Cap(c_a), veh/h	284	2515	1354	447	2581	1410	159	0	117	148	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.3	0.0	0.0	3.2	6.4	6.4	65.6	0.0	64.1	64.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.8	0.5	0.8	1.5	2.5	0.0	1.7	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.3	0.6	1.0	11.2	12.4	3.7	0.0	1.2	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.6	0.4	0.8	3.7	7.2	7.9	68.1	0.0	65.8	64.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	A	A
Approach Vol, veh/h		1599			2300			74			17	
Approach Delay, s/veh		0.7			7.3			67.5			64.7	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	114.8		14.4	12.7	112.9		14.4				
Change Period (Y+Rc), s	* 7.7	6.9		7.6	7.8	6.9		7.6				
Max Green Setting (Gmax), s	* 10	97.1		10.4	12.2	95.1		10.4				
Max Q Clear Time (g_c+I1), s	2.4	25.6		7.0	3.9	2.0		3.9				
Green Ext Time (p_c), s	0.0	44.9		0.0	0.1	26.5		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		6.0
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	954	414	0	1988	663	0	0	333	0	0	505
Future Volume (vph)	0	954	414	0	1988	663	0	0	333	0	0	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	9%	9%	9%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	954	414	0	1988	663	0	0	333	0	0	505
Future Vol, veh/h	0	954	414	0	1988	663	0	0	333	0	0	505
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Free
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	9	9	9	5	5	5
Mvmt Flow	0	1004	436	0	2093	698	0	0	351	0	0	532

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	-	0	-	-	-	0				-	-	-
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	-	-	-				-	-	-
Critical Hdwy	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-				-	-	-
Follow-up Hdwy	-	-	-	-	-	-				-	-	-
Pot Cap-1 Maneuver	0	-	0	0	-	0				0	0	0
Stage 1	0	-	0	0	-	0				0	0	0
Stage 2	0	-	0	0	-	0				0	0	0
Platoon blocked, %		-			-							
Mov Cap-1 Maneuver	-	-	-	-	-	-				-	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-				-	0	-
Stage 1	-	-	-	-	-	-				-	0	-
Stage 2	-	-	-	-	-	-				-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

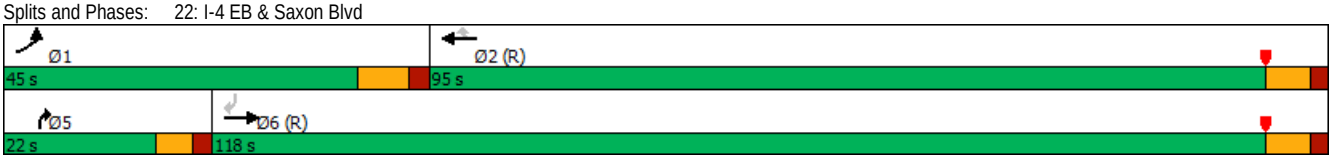
Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	961	0	0	1969	386	0	0	274	0	0	374
Future Volume (vph)	387	961	0	0	1969	386	0	0	274	0	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		3	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1263			900			503	
Travel Time (s)		24.2			19.1			13.6			7.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	430	1068	0	0	2188	429	0	0	304	0	0	416
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	45.0	118.0			95.0	95.0			22.0			118.0
Total Split (%)	32.1%	84.3%			67.9%	67.9%			15.7%			84.3%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	0.97	0.20			0.98	0.41			0.55			0.28
Control Delay	85.6	2.3			25.3	4.7			3.8			0.5
Queue Delay	0.0	0.0			0.0	0.0			0.0			0.0
Total Delay	85.6	2.3			25.3	4.7			3.8			0.5
Queue Length 50th (ft)	374	43			1116	42			0			0
Queue Length 95th (ft)	#612	70			#1234	m54			0			0
Internal Link Dist (ft)		1519			1183			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	449	5287			2241	1050			771			1501
Starvation Cap Reductn	0	0			0	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	0.96	0.20			0.98	0.41			0.39			0.28

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 104 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 22: I-4 EB & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	961	0	0	1969	386	0	0	274	0	0	374
Future Volume (vph)	387	961	0	0	1969	386	0	0	274	0	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.86			0.95	1.00			0.76			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1687	6108			3539	1583			3441			1565
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1687	6108			3539	1583			3441			1565
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	430	1068	0	0	2188	429	0	0	304	0	0	416
RTOR Reduction (vph)	0	0	0	0	0	47	0	0	291	0	0	56
Lane Group Flow (vph)	430	1068	0	0	2188	382	0	0	13	0	0	360
Heavy Vehicles (%)	7%	7%	7%	2%	2%	2%	7%	7%	7%	5%	5%	5%
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	36.8	121.2			88.7	88.7			6.0			121.2
Effective Green, g (s)	36.8	121.2			88.7	88.7			6.0			121.2
Actuated g/C Ratio	0.26	0.87			0.63	0.63			0.04			0.87
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	443	5287			2242	1002			147			1354
v/s Ratio Prot	c0.25	0.17			c0.62				0.00			
v/s Ratio Perm						0.24						0.23
v/c Ratio	0.97	0.20			0.98	0.38			0.09			0.27
Uniform Delay, d1	51.1	1.5			24.6	12.4			64.4			1.6
Progression Factor	0.99	1.45			0.61	0.47			1.00			1.00
Incremental Delay, d2	34.4	0.1			9.3	0.6			0.3			0.5
Delay (s)	85.1	2.3			24.2	6.4			64.6			2.1
Level of Service	F	A			C	A			E			A
Approach Delay (s)		26.1			21.3			64.6			2.1	
Approach LOS		C			C			E			A	

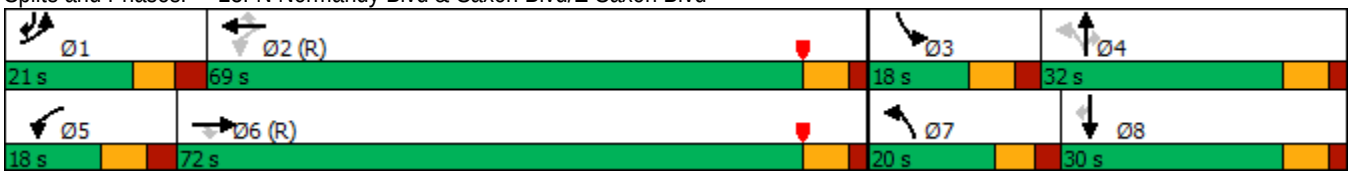
Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

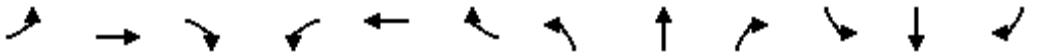
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	309	451	113	30	1199	172	219	201	18	87	161	497
Future Volume (vph)	309	451	113	30	1199	172	219	201	18	87	161	497
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	300		385
Storage Lanes	2		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1863			7172			3746			5140	
Travel Time (s)		31.8			122.3			73.0			100.1	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	8%	8%	8%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6	2		2	4		4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9	21.9	11.8	16.9	16.9	12.5	16.9	12.6
Total Split (s)	21.0	72.0	72.0	18.0	69.0	69.0	20.0	32.0	32.0	18.0	30.0	21.0
Total Split (%)	15.0%	51.4%	51.4%	12.9%	49.3%	49.3%	14.3%	22.9%	22.9%	12.9%	21.4%	15.0%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9	4.9	4.0	4.8	4.8	4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0	2.0	2.8	2.1	2.1	2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9	6.9	6.8	6.9	6.9	7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 48 (34%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	309	451	113	30	1199	172	219	201	18	87	161	497
Future Volume (veh/h)	309	451	113	30	1199	172	219	201	18	87	161	497
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	355	518	83	34	1378	192	252	231	16	100	185	405
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	8	8	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	315	1725	769	405	1576	703	278	393	333	147	309	413
Arrive On Green	0.03	0.17	0.17	0.03	0.44	0.44	0.09	0.21	0.21	0.04	0.17	0.17
Sat Flow, veh/h	3291	3385	1510	1781	3554	1585	1767	1856	1572	3456	1870	1585
Grp Volume(v), veh/h	355	518	83	34	1378	192	252	231	16	100	185	405
Grp Sat Flow(s),veh/h/ln	1646	1692	1510	1781	1777	1585	1767	1856	1572	1728	1870	1585
Q Serve(g_s), s	13.4	18.8	6.5	1.4	49.3	10.7	13.2	15.7	1.1	4.0	12.8	23.1
Cycle Q Clear(g_c), s	13.4	18.8	6.5	1.4	49.3	10.7	13.2	15.7	1.1	4.0	12.8	23.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1725	769	405	1576	703	278	393	333	147	309	413
V/C Ratio(X)	1.13	0.30	0.11	0.08	0.87	0.27	0.91	0.59	0.05	0.68	0.60	0.98
Avail Cap(c_a), veh/h	315	1725	769	485	1576	703	278	393	333	259	309	413
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.43	0.43	0.43	0.94	0.94	0.94	0.74	0.74	0.74
Uniform Delay (d), s/veh	67.8	36.4	31.3	20.4	35.4	24.7	48.0	49.7	43.9	66.1	54.2	51.4
Incr Delay (d2), s/veh	88.3	0.4	0.3	0.0	3.2	0.4	29.4	2.6	0.1	4.0	2.8	33.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.5	13.3	4.6	1.1	26.2	6.3	8.3	11.9	0.8	3.3	9.8	23.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	156.1	36.8	31.5	20.4	38.6	25.1	77.4	52.3	44.0	70.1	57.0	84.3
LnGrp LOS	F	D	C	C	D	C	E	D	D	E	E	F
Approach Vol, veh/h		956			1604			499			690	
Approach Delay, s/veh		80.6			36.6			64.7			75.0	
Approach LOS		F			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	69.0	13.5	36.5	11.8	78.2	20.0	30.0
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 13	62.1	* 11	25.1	* 9.9	65.1	* 13	23.1
Max Q Clear Time (g_c+I1), s	15.4	51.3	6.0	17.7	3.4	20.8	15.2	25.1
Green Ext Time (p_c), s	0.0	8.3	0.1	1.0	0.0	5.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.6
HCM 6th LOS	E

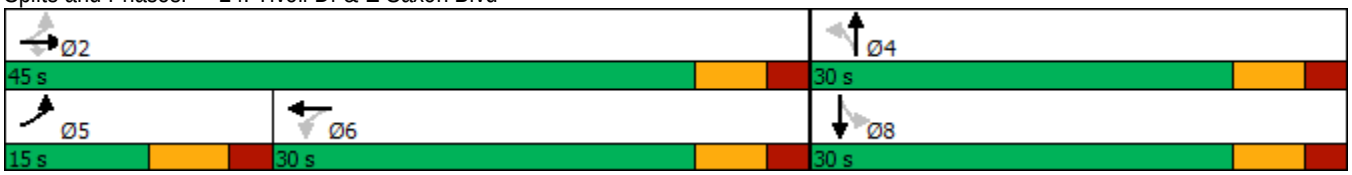
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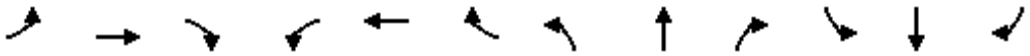
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	228	124	6	535	3	72	52	9	8	100	333
Future Volume (vph)	144	228	124	6	535	3	72	52	9	8	100	333
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390		0	120		0	265		0	150		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			30			30	
Link Distance (ft)		7172			644			704			1081	
Travel Time (s)		122.3			12.5			16.0			24.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	5	2	2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0	11.0	11.0	11.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	12.0	17.5	17.5	17.5	17.5		11.5	11.5		11.5	11.5	
Total Split (s)	15.0	45.0	45.0	30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	20.0%	60.0%	60.0%	40.0%	40.0%		40.0%	40.0%		40.0%	40.0%	
Yellow Time (s)	4.5	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	6.5	6.5	6.5	6.5		6.5	6.5		6.5	6.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min	Min	Min	Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 65.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 24: Tivoli Dr & E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	228	124	6	535	3	72	52	9	8	100	333
Future Volume (veh/h)	144	228	124	6	535	3	72	52	9	8	100	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1841	1841	1841	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	157	248	26	7	582	3	78	57	10	9	109	186
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	4	4	4	5	5	5	4	4	4
Cap, veh/h	287	992	841	488	635	3	223	402	71	422	162	277
Arrive On Green	0.08	0.53	0.53	0.35	0.35	0.35	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1767	1856	1572	1088	1830	9	1058	1513	265	1313	611	1042
Grp Volume(v), veh/h	157	248	26	7	0	585	78	0	67	9	0	295
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1088	0	1839	1058	0	1778	1313	0	1653
Q Serve(g_s), s	3.4	4.7	0.5	0.3	0.0	19.8	4.6	0.0	1.9	0.3	0.0	10.4
Cycle Q Clear(g_c), s	3.4	4.7	0.5	0.3	0.0	19.8	15.0	0.0	1.9	2.2	0.0	10.4
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.15	1.00		0.63
Lane Grp Cap(c), veh/h	287	992	841	488	0	639	223	0	472	422	0	439
V/C Ratio(X)	0.55	0.25	0.03	0.01	0.00	0.92	0.35	0.00	0.14	0.02	0.00	0.67
Avail Cap(c_a), veh/h	363	1097	929	503	0	663	323	0	641	546	0	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.8	8.1	7.2	14.0	0.0	20.4	28.1	0.0	18.3	19.1	0.0	21.4
Incr Delay (d2), s/veh	1.6	0.2	0.0	0.0	0.0	17.5	0.9	0.0	0.1	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	2.7	0.3	0.1	0.0	15.9	2.1	0.0	1.3	0.2	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	8.3	7.2	14.0	0.0	37.9	29.0	0.0	18.4	19.1	0.0	23.2
LnGrp LOS	B	A	A	B	A	D	C	A	B	B	A	C
Approach Vol, veh/h		431			592			145			304	
Approach Delay, s/veh		11.2			37.6			24.1			23.0	
Approach LOS		B			D			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		41.3		23.8	12.2	29.1		23.8				
Change Period (Y+Rc), s		6.5		6.5	7.0	6.5		6.5				
Max Green Setting (Gmax), s		38.5		23.5	8.0	23.5		23.5				
Max Q Clear Time (g_c+I1), s		6.7		17.0	5.4	21.8		12.4				
Green Ext Time (p_c), s		2.2		0.3	0.1	0.8		1.4				

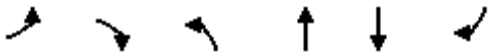
Intersection Summary												
HCM 6th Ctrl Delay			25.5									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	190	72	280	173	67	234
Future Volume (vph)	190	72	280	173	67	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	230			350
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			30	35	
Link Distance (ft)	908			839	3746	
Travel Time (s)	17.7			19.1	73.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	3.0	10.0	10.0	10.0
Minimum Split (s)	10.0	10.0	9.5	16.5	17.0	17.0
Total Split (s)	20.0	20.0	15.0	40.0	25.0	25.0
Total Split (%)	33.3%	33.3%	25.0%	66.7%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 46.1	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 25: N Normandy Blvd & Deltona Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	190	72	280	173	67	234
Future Volume (veh/h)	190	72	280	173	67	234
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	202	26	298	184	71	95
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	268	238	691	1002	429	364
Arrive On Green	0.15	0.15	0.16	0.54	0.23	0.23
Sat Flow, veh/h	1753	1560	1753	1841	1841	1560
Grp Volume(v), veh/h	202	26	298	184	71	95
Grp Sat Flow(s),veh/h/ln	1753	1560	1753	1841	1841	1560
Q Serve(g_s), s	4.7	0.6	4.9	2.2	1.3	2.1
Cycle Q Clear(g_c), s	4.7	0.6	4.9	2.2	1.3	2.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	268	238	691	1002	429	364
V/C Ratio(X)	0.75	0.11	0.43	0.18	0.17	0.26
Avail Cap(c_a), veh/h	572	509	758	1438	772	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	15.7	8.3	4.9	13.1	13.4
Incr Delay (d2), s/veh	3.2	0.1	0.3	0.1	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.3	1.0	2.5	1.0	0.8	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.6	15.8	8.6	5.0	13.3	13.8
LnGrp LOS	C	B	A	A	B	B
Approach Vol, veh/h	228			482	166	
Approach Delay, s/veh	20.1			7.2	13.6	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		30.3		12.5	13.3	17.0
Change Period (Y+Rc), s		* 7		6.0	6.5	7.0
Max Green Setting (Gmax), s		* 34		14.0	8.5	18.0
Max Q Clear Time (g_c+I1), s		4.2		6.7	6.9	4.1
Green Ext Time (p_c), s		1.1		0.3	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

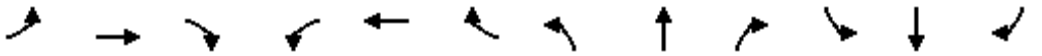
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1098	93	83	2581	83	64	8	69	65	23	150
Future Volume (vph)	100	1098	93	83	2581	83	64	8	69	65	23	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1044			1297			660			432	
Travel Time (s)		15.8			19.7			15.0			9.8	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	7%	7%	7%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	16.0	88.0	88.0	16.0	88.0		46.0	46.0		46.0	46.0	
Total Split (%)	10.7%	58.7%	58.7%	10.7%	58.7%		30.7%	30.7%		30.7%	30.7%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 82 (55%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1098	93	83	2581	83	64	8	69	65	23	150
Future Volume (veh/h)	100	1098	93	83	2581	83	64	8	69	65	23	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1856	1856	1856
Adj Flow Rate, veh/h	101	1109	94	84	2607	84	65	8	70	66	23	152
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	3	3	3
Cap, veh/h	175	3201	994	351	3206	103	131	27	239	216	36	240
Arrive On Green	0.03	0.63	0.63	0.06	1.00	1.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1767	5066	1572	1781	5083	163	1162	159	1388	1311	211	1394
Grp Volume(v), veh/h	101	1109	94	84	1740	951	65	0	78	66	0	175
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1781	1702	1841	1162	0	1546	1311	0	1605
Q Serve(g_s), s	3.1	15.5	3.5	2.5	0.0	0.0	8.3	0.0	6.6	6.9	0.0	15.2
Cycle Q Clear(g_c), s	3.1	15.5	3.5	2.5	0.0	0.0	23.5	0.0	6.6	13.5	0.0	15.2
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.90	1.00		0.87
Lane Grp Cap(c), veh/h	175	3201	994	351	2147	1161	131	0	267	216	0	277
V/C Ratio(X)	0.58	0.35	0.09	0.24	0.81	0.82	0.50	0.00	0.29	0.31	0.00	0.63
Avail Cap(c_a), veh/h	204	3201	994	383	2147	1161	228	0	397	327	0	412
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	0.54	0.54	0.54	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.0	13.0	10.8	9.6	0.0	0.0	68.5	0.0	54.1	60.0	0.0	57.7
Incr Delay (d2), s/veh	2.5	0.2	0.2	0.2	1.9	3.6	2.9	0.0	0.6	0.8	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	9.2	2.2	1.6	1.0	2.1	4.6	0.0	4.8	4.3	0.0	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.5	13.3	11.0	9.7	1.9	3.6	71.5	0.0	54.7	60.8	0.0	60.0
LnGrp LOS	B	B	B	A	A	A	E	A	D	E	A	E
Approach Vol, veh/h		1304			2775			143			241	
Approach Delay, s/veh		13.0			2.7			62.3			60.2	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	103.1		33.4	13.3	103.3		33.4				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	7.5	79.5		38.5	7.5	79.5		38.5				
Max Q Clear Time (g_c+I1), s	5.1	2.0		25.5	4.5	17.5		17.2				
Green Ext Time (p_c), s	0.0	62.7		0.5	0.0	15.3		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		10.7	
HCM 6th LOS		B	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1072	291	215	2900	241	80
Future Volume (vph)	1072	291	215	2900	241	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1297			6063	690	
Travel Time (s)	19.7			91.9	13.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	85.0		30.0	115.0	35.0	
Total Split (%)	56.7%		20.0%	76.7%	23.3%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 78 (52%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1072	291	215	2900	241	80
Future Volume (veh/h)	1072	291	215	2900	241	80
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1856	1900
Adj Flow Rate, veh/h	1117	303	224	3021	167	173
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	3	0
Cap, veh/h	2625	712	396	3929	219	199
Arrive On Green	1.00	1.00	0.06	0.77	0.12	0.12
Sat Flow, veh/h	4164	1084	1781	5274	1767	1610
Grp Volume(v), veh/h	952	468	224	3021	167	173
Grp Sat Flow(s),veh/h/ln	1702	1675	1781	1702	1767	1610
Q Serve(g_s), s	0.0	0.0	5.9	50.1	13.7	15.8
Cycle Q Clear(g_c), s	0.0	0.0	5.9	50.1	13.7	15.8
Prop In Lane		0.65	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2236	1100	396	3929	219	199
V/C Ratio(X)	0.43	0.43	0.57	0.77	0.76	0.87
Avail Cap(c_a), veh/h	2236	1100	552	3929	324	295
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	6.5	9.8	63.6	64.5
Incr Delay (d2), s/veh	0.6	1.1	0.1	0.1	6.0	16.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.6	2.7	16.9	10.7	20.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.6	1.1	6.6	9.9	69.6	80.8
LnGrp LOS	A	A	A	A	E	F
Approach Vol, veh/h	1420			3245	340	
Approach Delay, s/veh	0.8			9.7	75.3	
Approach LOS	A			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.9		26.1	16.9	107.0
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		106.5		27.5	21.5	76.5
Max Q Clear Time (g_c+I1), s		52.1		17.8	7.9	2.0
Green Ext Time (p_c), s		51.0		0.8	0.5	21.4

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

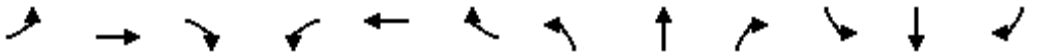
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	899	18	29	2095	5	155	34	17	39	15	457
Future Volume (vph)	87	899	18	29	2095	5	155	34	17	39	15	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1263			1863			570			439	
Travel Time (s)		21.5			28.2			13.0			10.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	18.0	70.0		18.0	70.0		52.0	52.0		52.0	52.0	52.0
Total Split (%)	12.9%	50.0%		12.9%	50.0%		37.1%	37.1%		37.1%	37.1%	37.1%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 78 (56%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	899	18	29	2095	5	155	34	17	39	15	457
Future Volume (veh/h)	87	899	18	29	2095	5	155	34	17	39	15	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	967	19	31	2253	5	167	37	18	42	16	491
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	2621	51	45	2492	6	300	383	186	362	131	511
Arrive On Green	0.13	1.00	1.00	0.03	0.63	0.63	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1767	5114	100	1781	5261	12	892	1188	578	987	407	1585
Grp Volume(v), veh/h	94	638	348	31	1458	800	167	0	55	58	0	491
Grp Sat Flow(s),veh/h/ln	1767	1689	1837	1781	1702	1868	892	0	1766	1394	0	1585
Q Serve(g_s), s	7.3	0.0	0.0	2.4	51.5	51.6	23.2	0.0	3.0	3.0	0.0	42.6
Cycle Q Clear(g_c), s	7.3	0.0	0.0	2.4	51.5	51.6	29.3	0.0	3.0	6.1	0.0	42.6
Prop In Lane	1.00		0.05	1.00		0.01	1.00		0.33	0.72		1.00
Lane Grp Cap(c), veh/h	114	1731	942	45	1612	885	300	0	570	494	0	511
V/C Ratio(X)	0.82	0.37	0.37	0.70	0.90	0.90	0.56	0.00	0.10	0.12	0.00	0.96
Avail Cap(c_a), veh/h	141	1731	942	141	1612	885	307	0	583	505	0	523
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.25	0.25	0.25	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.2	0.0	0.0	67.1	23.2	23.2	44.8	0.0	33.2	34.6	0.0	46.6
Incr Delay (d2), s/veh	25.5	0.6	1.1	4.8	2.5	4.4	2.7	0.0	0.1	0.1	0.0	29.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	0.3	0.5	2.0	20.3	22.6	9.2	0.0	2.4	2.6	0.0	28.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.7	0.6	1.1	72.0	25.7	27.5	47.5	0.0	33.3	34.7	0.0	76.1
LnGrp LOS	F	A	A	E	C	C	D	A	C	C	A	E
Approach Vol, veh/h		1080			2289			222			549	
Approach Delay, s/veh		8.2			26.9			44.0			71.7	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	78.7		50.9	15.8	73.2		50.9				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	63.1		* 46	11.2	63.1		* 46				
Max Q Clear Time (g_c+I1), s	4.4	2.0		44.6	9.3	53.6		31.3				
Green Ext Time (p_c), s	0.0	11.6		0.6	0.0	8.8		1.4				

Intersection Summary			
HCM 6th Ctrl Delay		28.9	
HCM 6th LOS		C	

Notes

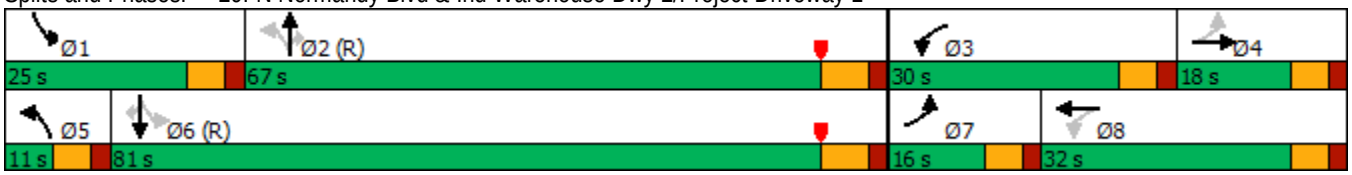
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

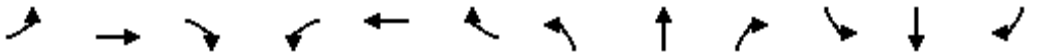
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	48	0	37	74	815	105	117	649	257
Future Volume (vph)	1	0	0	48	0	37	74	815	105	117	649	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	100		100	100		100
Storage Lanes	2		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		323			390			393			334	
Travel Time (s)		7.3			8.9			6.0			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	pm+pt			pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	25.0	25.0	11.0	25.0	25.0
Total Split (s)	16.0	18.0		30.0	32.0		11.0	67.0	67.0	25.0	81.0	81.0
Total Split (%)	11.4%	12.9%		21.4%	22.9%		7.9%	47.9%	47.9%	17.9%	57.9%	57.9%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	5.0	5.0	4.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	7.0	7.0	6.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 120 (86%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2/Project Driveway 1





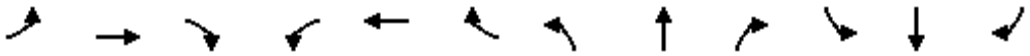
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	48	0	37	74	815	105	117	649	257
Future Volume (veh/h)	1	0	0	48	0	37	74	815	105	117	649	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	0	52	0	40	80	886	114	127	705	279
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	5	0	122	0	62	504	2650	1182	487	2654	1184
Arrive On Green	0.00	0.00	0.00	0.04	0.00	0.04	0.03	0.75	0.75	0.04	0.75	0.75
Sat Flow, veh/h	3456	1870	0	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	1	0	0	52	0	40	80	886	114	127	705	279
Grp Sat Flow(s),veh/h/ln	1728	1870	0	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	4.0	0.0	3.5	1.5	11.8	2.8	2.4	8.8	7.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	4.0	0.0	3.5	1.5	11.8	2.8	2.4	8.8	7.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	5	0	122	0	62	504	2650	1182	487	2654	1184
V/C Ratio(X)	0.01	0.00	0.00	0.42	0.00	0.65	0.16	0.33	0.10	0.26	0.27	0.24
Avail Cap(c_a), veh/h	357	160	0	361	0	294	506	2650	1182	666	2654	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.5	0.0	0.0	65.3	0.0	66.3	3.9	6.0	4.9	4.3	5.6	5.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.3	0.0	10.8	0.1	0.3	0.2	0.3	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	3.4	0.0	2.9	0.8	7.0	1.6	1.3	5.1	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	0.0	0.0	67.7	0.0	77.1	4.0	6.4	5.0	4.5	5.8	5.9
LnGrp LOS	E	A	A	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		1			92			1080			1111	
Approach Delay, s/veh		69.5			71.8			6.1			5.7	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	111.4	11.3	6.4	10.8	111.6	6.2	11.5
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	19.0	60.0	24.0	12.0	5.0	74.0	10.0	26.0
Max Q Clear Time (g_c+I1), s	4.4	13.8	6.0	0.0	3.5	10.8	2.0	5.5
Green Ext Time (p_c), s	0.2	7.2	0.1	0.0	0.0	6.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	0	0	23	148	1043	40	40	522	34
Future Volume (vph)	0	0	1	0	0	23	148	1043	40	40	522	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		100
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		341			399			381			393	
Travel Time (s)		7.8			9.1			5.8			6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

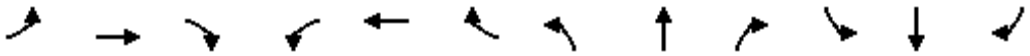
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	0	0	23	148	1043	40	40	522	34
Future Vol, veh/h	0	0	1	0	0	23	148	1043	40	40	522	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	0	0	25	161	1134	43	43	567	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	302	-	-	589	604	0	0	1177	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	694	0	0	452	970	-	-	589	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	694	-	-	452	970	-	-	589	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	13.4	1.1	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	694	452	589	-	-
HCM Lane V/C Ratio	0.166	-	-	0.002	0.055	0.074	-	-
HCM Control Delay (s)	9.4	-	-	10.2	13.4	11.6	-	-
HCM Lane LOS	A	-	-	B	B	B	-	-
HCM 95th %tile Q(veh)	0.6	-	-	0	0.2	0.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	26	0	32	29	1199	48	94	429	29
Future Volume (vph)	0	0	0	26	0	32	29	1199	48	94	429	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		314			391			4382			381	
Travel Time (s)		7.1			8.9			66.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	26	0	32	29	1199	48	94	429	29
Future Vol, veh/h	0	0	0	26	0	32	29	1199	48	94	429	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	28	0	35	32	1303	52	102	466	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1402	2105	249	1830	2095	678	498	0	0	1355	0	0
Stage 1	686	686	-	1393	1393	-	-	-	-	-	-	-
Stage 2	716	1419	-	437	702	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	100	51	751	48	52	395	1062	-	-	504	-	-
Stage 1	404	446	-	149	207	-	-	-	-	-	-	-
Stage 2	387	201	-	568	439	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	75	39	751	40	40	395	1062	-	-	504	-	-
Mov Cap-2 Maneuver	75	39	-	40	40	-	-	-	-	-	-	-
Stage 1	392	356	-	145	201	-	-	-	-	-	-	-
Stage 2	342	195	-	453	350	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	102.7	0.2	2.4
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1062	-	-	-	40	395	504	-	-
HCM Lane V/C Ratio	0.03	-	-	-	0.707	0.088	0.203	-	-
HCM Control Delay (s)	8.5	-	-	0	210.6	15	13.9	-	-
HCM Lane LOS	A	-	-	A	F	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	2.6	0.3	0.8	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	26	0	32	29	1199	48	94	429	29
Future Vol, veh/h	0	0	0	26	0	32	29	1199	48	94	429	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	28	0	35	32	1303	52	102	466	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2097	2105	482	2079	2095	1329	498	0	0	1355	0	0
Stage 1	686	686	-	1393	1393	-	-	-	-	-	-	-
Stage 2	1411	1419	-	686	702	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	38	51	584	39	52	189	1066	-	-	508	-	-
Stage 1	438	448	-	175	209	-	-	-	-	-	-	-
Stage 2	171	203	-	438	440	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	26	40	584	32	40	189	1066	-	-	508	-	-
Mov Cap-2 Maneuver	26	40	-	32	40	-	-	-	-	-	-	-
Stage 1	425	358	-	170	203	-	-	-	-	-	-	-
Stage 2	135	197	-	350	352	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	152	0.2	2.4
HCM LOS	A	F		

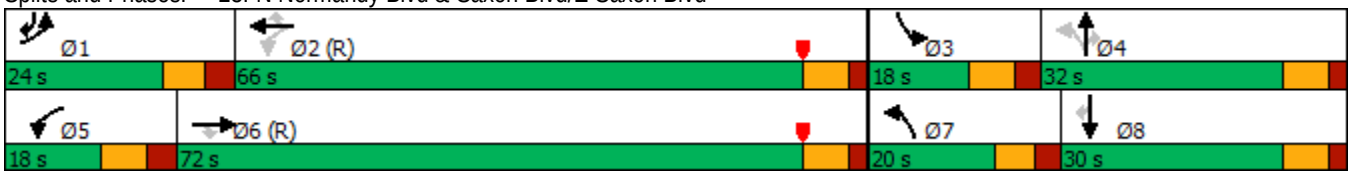
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1066	-	-	-	32	189	508	-	-
HCM Lane V/C Ratio	0.03	-	-	-	0.883	0.184	0.201	-	-
HCM Control Delay (s)	8.5	-	-	0	$ 304.3	28.3	13.9	-	-
HCM Lane LOS	A	-	-	A	F	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	3	0.7	0.7	-	-

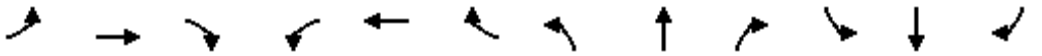
E-5: AM Peak Hour Buildout Traffic Conditions with Mitigation

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	309	451	113	30	1199	172	219	201	18	87	161	497
Future Volume (vph)	309	451	113	30	1199	172	219	201	18	87	161	497
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	300		385
Storage Lanes	2		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1863			7172			3746			5140	
Travel Time (s)		31.8			122.3			73.0			100.1	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	8%	8%	8%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6	2		2	4		4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9	21.9	11.8	16.9	16.9	12.5	16.9	12.6
Total Split (s)	24.0	72.0	72.0	18.0	66.0	66.0	20.0	32.0	32.0	18.0	30.0	24.0
Total Split (%)	17.1%	51.4%	51.4%	12.9%	47.1%	47.1%	14.3%	22.9%	22.9%	12.9%	21.4%	17.1%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9	4.9	4.0	4.8	4.8	4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0	2.0	2.8	2.1	2.1	2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9	6.9	6.8	6.9	6.9	7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 48 (34%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	309	451	113	30	1199	172	219	201	18	87	161	497
Future Volume (veh/h)	309	451	113	30	1199	172	219	201	18	87	161	497
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	355	518	83	34	1378	192	252	231	16	100	185	405
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	8	8	8	2	2	2	3	3	3	2	2	2
Cap, veh/h	386	1725	769	405	1500	669	278	393	333	147	309	447
Arrive On Green	0.04	0.17	0.17	0.03	0.42	0.42	0.09	0.21	0.21	0.04	0.17	0.17
Sat Flow, veh/h	3291	3385	1510	1781	3554	1585	1767	1856	1572	3456	1870	1585
Grp Volume(v), veh/h	355	518	83	34	1378	192	252	231	16	100	185	405
Grp Sat Flow(s),veh/h/ln	1646	1692	1510	1781	1777	1585	1767	1856	1572	1728	1870	1585
Q Serve(g_s), s	15.1	18.8	6.5	1.5	51.2	11.2	13.2	15.7	1.1	4.0	12.8	23.1
Cycle Q Clear(g_c), s	15.1	18.8	6.5	1.5	51.2	11.2	13.2	15.7	1.1	4.0	12.8	23.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	386	1725	769	405	1500	669	278	393	333	147	309	447
V/C Ratio(X)	0.92	0.30	0.11	0.08	0.92	0.29	0.91	0.59	0.05	0.68	0.60	0.91
Avail Cap(c_a), veh/h	386	1725	769	485	1500	669	278	393	333	259	309	447
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.43	0.43	0.43	0.94	0.94	0.94	0.74	0.74	0.74
Uniform Delay (d), s/veh	66.6	36.4	31.3	21.9	38.2	26.6	48.0	49.7	43.9	66.1	54.2	48.5
Incr Delay (d2), s/veh	26.1	0.4	0.3	0.0	5.1	0.5	29.4	2.6	0.1	4.0	2.8	17.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.6	13.3	4.6	1.1	27.7	6.5	8.3	11.9	0.8	3.3	9.8	21.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.7	36.8	31.5	21.9	43.3	27.1	77.4	52.3	44.0	70.1	57.0	66.0
LnGrp LOS	F	D	C	C	D	C	E	D	D	E	E	E
Approach Vol, veh/h		956			1604			499			690	
Approach Delay, s/veh		57.1			40.9			64.7			64.2	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	66.0	13.5	36.5	11.8	78.2	20.0	30.0
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 16	59.1	* 11	25.1	* 9.9	65.1	* 13	23.1
Max Q Clear Time (g_c+I1), s	17.1	53.2	6.0	17.7	3.5	20.8	15.2	25.1
Green Ext Time (p_c), s	0.0	4.8	0.1	1.0	0.0	5.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

Notes

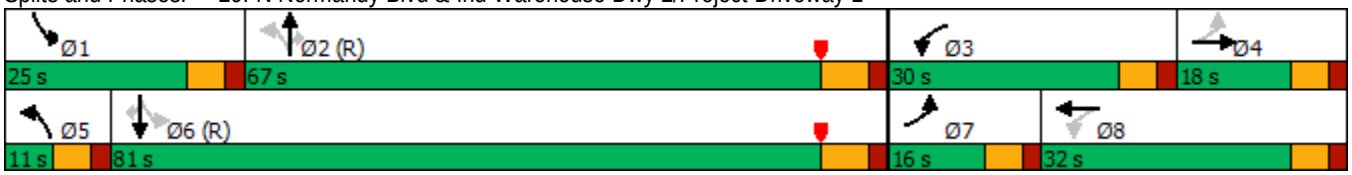
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

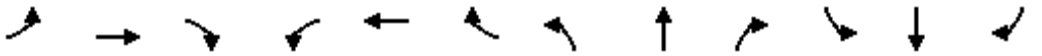
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	48	0	37	74	815	105	117	649	257
Future Volume (vph)	1	0	0	48	0	37	74	815	105	117	649	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	100		0	100		100
Storage Lanes	2		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		323			390			393			334	
Travel Time (s)		7.3			8.9			6.0			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	pm+pt			pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	25.0	25.0	11.0	25.0	25.0
Total Split (s)	16.0	18.0		30.0	32.0		11.0	67.0	67.0	25.0	81.0	81.0
Total Split (%)	11.4%	12.9%		21.4%	22.9%		7.9%	47.9%	47.9%	17.9%	57.9%	57.9%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	5.0	5.0	4.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	7.0	7.0	6.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 120 (86%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2/Project Driveway 1





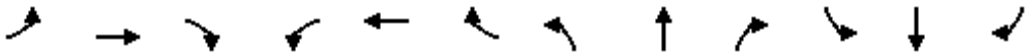
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	48	0	37	74	815	105	117	649	257
Future Volume (veh/h)	1	0	0	48	0	37	74	815	105	117	649	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	0	52	0	40	80	886	114	127	705	279
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	5	0	122	0	62	504	2650	1182	487	2654	1184
Arrive On Green	0.00	0.00	0.00	0.04	0.00	0.04	0.03	0.75	0.75	0.04	0.75	0.75
Sat Flow, veh/h	3456	1870	0	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	1	0	0	52	0	40	80	886	114	127	705	279
Grp Sat Flow(s),veh/h/ln	1728	1870	0	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	4.0	0.0	3.5	1.5	11.8	2.8	2.4	8.8	7.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	4.0	0.0	3.5	1.5	11.8	2.8	2.4	8.8	7.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	5	0	122	0	62	504	2650	1182	487	2654	1184
V/C Ratio(X)	0.01	0.00	0.00	0.42	0.00	0.65	0.16	0.33	0.10	0.26	0.27	0.24
Avail Cap(c_a), veh/h	357	160	0	361	0	294	506	2650	1182	666	2654	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.5	0.0	0.0	65.3	0.0	66.3	3.9	6.0	4.9	4.3	5.6	5.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.3	0.0	10.8	0.1	0.3	0.2	0.3	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	3.4	0.0	2.9	0.8	7.0	1.6	1.3	5.1	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	0.0	0.0	67.7	0.0	77.1	4.0	6.4	5.0	4.5	5.8	5.9
LnGrp LOS	E	A	A	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		1			92			1080			1111	
Approach Delay, s/veh		69.5			71.8			6.1			5.7	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	111.4	11.3	6.4	10.8	111.6	6.2	11.5
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	19.0	60.0	24.0	12.0	5.0	74.0	10.0	26.0
Max Q Clear Time (g_c+I1), s	4.4	13.8	6.0	0.0	3.5	10.8	2.0	5.5
Green Ext Time (p_c), s	0.2	7.2	0.1	0.0	0.0	6.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	0	0	23	148	1043	40	40	522	34
Future Volume (vph)	0	0	1	0	0	23	148	1043	40	40	522	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		100
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		341			399			381			393	
Travel Time (s)		7.8			9.1			5.8			6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	0	0	23	148	1043	40	40	522	34
Future Vol, veh/h	0	0	1	0	0	23	148	1043	40	40	522	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	0	0	25	161	1134	43	43	567	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	302	-	-	589	604	0	0	1177	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	694	0	0	452	970	-	-	589	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	694	-	-	452	970	-	-	589	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

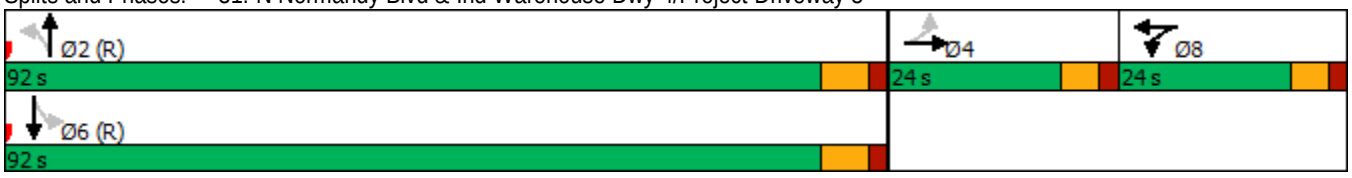
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	13.4	1.1	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	694	452	589	-	-
HCM Lane V/C Ratio	0.166	-	-	0.002	0.055	0.074	-	-
HCM Control Delay (s)	9.4	-	-	10.2	13.4	11.6	-	-
HCM Lane LOS	A	-	-	B	B	B	-	-
HCM 95th %tile Q(veh)	0.6	-	-	0	0.2	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	26	0	32	29	1199	48	94	429	29
Future Volume (vph)	0	0	0	26	0	32	29	1199	48	94	429	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		314			391			4382			381	
Travel Time (s)		7.1			8.9			66.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type				Split	NA		Perm	NA		Perm	NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4						2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		25.0	25.0		25.0	25.0	
Total Split (s)	24.0	24.0		24.0	24.0		92.0	92.0		92.0	92.0	
Total Split (%)	17.1%	17.1%		17.1%	17.1%		65.7%	65.7%		65.7%	65.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		6.0	6.0		7.0	7.0		7.0	7.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: N Normandy Blvd & Ind Warehouse Dwy 4/Project Driveway 3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	26	0	32	29	1199	48	94	429	29
Future Volume (veh/h)	0	0	0	26	0	32	29	1199	48	94	429	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	28	0	35	32	1303	52	102	466	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1	0	60	0	54	837	3042	121	372	2947	202
Arrive On Green	0.00	0.00	0.00	0.03	0.00	0.03	0.87	0.87	0.87	1.00	1.00	1.00
Sat Flow, veh/h	0	1870	0	1781	0	1585	900	3483	139	402	3375	231
Grp Volume(v), veh/h	0	0	0	28	0	35	32	664	691	102	245	253
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1585	900	1777	1845	402	1777	1829
Q Serve(g_s), s	0.0	0.0	0.0	2.2	0.0	3.1	0.7	10.6	10.6	4.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.2	0.0	3.1	0.7	10.6	10.6	15.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.08	1.00		0.13
Lane Grp Cap(c), veh/h	0	1	0	60	0	54	837	1552	1611	372	1552	1597
V/C Ratio(X)	0.00	0.00	0.00	0.46	0.00	0.65	0.04	0.43	0.43	0.27	0.16	0.16
Avail Cap(c_a), veh/h	0	240	0	229	0	204	837	1552	1611	372	1552	1597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	66.4	0.0	66.8	1.2	1.8	1.8	0.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.4	0.0	12.5	0.1	0.9	0.8	1.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	1.9	0.0	2.6	0.1	3.3	3.4	0.3	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	71.8	0.0	79.3	1.3	2.7	2.6	2.5	0.2	0.2
LnGrp LOS	A	A	A	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		0			63			1387			600	
Approach Delay, s/veh		0.0			76.0			2.6			0.6	
Approach LOS					E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	129.3	0.0	129.3	10.7
Change Period (Y+Rc), s	7.0	6.0	7.0	6.0
Max Green Setting (Gmax), s	85.0	18.0	85.0	18.0
Max Q Clear Time (g_c+I1), s	12.6	0.0	17.0	5.1
Green Ext Time (p_c), s	12.3	0.0	5.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.3
HCM 6th LOS	A

Arterial Level of Service: EB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FDOT Park & Ride	II	45	33.9	6.0	39.9	0.35	31.9	B
I-4 EB	II	45	37.1	2.3	39.4	0.40	36.1	A
Finland Dr	II	40	26.3	16.0	42.3	0.24	20.4	D
N Normandy Blvd	II	40	34.9	36.2	71.1	0.35	17.9	D
Total	II		132.2	60.5	192.7	1.34	25.0	C

Arterial Level of Service: WB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Finland Dr	II	45	33.9	23.3	57.2	0.35	22.2	C
I-4 EB	II	45	24.9	25.0	49.9	0.24	17.3	D
FDOT Park & Ride	II	45	37.1	4.6	41.7	0.40	34.1	B
Veterans Memorial Pk	II	45	33.9	14.7	48.6	0.35	26.2	C
Total	II		129.8	67.6	197.4	1.34	24.5	C

Arterial Level of Service: EB SR 472/Howland Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
N Kentucky Ave	I	55	17.7	39.1	56.8	0.18	11.6	F
I-4 WB	I	55	36.3	24.7	61.0	0.55	32.7	C
I-4 EB	I	50	30.3	25.6	55.9	0.32	20.6	E
E Graves Ave	I	50	26.1	36.7	62.8	0.28	15.8	F
Forest Edge Dr	I	45	20.6	8.2	28.8	0.20	24.7	D
Wolf Pack Run	I	45	25.5	18.0	43.5	0.25	20.3	E
Total	I		156.5	152.3	308.8	1.77	20.7	E

Arterial Level of Service: WB SR 472/Howland Blvd

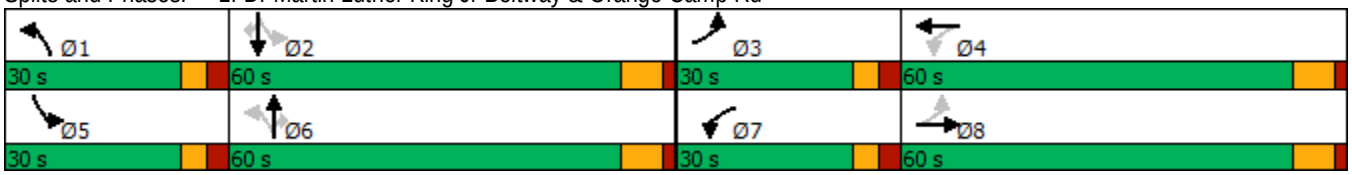
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Forest Edge Dr	I	45	25.5	18.5	44.0	0.25	20.1	E
E Graves Ave	I	45	20.6	39.0	59.6	0.20	11.9	F
I-4 EB	I	50	26.1	31.4	57.5	0.28	17.2	E
I-4 WB	I	50	30.3	8.2	38.5	0.32	29.8	C
Dr. Martin Luther Ki	I	55	36.3	33.2	69.5	0.55	28.7	C
Total	I		138.8	130.3	269.1	1.59	21.3	D

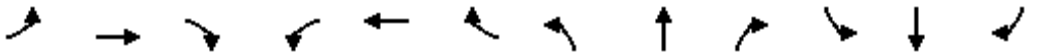
E-6: PM Peak Hour Existing Traffic Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	370	104	46	529	190	191	341	29	241	384	65
Future Volume (vph)	51	370	104	46	529	190	191	341	29	241	384	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6		6	2		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5		11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 140.4	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	370	104	46	529	190	191	341	29	241	384	65
Future Volume (veh/h)	51	370	104	46	529	190	191	341	29	241	384	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	54	389	95	48	557	188	201	359	18	254	404	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	113	583	142	276	532	179	276	420	356	320	462	392
Arrive On Green	0.03	0.40	0.40	0.03	0.40	0.40	0.10	0.23	0.23	0.13	0.25	0.25
Sat Flow, veh/h	1781	1452	355	1767	1327	448	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	54	0	484	48	0	745	201	359	18	254	404	43
Grp Sat Flow(s),veh/h/ln	1781	0	1807	1767	0	1775	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	2.3	0.0	28.7	2.1	0.0	52.5	11.3	24.3	1.2	14.2	27.4	2.8
Cycle Q Clear(g_c), s	2.3	0.0	28.7	2.1	0.0	52.5	11.3	24.3	1.2	14.2	27.4	2.8
Prop In Lane	1.00		0.20	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	0	726	276	0	711	276	420	356	320	462	392
V/C Ratio(X)	0.48	0.00	0.67	0.17	0.00	1.05	0.73	0.86	0.05	0.79	0.87	0.11
Avail Cap(c_a), veh/h	374	0	726	537	0	711	409	743	630	412	743	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	32.0	25.0	0.0	39.3	36.1	48.7	39.7	35.0	47.2	38.0
Incr Delay (d2), s/veh	3.1	0.0	2.6	0.3	0.0	47.0	3.7	7.1	0.1	8.0	8.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	18.2	1.5	0.0	41.1	8.5	17.2	0.8	10.7	19.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	0.0	34.7	25.3	0.0	86.3	39.7	55.7	39.8	43.0	55.9	38.2
LnGrp LOS	D	A	C	C	A	F	D	E	D	D	E	D
Approach Vol, veh/h		538			793			578			701	
Approach Delay, s/veh		34.7			82.6			49.7			50.1	
Approach LOS		C			F			D			D	

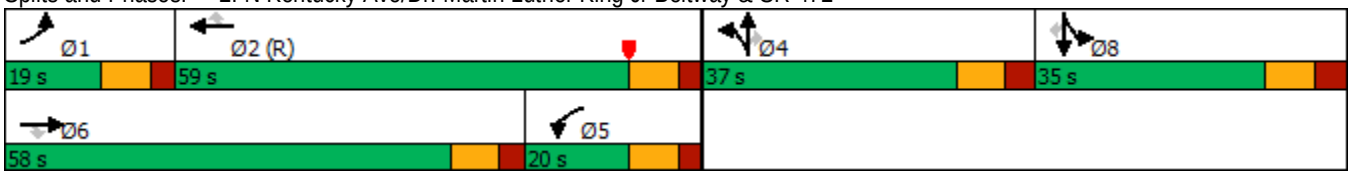
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.1	40.2	10.8	60.0	23.1	37.1	10.6	60.2
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	13.3	29.4	4.3	54.5	16.2	26.3	4.1	30.7
Green Ext Time (p_c), s	0.4	3.3	0.1	0.0	0.4	2.8	0.1	3.9

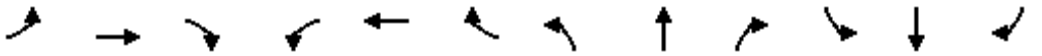
Intersection Summary	
HCM 6th Ctrl Delay	56.7
HCM 6th LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	1050	207	149	1011	335	83	240	39	237	267	38
Future Volume (vph)	58	1050	207	149	1011	335	83	240	39	237	267	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	15.8	15.8	15.8	16.4	16.4	16.4
Total Split (s)	19.0	58.0	58.0	20.0	59.0	59.0	37.0	37.0	37.0	35.0	35.0	35.0
Total Split (%)	12.7%	38.7%	38.7%	13.3%	39.3%	39.3%	24.7%	24.7%	24.7%	23.3%	23.3%	23.3%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3		8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	1050	207	149	1011	335	83	240	39	237	267	38
Future Volume (veh/h)	58	1050	207	149	1011	335	83	240	39	237	267	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	62	1129	106	160	1087	178	89	258	0	255	287	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	2	2	2
Cap, veh/h	79	1173	523	147	1301	580	88	254		297	312	
Arrive On Green	0.04	0.33	0.33	0.03	0.12	0.12	0.19	0.19	0.00	0.17	0.17	0.00
Sat Flow, veh/h	1781	3554	1585	1767	3526	1572	466	1351	1560	1781	1870	1585
Grp Volume(v), veh/h	62	1129	106	160	1087	178	347	0	0	255	287	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1767	1763	1572	1817	0	1560	1781	1870	1585
Q Serve(g_s), s	5.2	46.8	7.2	12.5	45.2	15.5	28.2	0.0	0.0	20.9	22.7	0.0
Cycle Q Clear(g_c), s	5.2	46.8	7.2	12.5	45.2	15.5	28.2	0.0	0.0	20.9	22.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.26		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	79	1173	523	147	1301	580	342	0		297	312	
V/C Ratio(X)	0.78	0.96	0.20	1.09	0.84	0.31	1.02	0.00		0.86	0.92	
Avail Cap(c_a), veh/h	127	1177	525	147	1301	580	342	0		304	319	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	0.86	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.0	49.3	36.1	72.9	61.4	48.4	60.9	0.0	0.0	60.8	61.5	0.0
Incr Delay (d2), s/veh	15.5	18.0	0.3	91.1	5.2	1.1	49.1	0.0	0.0	21.5	31.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.8	30.5	5.0	14.6	29.2	10.5	24.0	0.0	0.0	16.3	19.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.4	67.3	36.3	164.0	66.7	49.5	110.0	0.0	0.0	82.3	92.5	0.0
LnGrp LOS	F	E	D	F	E	D	F	A		F	F	
Approach Vol, veh/h		1297			1425			347	A		542	A
Approach Delay, s/veh		65.7			75.4			110.0			87.7	
Approach LOS		E			E			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	63.7		37.0	20.8	57.8		34.4				
Change Period (Y+Rc), s	* 8.3	* 8.3		* 8.8	* 8.3	* 8.3		9.4				
Max Green Setting (Gmax), s	* 11	* 51		* 28	* 12	* 50		25.6				
Max Q Clear Time (g_c+I1), s	7.2	47.2		30.2	14.5	48.8		24.7				
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	0.7		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		77.1
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

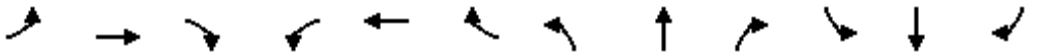
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	724	663	354	1211	0	0	0	0	341	0	275
Future Volume (vph)	0	724	663	354	1211	0	0	0	0	341	0	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	1		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		66.0	66.0	45.0	111.0					39.0		39.0
Total Split (%)		44.0%	44.0%	30.0%	74.0%					26.0%		26.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 38 (25%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	724	663	354	1211	0	0	0	0	341	0	275
Future Volume (veh/h)	0	724	663	354	1211	0	0	0	0	341	0	275
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	770	0	377	1288	0				363	0	125
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1783		400	2750	0				433	0	199
Arrive On Green	0.00	0.50	0.00	0.22	0.77	0.00				0.13	0.00	0.13
Sat Flow, veh/h	0	3647	1585	1781	3647	0				3456	0	1585
Grp Volume(v), veh/h	0	770	0	377	1288	0				363	0	125
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1728	0	1585
Q Serve(g_s), s	0.0	20.7	0.0	31.2	19.3	0.0				15.4	0.0	11.2
Cycle Q Clear(g_c), s	0.0	20.7	0.0	31.2	19.3	0.0				15.4	0.0	11.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1783		400	2750	0				433	0	199
V/C Ratio(X)	0.00	0.43		0.94	0.47	0.00				0.84	0.00	0.63
Avail Cap(c_a), veh/h	0	1783		450	2750	0				714	0	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.29	0.00	0.85	0.85	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.8	0.0	57.2	6.0	0.0				64.1	0.0	62.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	24.0	0.5	0.0				4.6	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	10.8	0.0	22.4	9.6	0.0				11.3	0.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.0	0.0	81.1	6.5	0.0				68.7	0.0	65.5
LnGrp LOS	A	C		F	A	A				E	A	E
Approach Vol, veh/h		770	A		1665						488	
Approach Delay, s/veh		24.0			23.4						67.9	
Approach LOS		C			C						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		123.2			40.8	82.4		26.8				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		103.9			37.9	58.9		31.0				
Max Q Clear Time (g_c+I1), s		21.3			33.2	22.7		17.4				
Green Ext Time (p_c), s		11.8			0.5	5.1		1.4				

Intersection Summary												
HCM 6th Ctrl Delay			31.0									
HCM 6th LOS			C									

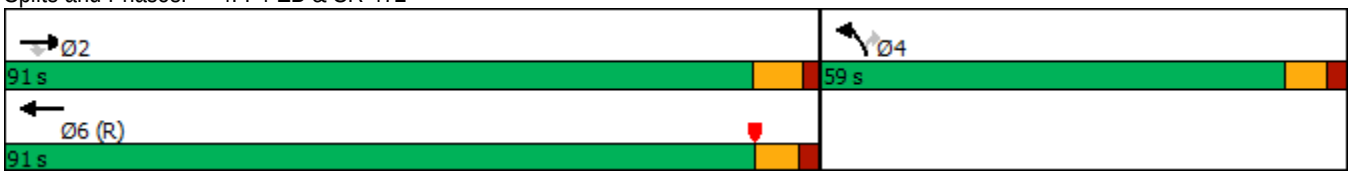
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1016	77	0	955	772	825
Future Volume (vph)	1016	77	0	955	772	825
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		620	1000		0	1000
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	50			50	45	
Link Distance (ft)	1685			1453	1185	
Travel Time (s)	23.0			19.8	18.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	4	
Permitted Phases		2				4
Detector Phase	2	2		6	4	4
Switch Phase						
Minimum Initial (s)	17.0	17.0		7.0	7.0	7.0
Minimum Split (s)	24.5	24.5		14.2	14.2	14.2
Total Split (s)	91.0	91.0		91.0	59.0	59.0
Total Split (%)	60.7%	60.7%		60.7%	39.3%	39.3%
Yellow Time (s)	5.5	5.5		4.8	4.8	4.8
All-Red Time (s)	2.0	2.0		2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.2	7.2	7.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 73 (49%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: I-4 EB & SR 472





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1016	77	0	955	772	825
Future Volume (veh/h)	1016	77	0	955	772	825
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1841	1856	1856
Adj Flow Rate, veh/h	1081	0	0	1016	821	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	4	3	3
Cap, veh/h	1985		0	2807	931	
Arrive On Green	0.56	0.00	0.00	0.56	0.27	0.00
Sat Flow, veh/h	3647	1585	0	5356	3428	1572
Grp Volume(v), veh/h	1081	0	0	1016	821	0
Grp Sat Flow(s),veh/h/ln	1777	1585	0	1675	1714	1572
Q Serve(g_s), s	28.9	0.0	0.0	16.8	34.4	0.0
Cycle Q Clear(g_c), s	28.9	0.0	0.0	16.8	34.4	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1985		0	2807	931	
V/C Ratio(X)	0.54		0.00	0.36	0.88	
Avail Cap(c_a), veh/h	1985		0	2807	1184	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.00	0.00	0.81	1.00	0.00
Uniform Delay (d), s/veh	21.0	0.0	0.0	18.3	52.3	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	7.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.5	0.0	0.0	10.0	21.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.3	0.0	0.0	18.6	59.7	0.0
LnGrp LOS	C		A	B	E	
Approach Vol, veh/h	1081	A		1016	821	A
Approach Delay, s/veh	21.3			18.6	59.7	
Approach LOS	C			B	E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.3		47.9		91.3
Change Period (Y+Rc), s		7.5		* 7.2		* 7.5
Max Green Setting (Gmax), s		83.5		* 52		* 84
Max Q Clear Time (g_c+I1), s		30.9		36.4		18.8
Green Ext Time (p_c), s		13.5		4.3		12.2

Intersection Summary	
HCM 6th Ctrl Delay	31.2
HCM 6th LOS	C

Notes

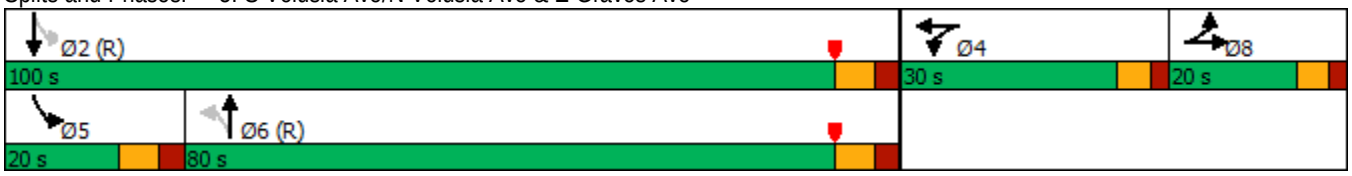
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

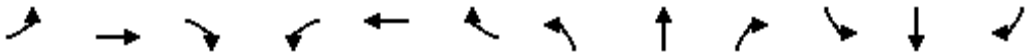
Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	33	18	122	61	135	14	1221	118	106	1039	38
Future Volume (vph)	25	33	18	122	61	135	14	1221	118	106	1039	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	245		0	280		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		329			1113			2670			438	
Travel Time (s)		9.0			25.3			45.5			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Split	NA		Split	NA		Perm	NA		pm+pt	NA	
Protected Phases	8	8		4	4			6		5	2	
Permitted Phases							6			2		
Detector Phase	8	8		4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	15.7	15.7		15.9	15.9		22.3	22.3		12.2	22.3	
Total Split (s)	20.0	20.0		30.0	30.0		80.0	80.0		20.0	100.0	
Total Split (%)	13.3%	13.3%		20.0%	20.0%		53.3%	53.3%		13.3%	66.7%	
Yellow Time (s)	3.4	3.4		3.8	3.8		4.5	4.5		4.4	4.5	
All-Red Time (s)	2.3	2.3		2.1	2.1		2.8	2.8		2.8	2.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		5.9	5.9		7.3	7.3		7.2	7.3	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Min	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 117 (78%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: S Volusia Ave/N Volusia Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	33	18	122	61	135	14	1221	118	106	1039	38
Future Volume (veh/h)	25	33	18	122	61	135	14	1221	118	106	1039	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	26	34	9	127	64	94	15	1272	117	110	1082	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	3	3	3
Cap, veh/h	112	90	24	196	75	111	330	2009	184	254	2435	81
Arrive On Green	0.06	0.06	0.06	0.11	0.11	0.11	0.62	0.62	0.62	0.04	0.70	0.70
Sat Flow, veh/h	1781	1425	377	1753	673	989	500	3265	299	1767	3482	116
Grp Volume(v), veh/h	26	0	43	127	0	158	15	685	704	110	548	570
Grp Sat Flow(s),veh/h/ln	1781	0	1802	1753	0	1663	500	1763	1802	1767	1763	1835
Q Serve(g_s), s	2.1	0.0	3.4	10.4	0.0	14.0	2.0	36.7	37.0	3.3	20.3	20.3
Cycle Q Clear(g_c), s	2.1	0.0	3.4	10.4	0.0	14.0	9.8	36.7	37.0	3.3	20.3	20.3
Prop In Lane	1.00		0.21	1.00		0.59	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	112	0	113	196	0	186	330	1084	1108	254	1233	1283
V/C Ratio(X)	0.23	0.00	0.38	0.65	0.00	0.85	0.05	0.63	0.64	0.43	0.44	0.44
Avail Cap(c_a), veh/h	170	0	172	282	0	267	330	1084	1108	341	1233	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.8	0.0	67.5	63.8	0.0	65.4	14.7	18.2	18.2	16.1	9.8	9.8
Incr Delay (d2), s/veh	1.0	0.0	2.1	3.6	0.0	15.9	0.3	2.8	2.8	1.2	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.0	3.0	8.5	0.0	11.1	0.5	21.4	22.0	2.4	12.3	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	0.0	69.6	67.4	0.0	81.3	15.0	21.0	21.0	17.3	11.0	11.0
LnGrp LOS	E	A	E	E	A	F	B	C	C	B	B	B
Approach Vol, veh/h		69			285			1404			1228	
Approach Delay, s/veh		68.9			75.1			20.9			11.5	
Approach LOS		E			E			C			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		112.2		22.7	12.6	99.6		15.1				
Change Period (Y+Rc), s		* 7.3		* 5.9	* 7.2	* 7.3		5.7				
Max Green Setting (Gmax), s		* 93		* 24	* 13	* 73		14.3				
Max Q Clear Time (g_c+I1), s		22.3		16.0	5.3	39.0		5.4				
Green Ext Time (p_c), s		8.9		0.8	0.1	12.0		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			23.3									
HCM 6th LOS			C									

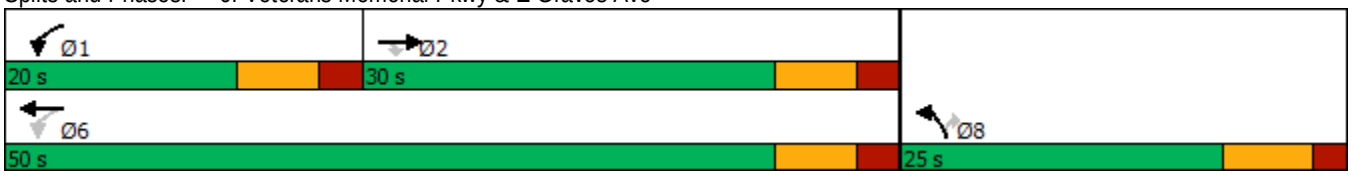
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	269	43	460	312	55	661
Future Volume (vph)	269	43	460	312	55	661
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases		2	6			8
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	7.0
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	14.0
Total Split (s)	30.0	30.0	20.0	50.0	25.0	25.0
Total Split (%)	40.0%	40.0%	26.7%	66.7%	33.3%	33.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	5.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 62.6	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	269	43	460	312	55	661
Future Volume (veh/h)	269	43	460	312	55	661
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1841	1841	1870	1870
Adj Flow Rate, veh/h	283	18	484	328	58	587
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	4	4	2	2
Cap, veh/h	371	314	521	934	493	439
Arrive On Green	0.20	0.20	0.20	0.51	0.28	0.28
Sat Flow, veh/h	1856	1572	1753	1841	1781	1585
Grp Volume(v), veh/h	283	18	484	328	58	587
Grp Sat Flow(s),veh/h/ln	1856	1572	1753	1841	1781	1585
Q Serve(g_s), s	9.4	0.6	13.0	6.9	1.6	18.0
Cycle Q Clear(g_c), s	9.4	0.6	13.0	6.9	1.6	18.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	371	314	521	934	493	439
V/C Ratio(X)	0.76	0.06	0.93	0.35	0.12	1.34
Avail Cap(c_a), veh/h	657	556	521	1218	493	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	21.0	16.7	9.6	17.6	23.5
Incr Delay (d2), s/veh	4.6	0.1	23.3	0.3	0.1	166.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	0.4	12.4	4.0	1.0	39.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.1	21.1	40.0	9.9	17.7	190.1
LnGrp LOS	C	C	D	A	B	F
Approach Vol, veh/h	301			812	645	
Approach Delay, s/veh	28.7			27.9	174.6	
Approach LOS	C			C	F	

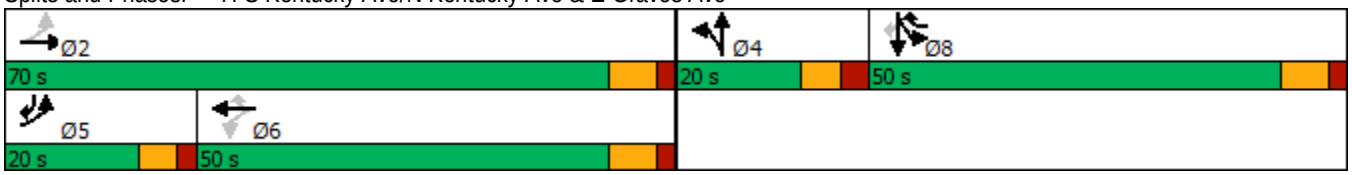
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	20.0	20.0				40.0	25.0
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	13.0	23.0				43.0	18.0
Max Q Clear Time (g_c+I1), s	15.0	11.4				8.9	20.0
Green Ext Time (p_c), s	0.0	1.6				2.8	0.0

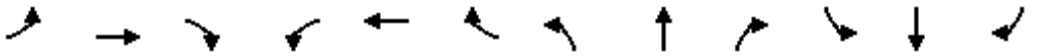
Intersection Summary	
HCM 6th Ctrl Delay	81.8
HCM 6th LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	691	20	19	436	121	15	9	17	278	19	322
Future Volume (vph)	243	691	20	19	436	121	15	9	17	278	19	322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			3280			535			4220	
Travel Time (s)		26.0			49.7			14.6			63.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6	8	4	4		8	8	5
Permitted Phases	2			6		6						8
Detector Phase	5	2		6	6	8	4	4		8	8	5
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	5.0
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	11.0
Total Split (s)	20.0	70.0		50.0	50.0	50.0	20.0	20.0		50.0	50.0	20.0
Total Split (%)	14.3%	50.0%		35.7%	35.7%	35.7%	14.3%	14.3%		35.7%	35.7%	14.3%
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	6.0
Lead/Lag	Lead			Lag	Lag							Lead
Lead-Lag Optimize?	Yes			Yes	Yes							Yes
Recall Mode	None	Min		Min	Min	None	None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 106.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	691	20	19	436	121	15	9	17	278	19	322
Future Volume (veh/h)	243	691	20	19	436	121	15	9	17	278	19	322
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	267	759	21	21	479	106	16	10	6	305	21	223
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	362	910	25	183	584	821	38	24	14	369	387	522
Arrive On Green	0.12	0.51	0.51	0.31	0.31	0.31	0.04	0.04	0.04	0.21	0.21	0.21
Sat Flow, veh/h	1767	1797	50	687	1856	1572	883	552	331	1781	1870	1585
Grp Volume(v), veh/h	267	0	780	21	479	106	32	0	0	305	21	223
Grp Sat Flow(s),veh/h/ln	1767	0	1847	687	1856	1572	1767	0	0	1781	1870	1585
Q Serve(g_s), s	8.3	0.0	31.2	2.3	20.6	3.0	1.5	0.0	0.0	14.2	0.8	9.5
Cycle Q Clear(g_c), s	8.3	0.0	31.2	17.0	20.6	3.0	1.5	0.0	0.0	14.2	0.8	9.5
Prop In Lane	1.00		0.03	1.00		1.00	0.50		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	362	0	935	183	584	821	77	0	0	369	387	522
V/C Ratio(X)	0.74	0.00	0.83	0.11	0.82	0.13	0.42	0.00	0.00	0.83	0.05	0.43
Avail Cap(c_a), veh/h	433	0	1347	309	924	1108	266	0	0	887	931	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	18.2	32.5	27.3	10.6	40.2	0.0	0.0	32.8	27.5	22.6
Incr Delay (d2), s/veh	5.3	0.0	3.8	0.4	4.4	0.1	3.6	0.0	0.0	4.8	0.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	0.0	17.9	0.7	14.0	2.7	1.3	0.0	0.0	10.3	0.6	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	22.0	32.9	31.8	10.7	43.8	0.0	0.0	37.5	27.5	23.2
LnGrp LOS	C	A	C	C	C	B	D	A	A	D	C	C
Approach Vol, veh/h		1047			606			32			549	
Approach Delay, s/veh		22.6			28.1			43.8			31.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		50.7		10.8	16.5	34.2		24.9				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		63.0		13.0	14.0	43.0		43.0				
Max Q Clear Time (g_c+I1), s		33.2		3.5	10.3	22.6		16.2				
Green Ext Time (p_c), s		8.5		0.1	0.3	4.6		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			26.6									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	548	404	198	392	181	181
Future Volume (vph)	548	404	198	392	181	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		630	400		200	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	3280			551	7144	
Travel Time (s)	49.7			8.3	108.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		5.0	12.0	7.0	7.0
Minimum Split (s)	19.0		12.0	19.0	13.0	13.0
Total Split (s)	45.0		20.0	65.0	25.0	25.0
Total Split (%)	50.0%		22.2%	72.2%	27.8%	27.8%
Yellow Time (s)	5.0		5.0	5.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0		7.0	7.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	Min		None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 72.1	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	548	404	198	392	181	181
Future Volume (veh/h)	548	404	198	392	181	181
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1841	1870	1870
Adj Flow Rate, veh/h	583	342	211	417	193	71
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	4	4	2	2
Cap, veh/h	869	509	410	1152	260	232
Arrive On Green	0.40	0.40	0.10	0.63	0.15	0.15
Sat Flow, veh/h	2249	1264	1753	1841	1781	1585
Grp Volume(v), veh/h	481	444	211	417	193	71
Grp Sat Flow(s),veh/h/ln	1777	1643	1753	1841	1781	1585
Q Serve(g_s), s	12.6	12.6	3.6	6.3	5.9	2.3
Cycle Q Clear(g_c), s	12.6	12.6	3.6	6.3	5.9	2.3
Prop In Lane		0.77	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	716	662	410	1152	260	232
V/C Ratio(X)	0.67	0.67	0.51	0.36	0.74	0.31
Avail Cap(c_a), veh/h	1184	1094	634	1872	593	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	13.9	9.8	5.2	23.3	21.8
Incr Delay (d2), s/veh	1.6	1.7	1.0	0.3	4.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	7.0	1.8	2.5	4.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.5	15.6	10.8	5.4	27.4	22.5
LnGrp LOS	B	B	B	A	C	C
Approach Vol, veh/h	925			628	264	
Approach Delay, s/veh	15.6			7.2	26.1	
Approach LOS	B			A	C	

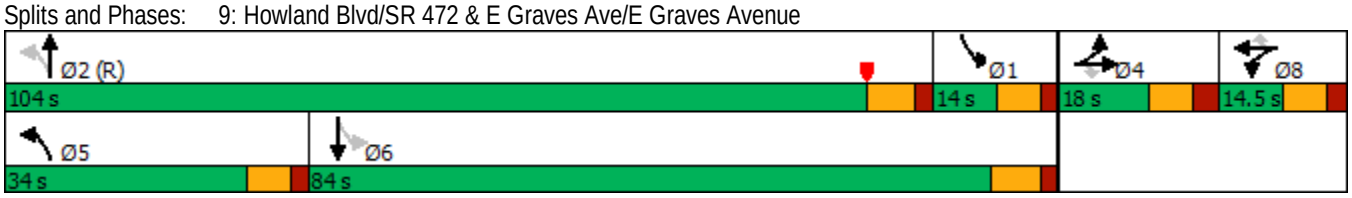
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		42.7		14.3	12.7	30.0
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		58.0		19.0	13.0	38.0
Max Q Clear Time (g_c+I1), s		8.3		7.9	5.6	14.6
Green Ext Time (p_c), s		3.9		0.6	0.3	8.4

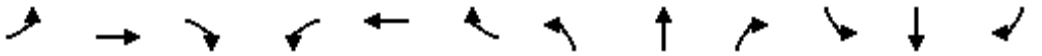
Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	20	611	52	27	106	340	807	14	55	1600	210
Future Volume (vph)	86	20	611	52	27	106	340	807	14	55	1600	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			363			1073			1453	
Travel Time (s)		12.6			8.3			16.3			19.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)	39%											
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2			6		
Detector Phase	4	4	4	8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0		7.0	17.0	
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.5	12.0	24.5		14.0	24.5	
Total Split (s)	18.0	18.0	18.0	14.5	14.5	14.5	34.0	104.0		14.0	84.0	
Total Split (%)	12.0%	12.0%	12.0%	9.6%	9.6%	9.6%	22.6%	69.1%		9.3%	55.8%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5		5.0	5.5	
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.5	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.5	7.0	7.5		7.0	7.5	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 150.5	
Actuated Cycle Length: 150.5	
Offset: 88.5 (59%), Referenced to phase 2:NBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave/E Graves Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	20	611	52	27	106	340	807	14	55	1600	210
Future Volume (veh/h)	86	20	611	52	27	106	340	807	14	55	1600	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	106	0	0	55	28	112	358	849	15	58	1684	213
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	3	3	3	2	2	2
Cap, veh/h	163	0		83	87	74	366	1048	19	811	1677	208
Arrive On Green	0.05	0.00	0.00	0.05	0.05	0.05	0.18	0.30	0.30	0.41	0.53	0.53
Sat Flow, veh/h	3534	0	1572	1781	1870	1585	1767	3544	63	1781	3181	395
Grp Volume(v), veh/h	106	0	0	55	28	112	358	422	442	58	926	971
Grp Sat Flow(s),veh/h/ln	1767	0	1572	1781	1870	1585	1767	1763	1844	1781	1777	1799
Q Serve(g_s), s	4.4	0.0	0.0	4.6	2.2	7.0	27.0	33.3	33.3	0.0	77.2	79.1
Cycle Q Clear(g_c), s	4.4	0.0	0.0	4.6	2.2	7.0	27.0	33.3	33.3	0.0	77.2	79.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.22
Lane Grp Cap(c), veh/h	163	0		83	87	74	366	521	545	811	937	949
V/C Ratio(X)	0.65	0.00		0.66	0.32	1.51	0.98	0.81	0.81	0.07	0.99	1.02
Avail Cap(c_a), veh/h	236	0		83	87	74	366	1134	1186	811	937	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	0.89	0.89	0.89	0.17	0.17	0.17
Uniform Delay (d), s/veh	70.4	0.0	0.0	70.3	69.2	71.5	52.0	48.9	48.9	23.7	35.0	35.5
Incr Delay (d2), s/veh	4.3	0.0	0.0	17.8	2.1	288.8	38.4	11.5	11.1	0.0	9.6	18.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	0.0	4.5	2.0	15.0	22.3	22.2	23.0	1.9	37.2	41.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	0.0	0.0	88.1	71.3	360.3	90.5	60.5	60.0	23.7	44.7	54.0
LnGrp LOS	E	A		F	E	F	F	E	E	C	D	F
Approach Vol, veh/h		106	A		195			1222			1955	
Approach Delay, s/veh		74.7			242.0			69.1			48.7	
Approach LOS		E			F			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	68.7	51.9		14.9	34.0	86.6		14.5				
Change Period (Y+Rc), s	7.5	* 7.5		8.0	7.0	7.5		7.5				
Max Green Setting (Gmax), s	7.0	* 97		10.0	27.0	76.5		7.0				
Max Q Clear Time (g_c+I1), s	2.0	35.3		6.4	29.0	81.1		9.0				
Green Ext Time (p_c), s	0.0	9.1		0.1	0.0	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		67.5
HCM 6th LOS		E

Notes

User approved volume balancing among the lanes for turning movement.

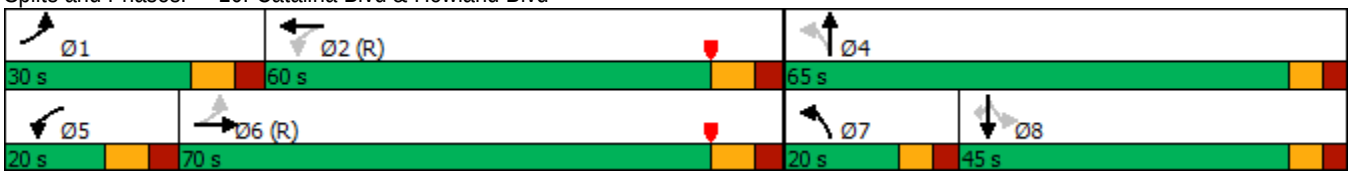
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

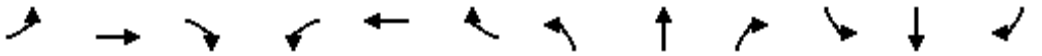
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	483	1107	54	40	589	63	51	71	30	91	71	264
Future Volume (vph)	483	1107	54	40	589	63	51	71	30	91	71	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6031			1895			1021			5049	
Travel Time (s)		91.4			28.7			23.2			98.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases	6			2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	30.0	70.0		20.0	60.0		20.0	65.0		45.0	45.0	45.0
Total Split (%)	19.4%	45.2%		12.9%	38.7%		12.9%	41.9%		29.0%	29.0%	29.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	483	1107	54	40	589	63	51	71	30	91	71	264
Future Volume (veh/h)	483	1107	54	40	589	63	51	71	30	91	71	264
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	493	1130	54	41	601	63	52	72	24	93	72	96
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	619	2230	107	316	1734	181	177	231	77	167	173	146
Arrive On Green	0.13	0.65	0.65	0.03	0.54	0.54	0.03	0.17	0.17	0.09	0.09	0.09
Sat Flow, veh/h	1781	3453	165	1767	3221	337	1781	1342	447	1300	1870	1585
Grp Volume(v), veh/h	493	581	603	41	328	336	52	0	96	93	72	96
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1767	1763	1795	1781	0	1790	1300	1870	1585
Q Serve(g_s), s	18.6	26.7	26.7	1.6	16.4	16.4	4.0	0.0	7.3	10.8	5.6	9.1
Cycle Q Clear(g_c), s	18.6	26.7	26.7	1.6	16.4	16.4	4.0	0.0	7.3	10.8	5.6	9.1
Prop In Lane	1.00		0.09	1.00		0.19	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	619	1148	1189	316	949	966	177	0	309	167	173	146
V/C Ratio(X)	0.80	0.51	0.51	0.13	0.35	0.35	0.29	0.00	0.31	0.56	0.42	0.66
Avail Cap(c_a), veh/h	627	1148	1189	400	949	966	264	0	670	365	459	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.15	0.15	0.15	0.86	0.86	0.86	1.00	0.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	13.6	14.4	14.4	15.4	20.3	20.3	59.2	0.0	56.1	68.8	66.4	68.0
Incr Delay (d2), s/veh	1.1	0.2	0.2	0.2	0.9	0.8	0.9	0.0	0.6	3.7	2.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	12.2	12.6	1.2	10.8	11.0	3.4	0.0	6.1	6.8	5.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	14.7	14.7	15.5	21.2	21.2	60.1	0.0	56.7	72.5	68.4	74.2
LnGrp LOS	B	B	B	B	C	C	E	A	E	E	E	E
Approach Vol, veh/h		1677			705			148			261	
Approach Delay, s/veh		14.7			20.8			57.9			72.0	
Approach LOS		B			C			E			E	

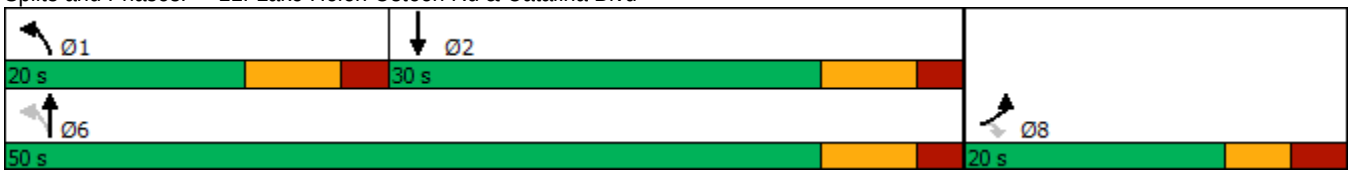
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.3	92.0		33.7	12.6	108.6	12.4	21.3				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	21.5	51.5		58.0	11.5	61.5	13.0	38.0				
Max Q Clear Time (g_c+I1), s	20.6	18.4		9.3	3.6	28.7	6.0	12.8				
Green Ext Time (p_c), s	0.2	6.0		0.6	0.0	12.8	0.0	1.5				

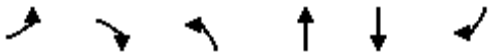
Intersection Summary			
HCM 6th Ctrl Delay		23.9	
HCM 6th LOS		C	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	146	407	200	179	314	86
Future Volume (vph)	146	407	200	179	314	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	185	0	240			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			45	45	
Link Distance (ft)	5049			5467	741	
Travel Time (s)	98.4			82.8	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	8		1	6	2	
Permitted Phases		8	6			
Detector Phase	8	8	1	6	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	
Minimum Split (s)	11.5	11.5	12.5	22.5	22.5	
Total Split (s)	20.0	20.0	20.0	50.0	30.0	
Total Split (%)	28.6%	28.6%	28.6%	71.4%	42.9%	
Yellow Time (s)	3.5	3.5	5.0	5.0	5.0	
All-Red Time (s)	3.0	3.0	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	7.5	7.5	7.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	Min	Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 64.9	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 11: Lake Helen Osteen Rd & Catalina Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	146	407	200	179	314	86
Future Volume (veh/h)	146	407	200	179	314	86
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	199	217	195	341	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	313	279	438	1047	444	95
Arrive On Green	0.18	0.18	0.12	0.56	0.30	0.30
Sat Flow, veh/h	1781	1585	1781	1870	1493	320
Grp Volume(v), veh/h	159	199	217	195	0	414
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	0	1813
Q Serve(g_s), s	4.3	6.3	4.0	2.7	0.0	11.0
Cycle Q Clear(g_c), s	4.3	6.3	4.0	2.7	0.0	11.0
Prop In Lane	1.00	1.00	1.00			0.18
Lane Grp Cap(c), veh/h	313	279	438	1047	0	539
V/C Ratio(X)	0.51	0.71	0.50	0.19	0.00	0.77
Avail Cap(c_a), veh/h	454	404	643	1500	0	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	20.6	11.0	5.7	0.0	16.9
Incr Delay (d2), s/veh	2.7	7.0	1.8	0.2	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.3	4.7	2.4	1.2	0.0	7.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.5	27.6	12.8	5.9	0.0	22.2
LnGrp LOS	C	C	B	A	A	C
Approach Vol, veh/h	358			412	414	
Approach Delay, s/veh	25.3			9.6	22.2	
Approach LOS	C			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	13.9	23.3				37.2	15.8
Change Period (Y+Rc), s	7.5	7.5				7.5	6.5
Max Green Setting (Gmax), s	12.5	22.5				42.5	13.5
Max Q Clear Time (g_c+I1), s	6.0	13.0				4.7	8.3
Green Ext Time (p_c), s	0.7	2.8				2.1	1.1

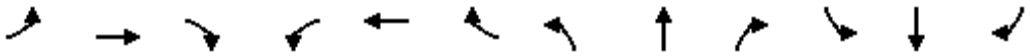
Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	874	318	38	475	1	204	1	54	1	0	2
Future Volume (vph)	1	874	318	38	475	1	204	1	54	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			209	
Travel Time (s)		28.7			22.0			170.9			4.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	90.0	90.0	90.0	20.0	110.0		25.0	45.0		20.0	20.0	
Total Split (%)	58.1%	58.1%	58.1%	12.9%	71.0%		16.1%	29.0%		12.9%	12.9%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 28 (18%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	874	318	38	475	1	204	1	54	1	0	2
Future Volume (veh/h)	1	874	318	38	475	1	204	1	54	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	920	316	40	500	1	215	1	26	1	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	596	1207	1023	382	1327	3	321	11	296	90	0	0
Arrive On Green	1.00	1.00	1.00	0.03	0.72	0.72	0.12	0.19	0.19	0.03	0.00	0.00
Sat Flow, veh/h	897	1870	1585	1767	1851	4	1781	59	1535	1383	0	0
Grp Volume(v), veh/h	1	920	316	40	0	501	215	0	27	1	0	0
Grp Sat Flow(s),veh/h/ln	897	1870	1585	1767	0	1855	1781	0	1594	1383	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	16.2	17.9	0.0	2.2	0.1	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	0.0	1.1	0.0	16.2	17.9	0.0	2.2	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.96	1.00		0.00
Lane Grp Cap(c), veh/h	596	1207	1023	382	0	1329	321	0	308	90	0	0
V/C Ratio(X)	0.00	0.76	0.31	0.10	0.00	0.38	0.67	0.00	0.09	0.01	0.00	0.00
Avail Cap(c_a), veh/h	596	1207	1023	483	0	1329	321	0	391	162	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	1.00	0.00	1.00	0.86	0.00	0.86	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.1	0.0	0.0	7.9	0.0	8.5	62.1	0.0	51.4	72.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.5	0.2	0.1	0.0	0.8	5.1	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	1.5	0.1	0.8	0.0	10.3	12.9	0.0	1.6	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.1	2.5	0.2	8.0	0.0	9.3	67.2	0.0	51.5	72.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	D	E	A	A
Approach Vol, veh/h		1237			541			242			1	
Approach Delay, s/veh		1.9			9.2			65.4			72.8	
Approach LOS		A			A			E			E	

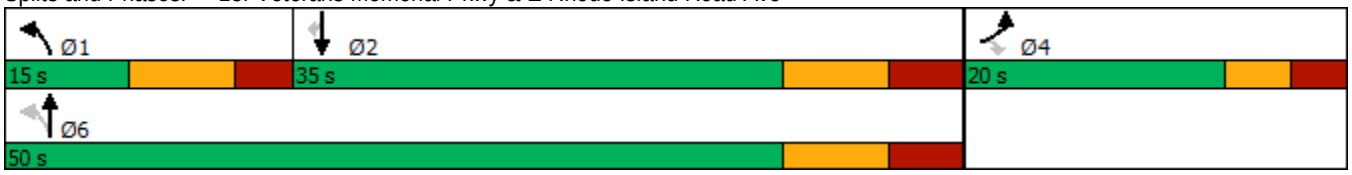
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		118.1		36.9	11.1	107.0	25.0	11.9				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		103.0		38.0	13.0	83.0	18.0	13.0				
Max Q Clear Time (g_c+I1), s		18.2		4.2	3.1	7.1	19.9	2.1				
Green Ext Time (p_c), s		5.0		0.1	0.0	17.3	0.0	0.0				

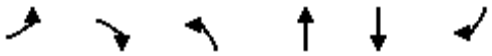
Intersection Summary												
HCM 6th Ctrl Delay			11.5									
HCM 6th LOS			B									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	176	258	285	673	444	131
Future Volume (vph)	176	258	285	673	444	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	13.5	13.5	13.5	20.5	20.5	20.5
Total Split (s)	20.0	20.0	15.0	50.0	35.0	35.0
Total Split (%)	28.6%	28.6%	21.4%	71.4%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 62.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	176	258	285	673	444	131
Future Volume (veh/h)	176	258	285	673	444	131
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	187	117	303	716	472	88
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	255	227	395	1072	574	486
Arrive On Green	0.14	0.14	0.12	0.57	0.31	0.31
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	187	117	303	716	472	88
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	5.7	3.8	6.3	14.9	13.2	2.3
Cycle Q Clear(g_c), s	5.7	3.8	6.3	14.9	13.2	2.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	255	227	395	1072	574	486
V/C Ratio(X)	0.73	0.52	0.77	0.67	0.82	0.18
Avail Cap(c_a), veh/h	427	380	395	1345	847	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	22.3	12.9	8.3	18.1	14.3
Incr Delay (d2), s/veh	4.1	1.8	8.8	0.9	4.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	2.5	4.8	6.5	8.8	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.2	24.2	21.6	9.2	22.3	14.5
LnGrp LOS	C	C	C	A	C	B
Approach Vol, veh/h	304			1019	560	
Approach Delay, s/veh	26.0			12.9	21.1	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	26.8		14.6		41.8
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	6.5	25.5		13.5		40.5
Max Q Clear Time (g_c+I1), s	8.3	15.2		7.7		16.9
Green Ext Time (p_c), s	0.0	2.1		0.5		4.5

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

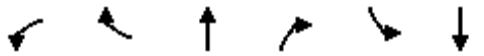
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	211	107	218	390	217	322
Future Volume (vph)	211	107	218	390	217	322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2576
Travel Time (s)	153.9		100.1			39.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	20.0	20.0	35.0		15.0	50.0
Total Split (%)	28.6%	28.6%	50.0%		21.4%	71.4%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 52.9
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	211	107	218	390	217	322
Future Volume (veh/h)	211	107	218	390	217	322
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	57	229	254	228	339
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	298	265	473	422	495	1896
Arrive On Green	0.17	0.17	0.27	0.27	0.12	0.53
Sat Flow, veh/h	1781	1585	1870	1585	1781	3647
Grp Volume(v), veh/h	222	57	229	254	228	339
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	5.3	1.4	4.9	6.3	3.7	2.2
Cycle Q Clear(g_c), s	5.3	1.4	4.9	6.3	3.7	2.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	298	265	473	422	495	1896
V/C Ratio(X)	0.75	0.22	0.48	0.60	0.46	0.18
Avail Cap(c_a), veh/h	533	474	1103	984	610	3426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	16.2	14.0	14.5	9.3	5.4
Incr Delay (d2), s/veh	3.7	0.4	0.8	1.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	0.1	3.1	3.6	1.8	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.6	16.6	14.7	15.9	10.0	5.5
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h	279		483			567
Approach Delay, s/veh	20.6		15.3			7.3
Approach LOS	C		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		31.1		14.0	12.1	19.0
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 44		13.5	8.5	28.0
Max Q Clear Time (g_c+I1), s		4.2		7.3	5.7	8.3
Green Ext Time (p_c), s		2.1		0.4	0.2	2.8

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	318	176	5	175	105	11
Future Volume (vph)	318	176	5	175	105	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	30	
Link Distance (ft)	7900			4491	5182	
Travel Time (s)	153.9			87.5	117.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	318	176	5	175	105	11
Future Vol, veh/h	318	176	5	175	105	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	346	191	5	190	114	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	537	0	642	442
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	200	-
Critical Hdwy	-	-	4.12	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.218	-	3.536	3.336
Pot Cap-1 Maneuver	-	-	1031	-	435	611
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	829	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1031	-	433	611
Mov Cap-2 Maneuver	-	-	-	-	433	-
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	16.3
HCM LOS			C

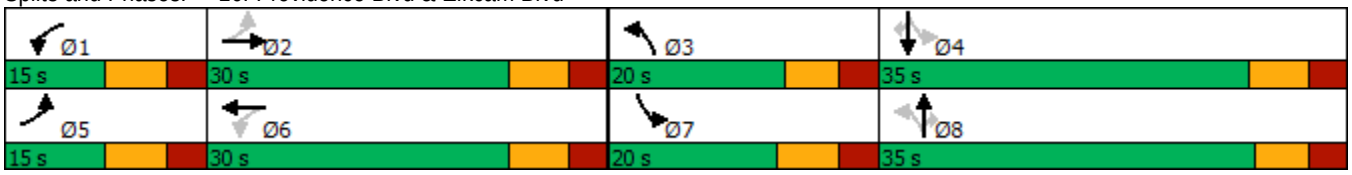
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	445	-	-	1031	-
HCM Lane V/C Ratio	0.283	-	-	0.005	-
HCM Control Delay (s)	16.3	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0	-

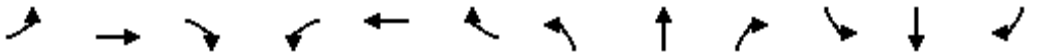
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	218	68	181	154	41	46	255	188	67	321	35
Future Volume (vph)	68	218	68	181	154	41	46	255	188	67	321	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	225		0	235		365	220		295
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		4491			6416			3965			8772	
Travel Time (s)		87.5			125.0			77.2			170.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	12.5	13.5		12.5	13.5		12.0	13.0	13.0	12.5	13.5	13.5
Total Split (s)	15.0	30.0		15.0	30.0		20.0	35.0	35.0	20.0	35.0	35.0
Total Split (%)	15.0%	30.0%		15.0%	30.0%		20.0%	35.0%	35.0%	20.0%	35.0%	35.0%
Yellow Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.5	7.5		7.0	7.0	7.0	7.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 81.2
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 16: Providence Blvd & Elkcam Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	218	68	181	154	41	46	255	188	67	321	35
Future Volume (veh/h)	68	218	68	181	154	41	46	255	188	67	321	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	232	57	193	164	35	49	271	109	71	341	16
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	389	292	72	345	380	81	241	402	341	279	433	367
Arrive On Green	0.05	0.20	0.20	0.11	0.25	0.25	0.04	0.22	0.22	0.05	0.23	0.23
Sat Flow, veh/h	1781	1450	356	1781	1494	319	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	72	0	289	193	0	199	49	271	109	71	341	16
Grp Sat Flow(s),veh/h/ln	1781	0	1806	1781	0	1813	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.2	0.0	10.8	6.0	0.0	6.5	1.5	9.4	4.1	2.1	12.1	0.6
Cycle Q Clear(g_c), s	2.2	0.0	10.8	6.0	0.0	6.5	1.5	9.4	4.1	2.1	12.1	0.6
Prop In Lane	1.00		0.20	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	389	0	364	345	0	461	241	402	341	279	433	367
V/C Ratio(X)	0.19	0.00	0.79	0.56	0.00	0.43	0.20	0.67	0.32	0.25	0.79	0.04
Avail Cap(c_a), veh/h	483	0	575	345	0	577	491	740	627	499	727	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.5	0.0	26.8	20.0	0.0	22.1	20.9	25.5	23.4	20.4	25.5	21.1
Incr Delay (d2), s/veh	0.2	0.0	5.6	2.0	0.0	0.9	0.4	2.8	0.8	0.5	4.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	8.5	4.4	0.0	4.9	1.1	7.6	2.7	1.6	9.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	32.4	22.1	0.0	23.0	21.3	28.3	24.2	20.9	30.0	21.2
LnGrp LOS	C	A	C	C	A	C	C	C	C	C	C	C
Approach Vol, veh/h		361			392			429			428	
Approach Delay, s/veh		30.1			22.5			26.4			28.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	21.8	10.1	23.9	11.3	25.5	11.3	22.7
Change Period (Y+Rc), s	7.5	7.5	7.0	7.5	7.5	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	7.5	22.5	13.0	27.5	7.5	22.5	12.5	* 28
Max Q Clear Time (g_c+I1), s	8.0	12.8	3.5	14.1	4.2	8.5	4.1	11.4
Green Ext Time (p_c), s	0.0	1.5	0.0	2.3	0.0	1.2	0.1	2.4

Intersection Summary	
HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

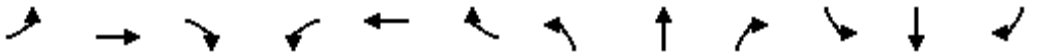
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	101	42	245	92	120	39	412	395	121	365	4
Future Volume (vph)	9	101	42	245	92	120	39	412	395	121	365	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	440		0	200		0	221		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35			35	
Link Distance (ft)		5182			627			844			3965	
Travel Time (s)		117.8			12.2			16.4			77.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0	12.0	5.0	12.0	
Minimum Split (s)	14.0	14.0		13.5	13.5		18.5	18.5	18.5	13.0	20.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0	35.0	20.0	55.0	
Total Split (%)	35.3%	35.3%		35.3%	35.3%		41.2%	41.2%	41.2%	23.5%	64.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.5	4.5	
All-Red Time (s)	3.0	3.0		2.5	2.5		2.5	2.5	2.5	3.5	3.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		6.5	6.5		6.5	6.5	6.5	8.0	8.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Min	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 70.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 17: Providence Blvd & Fort Smith Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	101	42	245	92	120	39	412	395	121	365	4
Future Volume (veh/h)	9	101	42	245	92	120	39	412	395	121	365	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	9	106	27	258	97	86	41	434	289	127	384	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	3	3	3
Cap, veh/h	353	416	106	402	269	238	405	565	479	295	896	9
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.07	0.49	0.49
Sat Flow, veh/h	1182	1415	361	1257	914	810	996	1870	1585	1767	1833	19
Grp Volume(v), veh/h	9	0	133	258	0	183	41	434	289	127	0	388
Grp Sat Flow(s),veh/h/ln	1182	0	1776	1257	0	1724	996	1870	1585	1767	0	1852
Q Serve(g_s), s	0.4	0.0	3.9	13.6	0.0	5.8	2.1	14.6	10.7	3.2	0.0	9.4
Cycle Q Clear(g_c), s	6.2	0.0	3.9	17.6	0.0	5.8	2.1	14.6	10.7	3.2	0.0	9.4
Prop In Lane	1.00		0.20	1.00		0.47	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	353	0	522	402	0	507	405	565	479	295	0	905
V/C Ratio(X)	0.03	0.00	0.25	0.64	0.00	0.36	0.10	0.77	0.60	0.43	0.00	0.43
Avail Cap(c_a), veh/h	399	0	592	460	0	587	515	772	654	477	0	1261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	18.6	25.3	0.0	19.2	17.5	21.9	20.6	15.7	0.0	11.4
Incr Delay (d2), s/veh	0.0	0.0	0.3	2.5	0.0	0.4	0.2	4.0	1.7	1.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	2.8	7.2	0.0	4.0	0.8	10.6	6.9	2.2	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	18.8	27.7	0.0	19.7	17.7	25.9	22.3	16.7	0.0	11.9
LnGrp LOS	C	A	B	C	A	B	B	C	C	B	A	B
Approach Vol, veh/h		142			441			764			515	
Approach Delay, s/veh		19.0			24.4			24.1			13.1	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.9	28.9		27.3		41.7		27.3				
Change Period (Y+Rc), s	8.0	* 8		7.0		8.0		* 7				
Max Green Setting (Gmax), s	12.0	* 29		23.0		47.0		* 24				
Max Q Clear Time (g_c+I1), s	5.2	16.6		8.2		11.4		19.6				
Green Ext Time (p_c), s	0.2	4.3		0.6		3.7		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		20.7	
HCM 6th LOS		C	

Notes

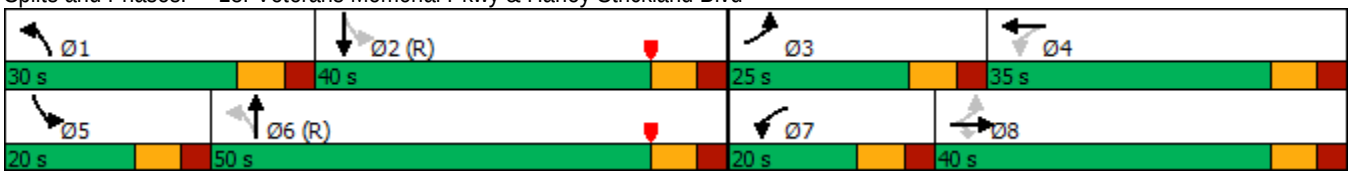
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

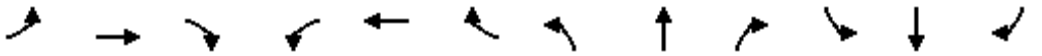
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	323	57	249	75	41	107	218	431	2	111	447	159
Future Volume (vph)	323	57	249	75	41	107	218	431	2	111	447	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	235		235	250		0	435		0	340		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		642			673			1923			1581	
Travel Time (s)		10.9			15.3			32.8			26.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	3	8	8	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	16.0		5.0	16.0	
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5		12.5	23.5		12.5	23.5	
Total Split (s)	25.0	40.0	40.0	20.0	35.0		30.0	50.0		20.0	40.0	
Total Split (%)	19.2%	30.8%	30.8%	15.4%	26.9%		23.1%	38.5%		15.4%	30.8%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 40 (31%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 18: Veterans Memorial Pkwy & Harley Strickland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	323	57	249	75	41	107	218	431	2	111	447	159
Future Volume (veh/h)	323	57	249	75	41	107	218	431	2	111	447	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	336	59	119	78	43	75	227	449	2	116	466	134
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	320	320	271	254	54	94	490	1788	8	543	1256	359
Arrive On Green	0.13	0.17	0.17	0.05	0.09	0.09	0.09	0.50	0.50	0.05	0.46	0.46
Sat Flow, veh/h	1781	1870	1585	1781	612	1067	1767	3599	16	1781	2728	779
Grp Volume(v), veh/h	336	59	119	78	0	118	227	220	231	116	302	298
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1678	1767	1763	1853	1781	1777	1730
Q Serve(g_s), s	17.5	3.5	8.7	5.1	0.0	9.0	8.7	9.3	9.3	4.4	14.4	14.6
Cycle Q Clear(g_c), s	17.5	3.5	8.7	5.1	0.0	9.0	8.7	9.3	9.3	4.4	14.4	14.6
Prop In Lane	1.00		1.00	1.00		0.64	1.00		0.01	1.00		0.45
Lane Grp Cap(c), veh/h	320	320	271	254	0	148	490	875	920	543	818	797
V/C Ratio(X)	1.05	0.18	0.44	0.31	0.00	0.80	0.46	0.25	0.25	0.21	0.37	0.37
Avail Cap(c_a), veh/h	320	468	396	333	0	355	644	875	920	626	818	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	46.1	48.3	50.2	0.0	58.1	16.5	18.8	18.8	16.8	22.8	22.9
Incr Delay (d2), s/veh	64.2	0.3	1.1	0.7	0.0	9.3	0.1	0.1	0.1	0.2	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.3	3.0	6.3	4.2	0.0	7.6	4.3	4.7	4.9	3.2	10.2	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	112.4	46.4	49.4	50.9	0.0	67.4	16.5	18.9	18.9	17.0	24.1	24.2
LnGrp LOS	F	D	D	D	A	E	B	B	B	B	C	C
Approach Vol, veh/h		514			196			678			716	
Approach Delay, s/veh		90.3			60.9			18.1			23.0	
Approach LOS		F			E			B			C	

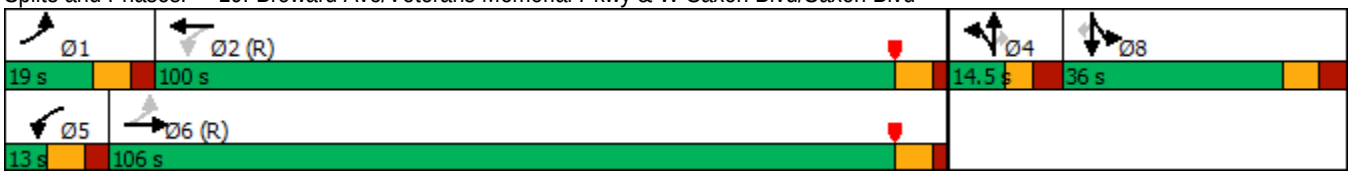
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	67.4	25.0	19.0	14.0	72.1	14.3	29.7
Change Period (Y+Rc), s	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max Green Setting (Gmax), s	22.5	32.5	17.5	27.5	12.5	42.5	12.5	32.5
Max Q Clear Time (g_c+I1), s	10.7	16.6	19.5	11.0	6.4	11.3	7.1	10.7
Green Ext Time (p_c), s	0.5	4.3	0.0	0.5	0.1	3.8	0.1	0.6

Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	1248	29	139	1050	447	47	48	101	667	68	189
Future Volume (vph)	204	1248	29	139	1050	447	47	48	101	667	68	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)										45%		
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	6			2					4			8
Detector Phase	1	6		5	2		4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	15.3	15.3	15.3
Total Split (s)	19.0	106.0		13.0	100.0		14.5	14.5	14.5	36.0	36.0	36.0
Total Split (%)	11.2%	62.5%		7.7%	59.0%		8.6%	8.6%	8.6%	21.2%	21.2%	21.2%
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.5	4.5	4.5
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	8.3	8.3	8.3
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 124 (73%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	1248	29	139	1050	447	47	48	101	667	68	189
Future Volume (veh/h)	204	1248	29	139	1050	447	47	48	101	667	68	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	1314	22	146	1105	471	49	51	38	753	0	104
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	268	3010	50	277	1921	818	73	77	65	580	0	258
Arrive On Green	0.06	0.59	0.59	0.03	0.55	0.55	0.04	0.04	0.04	0.16	0.00	0.16
Sat Flow, veh/h	1767	5131	86	1767	3483	1483	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	215	865	471	146	1072	504	49	51	38	753	0	104
Grp Sat Flow(s),veh/h/ln	1767	1689	1840	1767	1689	1589	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	9.0	24.2	24.2	5.2	35.4	35.5	4.6	4.6	4.0	27.7	0.0	10.0
Cycle Q Clear(g_c), s	9.0	24.2	24.2	5.2	35.4	35.5	4.6	4.6	4.0	27.7	0.0	10.0
Prop In Lane	1.00		0.05	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	1981	1079	277	1863	876	73	77	65	580	0	258
V/C Ratio(X)	0.80	0.44	0.44	0.53	0.58	0.58	0.67	0.66	0.58	1.30	0.00	0.40
Avail Cap(c_a), veh/h	268	1981	1079	277	1863	876	73	77	65	580	0	258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	0.89	0.00	0.89
Uniform Delay (d), s/veh	25.1	19.5	19.5	20.2	25.0	25.0	80.4	80.3	80.1	71.2	0.0	63.7
Incr Delay (d2), s/veh	16.0	0.7	1.3	1.7	1.2	2.5	20.9	19.2	12.5	144.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	14.5	15.8	2.4	20.0	19.4	4.6	4.7	3.3	35.9	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	20.2	20.8	21.9	26.2	27.5	101.3	99.6	92.6	216.0	0.0	64.6
LnGrp LOS	D	C	C	C	C	C	F	F	F	F	A	E
Approach Vol, veh/h		1551			1722			138			857	
Approach Delay, s/veh		23.3			26.2			98.2			197.6	
Approach LOS		C			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.9	100.6		14.5	13.0	106.5		36.0				
Change Period (Y+Rc), s	7.9	6.8		7.5	7.8	6.8		8.3				
Max Green Setting (Gmax), s	11.1	93.2		7.0	5.2	99.2		27.7				
Max Q Clear Time (g_c+I1), s	11.0	37.5		6.6	7.2	26.2		29.7				
Green Ext Time (p_c), s	0.0	15.6		0.0	0.0	11.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		61.9
HCM 6th LOS		E

Notes

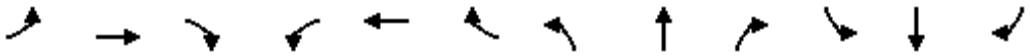
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1801	84	93	1431	24	61	0	100	35	5	15
Future Volume (vph)	35	1801	84	93	1431	24	61	0	100	35	5	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	365		0	390		0	105		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1867			487			266			246	
Travel Time (s)		28.3			7.4			6.0			5.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.7	17.9		12.8	17.9		14.6	14.6		14.6	14.6	
Total Split (s)	12.7	110.0		15.0	112.3		21.0	21.0		21.0	21.0	
Total Split (%)	8.7%	75.3%		10.3%	76.9%		14.4%	14.4%		14.4%	14.4%	
Yellow Time (s)	4.8	4.9		4.9	4.9		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.9	2.0		2.9	2.0		3.4	3.4		3.4	3.4	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.7	6.9		7.8	6.9		7.6	7.6			7.6	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 146	
Actuated Cycle Length: 146	
Offset: 31 (21%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: FDOT Park & Ride & Saxon Blvd





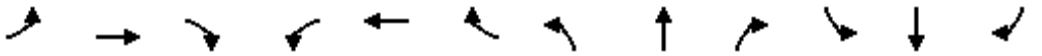
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1801	84	93	1431	24	61	0	100	35	5	15
Future Volume (veh/h)	35	1801	84	93	1431	24	61	0	100	35	5	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	1937	86	100	1539	25	66	0	42	38	5	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	311	3738	166	232	3898	63	151	0	107	92	12	7
Arrive On Green	0.03	0.75	0.75	0.03	0.75	0.75	0.07	0.00	0.07	0.07	0.07	0.07
Sat Flow, veh/h	1781	5012	222	1781	5175	84	1405	0	1585	706	180	103
Grp Volume(v), veh/h	38	1314	709	100	1012	552	66	0	42	48	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1830	1781	1702	1855	1405	0	1585	989	0	0
Q Serve(g_s), s	0.7	23.3	23.5	1.9	15.2	15.2	0.0	0.0	3.7	4.2	0.0	0.0
Cycle Q Clear(g_c), s	0.7	23.3	23.5	1.9	15.2	15.2	6.1	0.0	3.7	7.9	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.05	1.00		1.00	0.79		0.10
Lane Grp Cap(c), veh/h	311	2539	1365	232	2564	1397	151	0	107	111	0	0
V/C Ratio(X)	0.12	0.52	0.52	0.43	0.39	0.39	0.44	0.00	0.39	0.43	0.00	0.00
Avail Cap(c_a), veh/h	324	2539	1365	260	2564	1397	185	0	145	145	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.6	7.7	7.7	7.4	6.3	6.3	66.3	0.0	65.2	68.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.6	1.0	1.3	0.5	0.8	2.0	0.0	2.3	2.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	11.2	12.2	1.2	8.4	9.2	4.5	0.0	2.8	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.8	8.2	8.7	8.6	6.8	7.2	68.3	0.0	67.5	70.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	A	A
Approach Vol, veh/h		2061			1664			108			48	
Approach Delay, s/veh		8.3			7.0			68.0			70.8	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	116.9		17.5	12.7	115.8		17.5				
Change Period (Y+Rc), s	* 7.7	6.9		7.6	7.8	6.9		7.6				
Max Green Setting (Gmax), s	* 5	105.4		13.4	7.2	103.1		13.4				
Max Q Clear Time (g_c+I1), s	2.7	17.2		8.1	3.9	25.5		9.9				
Green Ext Time (p_c), s	0.0	25.7		0.1	0.1	41.1		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1693	465	0	1394	289	0	0	347	0	0	383
Future Volume (vph)	0	1693	465	0	1394	289	0	0	347	0	0	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	13

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	1693	465	0	1394	289	0	0	347	0	0	383
Future Vol, veh/h	0	1693	465	0	1394	289	0	0	347	0	0	383
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Stop
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	1782	489	0	1467	304	0	0	365	0	0	403

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	-	-	0			-	-	734
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	-	-	-			-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	-	-	-			-	-	3.33
Pot Cap-1 Maneuver	0	-	0	0	-	0			0	0	~ 360
Stage 1	0	-	0	0	-	0			0	0	-
Stage 2	0	-	0	0	-	0			0	0	-
Platoon blocked, %		-			-						
Mov Cap-1 Maneuver	-	-	-	-	-	-			-	0	~ 360
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	117.9
HCM LOS			F

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	360
HCM Lane V/C Ratio	-	-	1.12
HCM Control Delay (s)	-	-	117.9
HCM Lane LOS	-	-	F
HCM 95th %tile Q(veh)	-	-	15.3

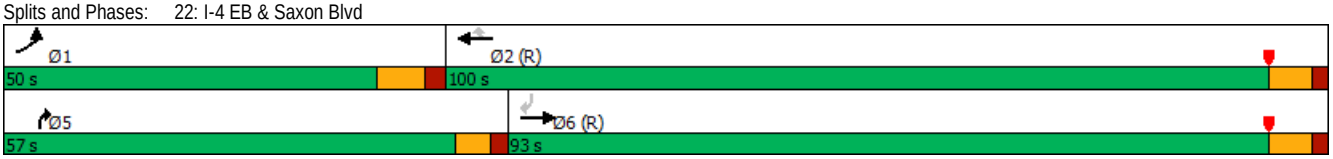
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

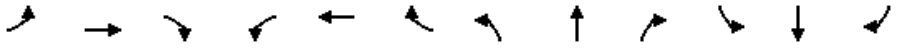
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	381	2587	0	0	1124	204	0	0	974	0	0	534
Future Volume (vph)	381	2587	0	0	1124	204	0	0	974	0	0	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		2	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1249			900			503	
Travel Time (s)		24.2			18.9			13.6			7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	405	2752	0	0	1196	217	0	0	1036	0	0	568
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	50.0	93.0			100.0	100.0			57.0			93.0
Total Split (%)	33.3%	62.0%			66.7%	66.7%			38.0%			62.0%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	0.90	0.94			0.52	0.20			1.07			0.41
Control Delay	77.7	37.5			17.1	5.3			95.7			0.9
Queue Delay	0.0	0.0			0.0	0.0			0.0			0.0
Total Delay	77.7	37.5			17.1	5.3			95.7			0.9
Queue Length 50th (ft)	380	882			334	25			~627			0
Queue Length 95th (ft)	#528	960			436	76			#779			0
Internal Link Dist (ft)		1519			1169			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	499	2922			2298	1084			966			1380
Starvation Cap Reductn	0	0			0	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	0.81	0.94			0.52	0.20			1.07			0.41

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 26 (17%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 22: I-4 EB & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	381	2587	0	0	1124	204	0	0	974	0	0	534
Future Volume (vph)	381	2587	0	0	1124	204	0	0	974	0	0	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.91			0.95	1.00			0.88			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	5085			3539	1583			2787			1611
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	5085			3539	1583			2787			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	405	2752	0	0	1196	217	0	0	1036	0	0	568
RTOR Reduction (vph)	0	0	0	0	0	57	0	0	18	0	0	242
Lane Group Flow (vph)	405	2752	0	0	1196	160	0	0	1018	0	0	326
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	38.1	86.2			97.4	97.4			51.0			86.2
Effective Green, g (s)	38.1	86.2			97.4	97.4			51.0			86.2
Actuated g/C Ratio	0.25	0.57			0.65	0.65			0.34			0.57
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	449	2922			2297	1027			947			925
v/s Ratio Prot	0.23	c0.54			0.34				c0.37			
v/s Ratio Perm						0.10						0.20
v/c Ratio	0.90	0.94			0.52	0.16			1.07			0.35
Uniform Delay, d1	54.1	29.6			13.9	10.3			49.5			17.0
Progression Factor	1.00	1.00			1.11	1.50			1.00			1.00
Incremental Delay, d2	21.0	7.7			0.8	0.3			51.4			1.1
Delay (s)	75.1	37.3			16.4	15.7			100.9			18.1
Level of Service	E	D			B	B			F			B
Approach Delay (s)		42.1			16.3			100.9			18.1	
Approach LOS		D			B			F			B	

Intersection Summary			
HCM 2000 Control Delay	43.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		

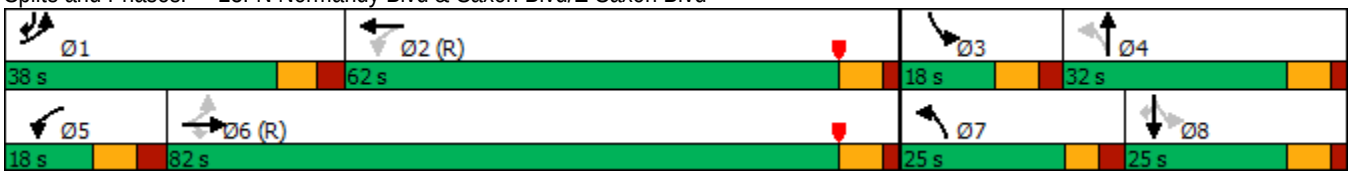
c Critical Lane Group

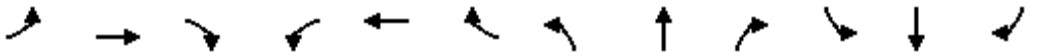
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	491	1421	335	33	674	64	191	192	47	108	184	283
Future Volume (vph)	491	1421	335	33	674	64	191	192	47	108	184	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	0		385
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1867			7172			3746			5140	
Travel Time (s)		31.8			122.3			73.0			100.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6		6	2			4			8		8
Detector Phase	1	6	6	5	2		7	4		3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		5.0	10.0		5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9		11.8	16.9		12.5	16.9	12.6
Total Split (s)	38.0	82.0	82.0	18.0	62.0		25.0	32.0		18.0	25.0	38.0
Total Split (%)	25.3%	54.7%	54.7%	12.0%	41.3%		16.7%	21.3%		12.0%	16.7%	25.3%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9		4.0	4.8		4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0		2.8	2.1		2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9		6.8	6.9		7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 95 (63%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	491	1421	335	33	674	64	191	192	47	108	184	283
Future Volume (veh/h)	491	1421	335	33	674	64	191	192	47	108	184	283
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	511	1480	289	34	702	65	199	200	41	112	192	169
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	540	1977	882	137	1329	123	259	231	47	196	217	471
Arrive On Green	0.06	0.18	0.18	0.03	0.40	0.40	0.11	0.15	0.15	0.07	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3288	304	1767	1494	306	1781	1870	1585
Grp Volume(v), veh/h	511	1480	289	34	379	388	199	0	241	112	192	169
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1816	1767	0	1800	1781	1870	1585
Q Serve(g_s), s	24.4	59.1	23.8	1.7	24.2	24.3	14.6	0.0	19.6	8.2	15.2	12.6
Cycle Q Clear(g_c), s	24.4	59.1	23.8	1.7	24.2	24.3	14.6	0.0	19.6	8.2	15.2	12.6
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	540	1977	882	137	718	734	259	0	279	196	217	471
V/C Ratio(X)	0.95	0.75	0.33	0.25	0.53	0.53	0.77	0.00	0.86	0.57	0.89	0.36
Avail Cap(c_a), veh/h	579	1977	882	209	718	734	277	0	301	200	226	478
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.70	0.70	0.70	0.82	0.00	0.82	0.95	0.95	0.95
Uniform Delay (d), s/veh	32.3	51.3	36.9	29.9	33.9	33.9	50.6	0.0	61.9	54.1	65.3	41.5
Incr Delay (d2), s/veh	20.5	2.1	0.8	0.7	1.9	1.9	9.6	0.0	18.7	3.5	30.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.1	36.7	15.0	1.3	15.2	15.5	11.1	0.0	15.2	7.0	13.9	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	53.4	37.6	30.6	35.8	35.8	60.2	0.0	80.5	57.6	95.7	42.1
LnGrp LOS	D	D	D	C	D	D	E	A	F	E	F	D
Approach Vol, veh/h		2280			801			440			473	
Approach Delay, s/veh		51.3			35.6			71.4			67.6	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.7	67.5	17.6	30.1	11.9	90.4	23.5	24.3
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 30	55.1	* 11	25.1	* 9.9	75.1	* 18	18.1
Max Q Clear Time (g_c+I1), s	26.4	26.3	10.2	21.6	3.7	61.1	16.6	17.2
Green Ext Time (p_c), s	0.7	7.1	0.0	0.5	0.0	11.0	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

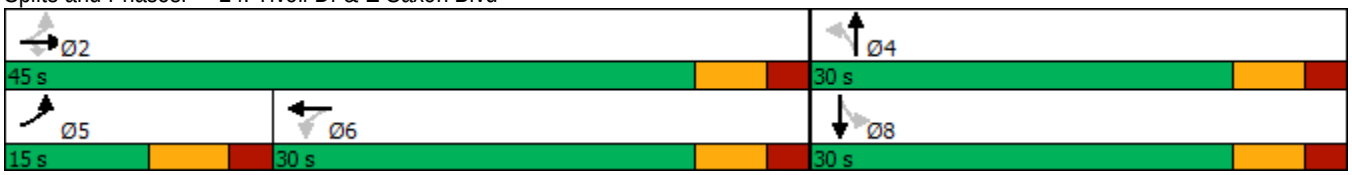
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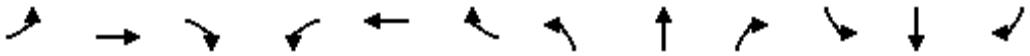
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	465	521	84	6	326	14	64	109	8	5	85	282
Future Volume (vph)	465	521	84	6	326	14	64	109	8	5	85	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390		0	120		0	265		0	150		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			30			30	
Link Distance (ft)		7172			644			704			1061	
Travel Time (s)		122.3			12.5			16.0			24.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	5	2	2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0	11.0	11.0	11.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	12.0	17.5	17.5	17.5	17.5		11.5	11.5		11.5	11.5	
Total Split (s)	15.0	45.0	45.0	30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	20.0%	60.0%	60.0%	40.0%	40.0%		40.0%	40.0%		40.0%	40.0%	
Yellow Time (s)	4.5	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	6.5	6.5	6.5	6.5		6.5	6.5		6.5	6.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min	Min	Min	Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 58.9	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 24: Tivoli Dr & E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	465	521	84	6	326	14	64	109	8	5	85	282
Future Volume (veh/h)	465	521	84	6	326	14	64	109	8	5	85	282
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	500	560	57	6	351	14	69	117	7	5	91	200
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	443	962	815	329	453	18	238	456	27	388	136	299
Arrive On Green	0.14	0.51	0.51	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	1870	1585	800	1772	71	1088	1747	105	1267	520	1144
Grp Volume(v), veh/h	500	560	57	6	0	365	69	0	124	5	0	291
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	800	0	1843	1088	0	1852	1267	0	1664
Q Serve(g_s), s	8.0	12.0	1.0	0.3	0.0	10.7	3.5	0.0	3.1	0.2	0.0	9.1
Cycle Q Clear(g_c), s	8.0	12.0	1.0	0.3	0.0	10.7	12.6	0.0	3.1	3.3	0.0	9.1
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.06	1.00		0.69
Lane Grp Cap(c), veh/h	443	962	815	329	0	471	238	0	484	388	0	435
V/C Ratio(X)	1.13	0.58	0.07	0.02	0.00	0.77	0.29	0.00	0.26	0.01	0.00	0.67
Avail Cap(c_a), veh/h	443	1243	1053	448	0	747	395	0	751	571	0	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	9.8	7.1	16.2	0.0	20.0	24.8	0.0	16.9	18.2	0.0	19.2
Incr Delay (d2), s/veh	82.7	0.8	0.1	0.0	0.0	3.9	0.7	0.0	0.3	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.8	6.8	0.5	0.1	0.0	8.1	1.6	0.0	2.2	0.1	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.8	10.5	7.1	16.2	0.0	23.9	25.5	0.0	17.2	18.3	0.0	21.0
LnGrp LOS	F	B	A	B	A	C	C	A	B	B	A	C
Approach Vol, veh/h		1117			371			193			296	
Approach Delay, s/veh		50.3			23.8			20.2			20.9	
Approach LOS		D			C			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		36.3		21.6	15.0	21.3		21.6				
Change Period (Y+Rc), s		6.5		6.5	7.0	6.5		6.5				
Max Green Setting (Gmax), s		38.5		23.5	8.0	23.5		23.5				
Max Q Clear Time (g_c+I1), s		14.0		14.6	10.0	12.7		11.1				
Green Ext Time (p_c), s		5.5		0.6	0.0	2.2		1.4				

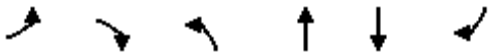
Intersection Summary												
HCM 6th Ctrl Delay			38.0									
HCM 6th LOS			D									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	288	358	194	163	258	260
Future Volume (vph)	288	358	194	163	258	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	230			350
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			30	35	
Link Distance (ft)	908			839	3746	
Travel Time (s)	17.7			19.1	73.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	3.0	10.0	10.0	10.0
Minimum Split (s)	10.0	10.0	9.5	16.5	17.0	17.0
Total Split (s)	20.0	20.0	15.0	40.0	25.0	25.0
Total Split (%)	33.3%	33.3%	25.0%	66.7%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 53.9	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 25: N Normandy Blvd & Deltona Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	288	358	194	163	258	260
Future Volume (veh/h)	288	358	194	163	258	260
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	306	160	206	173	274	177
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	390	347	458	914	421	357
Arrive On Green	0.22	0.22	0.12	0.49	0.22	0.22
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	306	160	206	173	274	177
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	7.2	3.9	3.6	2.3	5.9	4.3
Cycle Q Clear(g_c), s	7.2	3.9	3.6	2.3	5.9	4.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	390	347	458	914	421	357
V/C Ratio(X)	0.79	0.46	0.45	0.19	0.65	0.50
Avail Cap(c_a), veh/h	561	499	589	1409	757	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	15.1	10.3	6.4	15.6	15.0
Incr Delay (d2), s/veh	3.9	0.7	0.5	0.1	1.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	6.5	2.1	1.2	4.1	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.2	15.8	10.8	6.5	17.4	16.1
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	466			379	451	
Approach Delay, s/veh	18.7			8.9	16.9	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.7		15.7	11.7	17.0
Change Period (Y+Rc), s		* 7		6.0	6.5	7.0
Max Green Setting (Gmax), s		* 34		14.0	8.5	18.0
Max Q Clear Time (g_c+I1), s		4.3		9.2	5.6	7.9
Green Ext Time (p_c), s		1.0		0.5	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

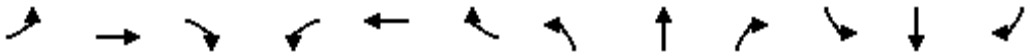
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	2287	13	35	938	16	80	22	58	16	13	112
Future Volume (vph)	157	2287	13	35	938	16	80	22	58	16	13	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1073			1303			959			734	
Travel Time (s)		16.3			19.7			21.8			16.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	25.0	85.0	85.0	25.0	85.0		40.0	40.0		40.0	40.0	
Total Split (%)	16.7%	56.7%	56.7%	16.7%	56.7%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 112 (75%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	2287	13	35	938	16	80	22	58	16	13	112
Future Volume (veh/h)	157	2287	13	35	938	16	80	22	58	16	13	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	164	2382	14	36	977	17	83	23	60	17	14	117
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	491	2326	1038	94	2262	39	150	71	185	194	27	225
Arrive On Green	0.05	0.65	0.65	0.05	1.00	1.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3574	62	1249	455	1187	1315	172	1439
Grp Volume(v), veh/h	164	2382	14	36	486	508	83	0	83	17	0	131
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1859	1249	0	1642	1315	0	1611
Q Serve(g_s), s	4.9	98.2	0.5	1.0	0.0	0.0	9.8	0.0	6.7	1.7	0.0	11.2
Cycle Q Clear(g_c), s	4.9	98.2	0.5	1.0	0.0	0.0	21.0	0.0	6.7	8.5	0.0	11.2
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.72	1.00		0.89
Lane Grp Cap(c), veh/h	491	2326	1038	94	1125	1177	150	0	256	194	0	252
V/C Ratio(X)	0.33	1.02	0.01	0.38	0.43	0.43	0.55	0.00	0.32	0.09	0.00	0.52
Avail Cap(c_a), veh/h	603	2326	1038	244	1125	1177	225	0	356	274	0	349
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.94	0.94	0.94	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.4	25.9	9.0	37.9	0.0	0.0	67.8	0.0	56.2	60.0	0.0	58.1
Incr Delay (d2), s/veh	0.0	13.2	0.0	2.4	1.1	1.1	3.2	0.0	0.7	0.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	45.0	0.3	1.6	0.6	0.6	5.9	0.0	5.2	1.1	0.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.5	39.1	9.0	40.3	1.1	1.1	71.0	0.0	57.0	60.2	0.0	59.8
LnGrp LOS	A	F	A	D	A	A	E	A	E	E	A	E
Approach Vol, veh/h		2560			1030			166			148	
Approach Delay, s/veh		37.0			2.5			64.0			59.8	
Approach LOS		D			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.6	103.5		30.9	12.4	106.7		30.9				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	16.5	76.5		32.5	16.5	76.5		32.5				
Max Q Clear Time (g_c+I1), s	6.9	2.0		23.0	3.0	100.2		13.2				
Green Ext Time (p_c), s	0.3	11.4		0.4	0.0	0.0		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		29.9	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2075	0	235	61	107	21
Future Volume (vph)	2075	0	235	61	107	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1303			6031	1518	
Travel Time (s)	19.7			91.4	29.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	6%	6%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	60.0		40.0	100.0	50.0	
Total Split (%)	40.0%		26.7%	66.7%	33.3%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 108 (72%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2075	0	235	61	107	21
Future Volume (veh/h)	2075	0	235	61	107	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1811	1900
Adj Flow Rate, veh/h	2207	0	250	65	135	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	6	0
Cap, veh/h	2576	0	277	2981	188	88
Arrive On Green	1.00	0.00	0.06	0.84	0.05	0.00
Sat Flow, veh/h	3741	0	1781	3647	3450	1610
Grp Volume(v), veh/h	2207	0	250	65	135	0
Grp Sat Flow(s),veh/h/ln	1777	0	1781	1777	1725	1610
Q Serve(g_s), s	0.0	0.0	5.9	0.5	5.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.9	0.5	5.8	0.0
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2576	0	277	2981	188	88
V/C Ratio(X)	0.86	0.00	0.90	0.02	0.72	0.00
Avail Cap(c_a), veh/h	2576	0	549	2981	977	456
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.20	0.00	0.79	0.79	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	18.2	2.0	69.8	0.0
Incr Delay (d2), s/veh	0.8	0.0	8.5	0.0	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	0.0	9.2	0.2	4.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.8	0.0	26.7	2.0	74.8	0.0
LnGrp LOS	A	A	C	A	E	A
Approach Vol, veh/h	2207			315	135	
Approach Delay, s/veh	0.8			21.6	74.8	
Approach LOS	A			C	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		134.3		15.7	17.1	117.2
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		91.5		42.5	31.5	51.5
Max Q Clear Time (g_c+I1), s		2.5		7.8	7.9	2.0
Green Ext Time (p_c), s		0.6		0.4	0.7	39.3

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

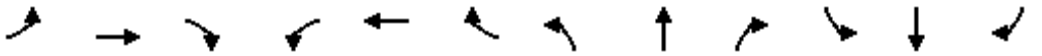
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	247	1832	0	46	86	1042	102	75	118	56	31	172
Future Volume (vph)	247	1832	0	46	86	1042	102	75	118	56	31	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1249			1867			677			522	
Travel Time (s)		21.3			28.3			15.4			11.9	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	30.0	100.0		18.0	88.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	20.0%	66.7%		12.0%	58.7%		21.3%	21.3%		21.3%	21.3%	21.3%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 15 (10%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	247	1832	0	46	86	1042	102	75	118	56	31	172
Future Volume (veh/h)	247	1832	0	46	86	1042	102	75	118	56	31	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	266	1970	0	49	92	1120	110	81	127	60	33	185
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	3365	0	63	961	857	48	115	180	90	42	277
Arrive On Green	0.31	1.00	0.00	0.01	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	5274	0	1781	1777	1585	1163	656	1029	292	239	1585
Grp Volume(v), veh/h	266	1970	0	49	92	1120	110	0	208	93	0	185
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1777	1585	1163	0	1685	531	0	1585
Q Serve(g_s), s	22.1	0.0	0.0	4.1	6.5	81.1	0.0	0.0	17.4	8.8	0.0	16.4
Cycle Q Clear(g_c), s	22.1	0.0	0.0	4.1	6.5	81.1	26.2	0.0	17.4	26.2	0.0	16.4
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.61	0.65		1.00
Lane Grp Cap(c), veh/h	276	3365	0	63	961	857	48	0	294	132	0	277
V/C Ratio(X)	0.97	0.59	0.00	0.77	0.10	1.31	2.29	0.00	0.71	0.70	0.00	0.67
Avail Cap(c_a), veh/h	276	3365	0	132	961	857	48	0	294	132	0	277
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.14	0.14	0.00	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	0.0	0.0	73.5	31.0	61.6	75.0	0.0	58.3	67.5	0.0	57.8
Incr Delay (d2), s/veh	13.1	0.1	0.0	14.2	0.2	144.8	641.5	0.0	8.2	16.9	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.3	0.1	0.0	3.9	5.2	98.4	18.7	0.0	12.8	7.6	0.0	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.5	0.1	0.0	87.7	31.1	206.4	716.5	0.0	66.5	84.4	0.0	64.6
LnGrp LOS	E	A	A	F	C	F	F	A	E	F	A	E
Approach Vol, veh/h		2236			1261			318			278	
Approach Delay, s/veh		7.8			189.0			291.4			71.2	
Approach LOS		A			F			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	105.8		32.0	30.0	88.0		32.0				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	93.1		* 26	23.2	81.1		* 26				
Max Q Clear Time (g_c+I1), s	6.1	2.0		28.2	24.1	83.1		28.2				
Green Ext Time (p_c), s	0.0	46.0		0.0	0.0	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	89.9
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Arterial Level of Service: EB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FDOT Park & Ride	II	45	33.9	10.4	44.3	0.35	28.7	B
I-4 EB	II	45	37.1	37.5	74.6	0.40	19.1	D
Finland Dr	II	40	26.0	16.9	42.9	0.24	19.9	D
N Normandy Blvd	II	40	35.0	39.9	74.9	0.35	17.0	E
Total	II		132.0	104.7	236.7	1.34	20.4	D

Arterial Level of Service: WB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Finland Dr	II	45	33.9	11.4	45.3	0.35	28.1	B
I-4 EB	II	45	24.6	17.1	41.7	0.24	20.4	D
FDOT Park & Ride	II	45	37.1	7.7	44.8	0.40	31.7	B
Veterans Memorial Pk	II	45	33.9	42.7	76.6	0.35	16.6	E
Total	II		129.5	78.9	208.4	1.34	23.1	C

Arterial Level of Service: EB SR 472/Howland Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
N Kentucky Ave	I	55	17.7	65.8	83.5	0.18	7.9	F
I-4 WB	I	55	36.3	9.0	45.3	0.55	44.0	A
I-4 EB	I	50	30.3	8.0	38.3	0.32	30.0	C
E Graves Ave	I	50	26.1	79.6	105.7	0.28	9.4	F
Forest Edge Dr	I	45	21.1	31.3	52.4	0.20	14.0	F
Wolf Pack Run	I	45	25.7	23.6	49.3	0.25	18.0	E
Total	I		157.2	217.3	374.5	1.78	17.1	E

Arterial Level of Service: WB SR 472/Howland Blvd

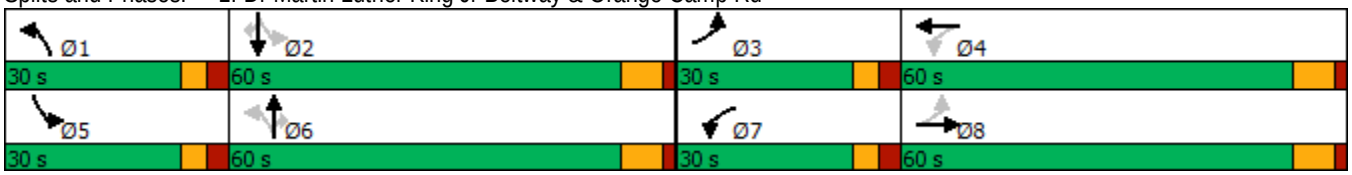
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Forest Edge Dr	I	45	25.7	15.2	40.9	0.25	21.7	D
E Graves Avenue	I	45	21.1	37.7	58.8	0.20	12.4	F
I-4 EB	I	50	26.1	18.8	44.9	0.28	22.1	D
I-4 WB	I	50	30.3	10.5	40.8	0.32	28.2	C
Dr. Martin Luther Ki	I	55	36.3	50.5	86.8	0.55	23.0	D
Total	I		139.5	132.7	272.2	1.60	21.1	D

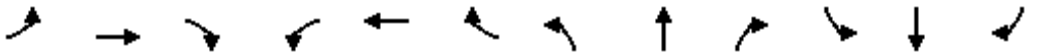
E-7: PM Peak Hour Future Background Traffic Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	506	177	80	722	260	304	512	60	262	453	70
Future Volume (vph)	70	506	177	80	722	260	304	512	60	262	453	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6		6	2		2
Detector Phase	3	8		7	4		1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0		5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5		11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 167	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	506	177	80	722	260	304	512	60	262	453	70
Future Volume (veh/h)	70	506	177	80	722	260	304	512	60	262	453	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	74	533	172	84	760	262	320	539	50	276	477	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	116	457	147	123	451	155	342	575	487	298	559	474
Arrive On Green	0.04	0.34	0.34	0.04	0.34	0.34	0.14	0.31	0.31	0.13	0.30	0.30
Sat Flow, veh/h	1781	1355	437	1767	1319	455	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	74	0	705	84	0	1022	320	539	50	276	477	49
Grp Sat Flow(s),veh/h/ln	1781	0	1792	1767	0	1774	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	4.2	0.0	52.5	4.8	0.0	53.2	19.3	44.0	3.5	17.9	37.6	3.5
Cycle Q Clear(g_c), s	4.2	0.0	52.5	4.8	0.0	53.2	19.3	44.0	3.5	17.9	37.6	3.5
Prop In Lane	1.00		0.24	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	0	604	123	0	606	342	575	487	298	559	474
V/C Ratio(X)	0.64	0.00	1.17	0.68	0.00	1.69	0.93	0.94	0.10	0.93	0.85	0.10
Avail Cap(c_a), veh/h	315	0	604	313	0	606	365	626	530	336	626	530
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	0.0	51.6	40.2	0.0	51.3	36.2	52.2	38.3	42.3	51.2	39.2
Incr Delay (d2), s/veh	5.8	0.0	92.2	6.5	0.0	316.1	30.1	21.4	0.1	29.3	10.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	53.4	4.0	0.0	117.1	16.1	30.9	2.5	15.1	25.5	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	0.0	143.8	46.7	0.0	367.4	66.3	73.7	38.4	71.6	61.9	39.4
LnGrp LOS	D	A	F	D	A	F	E	E	D	E	E	D
Approach Vol, veh/h		779			1106			909			802	
Approach Delay, s/veh		134.5			343.0			69.1			63.9	
Approach LOS		F			F			E			E	

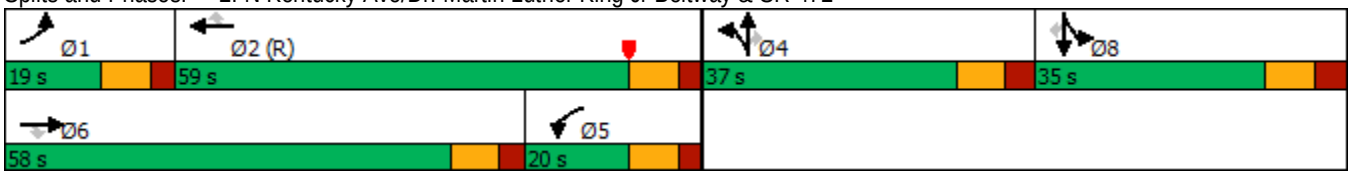
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	54.4	12.6	60.7	26.7	55.8	13.3	60.0
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	21.3	39.6	6.2	55.2	19.9	46.0	6.8	54.5
Green Ext Time (p_c), s	0.2	3.1	0.1	0.0	0.3	2.3	0.1	0.0

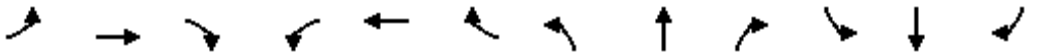
Intersection Summary	
HCM 6th Ctrl Delay	166.4
HCM 6th LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	1103	373	186	1144	380	282	410	67	315	460	51
Future Volume (vph)	61	1103	373	186	1144	380	282	410	67	315	460	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	15.8	15.8	15.8	16.4	16.4	16.4
Total Split (s)	19.0	58.0	58.0	20.0	59.0	59.0	37.0	37.0	37.0	35.0	35.0	35.0
Total Split (%)	12.7%	38.7%	38.7%	13.3%	39.3%	39.3%	24.7%	24.7%	24.7%	23.3%	23.3%	23.3%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3		8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1103	373	186	1144	380	282	410	67	315	460	51
Future Volume (veh/h)	61	1103	373	186	1144	380	282	410	67	315	460	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	66	1186	284	200	1230	227	303	441	0	339	495	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	2	2	2
Cap, veh/h	84	1177	525	138	1278	570	138	201		304	319	
Arrive On Green	0.05	0.33	0.33	0.03	0.12	0.12	0.19	0.19	0.00	0.17	0.17	0.00
Sat Flow, veh/h	1781	3554	1585	1767	3526	1572	735	1069	1560	1781	1870	1585
Grp Volume(v), veh/h	66	1186	284	200	1230	227	744	0	0	339	495	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1767	1763	1572	1804	0	1560	1781	1870	1585
Q Serve(g_s), s	5.5	49.7	21.9	11.7	52.1	20.0	28.2	0.0	0.0	25.6	25.6	0.0
Cycle Q Clear(g_c), s	5.5	49.7	21.9	11.7	52.1	20.0	28.2	0.0	0.0	25.6	25.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.41		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	84	1177	525	138	1278	570	339	0		304	319	
V/C Ratio(X)	0.79	1.01	0.54	1.45	0.96	0.40	2.19	0.00		1.12	1.55	
Avail Cap(c_a), veh/h	127	1177	525	138	1278	570	339	0		304	319	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.64	0.64	0.64	0.22	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.7	50.2	40.9	73.1	65.0	50.9	60.9	0.0	0.0	62.2	62.2	0.0
Incr Delay (d2), s/veh	16.8	28.0	1.5	227.0	13.1	1.3	539.3	0.0	0.0	86.2	262.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	34.0	13.2	21.5	33.7	12.5	92.0	0.0	0.0	27.0	53.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.6	78.2	42.3	300.0	78.1	52.2	600.2	0.0	0.0	148.4	325.0	0.0
LnGrp LOS	F	F	D	F	E	D	F	A		F	F	
Approach Vol, veh/h		1536			1657			744	A		834	A
Approach Delay, s/veh		71.9			101.4			600.2			253.2	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.3	62.7		37.0	20.0	58.0		35.0				
Change Period (Y+Rc), s	* 8.3	* 8.3		* 8.8	* 8.3	* 8.3		9.4				
Max Green Setting (Gmax), s	* 11	* 51		* 28	* 12	* 50		25.6				
Max Q Clear Time (g_c+I1), s	7.5	54.1		30.2	13.7	51.7		27.6				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		196.2
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

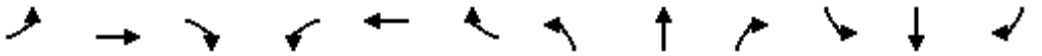
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	842	752	541	1573	0	0	0	0	421	0	315
Future Volume (vph)	0	842	752	541	1573	0	0	0	0	421	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	1		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		66.0	66.0	45.0	111.0					39.0		39.0
Total Split (%)		44.0%	44.0%	30.0%	74.0%					26.0%		26.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 38 (25%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	842	752	541	1573	0	0	0	0	421	0	315
Future Volume (veh/h)	0	842	752	541	1573	0	0	0	0	421	0	315
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	896	0	576	1673	0				448	0	167
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1594		450	2661	0				521	0	239
Arrive On Green	0.00	0.45	0.00	0.25	0.75	0.00				0.15	0.00	0.15
Sat Flow, veh/h	0	3647	1585	1781	3647	0				3456	0	1585
Grp Volume(v), veh/h	0	896	0	576	1673	0				448	0	167
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0				1728	0	1585
Q Serve(g_s), s	0.0	27.9	0.0	37.9	33.5	0.0				19.0	0.0	15.0
Cycle Q Clear(g_c), s	0.0	27.9	0.0	37.9	33.5	0.0				19.0	0.0	15.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1594		450	2661	0				521	0	239
V/C Ratio(X)	0.00	0.56		1.28	0.63	0.00				0.86	0.00	0.70
Avail Cap(c_a), veh/h	0	1594		450	2661	0				714	0	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.10	0.00	0.71	0.71	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	30.5	0.0	56.0	9.0	0.0				62.2	0.0	60.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	137.8	0.8	0.0				7.9	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.1	0.0	47.9	15.4	0.0				13.6	0.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.6	0.0	193.8	9.8	0.0				70.0	0.0	64.4
LnGrp LOS	A	C		F	A	A				E	A	E
Approach Vol, veh/h		896	A		2249						615	
Approach Delay, s/veh		30.6			56.9						68.5	
Approach LOS		C			E						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		119.4			45.0	74.4		30.6				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		103.9			37.9	58.9		31.0				
Max Q Clear Time (g_c+I1), s		35.5			39.9	29.9		21.0				
Green Ext Time (p_c), s		19.4			0.0	5.9		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			52.5									
HCM 6th LOS			D									

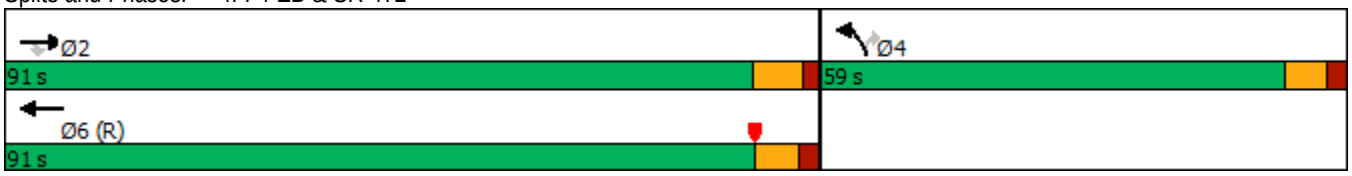
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1264	112	0	1592	806	948
Future Volume (vph)	1264	112	0	1592	806	948
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		620	1000		0	1000
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	50			50	45	
Link Distance (ft)	1685			1453	1185	
Travel Time (s)	23.0			19.8	18.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	4	
Permitted Phases		2				4
Detector Phase	2	2		6	4	4
Switch Phase						
Minimum Initial (s)	17.0	17.0		7.0	7.0	7.0
Minimum Split (s)	24.5	24.5		14.2	14.2	14.2
Total Split (s)	91.0	91.0		91.0	59.0	59.0
Total Split (%)	60.7%	60.7%		60.7%	39.3%	39.3%
Yellow Time (s)	5.5	5.5		4.8	4.8	4.8
All-Red Time (s)	2.0	2.0		2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.2	7.2	7.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 73 (49%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: I-4 EB & SR 472





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1264	112	0	1592	806	948
Future Volume (veh/h)	1264	112	0	1592	806	948
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1841	1856	1856
Adj Flow Rate, veh/h	1345	0	0	1694	857	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	4	3	3
Cap, veh/h	1985		0	2807	965	
Arrive On Green	0.74	0.00	0.00	0.56	0.28	0.00
Sat Flow, veh/h	3647	1585	0	5356	3428	1572
Grp Volume(v), veh/h	1345	0	0	1694	857	0
Grp Sat Flow(s),veh/h/ln	1777	1585	0	1675	1714	1572
Q Serve(g_s), s	29.4	0.0	0.0	33.7	35.9	0.0
Cycle Q Clear(g_c), s	29.4	0.0	0.0	33.7	35.9	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1985		0	2807	965	
V/C Ratio(X)	0.68		0.00	0.60	0.89	
Avail Cap(c_a), veh/h	1985		0	2807	1184	
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.00	0.00	0.09	1.00	0.00
Uniform Delay (d), s/veh	12.3	0.0	0.0	22.0	51.6	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	7.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	0.0	0.0	14.2	22.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.9	0.0	0.0	22.1	59.5	0.0
LnGrp LOS	B		A	C	E	
Approach Vol, veh/h	1345	A		1694	857	A
Approach Delay, s/veh	12.9			22.1	59.5	
Approach LOS	B			C	E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		91.3		49.4		91.3
Change Period (Y+Rc), s		7.5		* 7.2		* 7.5
Max Green Setting (Gmax), s		83.5		* 52		* 84
Max Q Clear Time (g_c+I1), s		31.4		37.9		35.7
Green Ext Time (p_c), s		19.1		4.3		24.9

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

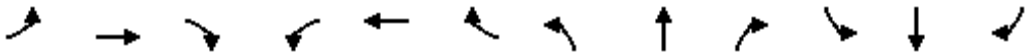
Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	57	21	138	89	154	14	1273	123	109	1070	39
Future Volume (vph)	30	57	21	138	89	154	14	1273	123	109	1070	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	245		0	280		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		329			1113			2670			438	
Travel Time (s)		9.0			25.3			45.5			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Split	NA		Split	NA		Perm	NA		pm+pt	NA	
Protected Phases	8	8		4	4			6		5	2	
Permitted Phases							6			2		
Detector Phase	8	8		4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	15.7	15.7		15.9	15.9		22.3	22.3		12.2	22.3	
Total Split (s)	20.0	20.0		30.0	30.0		80.0	80.0		20.0	100.0	
Total Split (%)	13.3%	13.3%		20.0%	20.0%		53.3%	53.3%		13.3%	66.7%	
Yellow Time (s)	3.4	3.4		3.8	3.8		4.5	4.5		4.4	4.5	
All-Red Time (s)	2.3	2.3		2.1	2.1		2.8	2.8		2.8	2.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		5.9	5.9		7.3	7.3		7.2	7.3	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Min	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 117 (78%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: US 17/92 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	57	21	138	89	154	14	1273	123	109	1070	39
Future Volume (veh/h)	30	57	21	138	89	154	14	1273	123	109	1070	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	31	59	12	144	93	113	15	1326	122	114	1115	37
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	3	3	3
Cap, veh/h	117	99	20	242	105	127	297	1904	174	225	2333	77
Arrive On Green	0.07	0.07	0.07	0.14	0.14	0.14	0.58	0.58	0.58	0.04	0.67	0.67
Sat Flow, veh/h	1781	1508	307	1753	756	919	484	3265	299	1767	3482	116
Grp Volume(v), veh/h	31	0	71	144	0	206	15	714	734	114	564	588
Grp Sat Flow(s),veh/h/ln	1781	0	1815	1753	0	1675	484	1763	1802	1767	1763	1835
Q Serve(g_s), s	2.5	0.0	5.7	11.6	0.0	18.1	2.3	42.5	43.0	3.8	23.3	23.3
Cycle Q Clear(g_c), s	2.5	0.0	5.7	11.6	0.0	18.1	12.6	42.5	43.0	3.8	23.3	23.3
Prop In Lane	1.00		0.17	1.00		0.55	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	117	0	119	242	0	232	297	1028	1050	225	1181	1229
V/C Ratio(X)	0.26	0.00	0.60	0.59	0.00	0.89	0.05	0.69	0.70	0.51	0.48	0.48
Avail Cap(c_a), veh/h	170	0	173	282	0	269	297	1028	1050	307	1181	1229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.6	0.0	68.1	60.7	0.0	63.5	18.2	21.9	22.0	20.5	12.0	12.0
Incr Delay (d2), s/veh	1.2	0.0	4.7	2.5	0.0	26.0	0.3	3.9	3.9	1.8	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.0	5.1	9.1	0.0	14.5	0.5	24.9	25.6	2.9	14.0	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.8	0.0	72.8	63.2	0.0	89.5	18.6	25.8	25.9	22.3	13.4	13.3
LnGrp LOS	E	A	E	E	A	F	B	C	C	C	B	B
Approach Vol, veh/h		102			350			1463			1266	
Approach Delay, s/veh		71.3			78.6			25.8			14.2	
Approach LOS		E			E			C			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		107.8		26.6	13.1	94.8		15.6				
Change Period (Y+Rc), s		* 7.3		* 5.9	* 7.2	* 7.3		5.7				
Max Green Setting (Gmax), s		* 93		* 24	* 13	* 73		14.3				
Max Q Clear Time (g_c+I1), s		25.3		20.1	5.8	45.0		7.7				
Green Ext Time (p_c), s		9.4		0.6	0.1	11.9		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

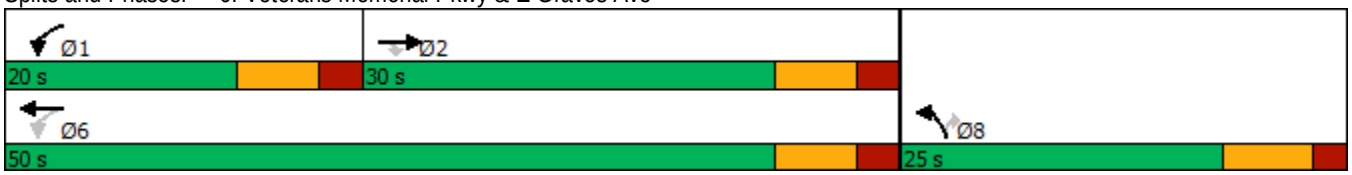
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	336	46	1004	619	73	1042
Future Volume (vph)	336	46	1004	619	73	1042
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases		2	6			8
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	7.0
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	14.0
Total Split (s)	30.0	30.0	20.0	50.0	25.0	25.0
Total Split (%)	40.0%	40.0%	26.7%	66.7%	33.3%	33.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	5.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 70.9	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	336	46	1004	619	73	1042
Future Volume (veh/h)	336	46	1004	619	73	1042
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1841	1841	1870	1870
Adj Flow Rate, veh/h	354	21	1057	652	77	988
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	4	4	2	2
Cap, veh/h	438	371	496	975	471	419
Arrive On Green	0.24	0.24	0.19	0.53	0.26	0.26
Sat Flow, veh/h	1856	1572	1753	1841	1781	1585
Grp Volume(v), veh/h	354	21	1057	652	77	988
Grp Sat Flow(s),veh/h/ln	1856	1572	1753	1841	1781	1585
Q Serve(g_s), s	12.3	0.7	13.0	17.6	2.3	18.0
Cycle Q Clear(g_c), s	12.3	0.7	13.0	17.6	2.3	18.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	438	371	496	975	471	419
V/C Ratio(X)	0.81	0.06	2.13	0.67	0.16	2.36
Avail Cap(c_a), veh/h	627	531	496	1163	471	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	20.1	17.2	11.7	19.2	25.0
Incr Delay (d2), s/veh	6.4	0.1	515.8	1.4	0.2	617.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.5	0.4	116.5	9.7	1.5	123.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.0	20.2	533.1	13.1	19.4	642.8
LnGrp LOS	C	C	F	B	B	F
Approach Vol, veh/h	375			1709	1065	
Approach Delay, s/veh	30.4			334.7	597.8	
Approach LOS	C			F	F	

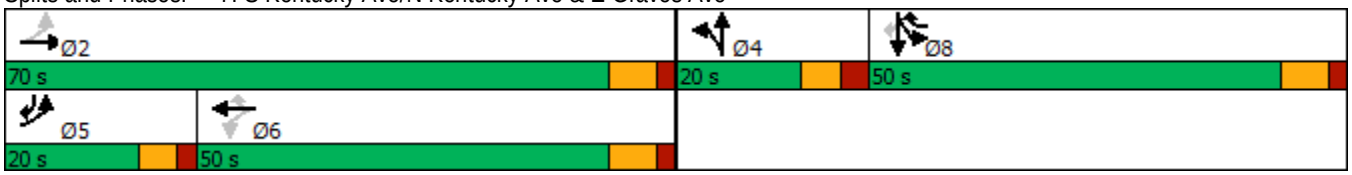
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	20.0	23.1				43.1	25.0
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	13.0	23.0				43.0	18.0
Max Q Clear Time (g_c+I1), s	15.0	14.3				19.6	20.0
Green Ext Time (p_c), s	0.0	1.8				6.0	0.0

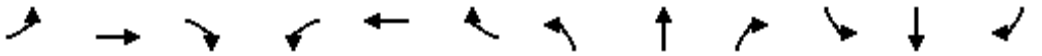
Intersection Summary			
HCM 6th Ctrl Delay		387.4	
HCM 6th LOS		F	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	367	1251	30	34	1013	540	15	9	17	596	21	369
Future Volume (vph)	367	1251	30	34	1013	540	15	9	17	596	21	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			2170			535			4220	
Travel Time (s)		26.0			32.9			14.6			63.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6	8	4	4		8	8	5
Permitted Phases	2			6		6						8
Detector Phase	5	2		6	6	8	4	4		8	8	5
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	5.0
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	11.0
Total Split (s)	20.0	70.0		50.0	50.0	50.0	20.0	20.0		50.0	50.0	20.0
Total Split (%)	14.3%	50.0%		35.7%	35.7%	35.7%	14.3%	14.3%		35.7%	35.7%	14.3%
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	6.0
Lead/Lag	Lead			Lag	Lag							Lead
Lead-Lag Optimize?	Yes			Yes	Yes							Yes
Recall Mode	None	Min		Min	Min	None	None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 132.5	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	1251	30	34	1013	540	15	9	17	596	21	369
Future Volume (veh/h)	367	1251	30	34	1013	540	15	9	17	596	21	369
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	403	1375	32	37	1113	566	16	10	6	655	23	274
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	242	863	20	55	605	1026	32	20	12	581	610	685
Arrive On Green	0.11	0.48	0.48	0.33	0.33	0.33	0.04	0.04	0.04	0.33	0.33	0.33
Sat Flow, veh/h	1767	1806	42	380	1856	1572	883	552	331	1781	1870	1585
Grp Volume(v), veh/h	403	0	1407	37	1113	566	32	0	0	655	23	274
Grp Sat Flow(s),veh/h/ln	1767	0	1848	380	1856	1572	1767	0	0	1781	1870	1585
Q Serve(g_s), s	14.0	0.0	63.0	0.0	43.0	25.8	2.3	0.0	0.0	43.0	1.1	15.6
Cycle Q Clear(g_c), s	14.0	0.0	63.0	43.0	43.0	25.8	2.3	0.0	0.0	43.0	1.1	15.6
Prop In Lane	1.00		0.02	1.00		1.00	0.50		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	883	55	605	1026	65	0	0	581	610	685
V/C Ratio(X)	1.66	0.00	1.59	0.68	1.84	0.55	0.49	0.00	0.00	1.13	0.04	0.40
Avail Cap(c_a), veh/h	242	0	883	55	605	1026	174	0	0	581	610	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	34.4	65.9	44.4	12.4	62.3	0.0	0.0	44.4	30.3	25.7
Incr Delay (d2), s/veh	316.1	0.0	272.3	31.5	383.9	0.8	5.7	0.0	0.0	77.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	40.4	0.0	143.2	3.1	130.2	26.0	2.1	0.0	0.0	43.0	0.9	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	357.0	0.0	306.7	97.4	428.4	13.3	68.0	0.0	0.0	122.0	30.3	26.1
LnGrp LOS	F	A	F	F	F	B	E	A	A	F	C	C
Approach Vol, veh/h		1810			1716			32			952	
Approach Delay, s/veh		317.9			284.3			68.0			92.2	
Approach LOS		F			F			E			F	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		70.0		11.8	20.0	50.0		50.0				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		63.0		13.0	14.0	43.0		43.0				
Max Q Clear Time (g_c+I1), s		65.0		4.3	16.0	45.0		45.0				
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			255.7									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	820	1109	799	684	817	756
Future Volume (vph)	820	1109	799	684	817	756
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		545	330		200	200
Storage Lanes		2	2		1	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	1110			551	7144	
Travel Time (s)	16.8			8.3	108.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases		6				4
Detector Phase	6	6	5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	5.0	12.0	7.0	7.0
Minimum Split (s)	19.0	19.0	12.0	19.0	13.0	13.0
Total Split (s)	45.0	45.0	20.0	65.0	25.0	25.0
Total Split (%)	50.0%	50.0%	22.2%	72.2%	27.8%	27.8%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	820	1109	799	684	817	756
Future Volume (veh/h)	820	1109	799	684	817	756
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1841	1870	1870
Adj Flow Rate, veh/h	872	1092	850	728	869	682
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	4	4	2	2
Cap, veh/h	1500	669	491	2254	376	589
Arrive On Green	0.42	0.42	0.14	0.64	0.21	0.21
Sat Flow, veh/h	3647	1585	3401	3589	1781	2790
Grp Volume(v), veh/h	872	1092	850	728	869	682
Grp Sat Flow(s),veh/h/ln	1777	1585	1700	1749	1781	1395
Q Serve(g_s), s	16.9	38.0	13.0	8.4	19.0	19.0
Cycle Q Clear(g_c), s	16.9	38.0	13.0	8.4	19.0	19.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1500	669	491	2254	376	589
V/C Ratio(X)	0.58	1.63	1.73	0.32	2.31	1.16
Avail Cap(c_a), veh/h	1500	669	491	2254	376	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	26.0	38.5	7.2	35.5	35.5
Incr Delay (d2), s/veh	0.7	291.0	337.1	0.1	598.2	89.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.6	104.4	44.5	4.5	110.2	30.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.6	317.0	375.6	7.3	633.7	124.5
LnGrp LOS	C	F	F	A	F	F
Approach Vol, veh/h	1964			1578	1551	
Approach Delay, s/veh	185.4			205.7	409.8	
Approach LOS	F			F	F	

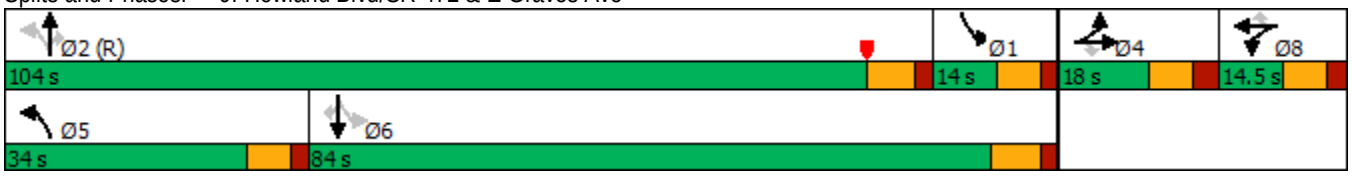
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		25.0	20.0	45.0
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		58.0		19.0	13.0	38.0
Max Q Clear Time (g_c+I1), s		10.4		21.0	15.0	40.0
Green Ext Time (p_c), s		7.9		0.0	0.0	0.0

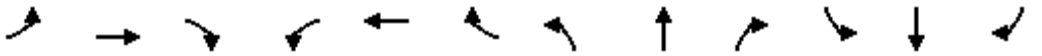
Intersection Summary		
HCM 6th Ctrl Delay		260.0
HCM 6th LOS		F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	271	241	1159	247	240	302	718	957	210	259	1912	390
Future Volume (vph)	271	241	1159	247	240	302	718	957	210	259	1912	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		330
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			363			1073			1453	
Travel Time (s)		12.6			8.3			16.3			19.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)	10%											
Turn Type	Split	NA	Perm	Split	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0	17.0	7.0	17.0	17.0
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.5	12.0	24.5	24.5	14.0	24.5	24.5
Total Split (s)	18.0	18.0	18.0	14.5	14.5	14.5	34.0	104.0	104.0	14.0	84.0	84.0
Total Split (%)	12.0%	12.0%	12.0%	9.6%	9.6%	9.6%	22.6%	69.1%	69.1%	9.3%	55.8%	55.8%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.5	7.0	7.5	7.5	7.0	7.5	7.5
Lead/Lag							Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 150.5	
Actuated Cycle Length: 150.5	
Offset: 88.5 (59%), Referenced to phase 2:NBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	241	1159	247	240	302	718	957	210	259	1912	390
Future Volume (veh/h)	271	241	1159	247	240	302	718	957	210	259	1912	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	270	276	0	260	253	318	756	1007	221	273	2013	403
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	3	3	3	2	2	2
Cap, veh/h	118	124		161	87	74	713	1292	576	1682	2215	988
Arrive On Green	0.07	0.07	0.00	0.05	0.05	0.05	0.18	0.37	0.37	0.43	0.62	0.62
Sat Flow, veh/h	1767	1856	1572	3456	1870	1585	3428	3526	1572	3456	3554	1585
Grp Volume(v), veh/h	270	276	0	260	253	318	756	1007	221	273	2013	403
Grp Sat Flow(s),veh/h/ln	1767	1856	1572	1728	1870	1585	1714	1763	1572	1728	1777	1585
Q Serve(g_s), s	10.0	10.0	0.0	7.0	7.0	7.0	27.0	38.0	15.5	0.0	73.8	19.3
Cycle Q Clear(g_c), s	10.0	10.0	0.0	7.0	7.0	7.0	27.0	38.0	15.5	0.0	73.8	19.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	124		161	87	74	713	1292	576	1682	2215	988
V/C Ratio(X)	2.29	2.23		1.61	2.90	4.30	1.06	0.78	0.38	0.16	0.91	0.41
Avail Cap(c_a), veh/h	118	124		161	87	74	713	2268	1012	1682	2215	988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.55	0.55	0.55	0.09	0.09	0.09
Uniform Delay (d), s/veh	70.0	70.0	0.0	71.5	71.5	71.5	46.2	42.1	35.0	21.7	24.5	14.3
Incr Delay (d2), s/veh	607.3	579.2	0.0	302.3	884.8	1515.7	42.6	2.6	1.1	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	38.7	39.0	0.0	16.8	39.0	51.9	20.9	21.5	9.0	3.5	30.5	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	677.3	649.2	0.0	373.8	956.3	1587.2	88.8	44.8	36.1	21.7	25.2	14.3
LnGrp LOS	F	F		F	F	F	F	D	D	C	C	B
Approach Vol, veh/h		546	A		831			1984			2689	
Approach Delay, s/veh		663.1			1015.4			60.6			23.2	
Approach LOS		F			F			E			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	73.0	62.5		18.0	34.0	101.5		14.5				
Change Period (Y+Rc), s	7.5	* 7.5		8.0	7.0	7.5		7.5				
Max Green Setting (Gmax), s	7.0	* 97		10.0	27.0	76.5		7.0				
Max Q Clear Time (g_c+I1), s	2.0	40.0		12.0	29.0	75.8		9.0				
Green Ext Time (p_c), s	0.4	15.0		0.0	0.0	0.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		229.5
HCM 6th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

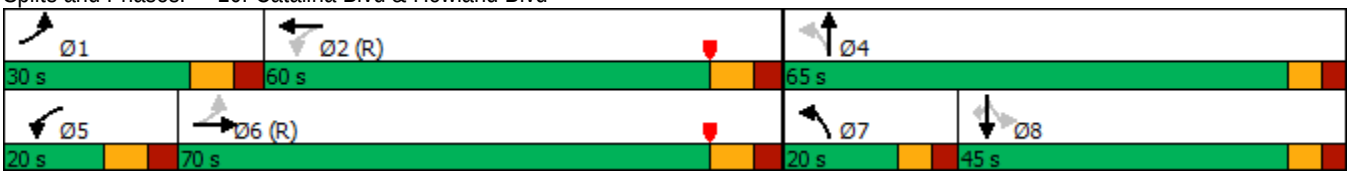
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

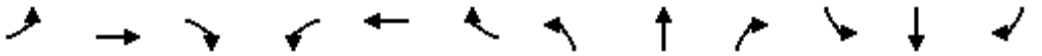
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	712	1543	109	55	926	86	87	72	31	93	72	356
Future Volume (vph)	712	1543	109	55	926	86	87	72	31	93	72	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6031			1895			1021			5049	
Travel Time (s)		91.4			28.7			23.2			98.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases	6			2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	30.0	70.0		20.0	60.0		20.0	65.0		45.0	45.0	45.0
Total Split (%)	19.4%	45.2%		12.9%	38.7%		12.9%	41.9%		29.0%	29.0%	29.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	712	1543	109	55	926	86	87	72	31	93	72	356
Future Volume (veh/h)	712	1543	109	55	926	86	87	72	31	93	72	356
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	727	1574	110	56	945	87	89	73	25	95	73	190
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	429	1939	135	156	1520	140	262	321	110	230	265	225
Arrive On Green	0.14	0.58	0.58	0.03	0.47	0.47	0.05	0.24	0.24	0.14	0.14	0.14
Sat Flow, veh/h	1781	3371	234	1767	3264	300	1781	1332	456	1297	1870	1585
Grp Volume(v), veh/h	727	825	859	56	510	522	89	0	98	95	73	190
Grp Sat Flow(s),veh/h/ln	1781	1777	1828	1767	1763	1801	1781	0	1788	1297	1870	1585
Q Serve(g_s), s	21.5	57.1	58.4	2.6	33.7	33.8	6.5	0.0	6.8	10.5	5.4	18.1
Cycle Q Clear(g_c), s	21.5	57.1	58.4	2.6	33.7	33.8	6.5	0.0	6.8	10.5	5.4	18.1
Prop In Lane	1.00		0.13	1.00		0.17	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	429	1022	1051	156	821	839	262	0	430	230	265	225
V/C Ratio(X)	1.69	0.81	0.82	0.36	0.62	0.62	0.34	0.00	0.23	0.41	0.28	0.85
Avail Cap(c_a), veh/h	429	1022	1051	235	821	839	315	0	669	364	459	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.64	0.64	0.64	1.00	0.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	31.0	26.1	26.4	27.3	31.1	31.1	51.3	0.0	47.3	61.6	59.4	64.9
Incr Delay (d2), s/veh	313.4	0.7	0.7	0.9	2.3	2.2	0.8	0.0	0.3	1.2	0.6	8.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	61.5	25.2	26.5	2.0	19.5	19.9	5.4	0.0	5.6	6.2	4.7	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	344.3	26.8	27.1	28.2	33.4	33.4	52.1	0.0	47.5	62.8	60.0	73.7
LnGrp LOS	F	C	C	C	C	C	D	A	D	E	E	E
Approach Vol, veh/h		2411			1088			187			358	
Approach Delay, s/veh		122.6			33.1			49.7			68.0	
Approach LOS		F			C			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	80.7		44.3	13.1	97.6	15.3	29.0				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	21.5	51.5		58.0	11.5	61.5	13.0	38.0				
Max Q Clear Time (g_c+I1), s	23.5	35.8		8.8	4.6	60.4	8.5	20.1				
Green Ext Time (p_c), s	0.0	7.5		0.6	0.0	1.0	0.1	1.9				

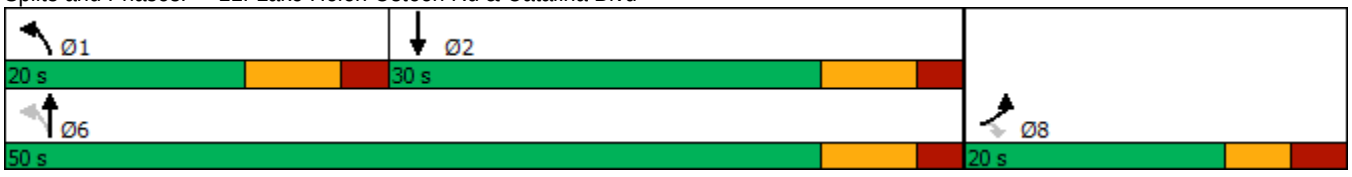
Intersection Summary			
HCM 6th Ctrl Delay		90.3	
HCM 6th LOS		F	

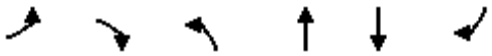
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	169	476	278	203	320	105
Future Volume (vph)	169	476	278	203	320	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	185	0	240			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			45	45	
Link Distance (ft)	5049			5467	741	
Travel Time (s)	98.4			82.8	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	8		1	6	2	
Permitted Phases		8	6			
Detector Phase	8	8	1	6	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	
Minimum Split (s)	11.5	11.5	12.5	22.5	22.5	
Total Split (s)	20.0	20.0	20.0	50.0	30.0	
Total Split (%)	28.6%	28.6%	28.6%	71.4%	42.9%	
Yellow Time (s)	3.5	3.5	5.0	5.0	5.0	
All-Red Time (s)	3.0	3.0	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	7.5	7.5	7.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	Min	Min	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 66.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Lake Helen Osteen Rd & Catalina Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	169	476	278	203	320	105
Future Volume (veh/h)	169	476	278	203	320	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	184	274	302	221	348	94
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	366	325	447	1062	421	114
Arrive On Green	0.21	0.21	0.15	0.57	0.30	0.30
Sat Flow, veh/h	1781	1585	1781	1870	1418	383
Grp Volume(v), veh/h	184	274	302	221	0	442
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	0	1801
Q Serve(g_s), s	5.6	10.2	6.6	3.6	0.0	14.1
Cycle Q Clear(g_c), s	5.6	10.2	6.6	3.6	0.0	14.1
Prop In Lane	1.00	1.00	1.00			0.21
Lane Grp Cap(c), veh/h	366	325	447	1062	0	535
V/C Ratio(X)	0.50	0.84	0.68	0.21	0.00	0.83
Avail Cap(c_a), veh/h	390	347	542	1289	0	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	23.6	13.0	6.5	0.0	20.2
Incr Delay (d2), s/veh	2.3	18.2	4.3	0.2	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	8.8	4.4	1.8	0.0	10.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.0	41.8	17.2	6.7	0.0	29.5
LnGrp LOS	C	D	B	A	A	C
Approach Vol, veh/h	458			523	442	
Approach Delay, s/veh	34.6			12.8	29.5	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	16.7	25.8				42.5	19.2
Change Period (Y+Rc), s	7.5	7.5				7.5	6.5
Max Green Setting (Gmax), s	12.5	22.5				42.5	13.5
Max Q Clear Time (g_c+I1), s	8.6	16.1				5.6	12.2
Green Ext Time (p_c), s	0.7	2.2				2.4	0.4

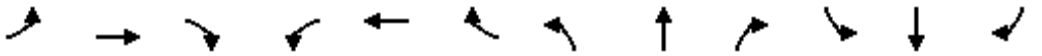
Intersection Summary	
HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1209	387	50	757	1	244	1	64	1	0	2
Future Volume (vph)	1	1209	387	50	757	1	244	1	64	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			209	
Travel Time (s)		28.7			22.0			170.9			4.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	90.0	90.0	90.0	20.0	110.0		25.0	45.0		20.0	20.0	
Total Split (%)	58.1%	58.1%	58.1%	12.9%	71.0%		16.1%	29.0%		12.9%	12.9%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 28 (18%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1209	387	50	757	1	244	1	64	1	0	2
Future Volume (veh/h)	1	1209	387	50	757	1	244	1	64	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1273	388	53	797	1	257	1	36	1	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	383	1193	1011	287	1319	2	328	9	306	96	0	0
Arrive On Green	1.00	1.00	1.00	0.03	0.71	0.71	0.12	0.20	0.20	0.04	0.00	0.00
Sat Flow, veh/h	681	1870	1585	1767	1853	2	1781	43	1549	1371	0	0
Grp Volume(v), veh/h	1	1273	388	53	0	798	257	0	37	1	0	0
Grp Sat Flow(s),veh/h/ln	681	1870	1585	1767	0	1855	1781	0	1592	1371	0	0
Q Serve(g_s), s	0.1	0.0	0.0	1.5	0.0	33.7	18.0	0.0	3.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	22.3	0.0	0.0	1.5	0.0	33.7	18.0	0.0	3.0	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.97	1.00		0.00
Lane Grp Cap(c), veh/h	383	1193	1011	287	0	1321	328	0	315	96	0	0
V/C Ratio(X)	0.00	1.07	0.38	0.18	0.00	0.60	0.78	0.00	0.12	0.01	0.00	0.00
Avail Cap(c_a), veh/h	383	1193	1011	384	0	1321	328	0	390	161	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.45	0.45	0.45	1.00	0.00	1.00	0.85	0.00	0.85	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.5	0.0	0.0	8.2	0.0	11.3	63.1	0.0	51.1	72.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	38.6	0.2	0.3	0.0	2.1	10.6	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	17.7	0.1	1.0	0.0	19.1	15.8	0.0	2.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.5	38.6	0.2	8.5	0.0	13.3	73.7	0.0	51.2	72.1	0.0	0.0
LnGrp LOS	A	F	A	A	A	B	E	A	D	E	A	A
Approach Vol, veh/h		1662			851			294			1	
Approach Delay, s/veh		29.6			13.0			70.9			72.1	
Approach LOS		C			B			E			E	

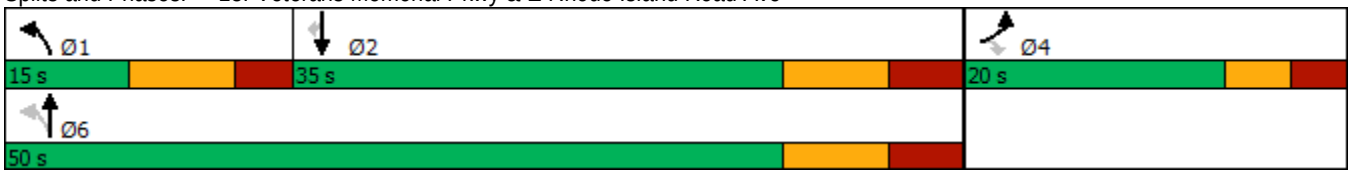
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		117.4		37.6	11.5	105.9	25.0	12.6				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		103.0		38.0	13.0	83.0	18.0	13.0				
Max Q Clear Time (g_c+I1), s		35.7		5.0	3.5	24.3	20.0	2.1				
Green Ext Time (p_c), s		10.2		0.2	0.1	33.6	0.0	0.0				

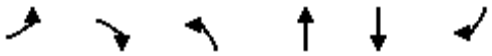
Intersection Summary												
HCM 6th Ctrl Delay			28.9									
HCM 6th LOS			C									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	308	297	433	1059	671	308
Future Volume (vph)	308	297	433	1059	671	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	13.5	13.5	13.5	20.5	20.5	20.5
Total Split (s)	20.0	20.0	15.0	50.0	35.0	35.0
Total Split (%)	28.6%	28.6%	21.4%	71.4%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	308	297	433	1059	671	308
Future Volume (veh/h)	308	297	433	1059	671	308
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	328	159	461	1127	714	277
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	344	306	268	1082	681	577
Arrive On Green	0.19	0.19	0.09	0.58	0.36	0.36
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	328	159	461	1127	714	277
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	12.8	6.3	6.5	40.5	25.5	9.4
Cycle Q Clear(g_c), s	12.8	6.3	6.5	40.5	25.5	9.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	344	306	268	1082	681	577
V/C Ratio(X)	0.95	0.52	1.72	1.04	1.05	0.48
Avail Cap(c_a), veh/h	344	306	268	1082	681	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	25.3	16.7	14.8	22.2	17.1
Incr Delay (d2), s/veh	36.7	1.6	338.6	38.8	47.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.2	4.2	42.2	31.9	26.0	5.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	64.6	26.9	355.3	53.5	69.9	17.8
LnGrp LOS	E	C	F	F	F	B
Approach Vol, veh/h	487			1588	991	
Approach Delay, s/veh	52.3			141.1	55.4	
Approach LOS	D			F	E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	35.0		20.0		50.0
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	6.5	25.5		13.5		40.5
Max Q Clear Time (g_c+I1), s	8.5	27.5		14.8		42.5
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0

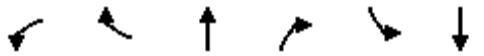
Intersection Summary						
HCM 6th Ctrl Delay			99.3			
HCM 6th LOS			F			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	248	282	761	398	404	960
Future Volume (vph)	248	282	761	398	404	960
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2576
Travel Time (s)	153.9		100.1			39.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	20.0	20.0	35.0		15.0	50.0
Total Split (%)	28.6%	28.6%	50.0%		21.4%	71.4%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 68	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	248	282	761	398	404	960
Future Volume (veh/h)	248	282	761	398	404	960
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	241	801	262	425	1011
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	328	291	979	320	400	2153
Arrive On Green	0.18	0.18	0.37	0.37	0.13	0.61
Sat Flow, veh/h	1781	1585	2725	860	1781	3647
Grp Volume(v), veh/h	261	241	541	522	425	1011
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1715	1781	1777
Q Serve(g_s), s	9.0	9.4	17.6	17.6	8.5	10.1
Cycle Q Clear(g_c), s	9.0	9.4	17.6	17.6	8.5	10.1
Prop In Lane	1.00	1.00		0.50	1.00	
Lane Grp Cap(c), veh/h	328	291	661	638	400	2153
V/C Ratio(X)	0.80	0.83	0.82	0.82	1.06	0.47
Avail Cap(c_a), veh/h	375	333	775	749	400	2409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	25.2	18.2	18.2	13.9	7.0
Incr Delay (d2), s/veh	10.2	14.1	6.0	6.2	62.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	13.8	11.8	11.6	14.8	4.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.2	39.3	24.2	24.4	76.7	7.1
LnGrp LOS	D	D	C	C	F	A
Approach Vol, veh/h	502		1063			1436
Approach Delay, s/veh	37.2		24.3			27.7
Approach LOS	D		C			C

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.9		18.3	15.0	30.9
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 44		13.5	8.5	28.0
Max Q Clear Time (g_c+I1), s		12.1		11.4	10.5	19.6
Green Ext Time (p_c), s		7.6		0.4	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	435	288	6	245	177	11
Future Volume (vph)	435	288	6	245	177	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	30	
Link Distance (ft)	7900			4491	5182	
Travel Time (s)	153.9			87.5	117.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	435	288	6	245	177	11
Future Vol, veh/h	435	288	6	245	177	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	473	313	7	266	192	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	786	0	910	630
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	280	-
Critical Hdwy	-	-	4.12	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.218	-	3.536	3.336
Pot Cap-1 Maneuver	-	-	833	-	302	478
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	833	-	299	478
Mov Cap-2 Maneuver	-	-	-	-	299	-
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	755	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	37.5
HCM LOS			E

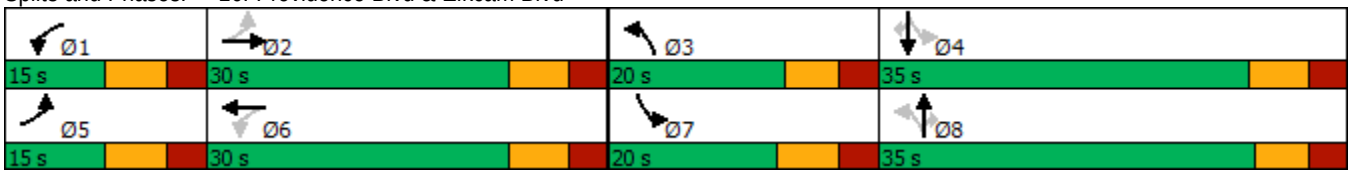
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	306	-	-	833	-
HCM Lane V/C Ratio	0.668	-	-	0.008	-
HCM Control Delay (s)	37.5	-	-	9.4	0
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q(veh)	4.5	-	-	0	-

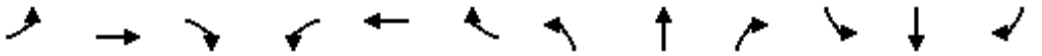
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	240	95	185	157	42	68	280	207	75	362	57
Future Volume (vph)	95	240	95	185	157	42	68	280	207	75	362	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	225		0	235		365	220		295
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		4491			6416			3965			8772	
Travel Time (s)		87.5			125.0			77.2			170.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	12.5	13.5		12.5	13.5		12.0	13.0	13.0	12.5	13.5	13.5
Total Split (s)	15.0	30.0		15.0	30.0		20.0	35.0	35.0	20.0	35.0	35.0
Total Split (%)	15.0%	30.0%		15.0%	30.0%		20.0%	35.0%	35.0%	20.0%	35.0%	35.0%
Yellow Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.5	7.5		7.0	7.0	7.0	7.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 86.3
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 16: Providence Blvd & Elkcam Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	240	95	185	157	42	68	280	207	75	362	57
Future Volume (veh/h)	95	240	95	185	157	42	68	280	207	75	362	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	255	86	197	167	36	72	298	129	80	385	40
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	398	301	102	308	388	84	236	452	383	280	468	396
Arrive On Green	0.06	0.23	0.23	0.10	0.26	0.26	0.05	0.24	0.24	0.05	0.25	0.25
Sat Flow, veh/h	1781	1338	451	1781	1491	321	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	101	0	341	197	0	203	72	298	129	80	385	40
Grp Sat Flow(s),veh/h/ln	1781	0	1789	1781	0	1813	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.3	0.0	14.2	6.6	0.0	7.3	2.3	11.2	5.2	2.6	15.2	1.5
Cycle Q Clear(g_c), s	3.3	0.0	14.2	6.6	0.0	7.3	2.3	11.2	5.2	2.6	15.2	1.5
Prop In Lane	1.00		0.25	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	398	0	403	308	0	471	236	452	383	280	468	396
V/C Ratio(X)	0.25	0.00	0.85	0.64	0.00	0.43	0.31	0.66	0.34	0.29	0.82	0.10
Avail Cap(c_a), veh/h	460	0	516	308	0	522	443	671	569	471	659	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	28.9	21.8	0.0	24.1	21.8	26.7	24.4	21.2	27.6	22.5
Incr Delay (d2), s/veh	0.3	0.0	11.2	4.4	0.0	0.9	0.7	2.3	0.7	0.6	7.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	0.0	11.4	5.3	0.0	5.5	1.7	8.7	3.5	1.9	11.7	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	0.0	40.1	26.2	0.0	24.9	22.6	29.1	25.2	21.8	34.6	22.7
LnGrp LOS	C	A	D	C	A	C	C	C	C	C	C	C
Approach Vol, veh/h		442			400			499			505	
Approach Delay, s/veh		35.9			25.6			27.1			31.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	25.1	11.0	27.0	12.3	27.8	11.6	26.4
Change Period (Y+Rc), s	7.5	7.5	7.0	7.5	7.5	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	7.5	22.5	13.0	27.5	7.5	22.5	12.5	* 28
Max Q Clear Time (g_c+I1), s	8.6	16.2	4.3	17.2	5.3	9.3	4.6	13.2
Green Ext Time (p_c), s	0.0	1.3	0.1	2.3	0.0	1.2	0.1	2.6

Intersection Summary	
HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

Notes

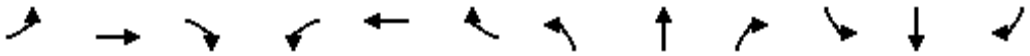
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	164	63	306	167	150	57	420	403	132	400	4
Future Volume (vph)	9	164	63	306	167	150	57	420	403	132	400	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	440		0	200		0	221		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35			35	
Link Distance (ft)		5182			627			844			3965	
Travel Time (s)		117.8			12.2			16.4			77.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0	12.0	5.0	12.0	
Minimum Split (s)	14.0	14.0		13.5	13.5		18.5	18.5	18.5	13.0	20.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0	35.0	20.0	55.0	
Total Split (%)	35.3%	35.3%		35.3%	35.3%		41.2%	41.2%	41.2%	23.5%	64.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.5	4.5	
All-Red Time (s)	3.0	3.0		2.5	2.5		2.5	2.5	2.5	3.5	3.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		6.5	6.5		6.5	6.5	6.5	8.0	8.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Min	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 78.3	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 17: Providence Blvd & Fort Smith Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	164	63	306	167	150	57	420	403	132	400	4
Future Volume (veh/h)	9	164	63	306	167	150	57	420	403	132	400	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	9	173	49	322	176	118	60	442	297	139	421	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	3	3	3
Cap, veh/h	286	436	123	349	330	221	385	559	474	289	885	8
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.30	0.30	0.30	0.08	0.48	0.48
Sat Flow, veh/h	1068	1380	391	1159	1044	700	962	1870	1585	1767	1835	17
Grp Volume(v), veh/h	9	0	222	322	0	294	60	442	297	139	0	425
Grp Sat Flow(s),veh/h/ln	1068	0	1770	1159	0	1744	962	1870	1585	1767	0	1852
Q Serve(g_s), s	0.5	0.0	7.3	16.2	0.0	10.3	3.5	16.1	12.0	3.8	0.0	11.5
Cycle Q Clear(g_c), s	10.8	0.0	7.3	23.5	0.0	10.3	3.5	16.1	12.0	3.8	0.0	11.5
Prop In Lane	1.00		0.22	1.00		0.40	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	286	0	559	349	0	551	385	559	474	289	0	893
V/C Ratio(X)	0.03	0.00	0.40	0.92	0.00	0.53	0.16	0.79	0.63	0.48	0.00	0.48
Avail Cap(c_a), veh/h	286	0	559	349	0	551	466	717	607	441	0	1171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	0.0	19.9	30.8	0.0	20.9	19.5	23.9	22.5	17.2	0.0	12.9
Incr Delay (d2), s/veh	0.0	0.0	0.5	29.1	0.0	1.0	0.3	5.4	1.9	1.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	5.3	13.2	0.0	7.3	1.4	11.9	7.9	2.7	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.4	0.0	20.3	60.0	0.0	21.9	19.7	29.3	24.4	18.4	0.0	13.5
LnGrp LOS	C	A	C	E	A	C	B	C	C	B	A	B
Approach Vol, veh/h		231			616			799			564	
Approach Delay, s/veh		20.5			41.8			26.8			14.7	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	13.6	30.2		30.5		43.9		30.5				
Change Period (Y+Rc), s	8.0	* 8		7.0		8.0		* 7				
Max Green Setting (Gmax), s	12.0	* 29		23.0		47.0		* 24				
Max Q Clear Time (g_c+I1), s	5.8	18.1		12.8		13.5		25.5				
Green Ext Time (p_c), s	0.2	4.1		0.9		4.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		27.2	
HCM 6th LOS		C	

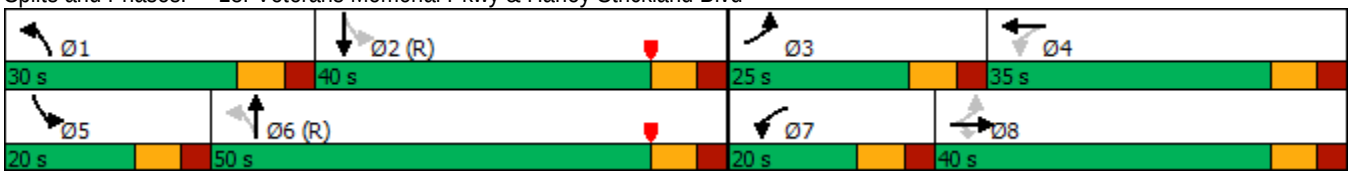
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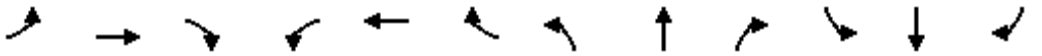
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	61	303	75	41	107	270	453	2	184	742	264
Future Volume (vph)	347	61	303	75	41	107	270	453	2	184	742	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	235		235	250		0	435		0	340		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		642			673			1923			1581	
Travel Time (s)		10.9			15.3			32.8			26.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	3	8	8	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	16.0		5.0	16.0	
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5		12.5	23.5		12.5	23.5	
Total Split (s)	25.0	40.0	40.0	20.0	35.0		30.0	50.0		20.0	40.0	
Total Split (%)	19.2%	30.8%	30.8%	15.4%	26.9%		23.1%	38.5%		15.4%	30.8%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 40 (31%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 18: Veterans Memorial Pkwy & Harley Strickland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	347	61	303	75	41	107	270	453	2	184	742	264
Future Volume (veh/h)	347	61	303	75	41	107	270	453	2	184	742	264
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	361	64	176	78	43	75	281	472	2	192	773	243
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	320	320	271	249	54	94	358	1697	7	549	1173	369
Arrive On Green	0.13	0.17	0.17	0.05	0.09	0.09	0.11	0.47	0.47	0.07	0.44	0.44
Sat Flow, veh/h	1781	1870	1585	1781	612	1067	1767	3600	15	1781	2660	836
Grp Volume(v), veh/h	361	64	176	78	0	118	281	231	243	192	516	500
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1678	1767	1763	1853	1781	1777	1720
Q Serve(g_s), s	17.5	3.8	13.5	5.1	0.0	9.0	11.2	10.4	10.4	7.6	29.8	29.8
Cycle Q Clear(g_c), s	17.5	3.8	13.5	5.1	0.0	9.0	11.2	10.4	10.4	7.6	29.8	29.8
Prop In Lane	1.00		1.00	1.00		0.64	1.00		0.01	1.00		0.49
Lane Grp Cap(c), veh/h	320	320	271	249	0	148	358	831	874	549	783	758
V/C Ratio(X)	1.13	0.20	0.65	0.31	0.00	0.80	0.78	0.28	0.28	0.35	0.66	0.66
Avail Cap(c_a), veh/h	320	468	396	327	0	355	478	831	874	587	783	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	46.3	50.3	50.2	0.0	58.1	22.8	20.9	20.9	17.3	28.6	28.6
Incr Delay (d2), s/veh	89.8	0.3	2.6	0.7	0.0	9.3	0.6	0.1	0.1	0.4	4.3	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.7	3.2	9.3	4.2	0.0	7.6	5.4	5.2	5.5	5.6	19.2	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	138.0	46.6	52.9	51.0	0.0	67.4	23.4	21.0	21.0	17.7	33.0	33.1
LnGrp LOS	F	D	D	D	A	E	C	C	C	B	C	C
Approach Vol, veh/h		601			196			755			1208	
Approach Delay, s/veh		103.3			60.9			21.9			30.6	
Approach LOS		F			E			C			C	

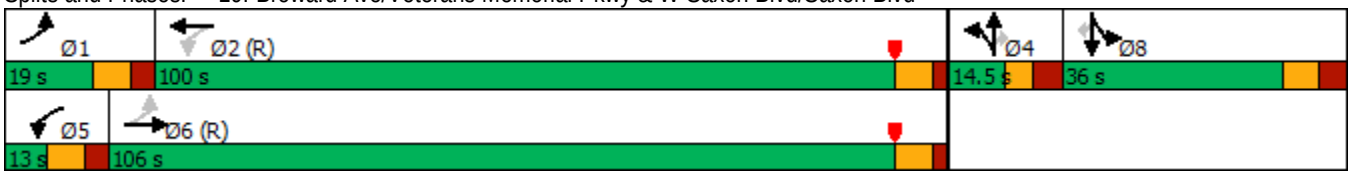
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	64.8	25.0	19.0	17.2	68.8	14.3	29.7
Change Period (Y+Rc), s	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max Green Setting (Gmax), s	22.5	32.5	17.5	27.5	12.5	42.5	12.5	32.5
Max Q Clear Time (g_c+I1), s	13.2	31.8	19.5	11.0	9.6	12.4	7.1	15.5
Green Ext Time (p_c), s	0.6	0.5	0.0	0.5	0.1	4.0	0.1	0.8

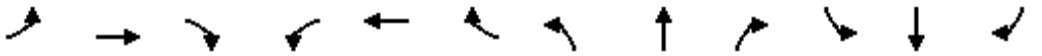
Intersection Summary	
HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1392	30	161	1339	559	48	49	103	729	70	197
Future Volume (vph)	210	1392	30	161	1339	559	48	49	103	729	70	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)										45%		
Turn Type	pm+pt	NA		pm+pt	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	6			2					4			8
Detector Phase	1	6		5	2		4	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	15.3	15.3	15.3
Total Split (s)	19.0	106.0		13.0	100.0		14.5	14.5	14.5	36.0	36.0	36.0
Total Split (%)	11.2%	62.5%		7.7%	59.0%		8.6%	8.6%	8.6%	21.2%	21.2%	21.2%
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.5	4.5	4.5
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	8.3	8.3	8.3
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 124 (73%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1392	30	161	1339	559	48	49	103	729	70	197
Future Volume (veh/h)	210	1392	30	161	1339	559	48	49	103	729	70	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	1465	23	169	1409	588	51	52	40	820	0	112
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	210	3013	47	244	1944	797	73	77	65	580	0	258
Arrive On Green	0.07	0.59	0.59	0.03	0.55	0.55	0.04	0.04	0.04	0.16	0.00	0.16
Sat Flow, veh/h	1767	5137	81	1767	3527	1445	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	221	963	525	169	1348	649	51	52	40	820	0	112
Grp Sat Flow(s),veh/h/ln	1767	1689	1841	1767	1689	1595	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	11.1	28.0	28.0	5.2	50.7	52.3	4.8	4.7	4.2	27.7	0.0	10.8
Cycle Q Clear(g_c), s	11.1	28.0	28.0	5.2	50.7	52.3	4.8	4.7	4.2	27.7	0.0	10.8
Prop In Lane	1.00		0.04	1.00		0.91	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	1981	1080	244	1862	879	73	77	65	580	0	258
V/C Ratio(X)	1.05	0.49	0.49	0.69	0.72	0.74	0.70	0.68	0.61	1.41	0.00	0.43
Avail Cap(c_a), veh/h	210	1981	1080	244	1862	879	73	77	65	580	0	258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00	0.61	0.00	0.61
Uniform Delay (d), s/veh	42.5	20.3	20.3	25.8	28.5	28.9	80.5	80.4	80.2	71.2	0.0	64.1
Incr Delay (d2), s/veh	76.8	0.9	1.6	6.7	2.1	4.6	24.9	20.9	15.8	191.9	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.9	16.4	17.9	5.9	27.0	27.1	4.9	4.9	3.6	40.6	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	119.3	21.2	21.9	32.6	30.6	33.5	105.3	101.3	96.0	263.1	0.0	64.8
LnGrp LOS	F	C	C	C	C	C	F	F	F	F	A	E
Approach Vol, veh/h		1709			2166			143			932	
Approach Delay, s/veh		34.1			31.6			101.3			239.3	
Approach LOS		C			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	100.5		14.5	13.0	106.5		36.0				
Change Period (Y+Rc), s	7.9	6.8		7.5	7.8	6.8		8.3				
Max Green Setting (Gmax), s	11.1	93.2		7.0	5.2	99.2		27.7				
Max Q Clear Time (g_c+I1), s	13.1	54.3		6.8	7.2	30.0		29.7				
Green Ext Time (p_c), s	0.0	20.4		0.0	0.0	13.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		73.6
HCM 6th LOS		E

Notes

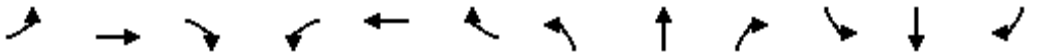
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	2299	101	111	1871	28	62	0	102	36	5	15
Future Volume (vph)	42	2299	101	111	1871	28	62	0	102	36	5	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	365		0	390		0	105		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1867			487			266			246	
Travel Time (s)		28.3			7.4			6.0			5.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.7	17.9		12.8	17.9		14.6	14.6		14.6	14.6	
Total Split (s)	12.7	110.0		15.0	112.3		21.0	21.0		21.0	21.0	
Total Split (%)	8.7%	75.3%		10.3%	76.9%		14.4%	14.4%		14.4%	14.4%	
Yellow Time (s)	4.8	4.9		4.9	4.9		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.9	2.0		2.9	2.0		3.4	3.4		3.4	3.4	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.7	6.9		7.8	6.9		7.6	7.6			7.6	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 146	
Actuated Cycle Length: 146	
Offset: 31 (21%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: FDOT Park & Ride & Saxon Blvd





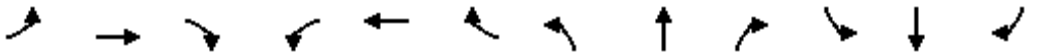
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	2299	101	111	1871	28	62	0	102	36	5	15
Future Volume (veh/h)	42	2299	101	111	1871	28	62	0	102	36	5	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	2472	105	119	2012	29	67	0	44	39	5	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	3736	157	169	3886	56	154	0	111	93	12	7
Arrive On Green	0.03	0.74	0.74	0.03	0.75	0.75	0.07	0.00	0.07	0.07	0.07	0.07
Sat Flow, veh/h	1781	5025	212	1781	5186	75	1405	0	1585	701	173	99
Grp Volume(v), veh/h	45	1668	909	119	1320	721	67	0	44	49	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1832	1781	1702	1857	1405	0	1585	974	0	0
Q Serve(g_s), s	0.9	36.0	36.9	2.3	23.2	23.2	0.0	0.0	3.9	4.3	0.0	0.0
Cycle Q Clear(g_c), s	0.9	36.0	36.9	2.3	23.2	23.2	6.2	0.0	3.9	8.2	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.04	1.00		1.00	0.80		0.10
Lane Grp Cap(c), veh/h	223	2531	1362	169	2551	1392	154	0	111	112	0	0
V/C Ratio(X)	0.20	0.66	0.67	0.70	0.52	0.52	0.43	0.00	0.40	0.44	0.00	0.00
Avail Cap(c_a), veh/h	232	2531	1362	197	2551	1392	185	0	145	143	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.1	9.4	9.5	26.3	7.5	7.5	66.1	0.0	65.0	68.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.9	1.7	8.9	0.8	1.4	1.9	0.0	2.3	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	16.0	17.8	6.5	11.8	13.0	4.5	0.0	3.0	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	10.3	11.2	35.2	8.2	8.9	68.0	0.0	67.3	70.8	0.0	0.0
LnGrp LOS	A	B	B	D	A	A	E	A	E	E	A	A
Approach Vol, veh/h		2622			2160			111			49	
Approach Delay, s/veh		10.6			9.9			67.7			70.8	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	116.3		17.8	12.8	115.4		17.8				
Change Period (Y+Rc), s	* 7.7	6.9		7.6	7.8	6.9		7.6				
Max Green Setting (Gmax), s	* 5	105.4		13.4	7.2	103.1		13.4				
Max Q Clear Time (g_c+I1), s	2.9	25.2		8.2	4.3	38.9		10.2				
Green Ext Time (p_c), s	0.0	42.3		0.1	0.1	51.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		12.2	
HCM 6th LOS		B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Volume (vph)	0	2245	578	0	1791	378	0	0	395	0	0	404
Future Volume (vph)	0	2245	578	0	1791	378	0	0	395	0	0	404
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	30.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	2245	578	0	1791	378	0	0	395	0	0	404
Future Vol, veh/h	0	2245	578	0	1791	378	0	0	395	0	0	404
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Stop
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	2363	608	0	1885	398	0	0	416	0	0	425

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	-	-	0			-	-	943
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	-	-	-			-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	-	-	-			-	-	3.33
Pot Cap-1 Maneuver	0	-	0	0	-	0			0	0	~ 262
Stage 1	0	-	0	0	-	0			0	0	-
Stage 2	0	-	0	0	-	0			0	0	-
Platoon blocked, %		-			-						
Mov Cap-1 Maneuver	-	-	-	-	-	-			-	0	~ 262
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	$ 331.3
HCM LOS			F

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	262
HCM Lane V/C Ratio	-	-	1.623
HCM Control Delay (s)	-	-	$ 331.3
HCM Lane LOS	-	-	F
HCM 95th %tile Q(veh)	-	-	26.4

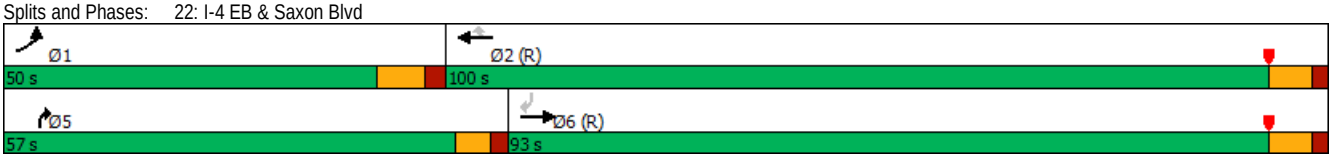
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Future Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		2	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1249			900			503	
Travel Time (s)		24.2			18.9			13.6			7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	477	3416	0	0	1547	285	0	0	1149	0	0	614
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	50.0	93.0			100.0	100.0			57.0			93.0
Total Split (%)	33.3%	62.0%			66.7%	66.7%			38.0%			62.0%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	0.97	1.17			0.70	0.28			1.19			0.45
Control Delay	86.8	110.9			7.9	2.5			137.6			1.0
Queue Delay	0.0	0.0			0.0	0.0			0.0			0.0
Total Delay	86.8	110.9			7.9	2.5			137.6			1.0
Queue Length 50th (ft)	461	~1452			134	9			~759			0
Queue Length 95th (ft)	#687	#1513			157	m27			#912			0
Internal Link Dist (ft)		1519			1169			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	499	2922			2212	1033			966			1379
Starvation Cap Reductn	0	0			0	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	0.96	1.17			0.70	0.28			1.19			0.45

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 26 (17%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 22: I-4 EB & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Future Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.91			0.95	1.00			0.88			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	5085			3539	1583			2787			1611
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	5085			3539	1583			2787			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	477	3416	0	0	1547	285	0	0	1149	0	0	614
RTOR Reduction (vph)	0	0	0	0	0	44	0	0	18	0	0	261
Lane Group Flow (vph)	477	3416	0	0	1547	241	0	0	1131	0	0	353
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	41.7	86.2			93.8	93.8			51.0			86.2
Effective Green, g (s)	41.7	86.2			93.8	93.8			51.0			86.2
Actuated g/C Ratio	0.28	0.57			0.63	0.63			0.34			0.57
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	492	2922			2213	989			947			925
v/s Ratio Prot	0.27	c0.67			0.44				c0.41			
v/s Ratio Perm						0.15						0.22
v/c Ratio	0.97	1.17			0.70	0.24			1.19			0.38
Uniform Delay, d1	53.5	31.9			18.7	12.4			49.5			17.4
Progression Factor	1.00	1.00			0.35	0.28			1.00			1.00
Incremental Delay, d2	32.4	80.1			1.2	0.4			97.7			1.2
Delay (s)	85.9	112.0			7.8	3.8			147.2			18.6
Level of Service	F	F			A	A			F			B
Approach Delay (s)		108.8			7.2			147.2			18.6	
Approach LOS		F			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	82.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	110.5%	ICU Level of Service	H
Analysis Period (min)	15		

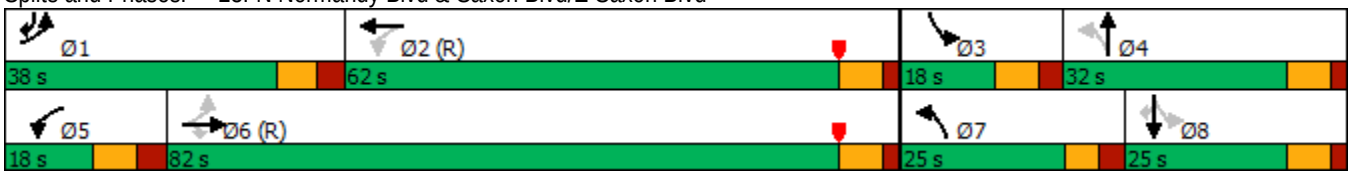
c Critical Lane Group

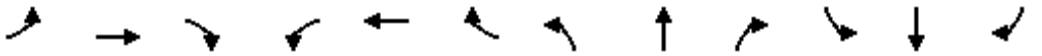
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	736	1527	360	34	688	239	195	301	48	314	310	533
Future Volume (vph)	736	1527	360	34	688	239	195	301	48	314	310	533
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	0		385
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1867			7172			3746			5140	
Travel Time (s)		31.8			122.3			73.0			100.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases	6		6	2			4			8		8
Detector Phase	1	6	6	5	2		7	4		3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		5.0	10.0		5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9		11.8	16.9		12.5	16.9	12.6
Total Split (s)	38.0	82.0	82.0	18.0	62.0		25.0	32.0		18.0	25.0	38.0
Total Split (%)	25.3%	54.7%	54.7%	12.0%	41.3%		16.7%	21.3%		12.0%	16.7%	25.3%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9		4.0	4.8		4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0		2.8	2.1		2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9		6.8	6.9		7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 95 (63%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	736	1527	360	34	688	239	195	301	48	314	310	533
Future Volume (veh/h)	736	1527	360	34	688	239	195	301	48	314	310	533
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	767	1591	315	35	717	247	203	314	42	327	323	429
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	482	1923	858	119	953	328	245	268	36	173	244	528
Arrive On Green	0.07	0.18	0.18	0.03	0.37	0.37	0.11	0.17	0.17	0.07	0.13	0.13
Sat Flow, veh/h	1781	3554	1585	1781	2593	893	1767	1603	214	1781	1870	1585
Grp Volume(v), veh/h	767	1591	315	35	491	473	203	0	356	327	323	429
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1710	1767	0	1817	1781	1870	1585
Q Serve(g_s), s	30.4	64.7	26.2	1.8	36.3	36.3	14.7	0.0	25.1	10.5	19.6	19.6
Cycle Q Clear(g_c), s	30.4	64.7	26.2	1.8	36.3	36.3	14.7	0.0	25.1	10.5	19.6	19.6
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	482	1923	858	119	653	628	245	0	304	173	244	528
V/C Ratio(X)	1.59	0.83	0.37	0.29	0.75	0.75	0.83	0.00	1.17	1.89	1.32	0.81
Avail Cap(c_a), veh/h	482	1923	858	191	653	628	262	0	304	173	244	528
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	0.56	0.56	0.56	0.74	0.00	0.74	0.84	0.84	0.84
Uniform Delay (d), s/veh	49.0	54.9	39.0	34.0	41.5	41.5	49.4	0.0	62.5	57.1	65.2	45.7
Incr Delay (d2), s/veh	271.7	2.6	0.7	0.8	4.5	4.7	14.2	0.0	100.0	419.9	168.0	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	80.8	38.8	15.6	1.5	21.4	20.8	11.3	0.0	28.4	33.6	30.9	21.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	320.8	57.5	39.8	34.8	46.0	46.2	63.6	0.0	162.4	477.0	233.2	54.1
LnGrp LOS	F	E	D	C	D	D	E	A	F	F	F	D
Approach Vol, veh/h		2673			999			559			1079	
Approach Delay, s/veh		130.9			45.7			126.6			235.9	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.0	62.0	18.0	32.0	11.9	88.1	23.5	26.5
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 30	55.1	* 11	25.1	* 9.9	75.1	* 18	18.1
Max Q Clear Time (g_c+I1), s	32.4	38.3	12.5	27.1	3.8	66.7	16.7	21.6
Green Ext Time (p_c), s	0.0	7.5	0.0	0.0	0.0	7.3	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	135.8
HCM 6th LOS	F

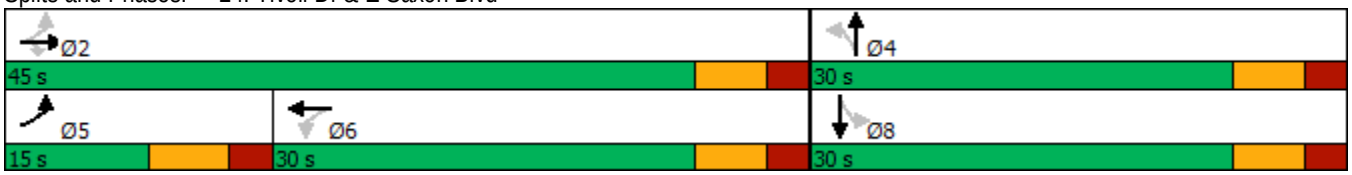
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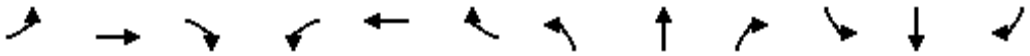
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	474	612	106	6	403	14	82	111	8	5	87	288
Future Volume (vph)	474	612	106	6	403	14	82	111	8	5	87	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390		0	120		0	265		0	150		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			30			30	
Link Distance (ft)		7172			644			704			1061	
Travel Time (s)		122.3			12.5			16.0			24.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	5	2	2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0	11.0	11.0	11.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	12.0	17.5	17.5	17.5	17.5		11.5	11.5		11.5	11.5	
Total Split (s)	15.0	45.0	45.0	30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	20.0%	60.0%	60.0%	40.0%	40.0%		40.0%	40.0%		40.0%	40.0%	
Yellow Time (s)	4.5	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	6.5	6.5	6.5	6.5		6.5	6.5		6.5	6.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min	Min	Min	Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 62.6	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 24: Tivoli Dr & E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	612	106	6	403	14	82	111	8	5	87	288
Future Volume (veh/h)	474	612	106	6	403	14	82	111	8	5	87	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	510	658	81	6	433	14	88	119	7	5	94	207
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	391	976	827	299	517	17	238	484	28	395	144	317
Arrive On Green	0.12	0.52	0.52	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	1870	1585	714	1787	58	1078	1749	103	1265	520	1145
Grp Volume(v), veh/h	510	658	81	6	0	447	88	0	126	5	0	301
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	714	0	1845	1078	0	1852	1265	0	1664
Q Serve(g_s), s	8.0	16.7	1.7	0.4	0.0	14.7	5.1	0.0	3.4	0.2	0.0	10.3
Cycle Q Clear(g_c), s	8.0	16.7	1.7	2.1	0.0	14.7	15.4	0.0	3.4	3.6	0.0	10.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.06	1.00		0.69
Lane Grp Cap(c), veh/h	391	976	827	299	0	534	238	0	512	395	0	461
V/C Ratio(X)	1.30	0.67	0.10	0.02	0.00	0.84	0.37	0.00	0.25	0.01	0.00	0.65
Avail Cap(c_a), veh/h	391	1116	946	352	0	672	332	0	675	506	0	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	11.4	7.8	17.7	0.0	21.5	27.4	0.0	18.1	19.5	0.0	20.6
Incr Delay (d2), s/veh	154.5	1.6	0.1	0.0	0.0	8.4	1.0	0.0	0.2	0.0	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	30.6	9.7	0.8	0.1	0.0	11.2	2.3	0.0	2.5	0.1	0.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	172.5	13.0	7.8	17.7	0.0	29.9	28.3	0.0	18.4	19.5	0.0	22.2
LnGrp LOS	F	B	A	B	A	C	C	A	B	B	A	C
Approach Vol, veh/h		1249			453			214			306	
Approach Delay, s/veh		77.8			29.7			22.5			22.1	
Approach LOS		E			C			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		40.2		24.3	15.0	25.2		24.3				
Change Period (Y+Rc), s		6.5		6.5	7.0	6.5		6.5				
Max Green Setting (Gmax), s		38.5		23.5	8.0	23.5		23.5				
Max Q Clear Time (g_c+I1), s		18.7		17.4	10.0	16.7		12.3				
Green Ext Time (p_c), s		6.3		0.5	0.0	2.0		1.4				

Intersection Summary												
HCM 6th Ctrl Delay			55.0									
HCM 6th LOS			D									

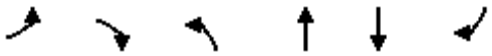
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	346	365	198	201	304	326
Future Volume (vph)	346	365	198	201	304	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	230			350
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			30	35	
Link Distance (ft)	908			839	3746	
Travel Time (s)	17.7			19.1	73.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	3.0	10.0	10.0	10.0
Minimum Split (s)	10.0	10.0	9.5	16.5	17.0	17.0
Total Split (s)	20.0	20.0	15.0	40.0	25.0	25.0
Total Split (%)	33.3%	33.3%	25.0%	66.7%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 56.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 25: N Normandy Blvd & Deltona Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	346	365	198	201	304	326
Future Volume (veh/h)	346	365	198	201	304	326
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	368	167	211	214	323	247
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	437	389	422	912	443	376
Arrive On Green	0.25	0.25	0.12	0.49	0.24	0.24
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	368	167	211	214	323	247
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	9.6	4.3	4.0	3.2	7.8	6.9
Cycle Q Clear(g_c), s	9.6	4.3	4.0	3.2	7.8	6.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	437	389	422	912	443	376
V/C Ratio(X)	0.84	0.43	0.50	0.23	0.73	0.66
Avail Cap(c_a), veh/h	512	455	524	1286	691	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	15.5	11.4	7.2	17.1	16.8
Incr Delay (d2), s/veh	10.1	0.6	0.7	0.1	2.3	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	0.1	2.4	1.8	5.6	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.6	16.1	12.1	7.3	19.5	18.8
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	535			425	570	
Approach Delay, s/veh	24.0			9.7	19.2	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		30.8		18.0	12.2	18.5
Change Period (Y+Rc), s		* 7		6.0	6.5	7.0
Max Green Setting (Gmax), s		* 34		14.0	8.5	18.0
Max Q Clear Time (g_c+I1), s		5.2		11.6	6.0	9.8
Green Ext Time (p_c), s		1.2		0.4	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Notes

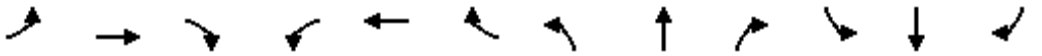
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	2979	15	50	1568	22	82	22	59	16	13	114
Future Volume (vph)	185	2979	15	50	1568	22	82	22	59	16	13	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1073			1303			959			734	
Travel Time (s)		16.3			19.7			21.8			16.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	25.0	85.0	85.0	25.0	85.0		40.0	40.0		40.0	40.0	
Total Split (%)	16.7%	56.7%	56.7%	16.7%	56.7%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 112 (75%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	2979	15	50	1568	22	82	22	59	16	13	114
Future Volume (veh/h)	185	2979	15	50	1568	22	82	22	59	16	13	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	193	3103	16	52	1633	23	85	23	61	17	14	119
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	333	2304	1028	101	2236	31	152	71	189	197	27	229
Arrive On Green	0.05	0.65	0.65	0.06	1.00	1.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3588	50	1247	449	1192	1314	170	1441
Grp Volume(v), veh/h	193	3103	16	52	808	848	85	0	84	17	0	133
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1861	1247	0	1641	1314	0	1611
Q Serve(g_s), s	5.9	97.2	0.5	1.6	0.0	0.0	10.1	0.0	6.8	1.7	0.0	11.4
Cycle Q Clear(g_c), s	5.9	97.2	0.5	1.6	0.0	0.0	21.4	0.0	6.8	8.5	0.0	11.4
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.73	1.00		0.89
Lane Grp Cap(c), veh/h	333	2304	1028	101	1107	1160	152	0	261	197	0	256
V/C Ratio(X)	0.58	1.35	0.02	0.52	0.73	0.73	0.56	0.00	0.32	0.09	0.00	0.52
Avail Cap(c_a), veh/h	432	2304	1028	244	1107	1160	224	0	356	273	0	349
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.80	0.80	0.80	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.7	26.4	9.4	37.3	0.0	0.0	67.7	0.0	55.9	59.7	0.0	57.8
Incr Delay (d2), s/veh	0.1	156.4	0.0	3.3	3.4	3.3	3.2	0.0	0.7	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	116.3	0.3	2.2	1.9	1.9	6.0	0.0	5.2	1.1	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.9	182.8	9.4	40.5	3.4	3.3	70.9	0.0	56.6	59.9	0.0	59.5
LnGrp LOS	A	F	A	D	A	A	E	A	E	E	A	E
Approach Vol, veh/h		3312			1708			169			150	
Approach Delay, s/veh		171.8			4.5			63.8			59.5	
Approach LOS		F			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.7	102.0		31.3	12.9	105.7		31.3				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	16.5	76.5		32.5	16.5	76.5		32.5				
Max Q Clear Time (g_c+I1), s	7.9	2.0		23.4	3.6	99.2		13.4				
Green Ext Time (p_c), s	0.3	30.9		0.4	0.1	0.0		0.7				

Intersection Summary		
HCM 6th Ctrl Delay	111.7	
HCM 6th LOS	F	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2751	279	84	1567	109	21
Future Volume (vph)	2751	279	84	1567	109	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1303			6031	1518	
Travel Time (s)	19.7			91.4	29.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	6%	6%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	60.0		40.0	100.0	50.0	
Total Split (%)	40.0%		26.7%	66.7%	33.3%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 108 (72%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2751	279	84	1567	109	21
Future Volume (veh/h)	2751	279	84	1567	109	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1811	1900
Adj Flow Rate, veh/h	2927	297	89	1667	137	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	6	0
Cap, veh/h	2435	243	114	2978	191	89
Arrive On Green	1.00	1.00	0.04	0.84	0.06	0.00
Sat Flow, veh/h	3357	325	1781	3647	3450	1610
Grp Volume(v), veh/h	1571	1653	89	1667	137	0
Grp Sat Flow(s),veh/h/ln	1777	1812	1781	1777	1725	1610
Q Serve(g_s), s	0.0	101.4	3.0	21.5	5.9	0.0
Cycle Q Clear(g_c), s	0.0	101.4	3.0	21.5	5.9	0.0
Prop In Lane		0.18	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1326	1352	114	2978	191	89
V/C Ratio(X)	1.18	1.22	0.78	0.56	0.72	0.00
Avail Cap(c_a), veh/h	1326	1352	426	2978	977	456
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.45	0.45	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	52.4	3.7	69.7	0.0
Incr Delay (d2), s/veh	83.8	100.9	5.2	0.3	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	39.4	49.3	5.5	7.6	4.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	83.8	100.9	57.6	4.0	74.7	0.0
LnGrp LOS	F	F	E	A	E	A
Approach Vol, veh/h	3224			1756	137	
Approach Delay, s/veh	92.6			6.8	74.7	
Approach LOS	F			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		134.2		15.8	13.7	120.5
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		91.5		42.5	31.5	51.5
Max Q Clear Time (g_c+I1), s		23.5		7.9	5.0	103.4
Green Ext Time (p_c), s		31.7		0.5	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.6
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

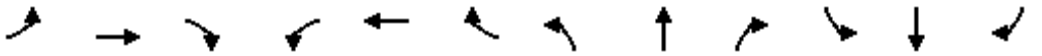
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	2183	50	97	1417	16	104	77	120	57	32	175
Future Volume (vph)	266	2183	50	97	1417	16	104	77	120	57	32	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1249			1867			677			522	
Travel Time (s)		21.3			28.3			15.4			11.9	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	30.0	100.0		18.0	88.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	20.0%	66.7%		12.0%	58.7%		21.3%	21.3%		21.3%	21.3%	21.3%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 15 (10%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	2183	50	97	1417	16	104	77	120	57	32	175
Future Volume (veh/h)	266	2183	50	97	1417	16	104	77	120	57	32	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2347	54	104	1524	17	112	83	129	61	34	188
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	3209	74	124	1946	22	48	115	179	88	41	277
Arrive On Green	0.31	1.00	1.00	0.09	0.72	0.72	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	5135	118	1781	3600	40	1159	660	1026	278	234	1585
Grp Volume(v), veh/h	286	1553	848	104	752	789	112	0	212	95	0	188
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1777	1863	1159	0	1686	512	0	1585
Q Serve(g_s), s	23.2	0.0	0.0	8.6	40.8	40.9	0.0	0.0	17.8	8.4	0.0	16.7
Cycle Q Clear(g_c), s	23.2	0.0	0.0	8.6	40.8	40.9	26.2	0.0	17.8	26.2	0.0	16.7
Prop In Lane	1.00		0.06	1.00		0.02	1.00		0.61	0.64		1.00
Lane Grp Cap(c), veh/h	276	2127	1155	124	961	1007	48	0	294	129	0	277
V/C Ratio(X)	1.04	0.73	0.73	0.84	0.78	0.78	2.33	0.00	0.72	0.74	0.00	0.68
Avail Cap(c_a), veh/h	276	2127	1155	132	961	1007	48	0	294	129	0	277
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.51	0.51	0.51	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.8	0.0	0.0	67.2	15.4	15.4	75.0	0.0	58.4	67.9	0.0	58.0
Incr Delay (d2), s/veh	27.2	0.2	0.4	19.8	3.3	3.2	659.7	0.0	9.0	21.1	0.0	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.8	0.1	0.2	6.9	17.1	17.8	19.2	0.0	13.1	7.9	0.0	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	0.2	0.4	87.0	18.7	18.6	734.7	0.0	67.4	89.1	0.0	65.2
LnGrp LOS	F	A	A	F	B	B	F	A	E	F	A	E
Approach Vol, veh/h		2687			1645			324			283	
Approach Delay, s/veh		8.7			23.0			298.1			73.2	
Approach LOS		A			C			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.4	100.6		32.0	30.0	88.0		32.0				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	93.1		* 26	23.2	81.1		* 26				
Max Q Clear Time (g_c+I1), s	10.6	2.0		28.2	25.2	42.9		28.2				
Green Ext Time (p_c), s	0.0	62.2		0.0	0.0	20.3		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		36.1
HCM 6th LOS		D

Notes

User approved pedestrian interval to be less than phase max green.

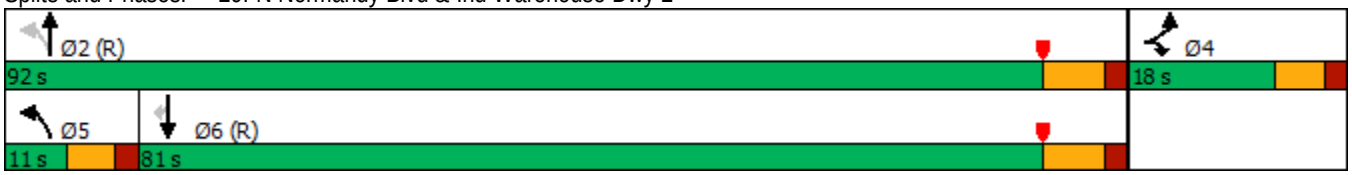
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

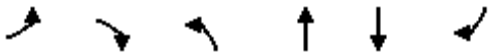
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	277	24	54	1168	1515	186
Future Volume (vph)	277	24	54	1168	1515	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	100			100
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			45	45	
Link Distance (ft)	405			375	2612	
Travel Time (s)	9.2			5.7	39.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Turn Type	Prot	Prot	pm+pt	NA	NA	Perm
Protected Phases	4	4	5	2	6	
Permitted Phases			2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	25.0	25.0	25.0
Total Split (s)	18.0	18.0	11.0	92.0	81.0	81.0
Total Split (%)	16.4%	16.4%	10.0%	83.6%	73.6%	73.6%
Yellow Time (s)	4.0	4.0	4.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	7.0	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 100 (91%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2

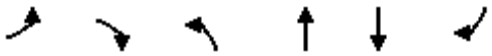




Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	277	24	54	1168	1515	186
Future Volume (veh/h)	277	24	54	1168	1515	186
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	301	26	59	1270	1647	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	361	165	133	1454	1281	1086
Arrive On Green	0.10	0.10	0.04	0.78	0.68	0.68
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	301	26	59	1270	1647	202
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	9.4	1.6	1.0	51.8	75.3	5.1
Cycle Q Clear(g_c), s	9.4	1.6	1.0	51.8	75.3	5.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	361	165	133	1454	1281	1086
V/C Ratio(X)	0.83	0.16	0.44	0.87	1.29	0.19
Avail Cap(c_a), veh/h	377	173	146	1454	1281	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.09	0.09
Uniform Delay (d), s/veh	48.3	44.9	31.0	8.5	17.3	6.3
Incr Delay (d2), s/veh	14.4	0.4	2.3	7.5	129.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	2.7	2.1	22.4	93.1	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.8	45.3	33.3	16.0	146.4	6.3
LnGrp LOS	E	D	C	B	F	A
Approach Vol, veh/h	327			1329	1849	
Approach Delay, s/veh	61.4			16.8	131.1	
Approach LOS	E			B	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.5		17.5	10.2	82.3
Change Period (Y+Rc), s		7.0		6.0	6.0	7.0
Max Green Setting (Gmax), s		85.0		12.0	5.0	74.0
Max Q Clear Time (g_c+I1), s		53.8		11.4	3.0	77.3
Green Ext Time (p_c), s		14.4		0.1	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		81.3
HCM 6th LOS		F



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	211	108	1167	1548	25
Future Volume (vph)	0	211	108	1167	1548	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	0	1	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			45	45	
Link Distance (ft)	480			482	375	
Travel Time (s)	10.9			7.3	5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	38.5

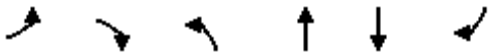
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	211	108	1167	1548	25
Future Vol, veh/h	0	211	108	1167	1548	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	229	117	1268	1683	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1697	1710	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	~ 114	371	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	~ 114	371	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 547.8	1.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	371	-	114	-	-
HCM Lane V/C Ratio	0.316	-	2.012	-	-
HCM Control Delay (s)	19.1	-	$ 547.8	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	1.3	-	19	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	60	30	21	1274	1759	21
Future Volume (vph)	60	30	21	1274	1759	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			45	45	
Link Distance (ft)	445			3743	482	
Travel Time (s)	10.1			56.7	7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	120.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	30	21	1274	1759	21
Future Vol, veh/h	60	30	21	1274	1759	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	33	23	1385	1912	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3355	1924	1935	0	-	0
Stage 1	1924	-	-	-	-	-
Stage 2	1431	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 9	83	303	-	-	-
Stage 1	125	-	-	-	-	-
Stage 2	220	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	83	303	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	116	-	-	-	-	-
Stage 2	220	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 4221	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	303	-	11	-	-
HCM Lane V/C Ratio	0.075	-	8.893	-	-
HCM Control Delay (s)	17.8	-	$ 4221	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	13.6	-	-

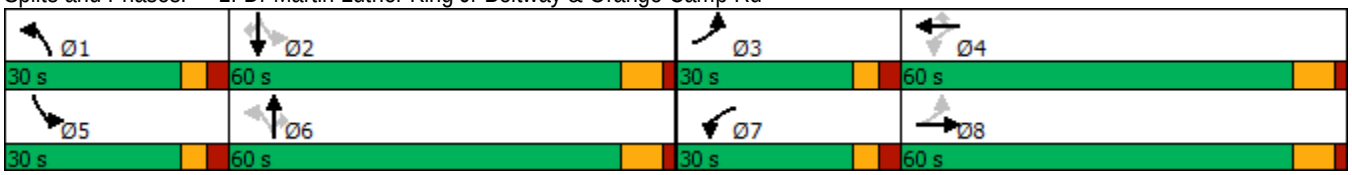
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

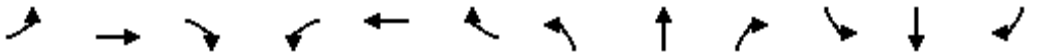
E-8: PM Peak Hour Future Background Traffic Conditions with Improvement

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	506	177	80	722	260	304	512	60	262	453	70
Future Volume (vph)	70	506	177	80	722	260	304	512	60	262	453	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4		4	6		6	2		2
Detector Phase	3	8		7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0	7.0	5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5	14.5	11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 156.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	506	177	80	722	260	304	512	60	262	453	70
Future Volume (veh/h)	70	506	177	80	722	260	304	512	60	262	453	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	74	533	172	84	760	262	320	539	50	276	477	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	735	236	212	998	445	368	602	511	318	571	484
Arrive On Green	0.04	0.28	0.28	0.05	0.28	0.28	0.14	0.32	0.32	0.12	0.31	0.31
Sat Flow, veh/h	1781	2644	850	1767	3526	1572	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	74	357	348	84	760	262	320	539	50	276	477	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1717	1767	1763	1572	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	3.7	22.7	22.9	4.2	24.6	17.9	15.2	34.5	2.8	13.1	29.9	2.8
Cycle Q Clear(g_c), s	3.7	22.7	22.9	4.2	24.6	17.9	15.2	34.5	2.8	13.1	29.9	2.8
Prop In Lane	1.00		0.49	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	494	477	212	998	445	368	602	511	318	571	484
V/C Ratio(X)	0.41	0.72	0.73	0.40	0.76	0.59	0.87	0.89	0.10	0.87	0.84	0.10
Avail Cap(c_a), veh/h	441	748	723	460	1484	662	450	781	662	430	781	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	40.7	40.8	32.1	40.9	38.5	28.2	40.1	29.4	29.3	40.2	30.8
Incr Delay (d2), s/veh	1.5	2.9	3.0	1.2	1.8	1.8	14.4	11.6	0.1	13.3	6.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	15.1	14.8	3.2	15.8	11.1	11.8	23.4	1.9	10.4	20.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	43.6	43.8	33.3	42.7	40.2	42.6	51.7	29.5	42.6	46.9	31.0
LnGrp LOS	C	D	D	C	D	D	D	D	C	D	D	C
Approach Vol, veh/h		779			1106			909			802	
Approach Delay, s/veh		42.8			41.4			47.3			44.5	
Approach LOS		D			D			D			D	

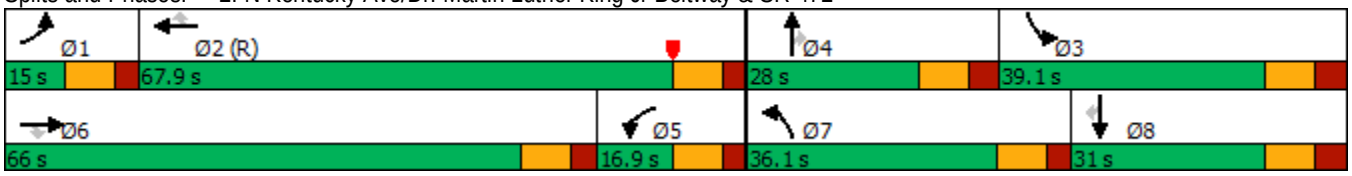
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.2	45.9	11.9	42.8	22.1	48.0	12.5	42.1
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	17.2	31.9	5.7	26.6	15.1	36.5	6.2	24.9
Green Ext Time (p_c), s	0.5	3.8	0.1	8.7	0.5	4.0	0.1	6.1

Intersection Summary	
HCM 6th Ctrl Delay	43.9
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	1103	373	186	1144	380	282	410	67	315	460	51
Future Volume (vph)	61	1103	373	186	1144	380	282	410	67	315	460	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	5.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	13.3	15.8	15.8	16.4	16.4	16.4
Total Split (s)	15.0	66.0	66.0	16.9	67.9	67.9	36.1	28.0	28.0	39.1	31.0	31.0
Total Split (%)	10.0%	44.0%	44.0%	11.3%	45.3%	45.3%	24.1%	18.7%	18.7%	26.1%	20.7%	20.7%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1103	373	186	1144	380	282	410	67	315	460	51
Future Volume (veh/h)	61	1103	373	186	1144	380	282	410	67	315	460	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	66	1186	284	200	1230	227	303	441	0	339	495	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	2	2	2
Cap, veh/h	80	1313	586	249	1401	625	323	448		353	516	
Arrive On Green	0.04	0.37	0.37	0.02	0.13	0.13	0.18	0.13	0.00	0.20	0.15	0.00
Sat Flow, veh/h	1781	3554	1585	3428	3526	1572	1753	3497	1560	1781	3554	1585
Grp Volume(v), veh/h	66	1186	284	200	1230	227	303	441	0	339	495	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1714	1763	1572	1753	1749	1560	1781	1777	1585
Q Serve(g_s), s	5.5	47.4	11.0	8.7	51.4	9.4	25.6	18.9	0.0	28.3	20.7	0.0
Cycle Q Clear(g_c), s	5.5	47.4	11.0	8.7	51.4	9.4	25.6	18.9	0.0	28.3	20.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	1313	586	249	1401	625	323	448		353	516	
V/C Ratio(X)	0.83	0.90	0.48	0.80	0.88	0.36	0.94	0.99		0.96	0.96	
Avail Cap(c_a), veh/h	80	1367	610	249	1401	625	325	448		353	516	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.64	0.64	0.64	0.64	0.64	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.1	44.8	10.3	72.1	61.6	10.8	60.4	65.3	0.0	59.6	63.6	0.0
Incr Delay (d2), s/veh	49.2	8.7	0.9	11.6	5.4	1.0	25.6	30.2	0.0	37.8	29.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	29.0	6.5	7.0	31.9	5.9	18.3	14.3	0.0	22.6	16.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.2	53.5	11.2	83.8	67.0	11.9	85.9	95.5	0.0	97.4	93.1	0.0
LnGrp LOS	F	D	B	F	E	B	F	F		F	F	
Approach Vol, veh/h		1536			1657			744	A		834	A
Approach Delay, s/veh		48.5			61.5			91.6			94.8	
Approach LOS		D			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	67.9	39.1	28.0	19.2	63.7	35.9	31.2
Change Period (Y+Rc), s	* 8.3	* 8.3	* 9.4	* 8.8	* 8.3	* 8.3	* 8.3	* 9.4
Max Green Setting (Gmax), s	* 6.7	* 60	* 30	* 19	* 8.6	* 58	* 28	* 22
Max Q Clear Time (g_c+I1), s	7.5	53.4	30.3	20.9	10.7	49.4	27.6	22.7
Green Ext Time (p_c), s	0.0	4.7	0.0	0.0	0.0	6.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	67.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

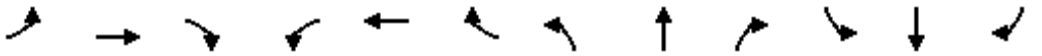
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	842	752	541	1573	0	0	0	0	421	0	315
Future Volume (vph)	0	842	752	541	1573	0	0	0	0	421	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	2		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		66.0	66.0	45.0	111.0					39.0		39.0
Total Split (%)		44.0%	44.0%	30.0%	74.0%					26.0%		26.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 38 (25%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	842	752	541	1573	0	0	0	0	421	0	315
Future Volume (veh/h)	0	842	752	541	1573	0	0	0	0	421	0	315
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	896	0	576	1673	0				448	0	167
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1828		646	2661	0				521	0	239
Arrive On Green	0.00	0.51	0.00	0.19	0.75	0.00				0.15	0.00	0.15
Sat Flow, veh/h	0	3647	1585	3456	3647	0				3456	0	1585
Grp Volume(v), veh/h	0	896	0	576	1673	0				448	0	167
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1728	1777	0				1728	0	1585
Q Serve(g_s), s	0.0	24.6	0.0	24.4	33.5	0.0				19.0	0.0	15.0
Cycle Q Clear(g_c), s	0.0	24.6	0.0	24.4	33.5	0.0				19.0	0.0	15.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1828		646	2661	0				521	0	239
V/C Ratio(X)	0.00	0.49		0.89	0.63	0.00				0.86	0.00	0.70
Avail Cap(c_a), veh/h	0	1828		873	2661	0				714	0	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.37	0.00	0.71	0.71	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.6	0.0	59.5	9.0	0.0				62.2	0.0	60.5
Incr Delay (d2), s/veh	0.0	0.3	0.0	6.7	0.8	0.0				7.9	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	12.9	0.0	15.6	15.4	0.0				13.6	0.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.0	0.0	66.2	9.8	0.0				70.0	0.0	64.4
LnGrp LOS	A	C		E	A	A				E	A	E
Approach Vol, veh/h		896	A		2249						615	
Approach Delay, s/veh		24.0			24.2						68.5	
Approach LOS		C			C						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		119.4			35.1	84.3		30.6				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		103.9			37.9	58.9		31.0				
Max Q Clear Time (g_c+I1), s		35.5			26.4	26.6		21.0				
Green Ext Time (p_c), s		19.4			1.6	6.1		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			31.4									
HCM 6th LOS			C									

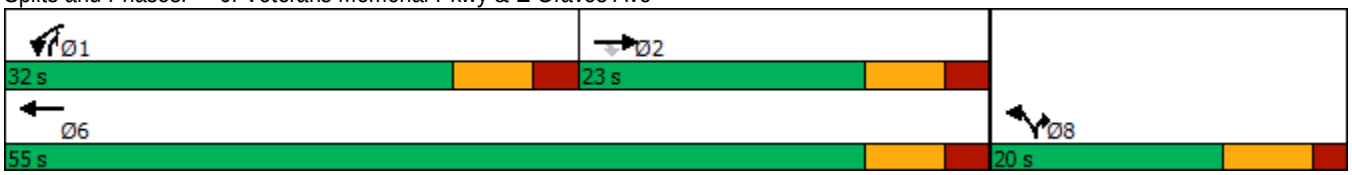
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	336	46	1004	619	73	1042
Future Volume (vph)	336	46	1004	619	73	1042
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	2		1	2
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8 1
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	
Total Split (s)	23.0	23.0	32.0	55.0	20.0	
Total Split (%)	30.7%	30.7%	42.7%	73.3%	26.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	336	46	1004	619	73	1042
Future Volume (veh/h)	336	46	1004	619	73	1042
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1841	1841	1870	1870
Adj Flow Rate, veh/h	354	21	1057	652	77	988
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	4	4	2	2
Cap, veh/h	395	335	1128	1175	310	1411
Arrive On Green	0.21	0.21	0.33	0.64	0.17	0.17
Sat Flow, veh/h	1856	1572	3401	1841	1781	2790
Grp Volume(v), veh/h	354	21	1057	652	77	988
Grp Sat Flow(s),veh/h/ln	1856	1572	1700	1841	1781	1395
Q Serve(g_s), s	13.9	0.8	22.5	14.8	2.8	13.0
Cycle Q Clear(g_c), s	13.9	0.8	22.5	14.8	2.8	13.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	395	335	1128	1175	310	1411
V/C Ratio(X)	0.90	0.06	0.94	0.55	0.25	0.70
Avail Cap(c_a), veh/h	398	337	1139	1183	310	1411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	23.4	24.2	7.6	26.6	14.1
Incr Delay (d2), s/veh	22.5	0.1	14.1	0.7	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.8	0.5	15.3	7.5	2.0	9.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.1	23.5	38.3	8.3	27.0	15.7
LnGrp LOS	D	C	D	A	C	B
Approach Vol, veh/h	375			1709	1065	
Approach Delay, s/veh	49.5			26.8	16.5	
Approach LOS	D			C	B	

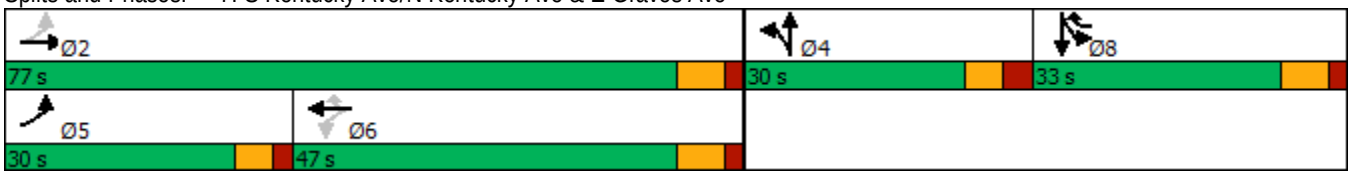
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	31.8	22.9				54.7	20.0
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	25.0	16.0				48.0	13.0
Max Q Clear Time (g_c+I1), s	24.5	15.9				16.8	15.0
Green Ext Time (p_c), s	0.3	0.0				6.6	0.0

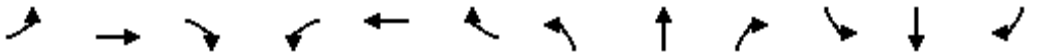
Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	367	1251	30	34	1013	540	15	9	17	596	21	369
Future Volume (vph)	367	1251	30	34	1013	540	15	9	17	596	21	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			3280			535			4220	
Travel Time (s)		26.0			49.7			14.6			63.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	
Protected Phases	5	2			6	8	4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		6	6	8	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	
Total Split (s)	30.0	77.0		47.0	47.0	33.0	30.0	30.0		33.0	33.0	
Total Split (%)	21.4%	55.0%		33.6%	33.6%	23.6%	21.4%	21.4%		23.6%	23.6%	
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min		Min	Min	None	None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 122.3	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	1251	30	34	1013	540	15	9	17	596	21	369
Future Volume (veh/h)	367	1251	30	34	1013	540	15	9	17	596	21	369
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	403	1375	32	37	1113	566	16	10	6	655	23	274
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	418	2041	47	177	1166	848	34	21	13	720	26	308
Arrive On Green	0.20	0.58	0.58	0.33	0.33	0.33	0.04	0.04	0.04	0.21	0.21	0.21
Sat Flow, veh/h	1767	3522	82	380	3526	1572	883	552	331	3456	124	1480
Grp Volume(v), veh/h	403	688	719	37	1113	566	32	0	0	655	0	297
Grp Sat Flow(s),veh/h/ln	1767	1763	1841	380	1763	1572	1767	0	0	1728	0	1604
Q Serve(g_s), s	22.7	32.5	32.5	9.0	37.2	31.3	2.1	0.0	0.0	22.3	0.0	21.7
Cycle Q Clear(g_c), s	22.7	32.5	32.5	11.5	37.2	31.3	2.1	0.0	0.0	22.3	0.0	21.7
Prop In Lane	1.00		0.04	1.00		1.00	0.50		0.19	1.00		0.92
Lane Grp Cap(c), veh/h	418	1022	1067	177	1166	848	67	0	0	720	0	334
V/C Ratio(X)	0.96	0.67	0.67	0.21	0.95	0.67	0.47	0.00	0.00	0.91	0.00	0.89
Avail Cap(c_a), veh/h	418	1023	1068	178	1169	849	337	0	0	745	0	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.9	17.5	17.5	31.8	39.5	20.0	56.8	0.0	0.0	46.7	0.0	46.4
Incr Delay (d2), s/veh	34.9	2.0	1.9	0.8	16.6	2.3	5.1	0.0	0.0	15.0	0.0	23.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	22.0	18.2	18.9	1.5	25.0	24.0	1.9	0.0	0.0	16.2	0.0	15.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.8	19.4	19.4	32.7	56.1	22.3	61.9	0.0	0.0	61.6	0.0	69.4
LnGrp LOS	E	B	B	C	E	C	E	A	A	E	A	E
Approach Vol, veh/h		1810			1716			32			952	
Approach Delay, s/veh		31.1			44.4			61.9			64.1	
Approach LOS		C			D			E			E	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		76.9		11.6	30.0	46.9		32.1				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		70.0		23.0	24.0	40.0		26.0				
Max Q Clear Time (g_c+I1), s		34.5		4.1	24.7	39.2		24.3				
Green Ext Time (p_c), s		17.1		0.1	0.0	0.7		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			43.3									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	820	1109	799	684	817	756
Future Volume (vph)	820	1109	799	684	817	756
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		545	330		200	200
Storage Lanes		2	2		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	3280			551	7144	
Travel Time (s)	49.7			8.3	108.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	6	4	5	2	4	
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0	7.0	5.0	12.0	7.0	7.0
Minimum Split (s)	19.0	13.0	12.0	19.0	13.0	13.0
Total Split (s)	41.0	39.0	40.0	81.0	39.0	39.0
Total Split (%)	34.2%	32.5%	33.3%	67.5%	32.5%	32.5%
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	6.0	7.0	7.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	Min	None	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 117.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	820	1109	799	684	817	756
Future Volume (veh/h)	820	1109	799	684	817	756
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1841	1870	1870
Adj Flow Rate, veh/h	872	1092	850	728	869	682
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	4	4	2	2
Cap, veh/h	1026	1568	912	2155	945	763
Arrive On Green	0.29	0.29	0.27	0.62	0.27	0.27
Sat Flow, veh/h	3647	2790	3401	3589	3456	2790
Grp Volume(v), veh/h	872	1092	850	728	869	682
Grp Sat Flow(s),veh/h/ln	1777	1395	1700	1749	1728	1395
Q Serve(g_s), s	27.2	33.2	28.7	11.9	28.8	27.7
Cycle Q Clear(g_c), s	27.2	33.2	28.7	11.9	28.8	27.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1026	1568	912	2155	945	763
V/C Ratio(X)	0.85	0.70	0.93	0.34	0.92	0.89
Avail Cap(c_a), veh/h	1026	1568	953	2197	968	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	18.6	42.1	11.0	41.5	41.2
Incr Delay (d2), s/veh	7.1	1.5	15.1	0.1	13.4	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.2	22.8	19.5	7.5	19.5	28.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.6	20.1	57.1	11.1	54.9	53.8
LnGrp LOS	D	C	E	B	D	D
Approach Vol, veh/h	1964			1578	1551	
Approach Delay, s/veh	31.9			35.9	54.4	
Approach LOS	C			D	D	

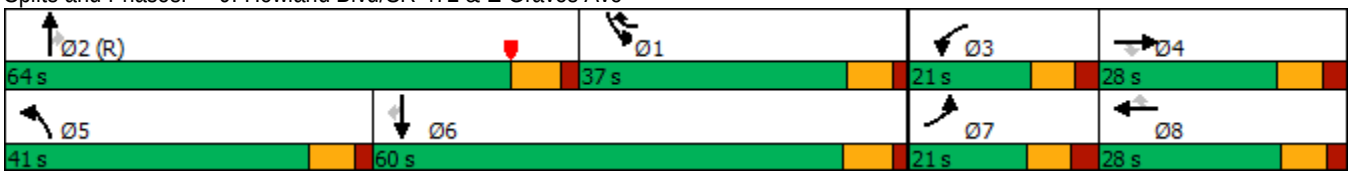
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		79.6		38.2	38.6	41.0
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		74.0		33.0	33.0	34.0
Max Q Clear Time (g_c+I1), s		13.9		30.8	30.7	35.2
Green Ext Time (p_c), s		8.0		1.5	0.9	0.0

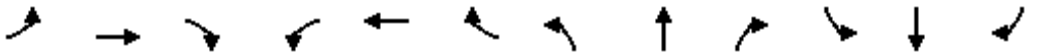
Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	271	241	1159	247	240	302	718	957	210	259	1912	390
Future Volume (vph)	271	241	1159	247	240	302	718	957	210	259	1912	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		330
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			363			1073			1453	
Travel Time (s)		12.6			8.3			16.3			19.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0	17.0	7.0	17.0	17.0
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.0	12.0	24.5	24.5	14.0	24.5	24.5
Total Split (s)	21.0	28.0	28.0	21.0	28.0	37.0	41.0	64.0	64.0	37.0	60.0	60.0
Total Split (%)	14.0%	18.7%	18.7%	14.0%	18.7%	24.7%	27.3%	42.7%	42.7%	24.7%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.0	7.0	7.5	7.5	7.0	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	241	1159	247	240	302	718	957	210	259	1912	390
Future Volume (veh/h)	271	241	1159	247	240	302	718	957	210	259	1912	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	285	254	0	260	253	318	756	1007	221	273	2013	403
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	3	3	3	2	2	2
Cap, veh/h	297	258		303	256	854	777	1426	443	1389	2349	729
Arrive On Green	0.09	0.14	0.00	0.09	0.14	0.14	0.07	0.09	0.09	0.40	0.46	0.46
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3428	5066	1572	3456	5106	1585
Grp Volume(v), veh/h	285	254	0	260	253	318	756	1007	221	273	2013	403
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1714	1689	1572	1728	1702	1585
Q Serve(g_s), s	12.4	20.5	0.0	11.1	20.3	5.3	33.0	28.9	18.0	7.7	52.7	27.6
Cycle Q Clear(g_c), s	12.4	20.5	0.0	11.1	20.3	5.3	33.0	28.9	18.0	7.7	52.7	27.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	297	258		303	256	854	777	1426	443	1389	2349	729
V/C Ratio(X)	0.96	0.99		0.86	0.99	0.37	0.97	0.71	0.50	0.20	0.86	0.55
Avail Cap(c_a), veh/h	297	258		311	256	854	777	1908	592	1389	2349	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.83	0.83	0.83	0.09	0.09	0.09
Uniform Delay (d), s/veh	68.2	64.4	0.0	67.5	64.6	12.1	68.9	62.0	46.6	29.1	36.1	29.3
Incr Delay (d2), s/veh	41.1	51.9	0.0	20.1	53.3	0.3	22.9	2.5	3.3	0.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	19.4	0.0	9.7	19.5	7.9	24.0	19.0	12.3	4.0	23.0	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.4	116.3	0.0	87.6	117.9	12.4	91.9	64.5	49.9	29.1	36.4	29.4
LnGrp LOS	F	F		F	F	B	F	E	D	C	D	C
Approach Vol, veh/h		539	A		831			1984			2689	
Approach Delay, s/veh		112.7			68.1			73.3			34.6	
Approach LOS		F			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	68.3	49.7	20.7	28.8	41.0	77.0	21.0	28.5
Change Period (Y+Rc), s	7.5	* 7.5	7.5	8.0	7.0	7.5	8.0	* 8
Max Green Setting (Gmax), s	30.0	* 57	13.5	20.0	34.0	52.5	13.0	* 21
Max Q Clear Time (g_c+I1), s	9.7	30.9	13.1	22.5	35.0	54.7	14.4	22.3
Green Ext Time (p_c), s	0.8	11.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.9
HCM 6th LOS	E

Notes

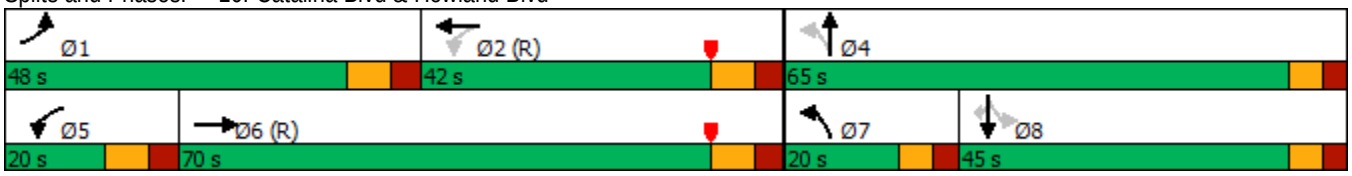
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

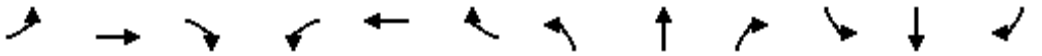
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	712	1543	109	55	926	86	87	72	31	93	72	356
Future Volume (vph)	712	1543	109	55	926	86	87	72	31	93	72	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6031			1895			1021			5049	
Travel Time (s)		91.4			28.7			23.2			98.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases				2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	48.0	70.0		20.0	42.0		20.0	65.0		45.0	45.0	45.0
Total Split (%)	31.0%	45.2%		12.9%	27.1%		12.9%	41.9%		29.0%	29.0%	29.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	712	1543	109	55	926	86	87	72	31	93	72	356
Future Volume (veh/h)	712	1543	109	55	926	86	87	72	31	93	72	356
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	727	1574	110	56	945	87	89	73	25	95	73	190
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	788	1938	135	156	1229	113	262	321	110	230	265	225
Arrive On Green	0.23	0.57	0.57	0.03	0.38	0.38	0.05	0.24	0.24	0.14	0.14	0.14
Sat Flow, veh/h	3456	3371	234	1767	3264	300	1781	1332	456	1297	1870	1585
Grp Volume(v), veh/h	727	825	859	56	510	522	89	0	98	95	73	190
Grp Sat Flow(s),veh/h/ln	1728	1777	1828	1767	1763	1801	1781	0	1788	1297	1870	1585
Q Serve(g_s), s	31.9	57.1	58.4	3.0	39.4	39.4	6.5	0.0	6.8	10.5	5.4	18.1
Cycle Q Clear(g_c), s	31.9	57.1	58.4	3.0	39.4	39.4	6.5	0.0	6.8	10.5	5.4	18.1
Prop In Lane	1.00		0.13	1.00		0.17	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	788	1021	1051	156	664	678	262	0	430	230	265	225
V/C Ratio(X)	0.92	0.81	0.82	0.36	0.77	0.77	0.34	0.00	0.23	0.41	0.28	0.85
Avail Cap(c_a), veh/h	881	1021	1051	235	664	678	315	0	669	364	459	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.31	0.31	0.31	0.71	0.71	0.71	1.00	0.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	58.5	26.2	26.4	31.3	42.4	42.4	51.3	0.0	47.3	61.6	59.4	64.9
Incr Delay (d2), s/veh	5.3	2.2	2.3	1.0	6.1	5.9	0.8	0.0	0.3	1.2	0.6	8.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.7	27.8	29.1	2.4	23.7	24.1	5.4	0.0	5.6	6.2	4.7	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.8	28.4	28.7	32.3	48.5	48.4	52.1	0.0	47.5	62.8	60.0	73.7
LnGrp LOS	E	C	C	C	D	D	D	A	D	E	E	E
Approach Vol, veh/h		2411			1088			187			358	
Approach Delay, s/veh		39.2			47.6			49.7			68.0	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	43.8	66.8		44.3	13.1	97.6	15.3	29.0				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	39.5	33.5		58.0	11.5	61.5	13.0	38.0				
Max Q Clear Time (g_c+I1), s	33.9	41.4		8.8	5.0	60.4	8.5	20.1				
Green Ext Time (p_c), s	1.5	0.0		0.6	0.0	1.0	0.1	1.9				

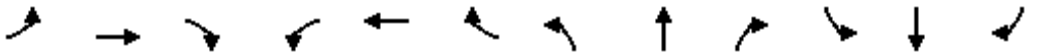
Intersection Summary			
HCM 6th Ctrl Delay		44.5	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1209	387	50	757	1	244	1	64	1	0	2
Future Volume (vph)	1	1209	387	50	757	1	244	1	64	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			209	
Travel Time (s)		28.7			22.0			170.9			4.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	93.0	93.0	93.0	20.0	113.0		25.0	42.0		17.0	17.0	
Total Split (%)	60.0%	60.0%	60.0%	12.9%	72.9%		16.1%	27.1%		11.0%	11.0%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 28 (18%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1209	387	50	757	1	244	1	64	1	0	2
Future Volume (veh/h)	1	1209	387	50	757	1	244	1	64	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1273	388	53	797	1	257	1	36	1	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	383	2267	1011	287	1319	2	328	9	306	96	0	0
Arrive On Green	1.00	1.00	1.00	0.03	0.71	0.71	0.12	0.20	0.20	0.04	0.00	0.00
Sat Flow, veh/h	681	3554	1585	1767	1853	2	1781	43	1549	1371	0	0
Grp Volume(v), veh/h	1	1273	388	53	0	798	257	0	37	1	0	0
Grp Sat Flow(s),veh/h/ln	681	1777	1585	1767	0	1855	1781	0	1592	1371	0	0
Q Serve(g_s), s	0.1	0.0	0.0	1.5	0.0	33.7	18.0	0.0	3.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	22.3	0.0	0.0	1.5	0.0	33.7	18.0	0.0	3.0	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.97	1.00		0.00
Lane Grp Cap(c), veh/h	383	2267	1011	287	0	1321	328	0	315	96	0	0
V/C Ratio(X)	0.00	0.56	0.38	0.18	0.00	0.60	0.78	0.00	0.12	0.01	0.00	0.00
Avail Cap(c_a), veh/h	383	2267	1011	384	0	1321	328	0	359	135	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	0.46	1.00	0.00	1.00	0.85	0.00	0.85	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.5	0.0	0.0	8.2	0.0	11.3	63.1	0.0	51.1	72.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.3	0.0	2.1	10.6	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.1	0.1	1.0	0.0	19.1	15.8	0.0	2.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.5	0.2	0.2	8.5	0.0	13.3	73.7	0.0	51.2	72.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	B	E	A	D	E	A	A
Approach Vol, veh/h		1662			851			294			1	
Approach Delay, s/veh		0.2			13.0			70.9			72.1	
Approach LOS		A			B			E			E	

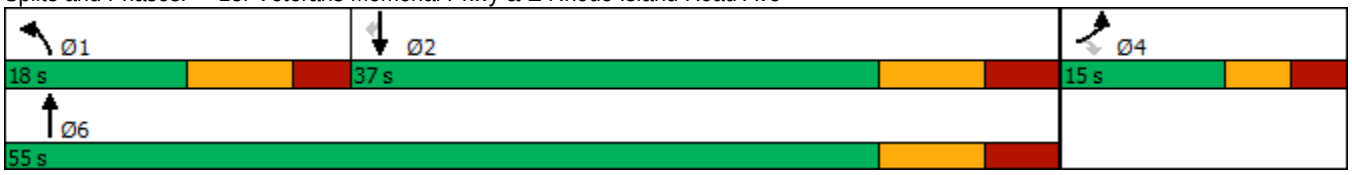
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		117.4		37.6	11.5	105.9	25.0	12.6				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		106.0		35.0	13.0	86.0	18.0	10.0				
Max Q Clear Time (g_c+I1), s		35.7		5.0	3.5	24.3	20.0	2.1				
Green Ext Time (p_c), s		10.2		0.1	0.1	24.5	0.0	0.0				

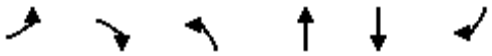
Intersection Summary												
HCM 6th Ctrl Delay			11.5									
HCM 6th LOS			B									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	308	297	433	1059	671	308
Future Volume (vph)	308	297	433	1059	671	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	13.5	13.5	13.5	20.5	20.5	20.5
Total Split (s)	15.0	15.0	18.0	55.0	37.0	37.0
Total Split (%)	21.4%	21.4%	25.7%	78.6%	52.9%	52.9%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	308	297	433	1059	671	308
Future Volume (veh/h)	308	297	433	1059	671	308
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	328	159	461	1127	714	277
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	420	192	469	1216	735	623
Arrive On Green	0.12	0.12	0.14	0.65	0.39	0.39
Sat Flow, veh/h	3456	1585	3456	1870	1870	1585
Grp Volume(v), veh/h	328	159	461	1127	714	277
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1870	1585
Q Serve(g_s), s	6.4	6.9	9.3	37.1	26.2	9.0
Cycle Q Clear(g_c), s	6.4	6.9	9.3	37.1	26.2	9.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	420	192	469	1216	735	623
V/C Ratio(X)	0.78	0.83	0.98	0.93	0.97	0.44
Avail Cap(c_a), veh/h	420	192	469	1216	735	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	30.0	30.2	10.8	20.9	15.6
Incr Delay (d2), s/veh	9.2	24.6	37.0	12.2	26.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.4	6.7	9.8	18.5	20.9	5.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.1	54.6	67.2	22.9	47.1	16.1
LnGrp LOS	D	D	E	C	D	B
Approach Vol, veh/h	487			1588	991	
Approach Delay, s/veh	44.2			35.8	38.5	
Approach LOS	D			D	D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.0	37.0		15.0		55.0
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	9.5	27.5		8.5		45.5
Max Q Clear Time (g_c+I1), s	11.3	28.2		8.9		39.1
Green Ext Time (p_c), s	0.0	0.0		0.0		4.0

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	248	282	761	398	404	960
Future Volume (vph)	248	282	761	398	404	960
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2576
Travel Time (s)	153.9		100.1			39.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	20.0	20.0	32.0		18.0	50.0
Total Split (%)	28.6%	28.6%	45.7%		25.7%	71.4%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 69.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	248	282	761	398	404	960
Future Volume (veh/h)	248	282	761	398	404	960
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	241	801	262	425	1011
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	323	288	918	300	447	2194
Arrive On Green	0.18	0.18	0.35	0.35	0.17	0.62
Sat Flow, veh/h	1781	1585	2725	860	1781	3647
Grp Volume(v), veh/h	261	241	541	522	425	1011
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1715	1781	1777
Q Serve(g_s), s	9.4	9.8	19.1	19.1	10.4	10.2
Cycle Q Clear(g_c), s	9.4	9.8	19.1	19.1	10.4	10.2
Prop In Lane	1.00	1.00		0.50	1.00	
Lane Grp Cap(c), veh/h	323	288	620	599	447	2194
V/C Ratio(X)	0.81	0.84	0.87	0.87	0.95	0.46
Avail Cap(c_a), veh/h	358	319	662	639	447	2304
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	26.5	20.4	20.4	15.4	6.9
Incr Delay (d2), s/veh	11.8	16.3	11.7	12.1	30.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.4	14.5	14.0	13.7	11.3	4.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.1	42.8	32.1	32.6	45.9	7.0
LnGrp LOS	D	D	C	C	D	A
Approach Vol, veh/h	502		1063			1436
Approach Delay, s/veh	40.4		32.3			18.5
Approach LOS	D		C			B

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		48.4		18.7	18.0	30.4
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 44		13.5	11.5	25.0
Max Q Clear Time (g_c+I1), s		12.2		11.8	12.4	21.1
Green Ext Time (p_c), s		7.6		0.3	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

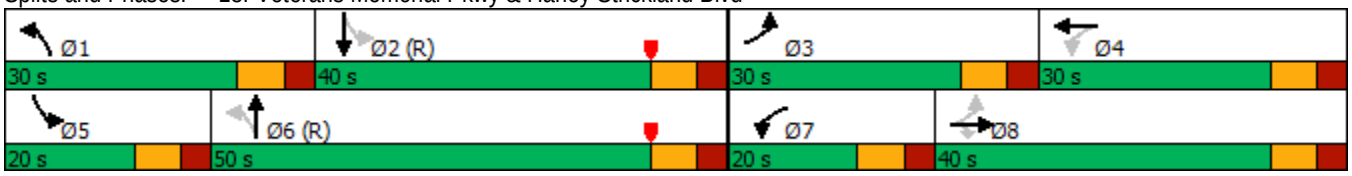
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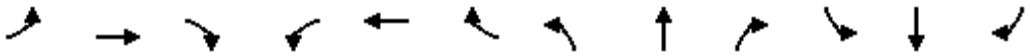
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	61	303	75	41	107	270	453	2	184	742	264
Future Volume (vph)	347	61	303	75	41	107	270	453	2	184	742	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	235		235	250		0	435		0	340		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		642			673			1923			1581	
Travel Time (s)		10.9			15.3			32.8			26.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	3	8	8	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	16.0		5.0	16.0	
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5		12.5	23.5		12.5	23.5	
Total Split (s)	30.0	40.0	40.0	20.0	30.0		30.0	50.0		20.0	40.0	
Total Split (%)	23.1%	30.8%	30.8%	15.4%	23.1%		23.1%	38.5%		15.4%	30.8%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 40 (31%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 18: Veterans Memorial Pkwy & Harley Strickland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	347	61	303	75	41	107	270	453	2	184	742	264
Future Volume (veh/h)	347	61	303	75	41	107	270	453	2	184	742	264
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	361	64	176	78	43	75	281	472	2	192	773	243
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	387	390	331	248	54	93	336	1545	7	512	1054	331
Arrive On Green	0.17	0.21	0.21	0.05	0.09	0.09	0.11	0.43	0.43	0.08	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	612	1067	1767	3600	15	1781	2660	836
Grp Volume(v), veh/h	361	64	176	78	0	118	281	231	243	192	516	500
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1678	1767	1763	1853	1781	1777	1720
Q Serve(g_s), s	22.5	3.6	12.8	5.1	0.0	9.0	12.1	11.2	11.2	8.2	32.1	32.1
Cycle Q Clear(g_c), s	22.5	3.6	12.8	5.1	0.0	9.0	12.1	11.2	11.2	8.2	32.1	32.1
Prop In Lane	1.00		1.00	1.00		0.64	1.00		0.01	1.00		0.49
Lane Grp Cap(c), veh/h	387	390	331	248	0	147	336	756	795	512	704	682
V/C Ratio(X)	0.93	0.16	0.53	0.31	0.00	0.80	0.84	0.31	0.31	0.37	0.73	0.73
Avail Cap(c_a), veh/h	387	468	396	326	0	290	443	756	795	542	704	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.45	0.45	0.45	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	42.1	45.8	50.3	0.0	58.2	26.0	24.4	24.4	20.3	33.4	33.4
Incr Delay (d2), s/veh	29.2	0.2	1.3	0.7	0.0	9.7	4.9	0.5	0.4	0.5	6.7	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.5	3.0	8.8	4.2	0.0	7.6	7.8	7.1	7.4	6.1	21.0	20.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	42.3	47.1	51.1	0.0	67.9	31.0	24.8	24.8	20.7	40.0	40.3
LnGrp LOS	E	D	D	D	A	E	C	C	C	C	D	D
Approach Vol, veh/h		601			196			755			1208	
Approach Delay, s/veh		62.2			61.2			27.1			37.1	
Approach LOS		E			E			C			D	

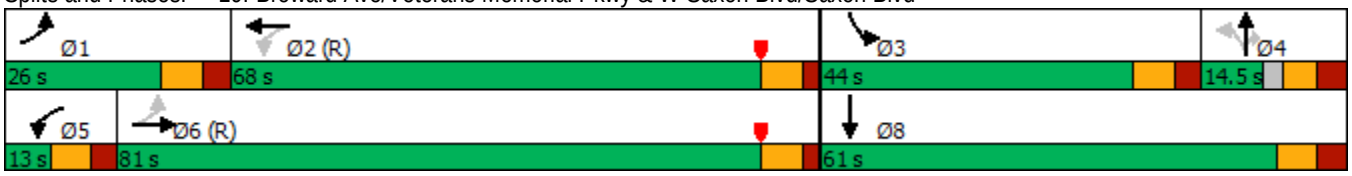
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	59.0	30.0	18.9	17.8	63.3	14.3	34.6
Change Period (Y+Rc), s	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max Green Setting (Gmax), s	22.5	32.5	22.5	22.5	12.5	42.5	12.5	32.5
Max Q Clear Time (g_c+I1), s	14.1	34.1	24.5	11.0	10.2	13.2	7.1	14.8
Green Ext Time (p_c), s	0.5	0.0	0.0	0.4	0.1	4.0	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	41.5
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1392	30	161	1339	559	48	49	103	729	70	197
Future Volume (vph)	210	1392	30	161	1339	559	48	49	103	729	70	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2			4		3	8	
Permitted Phases	6			2			4		4			
Detector Phase	1	6		5	2		4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	5.0	7.0	
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	12.9	15.3	
Total Split (s)	26.0	81.0		13.0	68.0		14.5	14.5	14.5	44.0	61.0	
Total Split (%)	16.8%	52.3%		8.4%	43.9%		9.4%	9.4%	9.4%	28.4%	39.4%	
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.8	4.5	
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.1	3.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	7.9	8.3	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 124 (80%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd



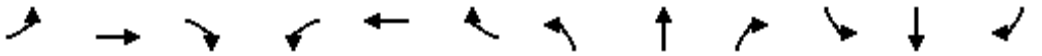
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1392	30	161	1339	559	48	49	103	729	70	197
Future Volume (veh/h)	210	1392	30	161	1339	559	48	49	103	729	70	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	1465	23	169	1409	588	51	52	40	767	74	170
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	242	2519	40	207	1461	599	98	84	72	803	166	380
Arrive On Green	0.11	0.49	0.49	0.03	0.41	0.41	0.05	0.05	0.05	0.23	0.33	0.33
Sat Flow, veh/h	1767	5137	81	1767	3527	1445	1136	1870	1585	3456	504	1158
Grp Volume(v), veh/h	221	963	525	169	1348	649	51	52	40	767	0	244
Grp Sat Flow(s),veh/h/ln	1767	1689	1841	1767	1689	1595	1136	1870	1585	1728	0	1662
Q Serve(g_s), s	14.8	31.5	31.5	5.2	60.3	62.3	7.0	4.2	3.8	33.9	0.0	17.9
Cycle Q Clear(g_c), s	14.8	31.5	31.5	5.2	60.3	62.3	7.0	4.2	3.8	33.9	0.0	17.9
Prop In Lane	1.00		0.04	1.00		0.91	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	242	1656	903	207	1399	661	98	84	72	803	0	546
V/C Ratio(X)	0.91	0.58	0.58	0.82	0.96	0.98	0.52	0.62	0.56	0.96	0.00	0.45
Avail Cap(c_a), veh/h	255	1656	903	207	1399	661	98	84	72	805	0	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00	0.55	0.00	0.55
Uniform Delay (d), s/veh	50.5	28.2	28.2	40.8	44.3	44.8	74.0	72.7	72.5	58.7	0.0	41.0
Incr Delay (d2), s/veh	33.5	1.5	2.7	18.9	14.8	27.9	4.9	12.6	9.4	14.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.1	18.6	20.4	8.4	35.0	36.9	3.9	4.2	3.1	21.1	0.0	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.0	29.7	30.9	59.7	59.1	72.7	78.9	85.3	81.9	73.0	0.0	41.3
LnGrp LOS	F	C	C	E	E	E	E	F	F	E	A	D
Approach Vol, veh/h		1709			2166			143			1011	
Approach Delay, s/veh		37.1			63.2			82.1			65.4	
Approach LOS		D			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	24.8	71.0	43.9	15.3	13.0	82.8		59.2				
Change Period (Y+Rc), s	7.9	6.8	7.9	* 8.3	7.8	6.8		* 8.3				
Max Green Setting (Gmax), s	18.1	61.2	36.1	* 7	5.2	74.2		* 53				
Max Q Clear Time (g_c+I1), s	16.8	64.3	35.9	9.0	7.2	33.5		19.9				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	12.6		1.5				

Intersection Summary	
HCM 6th Ctrl Delay	55.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Volume (vph)	0	2245	578	0	1791	378	0	0	395	0	0	404
Future Volume (vph)	0	2245	578	0	1791	378	0	0	395	0	0	404
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	2245	578	0	1791	378	0	0	395	0	0	404
Future Vol, veh/h	0	2245	578	0	1791	378	0	0	395	0	0	404
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Free
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	2363	608	0	1885	398	0	0	416	0	0	425

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	-	-	0			-	-	-
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	-	-	-			-	-	-
Pot Cap-1 Maneuver	0	-	0	0	-	0			0	0	0
Stage 1	0	-	0	0	-	0			0	0	0
Stage 2	0	-	0	0	-	0			0	0	0
Platoon blocked, %		-			-						
Mov Cap-1 Maneuver	-	-	-	-	-	-			-	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

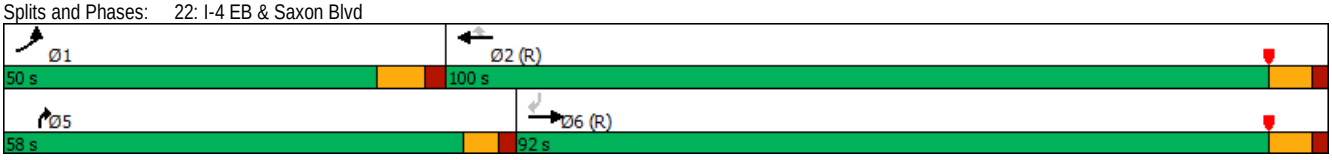
Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Future Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		3	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1249			900			503	
Travel Time (s)		24.2			18.9			13.6			7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	477	3416	0	0	1547	285	0	0	1149	0	0	614
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	50.0	92.0			100.0	100.0			58.0			92.0
Total Split (%)	33.3%	61.3%			66.7%	66.7%			38.7%			61.3%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	0.97	0.92			0.70	0.28			0.93			0.45
Control Delay	86.8	34.0			13.3	2.6			60.9			1.1
Queue Delay	0.0	0.0			0.0	0.0			0.0			0.0
Total Delay	86.8	34.0			13.3	2.6			60.9			1.1
Queue Length 50th (ft)	461	868			136	10			460			0
Queue Length 95th (ft)	#687	914			193	28			#550			0
Internal Link Dist (ft)		1519			1169			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	499	3708			2212	1033			1269			1371
Starvation Cap Reductn	0	0			0	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	0.96	0.92			0.70	0.28			0.91			0.45

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 26 (17%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 22: I-4 EB & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Future Volume (vph)	448	3211	0	0	1454	268	0	0	1080	0	0	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.86			0.95	1.00			0.76			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			3539	1583			3610			1611
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			3539	1583			3610			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	477	3416	0	0	1547	285	0	0	1149	0	0	614
RTOR Reduction (vph)	0	0	0	0	0	44	0	0	19	0	0	259
Lane Group Flow (vph)	477	3416	0	0	1547	241	0	0	1130	0	0	355
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	41.7	86.8			93.8	93.8			50.4			86.8
Effective Green, g (s)	41.7	86.8			93.8	93.8			50.4			86.8
Actuated g/C Ratio	0.28	0.58			0.63	0.63			0.34			0.58
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	492	3708			2213	989			1212			932
v/s Ratio Prot	0.27	c0.53			0.44				c0.31			
v/s Ratio Perm						0.15						0.22
v/c Ratio	0.97	0.92			0.70	0.24			0.93			0.38
Uniform Delay, d1	53.5	28.5			18.7	12.4			48.2			17.1
Progression Factor	1.00	1.00			0.61	0.28			1.00			1.00
Incremental Delay, d2	32.4	5.0			1.6	0.5			12.8			1.2
Delay (s)	85.9	33.5			13.0	4.0			61.0			18.3
Level of Service	F	C			B	A			E			B
Approach Delay (s)		39.9			11.6			61.0			18.3	
Approach LOS		D			B			E			B	

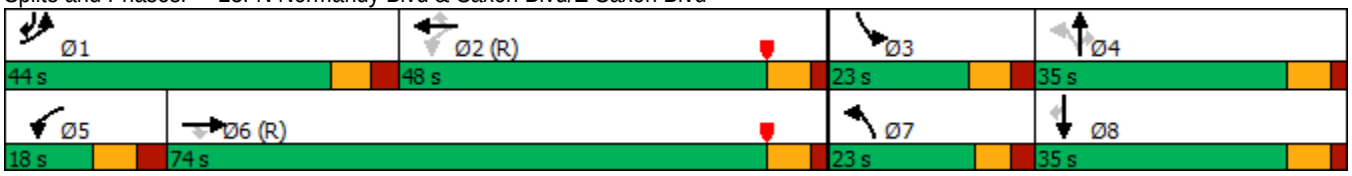
Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		

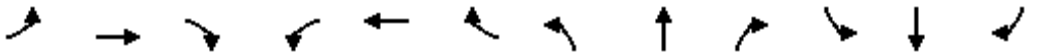
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	736	1527	360	34	688	239	195	301	48	314	310	533
Future Volume (vph)	736	1527	360	34	688	239	195	301	48	314	310	533
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	0		385
Storage Lanes	2		1	1		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1867			7172			3746			5140	
Travel Time (s)		31.8			122.3			73.0			100.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6	2		2	4		4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9	21.9	11.8	16.9	16.9	12.5	16.9	12.6
Total Split (s)	44.0	74.0	74.0	18.0	48.0	48.0	23.0	35.0	35.0	23.0	35.0	44.0
Total Split (%)	29.3%	49.3%	49.3%	12.0%	32.0%	32.0%	15.3%	23.3%	23.3%	15.3%	23.3%	29.3%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9	4.9	4.0	4.8	4.8	4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0	2.0	2.8	2.1	2.1	2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9	6.9	6.8	6.9	6.9	7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 95 (63%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	736	1527	360	34	688	239	195	301	48	314	310	533
Future Volume (veh/h)	736	1527	360	34	688	239	195	301	48	314	310	533
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	767	1591	315	35	717	247	203	314	42	327	323	429
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	820	1742	777	105	1002	447	247	343	291	357	350	673
Arrive On Green	0.08	0.16	0.16	0.03	0.28	0.28	0.11	0.18	0.18	0.10	0.19	0.19
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1767	1856	1572	3456	1870	1585
Grp Volume(v), veh/h	767	1591	315	35	717	247	203	314	42	327	323	429
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1767	1856	1572	1728	1870	1585
Q Serve(g_s), s	33.1	66.1	26.7	2.1	27.2	19.9	13.8	24.9	3.4	14.1	25.4	28.1
Cycle Q Clear(g_c), s	33.1	66.1	26.7	2.1	27.2	19.9	13.8	24.9	3.4	14.1	25.4	28.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	820	1742	777	105	1002	447	247	343	291	357	350	673
V/C Ratio(X)	0.94	0.91	0.41	0.33	0.72	0.55	0.82	0.92	0.14	0.92	0.92	0.64
Avail Cap(c_a), veh/h	839	1742	777	177	1002	447	251	348	295	357	350	673
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	0.27	0.27	0.27	0.74	0.74	0.74	0.84	0.84	0.84
Uniform Delay (d), s/veh	68.0	59.7	43.3	41.4	48.4	45.8	45.1	60.0	51.2	66.6	59.9	34.1
Incr Delay (d2), s/veh	11.5	5.5	0.9	0.5	1.2	1.3	14.7	22.8	0.2	24.3	26.1	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.9	40.1	15.9	1.7	15.1	10.4	10.8	19.1	2.4	11.5	20.3	18.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.5	65.3	44.2	41.9	49.7	47.1	59.8	82.7	51.4	90.9	85.9	36.0
LnGrp LOS	E	E	D	D	D	D	E	F	D	F	F	D
Approach Vol, veh/h		2673			999			559			1079	
Approach Delay, s/veh		66.9			48.8			72.1			67.6	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	43.2	49.2	23.0	34.6	11.9	80.4	22.6	35.0
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 36	41.1	* 16	28.1	* 9.9	67.1	* 16	28.1
Max Q Clear Time (g_c+I1), s	35.1	29.2	16.1	26.9	4.1	68.1	15.8	30.1
Green Ext Time (p_c), s	0.5	5.7	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	64.2
HCM 6th LOS	E

Notes

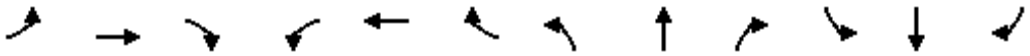
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	474	612	106	6	403	14	82	111	8	5	87	288
Future Volume (vph)	474	612	106	6	403	14	82	111	8	5	87	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390		0	120		0	265		0	150		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			30			30	
Link Distance (ft)		7172			644			704			1061	
Travel Time (s)		122.3			12.5			16.0			24.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	5	2	2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0	11.0	11.0	11.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	12.0	17.5	17.5	17.5	17.5		11.5	11.5		11.5	11.5	
Total Split (s)	25.0	51.0	51.0	26.0	26.0		24.0	24.0		24.0	24.0	
Total Split (%)	33.3%	68.0%	68.0%	34.7%	34.7%		32.0%	32.0%		32.0%	32.0%	
Yellow Time (s)	4.5	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	6.5	6.5	6.5	6.5		6.5	6.5		6.5	6.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min	Min	Min	Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 74.2	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 24: Tivoli Dr & E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	612	106	6	403	14	82	111	8	5	87	288
Future Volume (veh/h)	474	612	106	6	403	14	82	111	8	5	87	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	510	658	81	6	433	14	88	119	7	5	94	207
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	544	1109	940	282	465	15	166	409	24	321	121	267
Arrive On Green	0.24	0.59	0.59	0.26	0.26	0.26	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	1870	1585	714	1787	58	1078	1749	103	1265	520	1145
Grp Volume(v), veh/h	510	658	81	6	0	447	88	0	126	5	0	301
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	714	0	1845	1078	0	1852	1265	0	1664
Q Serve(g_s), s	15.9	16.6	1.6	0.5	0.0	17.7	4.8	0.0	4.2	0.2	0.0	12.7
Cycle Q Clear(g_c), s	15.9	16.6	1.6	0.5	0.0	17.7	17.5	0.0	4.2	4.4	0.0	12.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.06	1.00		0.69
Lane Grp Cap(c), veh/h	544	1109	940	282	0	480	166	0	433	321	0	389
V/C Ratio(X)	0.94	0.59	0.09	0.02	0.00	0.93	0.53	0.00	0.29	0.02	0.00	0.77
Avail Cap(c_a), veh/h	547	1111	942	282	0	480	166	0	433	321	0	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	9.6	6.5	20.7	0.0	27.0	35.5	0.0	23.6	25.4	0.0	26.9
Incr Delay (d2), s/veh	23.9	1.0	0.1	0.0	0.0	25.2	3.2	0.0	0.4	0.0	0.0	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.1	9.4	0.8	0.1	0.0	15.9	3.1	0.0	3.3	0.1	0.0	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.4	10.6	6.6	20.7	0.0	52.2	38.8	0.0	24.0	25.4	0.0	36.2
LnGrp LOS	D	B	A	C	A	D	D	A	C	C	A	D
Approach Vol, veh/h		1249			453			214			306	
Approach Delay, s/veh		22.9			51.8			30.1			36.1	
Approach LOS		C			D			C			D	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		50.9		24.0	24.9	26.0		24.0				
Change Period (Y+Rc), s		6.5		6.5	7.0	6.5		6.5				
Max Green Setting (Gmax), s		44.5		17.5	18.0	19.5		17.5				
Max Q Clear Time (g_c+I1), s		18.6		19.5	17.9	19.7		14.7				
Green Ext Time (p_c), s		7.0		0.0	0.0	0.0		0.5				

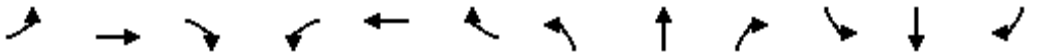
Intersection Summary												
HCM 6th Ctrl Delay			31.3									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	2979	15	50	1568	22	82	22	59	16	13	114
Future Volume (vph)	185	2979	15	50	1568	22	82	22	59	16	13	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1073			1303			959			734	
Travel Time (s)		16.3			19.7			21.8			16.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	25.0	85.0	85.0	25.0	85.0		40.0	40.0		40.0	40.0	
Total Split (%)	16.7%	56.7%	56.7%	16.7%	56.7%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 112 (75%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	2979	15	50	1568	22	82	22	59	16	13	114
Future Volume (veh/h)	185	2979	15	50	1568	22	82	22	59	16	13	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	193	3103	16	52	1633	23	85	23	61	17	14	119
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	333	3310	1028	108	3233	46	152	71	189	197	27	229
Arrive On Green	0.05	0.65	0.65	0.06	1.00	1.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	5106	1585	1781	5188	73	1247	449	1192	1314	170	1441
Grp Volume(v), veh/h	193	3103	16	52	1071	585	85	0	84	17	0	133
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1857	1247	0	1641	1314	0	1611
Q Serve(g_s), s	5.9	81.7	0.5	1.6	0.0	0.0	10.1	0.0	6.8	1.7	0.0	11.4
Cycle Q Clear(g_c), s	5.9	81.7	0.5	1.6	0.0	0.0	21.4	0.0	6.8	8.5	0.0	11.4
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.73	1.00		0.89
Lane Grp Cap(c), veh/h	333	3310	1028	108	2121	1157	152	0	261	197	0	256
V/C Ratio(X)	0.58	0.94	0.02	0.48	0.51	0.51	0.56	0.00	0.32	0.09	0.00	0.52
Avail Cap(c_a), veh/h	432	3310	1028	251	2121	1157	224	0	356	273	0	349
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.7	23.7	9.4	36.2	0.0	0.0	67.7	0.0	55.9	59.7	0.0	57.8
Incr Delay (d2), s/veh	0.1	0.7	0.0	3.0	0.8	1.5	3.2	0.0	0.7	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	32.2	0.3	2.2	0.4	0.8	6.0	0.0	5.2	1.1	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.9	24.4	9.4	39.2	0.8	1.5	70.9	0.0	56.6	59.9	0.0	59.5
LnGrp LOS	A	C	A	D	A	A	E	A	E	E	A	E
Approach Vol, veh/h		3312			1708			169			150	
Approach Delay, s/veh		23.4			2.2			63.8			59.5	
Approach LOS		C			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.7	102.0		31.3	12.9	105.7		31.3				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	16.5	76.5		32.5	16.5	76.5		32.5				
Max Q Clear Time (g_c+I1), s	7.9	2.0		23.4	3.6	83.7		13.4				
Green Ext Time (p_c), s	0.3	27.7		0.4	0.1	0.0		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		18.9	
HCM 6th LOS		B	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2751	279	84	1567	109	21
Future Volume (vph)	2751	279	84	1567	109	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1303			6031	1518	
Travel Time (s)	19.7			91.4	29.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	6%	6%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	60.0		40.0	100.0	50.0	
Total Split (%)	40.0%		26.7%	66.7%	33.3%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 108 (72%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2751	279	84	1567	109	21
Future Volume (veh/h)	2751	279	84	1567	109	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1811	1900
Adj Flow Rate, veh/h	2927	297	89	1667	137	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	6	0
Cap, veh/h	3540	348	153	4279	191	89
Arrive On Green	1.00	1.00	0.03	0.84	0.06	0.00
Sat Flow, veh/h	4895	464	1781	5274	3450	1610
Grp Volume(v), veh/h	2081	1143	89	1667	137	0
Grp Sat Flow(s),veh/h/ln	1702	1787	1781	1702	1725	1610
Q Serve(g_s), s	0.0	0.0	1.6	11.8	5.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.6	11.8	5.9	0.0
Prop In Lane		0.26	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2549	1338	153	4279	191	89
V/C Ratio(X)	0.82	0.85	0.58	0.39	0.72	0.00
Avail Cap(c_a), veh/h	2549	1338	469	4279	977	456
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.54	0.54	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.1	2.9	69.7	0.0
Incr Delay (d2), s/veh	1.2	2.9	1.9	0.1	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	1.9	3.5	4.6	4.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.2	2.9	18.9	3.1	74.7	0.0
LnGrp LOS	A	A	B	A	E	A
Approach Vol, veh/h	3224			1756	137	
Approach Delay, s/veh	1.8			3.9	74.7	
Approach LOS	A			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		134.2		15.8	13.4	120.8
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		91.5		42.5	31.5	51.5
Max Q Clear Time (g_c+I1), s		13.8		7.9	3.6	2.0
Green Ext Time (p_c), s		30.2		0.5	0.2	47.4

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	2183	50	97	1417	16	104	77	120	57	32	175
Future Volume (vph)	266	2183	50	97	1417	16	104	77	120	57	32	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1249			1867			677			522	
Travel Time (s)		21.3			28.3			15.4			11.9	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	40.0	92.0		18.0	70.0		40.0	40.0		40.0	40.0	40.0
Total Split (%)	26.7%	61.3%		12.0%	46.7%		26.7%	26.7%		26.7%	26.7%	26.7%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

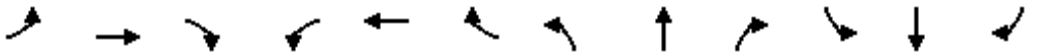
Offset: 15 (10%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	2183	50	97	1417	16	104	77	120	57	32	175
Future Volume (veh/h)	266	2183	50	97	1417	16	104	77	120	57	32	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2347	54	104	1524	17	112	83	129	61	34	188
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	306	2931	67	126	2447	27	119	150	234	141	70	361
Arrive On Green	0.34	1.00	1.00	0.02	0.16	0.16	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	5135	118	1781	5206	58	1159	660	1026	445	309	1585
Grp Volume(v), veh/h	286	1553	848	104	997	544	112	0	212	95	0	188
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1702	1860	1159	0	1686	754	0	1585
Q Serve(g_s), s	23.3	0.0	0.0	8.7	41.1	41.1	9.2	0.0	16.7	8.4	0.0	15.6
Cycle Q Clear(g_c), s	23.3	0.0	0.0	8.7	41.1	41.1	34.2	0.0	16.7	25.0	0.0	15.6
Prop In Lane	1.00		0.06	1.00		0.03	1.00		0.61	0.64		1.00
Lane Grp Cap(c), veh/h	306	1943	1055	126	1600	874	119	0	384	211	0	361
V/C Ratio(X)	0.93	0.80	0.80	0.83	0.62	0.62	0.94	0.00	0.55	0.45	0.00	0.52
Avail Cap(c_a), veh/h	394	1943	1055	132	1600	874	119	0	384	211	0	361
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.26	0.26	0.26	0.61	0.61	0.61	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.4	0.0	0.0	72.3	50.9	50.9	72.1	0.0	51.1	59.2	0.0	50.7
Incr Delay (d2), s/veh	9.3	1.0	1.8	21.8	1.1	2.0	64.8	0.0	2.2	2.1	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.1	0.5	0.9	7.7	24.6	26.9	10.7	0.0	11.8	6.4	0.0	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	1.0	1.8	94.2	52.1	53.0	136.9	0.0	53.3	61.3	0.0	52.5
LnGrp LOS	E	A	A	F	D	D	F	A	D	E	A	D
Approach Vol, veh/h		2687			1645			324			283	
Approach Delay, s/veh		7.3			55.0			82.2			55.5	
Approach LOS		A			E			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.5	92.5		40.0	32.6	77.4		40.0				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	85.1		* 34	33.2	63.1		* 34				
Max Q Clear Time (g_c+I1), s	10.7	2.0		27.0	25.3	43.1		36.2				
Green Ext Time (p_c), s	0.0	58.5		1.0	0.5	12.9		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

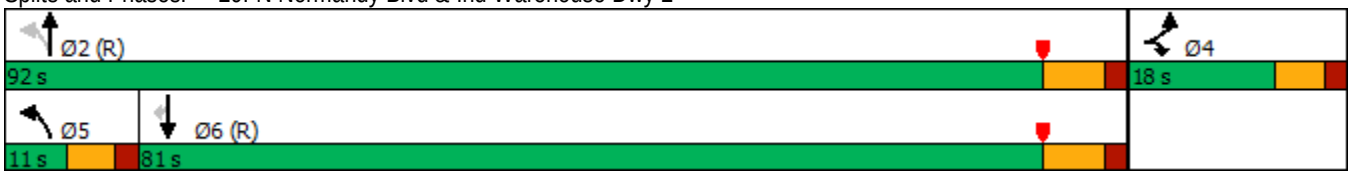
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

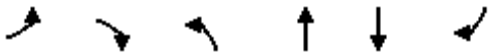
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	277	24	54	1168	1515	186
Future Volume (vph)	277	24	54	1168	1515	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	100			100
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			45	45	
Link Distance (ft)	643			366	2444	
Travel Time (s)	14.6			5.5	37.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Turn Type	Prot	Prot	pm+pt	NA	NA	Perm
Protected Phases	4	4	5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	25.0	25.0	25.0
Total Split (s)	18.0	18.0	11.0	92.0	81.0	81.0
Total Split (%)	16.4%	16.4%	10.0%	83.6%	73.6%	73.6%
Yellow Time (s)	4.0	4.0	4.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	7.0	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 100 (91%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2

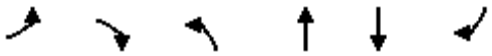




Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	277	24	54	1168	1515	186
Future Volume (veh/h)	277	24	54	1168	1515	186
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	301	26	59	1270	1647	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	361	165	236	2763	2434	1086
Arrive On Green	0.10	0.10	0.04	0.78	0.68	0.68
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	301	26	59	1270	1647	202
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	9.4	1.6	1.0	13.6	29.9	5.1
Cycle Q Clear(g_c), s	9.4	1.6	1.0	13.6	29.9	5.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	361	165	236	2763	2434	1086
V/C Ratio(X)	0.83	0.16	0.25	0.46	0.68	0.19
Avail Cap(c_a), veh/h	377	173	249	2763	2434	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.52	0.52
Uniform Delay (d), s/veh	48.3	44.9	9.9	4.2	10.2	6.3
Incr Delay (d2), s/veh	14.4	0.4	0.5	0.6	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	2.7	0.8	6.2	13.2	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.8	45.3	10.4	4.8	11.0	6.5
LnGrp LOS	E	D	B	A	B	A
Approach Vol, veh/h	327			1329	1849	
Approach Delay, s/veh	61.4			5.0	10.5	
Approach LOS	E			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.5		17.5	10.2	82.3
Change Period (Y+Rc), s		7.0		6.0	6.0	7.0
Max Green Setting (Gmax), s		85.0		12.0	5.0	74.0
Max Q Clear Time (g_c+I1), s		15.6		11.4	3.0	31.9
Green Ext Time (p_c), s		12.0		0.1	0.0	18.7

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	211	108	1167	1548	25
Future Volume (vph)	0	211	108	1167	1548	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	0	1	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			45	45	
Link Distance (ft)	655			395	366	
Travel Time (s)	14.9			6.0	5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

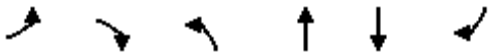
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	211	108	1167	1548	25
Future Vol, veh/h	0	211	108	1167	1548	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	229	117	1268	1683	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	855	1710	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	302	367	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	302	367	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46.5	1.6	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	367	-	302	-	-
HCM Lane V/C Ratio	0.32	-	0.759	-	-
HCM Control Delay (s)	19.4	-	46.5	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	1.4	-	5.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	60	30	21	1274	1759	21
Future Volume (vph)	60	30	21	1274	1759	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			45	45	
Link Distance (ft)	683			3993	395	
Travel Time (s)	15.5			60.5	6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	46.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	30	21	1274	1759	21
Future Vol, veh/h	60	30	21	1274	1759	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	33	23	1385	1912	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2663	968	1935	0	-	0
Stage 1	1924	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 18	254	300	-	-	-
Stage 1	100	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 17	254	300	-	-	-
Mov Cap-2 Maneuver	~ 17	-	-	-	-	-
Stage 1	92	-	-	-	-	-
Stage 2	433	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1631	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	300	-	25	-	-
HCM Lane V/C Ratio	0.076	-	3.913	-	-
HCM Control Delay (s)	18	-	$ 1631	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	12.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Arterial Level of Service: EB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FDOT Park & Ride	II	45	33.9	13.7	47.6	0.35	26.7	C
I-4 EB	II	45	37.1	34.0	71.1	0.40	20.0	D
Finland Dr	II	40	26.0	18.4	44.4	0.24	19.2	D
N Normandy Blvd	II	40	35.0	57.5	92.5	0.35	13.8	E
Total	II		132.0	123.6	255.6	1.34	18.9	D

Arterial Level of Service: WB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Finland Dr	II	45	33.9	24.2	58.1	0.35	21.9	D
I-4 EB	II	45	24.6	13.3	37.9	0.24	22.5	C
FDOT Park & Ride	II	45	37.1	8.8	45.9	0.40	31.0	B
Veterans Memorial Pk	II	45	33.9	65.2	99.1	0.35	12.8	F
Total	II		129.5	111.5	241.0	1.34	20.0	D

Arterial Level of Service: EB SR 472/Howland Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
N Kentucky Ave	I	55	17.7	52.7	70.4	0.18	9.3	F
I-4 WB	I	55	36.3	14.6	50.9	0.55	39.2	B
I-4 EB	I	50	30.3	16.9	47.2	0.32	24.3	D
E Graves Ave	I	50	26.1	98.6	124.7	0.28	7.9	F
Forest Edge Dr	I	45	21.1	17.3	38.4	0.20	19.1	E
Wolf Pack Run	I	45	25.7	12.8	38.5	0.25	23.1	D
Total	I		157.2	212.9	370.1	1.78	17.3	E

Arterial Level of Service: WB SR 472/Howland Blvd

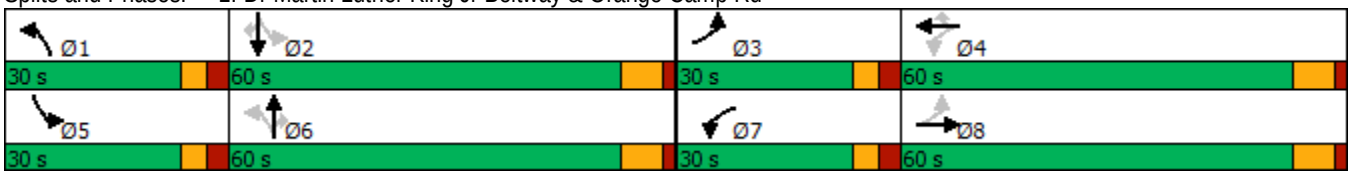
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Forest Edge Dr	I	45	25.7	15.6	41.3	0.25	21.5	D
E Graves Ave	I	45	21.1	45.3	66.4	0.20	11.0	F
I-4 EB	I	50	26.1	28.1	54.2	0.28	18.3	E
I-4 WB	I	50	30.3	18.0	48.3	0.32	23.8	D
Dr. Martin Luther Ki	I	55	36.3	41.9	78.2	0.55	25.5	D
Total	I		139.5	148.9	288.4	1.60	20.0	E

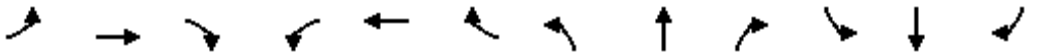
E-9: PM Peak Hour Buildout Traffic Conditions (with Background Improvement)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	506	180	83	722	260	310	518	63	262	456	70
Future Volume (vph)	70	506	180	83	722	260	310	518	63	262	456	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	385		0	550		0	340		375	335		380
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		616			826			5888			604	
Travel Time (s)		8.4			11.3			73.0			7.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4		4	6		6	2		2
Detector Phase	3	8		7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0	7.0	7.0	5.0	17.0	17.0	5.0	17.0	17.0
Minimum Split (s)	11.5	14.5		11.5	14.5	14.5	11.5	24.5	24.5	11.5	24.5	24.5
Total Split (s)	30.0	60.0		30.0	60.0	60.0	30.0	60.0	60.0	30.0	60.0	60.0
Total Split (%)	16.7%	33.3%		16.7%	33.3%	33.3%	16.7%	33.3%	33.3%	16.7%	33.3%	33.3%
Yellow Time (s)	3.5	5.5		3.5	5.5	5.5	3.5	5.5	5.5	3.5	5.5	5.5
All-Red Time (s)	3.0	2.0		3.0	2.0	2.0	3.0	2.0	2.0	3.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	7.5		6.5	7.5	7.5	6.5	7.5	7.5	6.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 157	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Dr Martin Luther King Jr Beltway & Orange Camp Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	506	180	83	722	260	310	518	63	262	456	70
Future Volume (veh/h)	70	506	180	83	722	260	310	518	63	262	456	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	74	533	175	87	760	262	326	545	53	276	480	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	712	233	209	978	436	370	605	513	317	570	483
Arrive On Green	0.04	0.27	0.27	0.05	0.28	0.28	0.14	0.33	0.33	0.12	0.31	0.31
Sat Flow, veh/h	1781	2632	861	1767	3526	1572	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	74	359	349	87	760	262	326	545	53	276	480	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1715	1767	1763	1572	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	3.6	22.6	22.8	4.3	24.3	17.7	15.2	34.3	2.9	12.9	29.6	2.7
Cycle Q Clear(g_c), s	3.6	22.6	22.8	4.3	24.3	17.7	15.2	34.3	2.9	12.9	29.6	2.7
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	481	464	209	978	436	370	605	513	317	570	483
V/C Ratio(X)	0.41	0.75	0.75	0.42	0.78	0.60	0.88	0.90	0.10	0.87	0.84	0.10
Avail Cap(c_a), veh/h	444	762	735	460	1511	674	454	795	674	435	795	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	40.8	40.9	32.1	40.8	38.4	27.7	39.4	28.8	28.8	39.7	30.4
Incr Delay (d2), s/veh	1.5	3.3	3.5	1.3	2.0	1.9	15.7	12.0	0.1	13.4	6.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	15.1	14.8	3.3	15.6	11.0	11.9	23.3	1.9	10.2	19.9	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	44.1	44.4	33.5	42.7	40.3	43.4	51.3	28.9	42.2	46.6	30.5
LnGrp LOS	C	D	D	C	D	D	D	D	C	D	D	C
Approach Vol, veh/h		782			1109			924			805	
Approach Delay, s/veh		43.3			41.4			47.2			44.1	
Approach LOS		D			D			D			D	

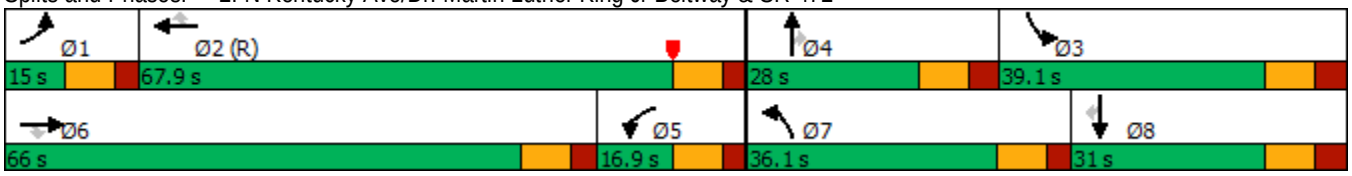
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.1	45.1	11.8	41.5	21.8	47.4	12.6	40.7
Change Period (Y+Rc), s	6.5	7.5	6.5	7.5	6.5	7.5	6.5	7.5
Max Green Setting (Gmax), s	23.5	52.5	23.5	52.5	23.5	52.5	23.5	52.5
Max Q Clear Time (g_c+I1), s	17.2	31.6	5.6	26.3	14.9	36.3	6.3	24.8
Green Ext Time (p_c), s	0.4	3.4	0.1	7.6	0.4	3.6	0.1	5.3

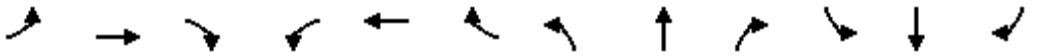
Intersection Summary	
HCM 6th Ctrl Delay	43.9
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	1103	390	186	1144	380	312	428	84	317	470	51
Future Volume (vph)	61	1103	390	186	1144	380	312	428	84	317	470	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	5.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	13.3	15.8	15.8	16.4	16.4	16.4
Total Split (s)	15.0	66.0	66.0	16.9	67.9	67.9	36.1	28.0	28.0	39.1	31.0	31.0
Total Split (%)	10.0%	44.0%	44.0%	11.3%	45.3%	45.3%	24.1%	18.7%	18.7%	26.1%	20.7%	20.7%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1103	390	186	1144	380	312	428	84	317	470	51
Future Volume (veh/h)	61	1103	390	186	1144	380	312	428	84	317	470	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	66	1186	302	200	1230	227	335	460	0	341	505	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	2	2	2
Cap, veh/h	80	1307	583	255	1401	625	325	448		353	512	
Arrive On Green	0.04	0.37	0.37	0.07	0.40	0.40	0.19	0.13	0.00	0.20	0.14	0.00
Sat Flow, veh/h	1781	3554	1585	3428	3526	1572	1753	3497	1560	1781	3554	1585
Grp Volume(v), veh/h	66	1186	302	200	1230	227	335	460	0	341	505	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1714	1763	1572	1753	1749	1560	1781	1777	1585
Q Serve(g_s), s	5.5	47.5	11.9	8.6	48.4	7.3	27.8	19.2	0.0	28.5	21.3	0.0
Cycle Q Clear(g_c), s	5.5	47.5	11.9	8.6	48.4	7.3	27.8	19.2	0.0	28.5	21.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	1307	583	255	1401	625	325	448		353	512	
V/C Ratio(X)	0.83	0.91	0.52	0.79	0.88	0.36	1.03	1.03		0.97	0.99	
Avail Cap(c_a), veh/h	80	1367	610	255	1401	625	325	448		353	512	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.61	0.61	0.61	0.60	0.60	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.1	45.0	10.5	68.3	41.8	7.2	61.1	65.4	0.0	59.7	64.1	0.0
Incr Delay (d2), s/veh	49.2	9.1	1.0	9.6	5.2	1.0	46.9	40.2	0.0	39.2	36.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	29.1	7.0	6.6	26.8	8.2	21.8	15.3	0.0	22.8	17.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.2	54.1	11.5	77.8	47.0	8.2	108.0	105.6	0.0	98.8	100.4	0.0
LnGrp LOS	F	D	B	E	D	A	F	F		F	F	
Approach Vol, veh/h		1554			1657			795	A		846	A
Approach Delay, s/veh		48.6			45.4			106.6			99.7	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	67.9	39.1	28.0	19.4	63.5	36.1	31.0
Change Period (Y+Rc), s	* 8.3	* 8.3	* 9.4	* 8.8	* 8.3	* 8.3	* 8.3	* 9.4
Max Green Setting (Gmax), s	* 6.7	* 60	* 30	* 19	* 8.6	* 58	* 28	* 22
Max Q Clear Time (g_c+I1), s	7.5	50.4	30.5	21.2	10.6	49.5	29.8	23.3
Green Ext Time (p_c), s	0.0	6.2	0.0	0.0	0.0	5.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

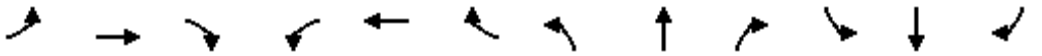
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	844	769	541	1576	0	0	0	0	448	0	345
Future Volume (vph)	0	844	769	541	1576	0	0	0	0	448	0	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		500	0		0	0		0	550		550
Storage Lanes	0		1	2		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			50			30			45	
Link Distance (ft)		2926			1685			410			759	
Travel Time (s)		36.3			23.0			9.3			11.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		6		5	2					8		8
Permitted Phases			6									8
Detector Phase		6	6	5	2					8		8
Switch Phase												
Minimum Initial (s)		17.0	17.0	6.0	17.0					7.0		7.0
Minimum Split (s)		24.1	24.1	13.1	24.1					15.0		15.0
Total Split (s)		66.0	66.0	45.0	111.0					39.0		39.0
Total Split (%)		44.0%	44.0%	30.0%	74.0%					26.0%		26.0%
Yellow Time (s)		5.1	5.1	5.1	5.1					5.1		5.1
All-Red Time (s)		2.0	2.0	2.0	2.0					2.9		2.9
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		7.1	7.1	7.1	7.1					8.0		8.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		C-Min	C-Min	None	C-Min					None		None

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 38 (25%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: I-4 WB & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	844	769	541	1576	0	0	0	0	448	0	345
Future Volume (veh/h)	0	844	769	541	1576	0	0	0	0	448	0	345
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	898	0	576	1677	0				477	0	199
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1810		640	2636	0				544	0	250
Arrive On Green	0.00	0.51	0.00	0.19	0.74	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3647	1585	3456	3647	0				3456	0	1585
Grp Volume(v), veh/h	0	898	0	576	1677	0				477	0	199
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1728	1777	0				1728	0	1585
Q Serve(g_s), s	0.0	24.9	0.0	24.4	34.6	0.0				20.2	0.0	18.1
Cycle Q Clear(g_c), s	0.0	24.9	0.0	24.4	34.6	0.0				20.2	0.0	18.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1810		640	2636	0				544	0	250
V/C Ratio(X)	0.00	0.50		0.90	0.64	0.00				0.88	0.00	0.80
Avail Cap(c_a), veh/h	0	1810		873	2636	0				714	0	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.38	0.00	0.71	0.71	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.2	0.0	59.7	9.5	0.0				61.8	0.0	60.9
Incr Delay (d2), s/veh	0.0	0.4	0.0	7.2	0.8	0.0				9.6	0.0	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.2	0.0	15.7	16.1	0.0				14.5	0.0	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.5	0.0	67.0	10.3	0.0				71.3	0.0	70.7
LnGrp LOS	A	C		E	B	A				E	A	E
Approach Vol, veh/h		898	A		2253						676	
Approach Delay, s/veh		24.5			24.8						71.2	
Approach LOS		C			C						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		118.4			34.9	83.5		31.6				
Change Period (Y+Rc), s		7.1			7.1	7.1		8.0				
Max Green Setting (Gmax), s		103.9			37.9	58.9		31.0				
Max Q Clear Time (g_c+I1), s		36.6			26.4	26.9		22.2				
Green Ext Time (p_c), s		15.7			1.3	5.1		1.4				

Intersection Summary		
HCM 6th Ctrl Delay		32.9
HCM 6th LOS		C

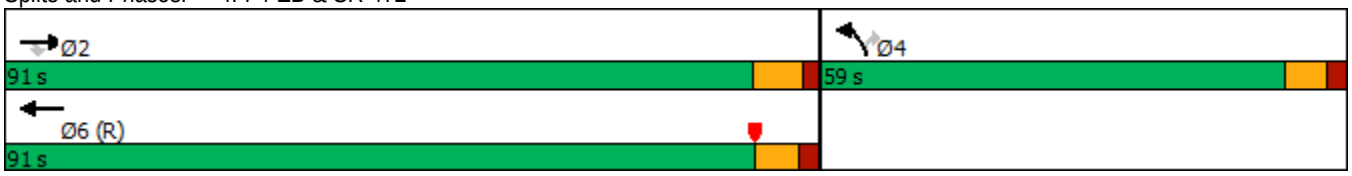
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1292	112	0	1611	806	958
Future Volume (vph)	1292	112	0	1611	806	958
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		620	1000		0	1000
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	50			50	45	
Link Distance (ft)	1685			1453	1185	
Travel Time (s)	23.0			19.8	18.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Turn Type	NA	Perm		NA	Prot	Perm
Protected Phases	2			6	4	
Permitted Phases		2				4
Detector Phase	2	2		6	4	4
Switch Phase						
Minimum Initial (s)	17.0	17.0		7.0	7.0	7.0
Minimum Split (s)	24.5	24.5		14.2	14.2	14.2
Total Split (s)	91.0	91.0		91.0	59.0	59.0
Total Split (%)	60.7%	60.7%		60.7%	39.3%	39.3%
Yellow Time (s)	5.5	5.5		4.8	4.8	4.8
All-Red Time (s)	2.0	2.0		2.4	2.4	2.4
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.2	7.2	7.2
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Min	Min		C-Max	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 73 (49%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: I-4 EB & SR 472





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1292	112	0	1611	806	958
Future Volume (veh/h)	1292	112	0	1611	806	958
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1841	1856	1856
Adj Flow Rate, veh/h	1374	0	0	1714	857	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	4	3	3
Cap, veh/h	1985		0	2807	955	
Arrive On Green	0.74	0.00	0.00	0.56	0.28	0.00
Sat Flow, veh/h	3647	1585	0	5356	3428	1572
Grp Volume(v), veh/h	1374	0	0	1714	857	0
Grp Sat Flow(s),veh/h/ln	1777	1585	0	1675	1714	1572
Q Serve(g_s), s	30.7	0.0	0.0	34.3	36.1	0.0
Cycle Q Clear(g_c), s	30.7	0.0	0.0	34.3	36.1	0.0
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1985		0	2807	955	
V/C Ratio(X)	0.69		0.00	0.61	0.90	
Avail Cap(c_a), veh/h	1985		0	2807	1184	
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.00	0.00	0.60	1.00	0.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	22.2	52.1	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.6	8.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	0.0	0.0	17.4	22.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.3	0.0	0.0	22.8	60.7	0.0
LnGrp LOS	B		A	C	E	
Approach Vol, veh/h	1374	A		1714	857	A
Approach Delay, s/veh	13.3			22.8	60.7	
Approach LOS	B			C	E	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	91.3		49.0		91.3
Change Period (Y+Rc), s	7.5		* 7.2		* 7.5
Max Green Setting (Gmax), s	83.5		* 52		* 84
Max Q Clear Time (g_c+I1), s	32.7		38.1		36.3
Green Ext Time (p_c), s	17.0		3.7		22.2

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

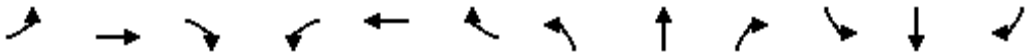
Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	57	21	141	89	154	14	1273	125	109	1070	39
Future Volume (vph)	30	57	21	141	89	154	14	1273	125	109	1070	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	245		0	280		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			30			40			40	
Link Distance (ft)		329			1113			2670			438	
Travel Time (s)		9.0			25.3			45.5			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Split	NA		Split	NA		Perm	NA		pm+pt	NA	
Protected Phases	8	8		4	4			6		5	2	
Permitted Phases							6			2		
Detector Phase	8	8		4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		15.0	15.0		5.0	15.0	
Minimum Split (s)	15.7	15.7		15.9	15.9		22.3	22.3		12.2	22.3	
Total Split (s)	20.0	20.0		30.0	30.0		80.0	80.0		20.0	100.0	
Total Split (%)	13.3%	13.3%		20.0%	20.0%		53.3%	53.3%		13.3%	66.7%	
Yellow Time (s)	3.4	3.4		3.8	3.8		4.5	4.5		4.4	4.5	
All-Red Time (s)	2.3	2.3		2.1	2.1		2.8	2.8		2.8	2.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.7	5.7		5.9	5.9		7.3	7.3		7.2	7.3	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	None		None	None		C-Min	C-Min		None	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 117 (78%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: US 17/92 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	57	21	141	89	154	14	1273	125	109	1070	39
Future Volume (veh/h)	30	57	21	141	89	154	14	1273	125	109	1070	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	31	59	12	147	93	113	15	1326	124	114	1115	37
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	4	4	4	3	3	3	3	3	3
Cap, veh/h	117	99	20	241	104	127	297	1903	177	225	2335	77
Arrive On Green	0.07	0.07	0.07	0.14	0.14	0.14	0.58	0.58	0.58	0.04	0.67	0.67
Sat Flow, veh/h	1781	1508	307	1753	756	919	484	3260	304	1767	3482	116
Grp Volume(v), veh/h	31	0	71	147	0	206	15	715	735	114	564	588
Grp Sat Flow(s),veh/h/ln	1781	0	1815	1753	0	1675	484	1763	1801	1767	1763	1835
Q Serve(g_s), s	2.5	0.0	5.7	11.8	0.0	18.1	2.3	42.6	43.1	3.8	23.3	23.3
Cycle Q Clear(g_c), s	2.5	0.0	5.7	11.8	0.0	18.1	12.6	42.6	43.1	3.8	23.3	23.3
Prop In Lane	1.00		0.17	1.00		0.55	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	117	0	119	241	0	231	297	1029	1051	225	1182	1230
V/C Ratio(X)	0.26	0.00	0.60	0.61	0.00	0.89	0.05	0.69	0.70	0.51	0.48	0.48
Avail Cap(c_a), veh/h	170	0	173	282	0	269	297	1029	1051	307	1182	1230
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.6	0.0	68.1	60.9	0.0	63.6	18.2	21.9	22.0	20.5	12.0	12.0
Incr Delay (d2), s/veh	1.2	0.0	4.7	2.9	0.0	26.5	0.3	3.9	3.9	1.8	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.0	5.1	9.3	0.0	14.5	0.5	24.9	25.6	2.9	14.0	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.8	0.0	72.8	63.7	0.0	90.1	18.5	25.7	25.8	22.3	13.4	13.3
LnGrp LOS	E	A	E	E	A	F	B	C	C	C	B	B
Approach Vol, veh/h		102			353			1465			1266	
Approach Delay, s/veh		71.3			79.1			25.7			14.1	
Approach LOS		E			E			C			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		107.9		26.6	13.0	94.9		15.6				
Change Period (Y+Rc), s		* 7.3		* 5.9	* 7.2	* 7.3		5.7				
Max Green Setting (Gmax), s		* 93		* 24	* 13	* 73		14.3				
Max Q Clear Time (g_c+I1), s		25.3		20.1	5.8	45.1		7.7				
Green Ext Time (p_c), s		7.4		0.5	0.1	9.9		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		28.5
HCM 6th LOS		C

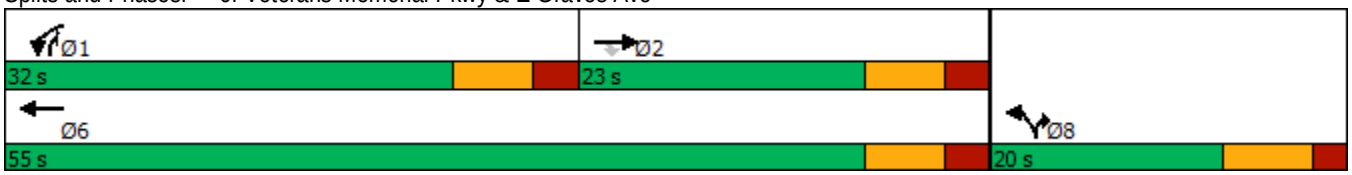
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	345	46	1010	634	73	1045
Future Volume (vph)	345	46	1010	634	73	1045
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		400	300		1000	0
Storage Lanes		1	2		1	2
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			45	50	
Link Distance (ft)	7754			1716	7106	
Travel Time (s)	132.2			26.0	96.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Detector Phase	2	2	1	6	8	8 1
Switch Phase						
Minimum Initial (s)	11.0	11.0	7.0	11.0	7.0	
Minimum Split (s)	18.0	18.0	14.0	18.0	14.0	
Total Split (s)	23.0	23.0	32.0	55.0	20.0	
Total Split (%)	30.7%	30.7%	42.7%	73.3%	26.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	5.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 6: Veterans Memorial Pkwy & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	345	46	1010	634	73	1045
Future Volume (veh/h)	345	46	1010	634	73	1045
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1841	1841	1870	1870
Adj Flow Rate, veh/h	363	21	1063	667	77	991
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	4	4	2	2
Cap, veh/h	397	336	1129	1177	309	1411
Arrive On Green	0.21	0.21	0.33	0.64	0.17	0.17
Sat Flow, veh/h	1856	1572	3401	1841	1781	2790
Grp Volume(v), veh/h	363	21	1063	667	77	991
Grp Sat Flow(s),veh/h/ln	1856	1572	1700	1841	1781	1395
Q Serve(g_s), s	14.3	0.8	22.7	15.3	2.8	13.0
Cycle Q Clear(g_c), s	14.3	0.8	22.7	15.3	2.8	13.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	397	336	1129	1177	309	1411
V/C Ratio(X)	0.92	0.06	0.94	0.57	0.25	0.70
Avail Cap(c_a), veh/h	397	336	1136	1180	309	1411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	23.5	24.3	7.6	26.7	14.2
Incr Delay (d2), s/veh	25.8	0.1	14.7	0.8	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.6	0.5	15.5	7.8	2.0	9.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.6	23.6	39.0	8.4	27.1	15.8
LnGrp LOS	D	C	D	A	C	B
Approach Vol, veh/h	384			1730	1068	
Approach Delay, s/veh	52.9			27.2	16.6	
Approach LOS	D			C	B	

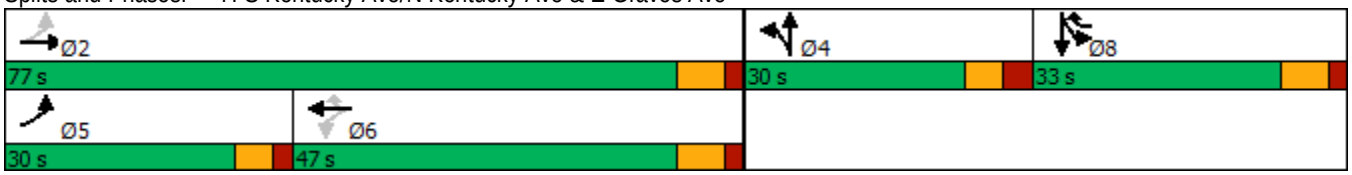
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	31.9	23.0				54.9	20.0
Change Period (Y+Rc), s	7.0	7.0				7.0	7.0
Max Green Setting (Gmax), s	25.0	16.0				48.0	13.0
Max Q Clear Time (g_c+I1), s	24.7	16.3				17.3	15.0
Green Ext Time (p_c), s	0.1	0.0				5.8	0.0

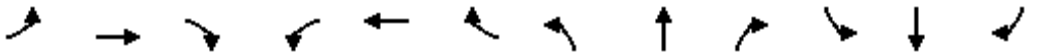
Intersection Summary	
HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	367	1263	30	40	1034	605	15	9	20	624	21	369
Future Volume (vph)	367	1263	30	40	1034	605	15	9	20	624	21	369
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	235		460	0		0	320		175
Storage Lanes	1		0	1		1	0		0	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		1716			2376			535			4220	
Travel Time (s)		26.0			36.0			14.6			63.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA		Split	NA	
Protected Phases	5	2			6	8	4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		6	6	8	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		11.0	11.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	18.0		18.0	18.0	14.0	14.0	14.0		14.0	14.0	
Total Split (s)	30.0	77.0		47.0	47.0	33.0	30.0	30.0		33.0	33.0	
Total Split (%)	21.4%	55.0%		33.6%	33.6%	23.6%	21.4%	21.4%		23.6%	23.6%	
Yellow Time (s)	4.0	5.0		5.0	5.0	5.0	4.0	4.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	6.0	7.0		7.0	7.0	7.0		7.0		7.0	7.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min		Min	Min	None	None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 122.4	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 7: S Kentucky Ave/N Kentucky Ave & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	1263	30	40	1034	605	15	9	20	624	21	369
Future Volume (veh/h)	367	1263	30	40	1034	605	15	9	20	624	21	369
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	403	1388	32	44	1136	638	16	10	9	686	23	274
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	410	2026	47	171	1159	851	32	20	18	734	26	314
Arrive On Green	0.20	0.58	0.58	0.33	0.33	0.33	0.04	0.04	0.04	0.21	0.21	0.21
Sat Flow, veh/h	1767	3523	81	375	3526	1572	800	500	450	3456	124	1480
Grp Volume(v), veh/h	403	694	726	44	1136	638	35	0	0	686	0	297
Grp Sat Flow(s),veh/h/ln	1767	1763	1841	375	1763	1572	1749	0	0	1728	0	1604
Q Serve(g_s), s	23.4	33.6	33.7	11.4	38.9	38.1	2.4	0.0	0.0	23.7	0.0	21.8
Cycle Q Clear(g_c), s	23.4	33.6	33.7	15.0	38.9	38.1	2.4	0.0	0.0	23.7	0.0	21.8
Prop In Lane	1.00		0.04	1.00		1.00	0.46		0.26	1.00		0.92
Lane Grp Cap(c), veh/h	410	1014	1059	171	1159	851	70	0	0	734	0	341
V/C Ratio(X)	0.98	0.68	0.69	0.26	0.98	0.75	0.50	0.00	0.00	0.93	0.00	0.87
Avail Cap(c_a), veh/h	410	1014	1059	171	1159	851	331	0	0	738	0	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.3	18.1	18.1	33.9	40.5	21.6	57.2	0.0	0.0	47.1	0.0	46.3
Incr Delay (d2), s/veh	39.7	2.1	2.1	1.1	21.8	4.0	5.5	0.0	0.0	18.9	0.0	20.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.1	18.9	19.6	1.9	26.8	27.6	2.1	0.0	0.0	17.4	0.0	15.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.0	20.3	20.2	35.1	62.3	25.6	62.7	0.0	0.0	66.0	0.0	67.1
LnGrp LOS	E	C	C	D	E	C	E	A	A	E	A	E
Approach Vol, veh/h		1823			1818			35			983	
Approach Delay, s/veh		33.0			48.7			62.7			66.3	
Approach LOS		C			D			E			E	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		77.0		11.9	30.0	47.0		32.9				
Change Period (Y+Rc), s		7.0		7.0	6.0	7.0		7.0				
Max Green Setting (Gmax), s		70.0		23.0	24.0	40.0		26.0				
Max Q Clear Time (g_c+I1), s		35.7		4.4	25.4	40.9		25.7				
Green Ext Time (p_c), s		14.9		0.1	0.0	0.0		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			46.4									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	820	1153	865	684	909	853
Future Volume (vph)	820	1153	865	684	909	853
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		545	330		200	200
Storage Lanes		2	2		2	1
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	45	
Link Distance (ft)	904			551	1767	
Travel Time (s)	13.7			8.3	26.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	6	4	5	2	4	
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0	7.0	5.0	12.0	7.0	7.0
Minimum Split (s)	19.0	13.0	12.0	19.0	13.0	13.0
Total Split (s)	37.0	43.0	40.0	77.0	43.0	43.0
Total Split (%)	30.8%	35.8%	33.3%	64.2%	35.8%	35.8%
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	6.0	7.0	7.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	Min	None	None	Min	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 8: N Normandy Blvd & E Graves Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	820	1153	865	684	909	853
Future Volume (veh/h)	820	1153	865	684	909	853
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1841	1870	1870
Adj Flow Rate, veh/h	872	1139	920	728	967	785
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	4	4	2	2
Cap, veh/h	895	1548	942	2056	1047	845
Arrive On Green	0.25	0.25	0.28	0.59	0.30	0.30
Sat Flow, veh/h	3647	2790	3401	3589	3456	2790
Grp Volume(v), veh/h	872	1139	920	728	967	785
Grp Sat Flow(s),veh/h/ln	1777	1395	1700	1749	1728	1395
Q Serve(g_s), s	29.0	30.0	31.9	12.9	32.3	32.5
Cycle Q Clear(g_c), s	29.0	30.0	31.9	12.9	32.3	32.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	895	1548	942	2056	1047	845
V/C Ratio(X)	0.97	0.74	0.98	0.35	0.92	0.93
Avail Cap(c_a), veh/h	895	1548	942	2056	1074	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	18.5	42.7	12.8	40.2	40.2
Incr Delay (d2), s/veh	23.9	2.0	23.6	0.1	12.8	15.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.6	24.0	22.5	8.2	21.3	31.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	68.1	20.5	66.2	12.9	52.9	56.1
LnGrp LOS	E	C	E	B	D	E
Approach Vol, veh/h	2011			1648	1752	
Approach Delay, s/veh	41.1			42.7	54.3	
Approach LOS	D			D	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		77.0		42.1	40.0	37.0
Change Period (Y+Rc), s		7.0		6.0	7.0	7.0
Max Green Setting (Gmax), s		70.0		37.0	33.0	30.0
Max Q Clear Time (g_c+I1), s		14.9		34.5	33.9	32.0
Green Ext Time (p_c), s		6.8		1.6	0.0	0.0

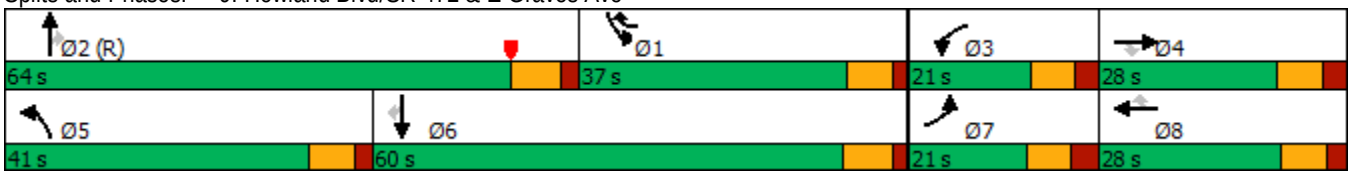
Intersection Summary	
HCM 6th Ctrl Delay	45.9
HCM 6th LOS	D

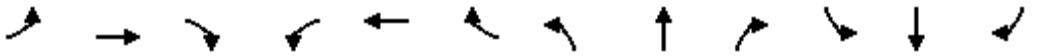
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	247	1201	247	243	302	742	957	210	259	1912	428
Future Volume (vph)	320	247	1201	247	243	302	742	957	210	259	1912	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		330
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			654			1067			1453	
Travel Time (s)		12.6			14.9			16.2			19.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0	17.0	7.0	17.0	17.0
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.0	12.0	24.5	24.5	14.0	24.5	24.5
Total Split (s)	21.0	28.0	28.0	21.0	28.0	37.0	41.0	64.0	64.0	37.0	60.0	60.0
Total Split (%)	14.0%	18.7%	18.7%	14.0%	18.7%	24.7%	27.3%	42.7%	42.7%	24.7%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.0	7.0	7.5	7.5	7.0	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	Min	Min

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	247	1201	247	243	302	742	957	210	259	1912	428
Future Volume (veh/h)	320	247	1201	247	243	302	742	957	210	259	1912	428
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	337	260	0	260	256	318	781	1007	221	273	2013	443
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	3	3	3	2	2	2
Cap, veh/h	297	258		303	256	867	777	1384	430	1417	2349	729
Arrive On Green	0.09	0.14	0.00	0.09	0.14	0.14	0.07	0.09	0.09	0.41	0.46	0.46
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3428	5066	1572	3456	5106	1585
Grp Volume(v), veh/h	337	260	0	260	256	318	781	1007	221	273	2013	443
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1714	1689	1572	1728	1702	1585
Q Serve(g_s), s	13.0	20.8	0.0	11.1	20.5	5.3	34.0	29.0	18.1	7.6	52.7	31.4
Cycle Q Clear(g_c), s	13.0	20.8	0.0	11.1	20.5	5.3	34.0	29.0	18.1	7.6	52.7	31.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	297	258		303	256	867	777	1384	430	1417	2349	729
V/C Ratio(X)	1.13	1.01		0.86	1.00	0.37	1.01	0.73	0.51	0.19	0.86	0.61
Avail Cap(c_a), veh/h	297	258		311	256	867	777	1908	592	1417	2349	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.82	0.82	0.82	0.09	0.09	0.09
Uniform Delay (d), s/veh	68.5	64.6	0.0	67.5	64.8	11.6	69.4	62.8	47.3	28.3	36.1	30.4
Incr Delay (d2), s/veh	93.5	58.3	0.0	20.2	56.7	0.3	30.5	2.8	3.6	0.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.3	20.2	0.0	9.7	19.9	7.7	25.5	19.0	12.3	3.9	23.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	162.0	122.9	0.0	87.7	121.4	11.9	99.9	65.6	50.9	28.3	36.4	30.5
LnGrp LOS	F	F		F	F	B	F	E	D	C	D	C
Approach Vol, veh/h		597	A		834			2009			2729	
Approach Delay, s/veh		144.9			69.1			77.3			34.7	
Approach LOS		F			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	69.5	48.5	20.7	28.8	41.0	77.0	21.0	28.5
Change Period (Y+Rc), s	7.5	* 7.5	7.5	8.0	7.0	7.5	8.0	* 8
Max Green Setting (Gmax), s	30.0	* 57	13.5	20.0	34.0	52.5	13.0	* 21
Max Q Clear Time (g_c+I1), s	9.6	31.0	13.1	22.8	36.0	54.7	15.0	22.5
Green Ext Time (p_c), s	0.7	10.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	63.9
HCM 6th LOS	E

Notes

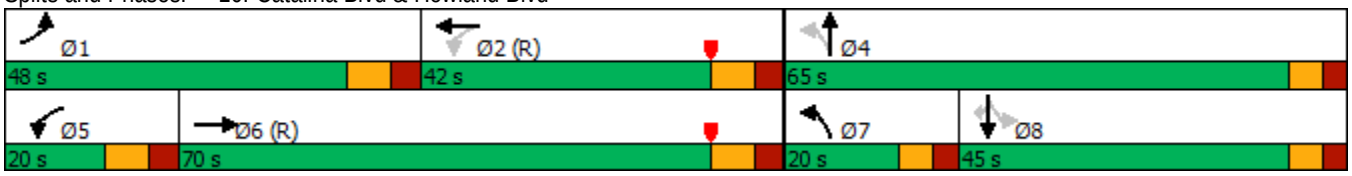
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

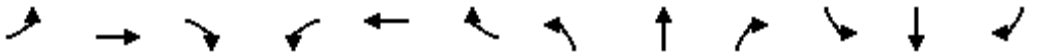
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	724	1561	115	55	936	86	90	72	31	93	72	363
Future Volume (vph)	724	1561	115	55	936	86	90	72	31	93	72	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	270		0	180		0	235		415
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		6043			1895			1021			5049	
Travel Time (s)		91.6			28.7			23.2			98.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		Perm	NA	Perm
Protected Phases	1	6		5	2		7	4			8	
Permitted Phases				2			4			8		8
Detector Phase	1	6		5	2		7	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		5.0	7.0		7.0	7.0	7.0
Minimum Split (s)	13.5	19.5		13.5	19.5		12.0	14.0		14.0	14.0	14.0
Total Split (s)	48.0	70.0		20.0	42.0		20.0	65.0		45.0	45.0	45.0
Total Split (%)	31.0%	45.2%		12.9%	27.1%		12.9%	41.9%		29.0%	29.0%	29.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	3.5	3.5		3.5	3.5		3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	8.5	8.5		8.5	8.5		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Catalina Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	724	1561	115	55	936	86	90	72	31	93	72	363
Future Volume (veh/h)	724	1561	115	55	936	86	90	72	31	93	72	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	739	1593	116	56	955	87	92	73	25	95	73	197
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	794	1918	139	150	1211	110	266	326	112	234	270	229
Arrive On Green	0.23	0.57	0.57	0.03	0.37	0.37	0.06	0.24	0.24	0.14	0.14	0.14
Sat Flow, veh/h	3456	3360	243	1767	3267	298	1781	1332	456	1297	1870	1585
Grp Volume(v), veh/h	739	837	872	56	515	527	92	0	98	95	73	197
Grp Sat Flow(s),veh/h/ln	1728	1777	1827	1767	1763	1802	1781	0	1788	1297	1870	1585
Q Serve(g_s), s	32.5	59.3	60.8	3.0	40.3	40.3	6.6	0.0	6.8	10.5	5.4	18.8
Cycle Q Clear(g_c), s	32.5	59.3	60.8	3.0	40.3	40.3	6.6	0.0	6.8	10.5	5.4	18.8
Prop In Lane	1.00		0.13	1.00		0.17	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	794	1014	1042	150	653	668	266	0	438	234	270	229
V/C Ratio(X)	0.93	0.83	0.84	0.37	0.79	0.79	0.35	0.00	0.22	0.41	0.27	0.86
Avail Cap(c_a), veh/h	881	1014	1042	228	653	668	318	0	669	364	459	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.29	0.29	0.29	0.70	0.70	0.70	1.00	0.00	1.00	0.73	0.73	0.73
Uniform Delay (d), s/veh	58.5	27.0	27.3	32.3	43.4	43.4	50.9	0.0	46.8	61.2	59.0	64.8
Incr Delay (d2), s/veh	5.6	2.4	2.5	1.1	6.7	6.6	0.8	0.0	0.3	1.2	0.6	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.9	28.7	30.1	2.4	24.2	24.7	5.5	0.0	5.6	6.2	4.7	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.0	29.4	29.8	33.4	50.1	50.0	51.7	0.0	47.0	62.4	59.6	74.5
LnGrp LOS	E	C	C	C	D	D	D	A	D	E	E	E
Approach Vol, veh/h		2448			1098			190			365	
Approach Delay, s/veh		40.0			49.2			49.3			68.4	
Approach LOS		D			D			D			E	

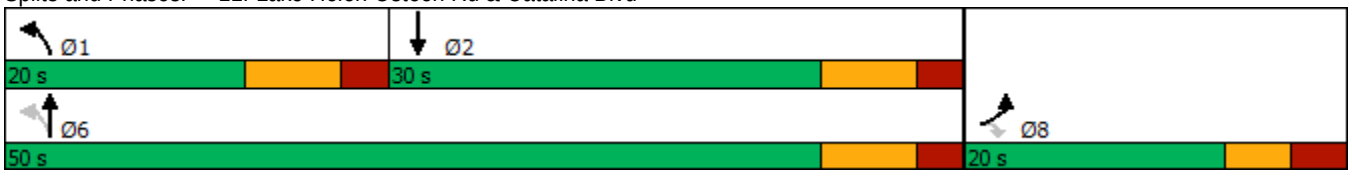
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	44.1	65.9		44.9	13.1	97.0	15.5	29.4				
Change Period (Y+Rc), s	8.5	8.5		7.0	8.5	8.5	7.0	7.0				
Max Green Setting (Gmax), s	39.5	33.5		58.0	11.5	61.5	13.0	38.0				
Max Q Clear Time (g_c+I1), s	34.5	42.3		8.8	5.0	62.8	8.6	20.8				
Green Ext Time (p_c), s	1.2	0.0		0.5	0.0	0.0	0.1	1.6				

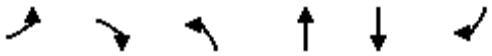
Intersection Summary												
HCM 6th Ctrl Delay			45.4									
HCM 6th LOS			D									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	172	485	283	203	320	107
Future Volume (vph)	172	485	283	203	320	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	185	0	240			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			45	45	
Link Distance (ft)	5049			5467	741	
Travel Time (s)	98.4			82.8	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	8		1	6	2	
Permitted Phases		8	6			
Detector Phase	8	8	1	6	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	
Minimum Split (s)	11.5	11.5	12.5	22.5	22.5	
Total Split (s)	20.0	20.0	20.0	50.0	30.0	
Total Split (%)	28.6%	28.6%	28.6%	71.4%	42.9%	
Yellow Time (s)	3.5	3.5	5.0	5.0	5.0	
All-Red Time (s)	3.0	3.0	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	7.5	7.5	7.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	Min	Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 66.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 11: Lake Helen Osteen Rd & Catalina Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	172	485	283	203	320	107
Future Volume (veh/h)	172	485	283	203	320	107
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	187	284	308	221	348	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	372	331	444	1059	416	115
Arrive On Green	0.21	0.21	0.15	0.57	0.29	0.29
Sat Flow, veh/h	1781	1585	1781	1870	1411	389
Grp Volume(v), veh/h	187	284	308	221	0	444
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	0	1800
Q Serve(g_s), s	5.8	10.7	6.8	3.6	0.0	14.3
Cycle Q Clear(g_c), s	5.8	10.7	6.8	3.6	0.0	14.3
Prop In Lane	1.00	1.00	1.00			0.22
Lane Grp Cap(c), veh/h	372	331	444	1059	0	531
V/C Ratio(X)	0.50	0.86	0.69	0.21	0.00	0.84
Avail Cap(c_a), veh/h	387	344	535	1279	0	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	23.7	13.2	6.6	0.0	20.5
Incr Delay (d2), s/veh	2.2	20.3	4.8	0.2	0.0	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.4	9.4	4.7	1.9	0.0	10.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.0	44.0	18.0	6.8	0.0	30.5
LnGrp LOS	C	D	B	A	A	C
Approach Vol, veh/h	471			529	444	
Approach Delay, s/veh	36.1			13.3	30.5	
Approach LOS	D			B	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	16.9	25.8				42.7	19.5
Change Period (Y+Rc), s	7.5	7.5				7.5	6.5
Max Green Setting (Gmax), s	12.5	22.5				42.5	13.5
Max Q Clear Time (g_c+I1), s	8.8	16.3				5.6	12.7
Green Ext Time (p_c), s	0.6	2.0				2.2	0.2

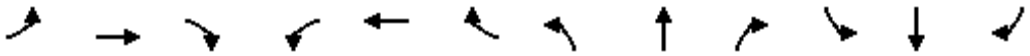
Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1227	387	50	767	1	244	1	64	1	0	2
Future Volume (vph)	1	1227	387	50	767	1	244	1	64	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	160		0	280		0	0		0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		1895			1449			8772			209	
Travel Time (s)		28.7			22.0			170.9			4.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		6		5	2		7	4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	6	6	6	5	2		7	4		8	8	
Switch Phase												
Minimum Initial (s)	11.0	11.0	11.0	5.0	11.0		5.0	7.0		7.0	7.0	
Minimum Split (s)	18.0	18.0	18.0	12.0	18.0		12.0	14.0		14.0	14.0	
Total Split (s)	93.0	93.0	93.0	20.0	113.0		25.0	42.0		17.0	17.0	
Total Split (%)	60.0%	60.0%	60.0%	12.9%	72.9%		16.1%	27.1%		11.0%	11.0%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.5	4.5		4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Recall Mode	Min	Min	Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 28 (18%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Providence Blvd & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1227	387	50	767	1	244	1	64	1	0	2
Future Volume (veh/h)	1	1227	387	50	767	1	244	1	64	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1292	388	53	807	1	257	1	36	1	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	377	2267	1011	284	1319	2	328	9	306	96	0	0
Arrive On Green	1.00	1.00	1.00	0.03	0.71	0.71	0.12	0.20	0.20	0.04	0.00	0.00
Sat Flow, veh/h	675	3554	1585	1767	1853	2	1781	43	1549	1371	0	0
Grp Volume(v), veh/h	1	1292	388	53	0	808	257	0	37	1	0	0
Grp Sat Flow(s),veh/h/ln	675	1777	1585	1767	0	1855	1781	0	1592	1371	0	0
Q Serve(g_s), s	0.1	0.0	0.0	1.5	0.0	34.4	18.0	0.0	3.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	23.0	0.0	0.0	1.5	0.0	34.4	18.0	0.0	3.0	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.97	1.00		0.00
Lane Grp Cap(c), veh/h	377	2267	1011	284	0	1321	328	0	315	96	0	0
V/C Ratio(X)	0.00	0.57	0.38	0.19	0.00	0.61	0.78	0.00	0.12	0.01	0.00	0.00
Avail Cap(c_a), veh/h	377	2267	1011	381	0	1321	328	0	359	135	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	1.00	0.00	1.00	0.85	0.00	0.85	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	0.0	0.0	8.2	0.0	11.4	63.1	0.0	51.1	72.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.3	0.0	2.1	10.6	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.1	0.1	1.0	0.0	19.4	15.8	0.0	2.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.7	0.2	0.1	8.5	0.0	13.5	73.7	0.0	51.2	72.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	B	E	A	D	E	A	A
Approach Vol, veh/h		1681			861			294			1	
Approach Delay, s/veh		0.2			13.2			70.9			72.1	
Approach LOS		A			B			E			E	

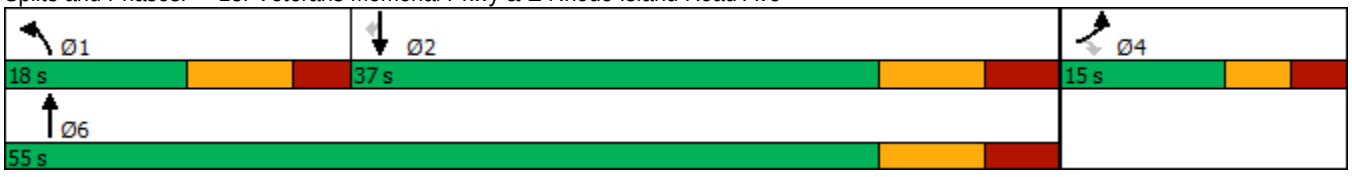
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		117.4		37.6	11.5	105.9	25.0	12.6				
Change Period (Y+Rc), s		7.0		7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s		106.0		35.0	13.0	86.0	18.0	10.0				
Max Q Clear Time (g_c+I1), s		36.4		5.0	3.5	25.0	20.0	2.1				
Green Ext Time (p_c), s		8.7		0.1	0.0	20.9	0.0	0.0				

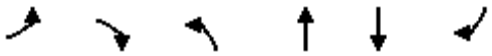
Intersection Summary												
HCM 6th Ctrl Delay			11.5									
HCM 6th LOS			B									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	310	297	433	1061	674	311
Future Volume (vph)	310	297	433	1061	674	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	450	0	385			385
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	40			50	50	
Link Distance (ft)	2716			4782	7106	
Travel Time (s)	46.3			65.2	96.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	5.0	11.0	11.0	11.0
Minimum Split (s)	13.5	13.5	13.5	20.5	20.5	20.5
Total Split (s)	15.0	15.0	18.0	55.0	37.0	37.0
Total Split (%)	21.4%	21.4%	25.7%	78.6%	52.9%	52.9%
Yellow Time (s)	3.5	3.5	5.5	5.5	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	8.5	9.5	9.5	9.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 70	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 13: Veterans Memorial Pkwy & E Rhode Island Road Ave





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	310	297	433	1061	674	311
Future Volume (veh/h)	310	297	433	1061	674	311
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	330	159	461	1129	717	280
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	420	192	469	1216	735	623
Arrive On Green	0.12	0.12	0.14	0.65	0.39	0.39
Sat Flow, veh/h	3456	1585	3456	1870	1870	1585
Grp Volume(v), veh/h	330	159	461	1129	717	280
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1870	1585
Q Serve(g_s), s	6.5	6.9	9.3	37.3	26.4	9.1
Cycle Q Clear(g_c), s	6.5	6.9	9.3	37.3	26.4	9.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	420	192	469	1216	735	623
V/C Ratio(X)	0.79	0.83	0.98	0.93	0.98	0.45
Avail Cap(c_a), veh/h	420	192	469	1216	735	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	30.0	30.2	10.8	20.9	15.7
Incr Delay (d2), s/veh	9.6	24.6	37.0	12.4	27.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	6.7	9.8	18.6	21.2	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.4	54.6	67.2	23.2	48.1	16.2
LnGrp LOS	D	D	E	C	D	B
Approach Vol, veh/h	489			1590	997	
Approach Delay, s/veh	44.4			35.9	39.1	
Approach LOS	D			D	D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.0	37.0		15.0		55.0
Change Period (Y+Rc), s	8.5	9.5		6.5		9.5
Max Green Setting (Gmax), s	9.5	27.5		8.5		45.5
Max Q Clear Time (g_c+I1), s	11.3	28.4		8.9		39.3
Green Ext Time (p_c), s	0.0	0.0		0.0		3.6

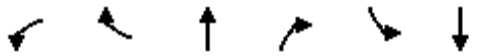
Intersection Summary	
HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	248	298	824	398	431	1068
Future Volume (vph)	248	298	824	398	431	1068
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2576
Travel Time (s)	153.9		100.1			39.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	20.0	20.0	32.0		18.0	50.0
Total Split (%)	28.6%	28.6%	45.7%		25.7%	71.4%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 69.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	248	298	824	398	431	1068
Future Volume (veh/h)	248	298	824	398	431	1068
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	258	867	262	454	1124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	336	299	951	287	425	2186
Arrive On Green	0.19	0.19	0.35	0.35	0.17	0.62
Sat Flow, veh/h	1781	1585	2783	812	1781	3647
Grp Volume(v), veh/h	261	258	572	557	454	1124
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1724	1781	1777
Q Serve(g_s), s	9.6	10.9	21.1	21.2	11.5	12.2
Cycle Q Clear(g_c), s	9.6	10.9	21.1	21.2	11.5	12.2
Prop In Lane	1.00	1.00		0.47	1.00	
Lane Grp Cap(c), veh/h	336	299	628	609	425	2186
V/C Ratio(X)	0.78	0.86	0.91	0.91	1.07	0.51
Avail Cap(c_a), veh/h	350	311	646	627	425	2248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	27.0	21.2	21.2	17.6	7.4
Incr Delay (d2), s/veh	10.2	20.8	17.0	17.7	62.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	16.0	16.2	15.9	17.1	5.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.7	47.8	38.2	38.9	80.5	7.6
LnGrp LOS	D	D	D	D	F	A
Approach Vol, veh/h	519		1129			1578
Approach Delay, s/veh	42.3		38.5			28.6
Approach LOS	D		D			C

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		49.3		19.5	18.0	31.3
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 44		13.5	11.5	25.0
Max Q Clear Time (g_c+I1), s		14.2		12.9	13.5	23.2
Green Ext Time (p_c), s		7.3		0.1	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	444	300	6	250	184	11
Future Volume (vph)	444	300	6	250	184	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	30	
Link Distance (ft)	7900			4491	5182	
Travel Time (s)	153.9			87.5	117.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	444	300	6	250	184	11
Future Vol, veh/h	444	300	6	250	184	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	483	326	7	272	200	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	809	0	932	646
Stage 1	-	-	-	-	646	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	-	-	4.12	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.218	-	3.536	3.336
Pot Cap-1 Maneuver	-	-	817	-	293	468
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	758	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	817	-	290	468
Mov Cap-2 Maneuver	-	-	-	-	290	-
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	750	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	42.7
HCM LOS			E

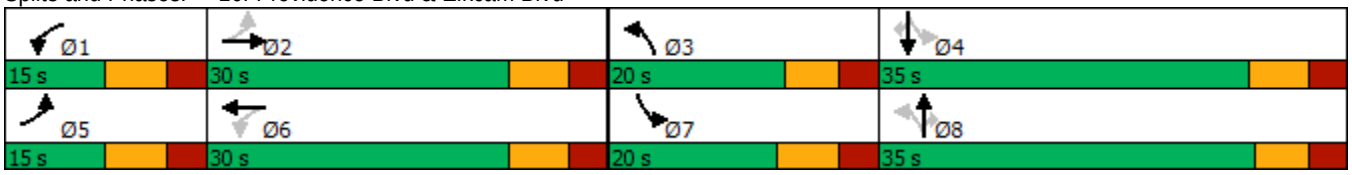
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	296	-	-	817	-
HCM Lane V/C Ratio	0.716	-	-	0.008	-
HCM Control Delay (s)	42.7	-	-	9.4	0
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q(veh)	5.1	-	-	0	-

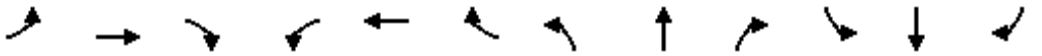
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	243	98	185	159	42	70	280	207	75	362	57
Future Volume (vph)	95	243	98	185	159	42	70	280	207	75	362	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		0	225		0	235		365	220		295
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		4491			6416			3965			8772	
Travel Time (s)		87.5			125.0			77.2			170.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	12.5	13.5		12.5	13.5		12.0	13.0	13.0	12.5	13.5	13.5
Total Split (s)	15.0	30.0		15.0	30.0		20.0	35.0	35.0	20.0	35.0	35.0
Total Split (%)	15.0%	30.0%		15.0%	30.0%		20.0%	35.0%	35.0%	20.0%	35.0%	35.0%
Yellow Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.5	4.5	4.5
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5		7.5	7.5		7.0	7.0	7.0	7.5	7.5	7.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 86.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 16: Providence Blvd & Elkcam Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	243	98	185	159	42	70	280	207	75	362	57
Future Volume (veh/h)	95	243	98	185	159	42	70	280	207	75	362	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	259	89	197	169	36	74	298	129	80	385	40
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	399	303	104	306	392	84	234	447	379	278	462	392
Arrive On Green	0.06	0.23	0.23	0.10	0.26	0.26	0.05	0.24	0.24	0.05	0.25	0.25
Sat Flow, veh/h	1781	1331	457	1781	1495	318	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	101	0	348	197	0	205	74	298	129	80	385	40
Grp Sat Flow(s),veh/h/ln	1781	0	1788	1781	0	1813	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.3	0.0	14.6	6.6	0.0	7.3	2.4	11.3	5.3	2.6	15.2	1.5
Cycle Q Clear(g_c), s	3.3	0.0	14.6	6.6	0.0	7.3	2.4	11.3	5.3	2.6	15.2	1.5
Prop In Lane	1.00		0.26	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	0	407	306	0	476	234	447	379	278	462	392
V/C Ratio(X)	0.25	0.00	0.86	0.64	0.00	0.43	0.32	0.67	0.34	0.29	0.83	0.10
Avail Cap(c_a), veh/h	462	0	516	306	0	523	439	671	569	469	659	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	28.9	21.8	0.0	23.9	22.0	26.9	24.6	21.4	27.8	22.7
Incr Delay (d2), s/veh	0.3	0.0	12.2	4.6	0.0	0.9	0.8	2.4	0.8	0.6	7.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	0.0	11.7	5.3	0.0	5.6	1.8	8.7	3.5	1.9	11.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	0.0	41.1	26.3	0.0	24.8	22.7	29.3	25.3	21.9	35.3	22.8
LnGrp LOS	C	A	D	C	A	C	C	C	C	C	D	C
Approach Vol, veh/h		449			402			501			505	
Approach Delay, s/veh		36.6			25.6			27.3			32.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	25.3	11.0	26.8	12.3	28.0	11.6	26.2
Change Period (Y+Rc), s	7.5	7.5	7.0	7.5	7.5	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	7.5	22.5	13.0	27.5	7.5	22.5	12.5	* 28
Max Q Clear Time (g_c+I1), s	8.6	16.6	4.4	17.2	5.3	9.3	4.6	13.3
Green Ext Time (p_c), s	0.0	1.2	0.1	2.1	0.0	1.0	0.1	2.3

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Notes

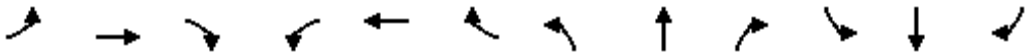
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	173	66	306	172	150	59	420	403	132	400	4
Future Volume (vph)	9	173	66	306	172	150	59	420	403	132	400	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	440		0	200		0	221		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			35			35			35	
Link Distance (ft)		5182			627			844			3965	
Travel Time (s)		117.8			12.2			16.4			77.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0	12.0	5.0	12.0	
Minimum Split (s)	14.0	14.0		13.5	13.5		18.5	18.5	18.5	13.0	20.0	
Total Split (s)	30.0	30.0		30.0	30.0		35.0	35.0	35.0	20.0	55.0	
Total Split (%)	35.3%	35.3%		35.3%	35.3%		41.2%	41.2%	41.2%	23.5%	64.7%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.5	4.5	
All-Red Time (s)	3.0	3.0		2.5	2.5		2.5	2.5	2.5	3.5	3.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		6.5	6.5		6.5	6.5	6.5	8.0	8.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Min	Min	Min	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 78.3	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 17: Providence Blvd & Fort Smith Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	173	66	306	172	150	59	420	403	132	400	4
Future Volume (veh/h)	9	173	66	306	172	150	59	420	403	132	400	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	9	182	52	322	181	118	62	442	297	139	421	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	2	2	2	2	2	2	3	3	3
Cap, veh/h	286	438	125	343	336	219	381	551	467	286	878	8
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.29	0.29	0.29	0.08	0.48	0.48
Sat Flow, veh/h	1063	1377	393	1146	1057	689	962	1870	1585	1767	1835	17
Grp Volume(v), veh/h	9	0	234	322	0	299	62	442	297	139	0	425
Grp Sat Flow(s),veh/h/ln	1063	0	1770	1146	0	1746	962	1870	1585	1767	0	1852
Q Serve(g_s), s	0.5	0.0	7.7	15.8	0.0	10.4	3.6	16.1	12.0	3.8	0.0	11.5
Cycle Q Clear(g_c), s	10.9	0.0	7.7	23.5	0.0	10.4	3.6	16.1	12.0	3.8	0.0	11.5
Prop In Lane	1.00		0.22	1.00		0.39	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	286	0	563	343	0	556	381	551	467	286	0	887
V/C Ratio(X)	0.03	0.00	0.42	0.94	0.00	0.54	0.16	0.80	0.64	0.49	0.00	0.48
Avail Cap(c_a), veh/h	286	0	563	343	0	556	469	722	612	439	0	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	19.8	30.9	0.0	20.7	19.6	24.0	22.6	17.3	0.0	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.5	32.9	0.0	1.0	0.3	5.7	2.0	1.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	5.5	13.6	0.0	7.3	1.4	11.9	7.9	2.7	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	0.0	20.3	63.8	0.0	21.7	19.9	29.8	24.6	18.6	0.0	13.6
LnGrp LOS	C	A	C	E	A	C	B	C	C	B	A	B
Approach Vol, veh/h		243			621			801			564	
Approach Delay, s/veh		20.5			43.6			27.1			14.8	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	13.6	29.8		30.5		43.4		30.5				
Change Period (Y+Rc), s	8.0	* 8		7.0		8.0		* 7				
Max Green Setting (Gmax), s	12.0	* 29		23.0		47.0		* 24				
Max Q Clear Time (g_c+I1), s	5.8	18.1		12.9		13.5		25.5				
Green Ext Time (p_c), s	0.1	3.7		0.8		3.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			27.9									
HCM 6th LOS			C									

Notes

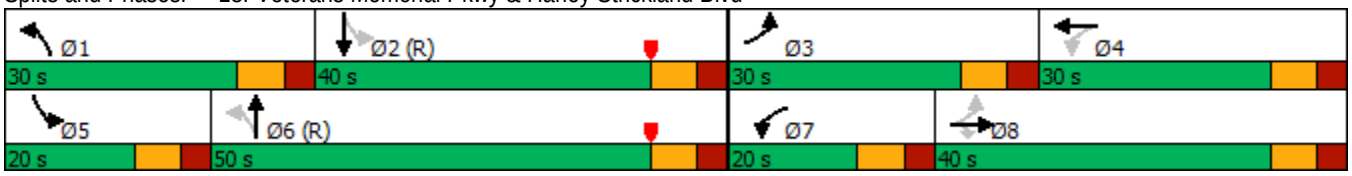
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

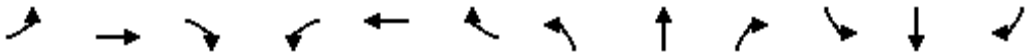
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	61	305	75	41	107	273	456	2	184	744	264
Future Volume (vph)	347	61	305	75	41	107	273	456	2	184	744	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	235		235	250		0	435		0	340		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		642			673			1923			1581	
Travel Time (s)		10.9			15.3			32.8			26.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	3	8	8	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0		5.0	16.0		5.0	16.0	
Minimum Split (s)	12.5	14.5	14.5	12.5	14.5		12.5	23.5		12.5	23.5	
Total Split (s)	30.0	40.0	40.0	20.0	30.0		30.0	50.0		20.0	40.0	
Total Split (%)	23.1%	30.8%	30.8%	15.4%	23.1%		23.1%	38.5%		15.4%	30.8%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	7.5	7.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 40 (31%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 18: Veterans Memorial Pkwy & Harley Strickland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	347	61	305	75	41	107	273	456	2	184	744	264
Future Volume (veh/h)	347	61	305	75	41	107	273	456	2	184	744	264
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	361	64	178	78	43	75	284	475	2	192	775	243
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	387	390	330	247	53	93	336	1547	7	511	1056	331
Arrive On Green	0.17	0.21	0.21	0.05	0.09	0.09	0.11	0.43	0.43	0.08	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	612	1067	1767	3600	15	1781	2662	835
Grp Volume(v), veh/h	361	64	178	78	0	118	284	233	244	192	517	501
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1678	1767	1763	1853	1781	1777	1720
Q Serve(g_s), s	22.5	3.6	13.0	5.1	0.0	9.0	12.2	11.3	11.3	8.2	32.2	32.2
Cycle Q Clear(g_c), s	22.5	3.6	13.0	5.1	0.0	9.0	12.2	11.3	11.3	8.2	32.2	32.2
Prop In Lane	1.00		1.00	1.00		0.64	1.00		0.01	1.00		0.49
Lane Grp Cap(c), veh/h	387	390	330	247	0	146	336	758	796	511	705	682
V/C Ratio(X)	0.93	0.16	0.54	0.32	0.00	0.81	0.85	0.31	0.31	0.38	0.73	0.73
Avail Cap(c_a), veh/h	387	468	396	326	0	290	443	758	796	541	705	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.45	0.45	0.45	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	42.2	45.9	50.4	0.0	58.3	26.1	24.3	24.3	20.3	33.4	33.4
Incr Delay (d2), s/veh	29.5	0.2	1.4	0.7	0.0	10.0	5.4	0.5	0.5	0.5	6.7	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.5	3.1	8.9	4.2	0.0	7.6	7.9	7.1	7.4	6.1	21.1	20.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	42.4	47.3	51.1	0.0	68.3	31.5	24.8	24.8	20.7	40.1	40.3
LnGrp LOS	E	D	D	D	A	E	C	C	C	C	D	D
Approach Vol, veh/h		603			196			761			1210	
Approach Delay, s/veh		62.4			61.4			27.3			37.1	
Approach LOS		E			E			C			D	

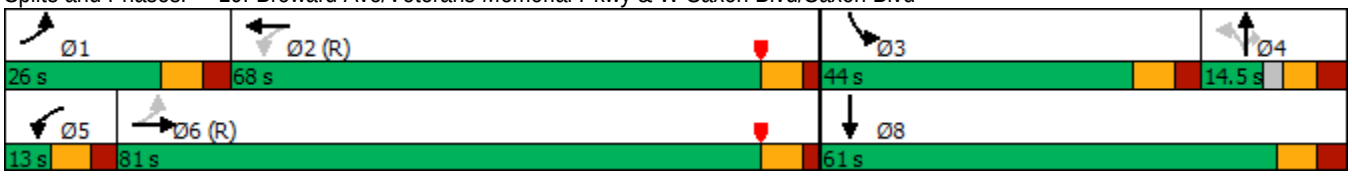
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	59.0	30.0	18.8	17.8	63.4	14.2	34.6
Change Period (Y+Rc), s	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Max Green Setting (Gmax), s	22.5	32.5	22.5	22.5	12.5	42.5	12.5	32.5
Max Q Clear Time (g_c+I1), s	14.2	34.2	24.5	11.0	10.2	13.3	7.1	15.0
Green Ext Time (p_c), s	0.4	0.0	0.0	0.3	0.1	3.4	0.0	0.6

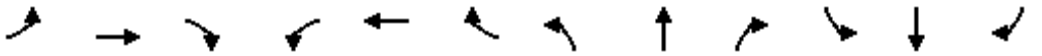
Intersection Summary	
HCM 6th Ctrl Delay	41.6
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1399	30	164	1351	565	48	49	105	732	70	197
Future Volume (vph)	210	1399	30	164	1351	565	48	49	105	732	70	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2			4		3	8	
Permitted Phases	6			2			4		4			
Detector Phase	1	6		5	2		4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	5.0	7.0	
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	12.9	15.3	
Total Split (s)	26.0	81.0		13.0	68.0		14.5	14.5	14.5	44.0	61.0	
Total Split (%)	16.8%	52.3%		8.4%	43.9%		9.4%	9.4%	9.4%	28.4%	39.4%	
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.8	4.5	
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.1	3.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	7.9	8.3	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 124 (80%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1399	30	164	1351	565	48	49	105	732	70	197
Future Volume (veh/h)	210	1399	30	164	1351	565	48	49	105	732	70	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	1473	23	173	1422	595	51	52	43	771	74	112
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	241	2516	39	205	1454	597	101	84	72	805	221	334
Arrive On Green	0.11	0.49	0.49	0.03	0.41	0.41	0.05	0.05	0.05	0.23	0.33	0.33
Sat Flow, veh/h	1767	5138	80	1767	3526	1446	1198	1870	1585	3456	671	1016
Grp Volume(v), veh/h	221	968	528	173	1361	656	51	52	43	771	0	186
Grp Sat Flow(s),veh/h/ln	1767	1689	1841	1767	1689	1595	1198	1870	1585	1728	0	1687
Q Serve(g_s), s	15.0	31.8	31.8	5.2	61.5	63.6	6.6	4.2	4.1	34.1	0.0	12.9
Cycle Q Clear(g_c), s	15.0	31.8	31.8	5.2	61.5	63.6	6.6	4.2	4.1	34.1	0.0	12.9
Prop In Lane	1.00		0.04	1.00		0.91	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	241	1654	902	205	1393	658	101	84	72	805	0	555
V/C Ratio(X)	0.92	0.59	0.59	0.84	0.98	1.00	0.51	0.62	0.60	0.96	0.00	0.33
Avail Cap(c_a), veh/h	253	1654	902	205	1393	658	101	84	72	805	0	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00	0.54	0.00	0.54
Uniform Delay (d), s/veh	51.2	28.3	28.3	42.1	44.8	45.5	73.8	72.7	72.6	58.7	0.0	39.2
Incr Delay (d2), s/veh	34.0	1.5	2.8	22.4	17.0	31.2	4.1	12.6	13.2	14.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.1	18.7	20.5	9.1	35.9	38.1	3.9	4.2	3.5	21.2	0.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.2	29.8	31.1	64.4	61.8	76.6	77.9	85.3	85.8	73.2	0.0	39.4
LnGrp LOS	F	C	C	E	E	E	E	F	F	E	A	D
Approach Vol, veh/h		1717			2190			146			957	
Approach Delay, s/veh		37.3			66.5			82.9			66.7	
Approach LOS		D			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	25.0	70.7	44.0	15.3	13.0	82.7		59.3				
Change Period (Y+Rc), s	7.9	6.8	7.9	* 8.3	7.8	6.8		* 8.3				
Max Green Setting (Gmax), s	18.1	61.2	36.1	* 7	5.2	74.2		* 53				
Max Q Clear Time (g_c+I1), s	17.0	65.6	36.1	8.6	7.2	33.8		14.9				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	10.4		0.9				

Intersection Summary	
HCM 6th Ctrl Delay	57.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

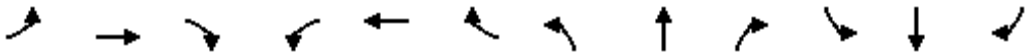
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	2311	101	111	1892	28	62	0	102	36	5	15
Future Volume (vph)	42	2311	101	111	1892	28	62	0	102	36	5	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	365		0	390		0	105		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1867			487			266			246	
Travel Time (s)		28.3			7.4			6.0			5.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.7	17.9		12.8	17.9		14.6	14.6		14.6	14.6	
Total Split (s)	12.7	110.0		15.0	112.3		21.0	21.0		21.0	21.0	
Total Split (%)	8.7%	75.3%		10.3%	76.9%		14.4%	14.4%		14.4%	14.4%	
Yellow Time (s)	4.8	4.9		4.9	4.9		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.9	2.0		2.9	2.0		3.4	3.4		3.4	3.4	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.7	6.9		7.8	6.9		7.6	7.6			7.6	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 146	
Actuated Cycle Length: 146	
Offset: 31 (21%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: FDOT Park & Ride & Saxon Blvd





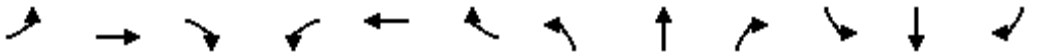
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	2311	101	111	1892	28	62	0	102	36	5	15
Future Volume (veh/h)	42	2311	101	111	1892	28	62	0	102	36	5	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	2485	105	119	2034	29	67	0	44	39	5	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	3737	157	168	3887	55	154	0	111	93	12	7
Arrive On Green	0.03	0.74	0.74	0.03	0.75	0.75	0.07	0.00	0.07	0.07	0.07	0.07
Sat Flow, veh/h	1781	5026	211	1781	5187	74	1405	0	1585	701	173	99
Grp Volume(v), veh/h	45	1676	914	119	1334	729	67	0	44	49	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1832	1781	1702	1857	1405	0	1585	973	0	0
Q Serve(g_s), s	0.9	36.3	37.2	2.3	23.6	23.6	0.0	0.0	3.9	4.3	0.0	0.0
Cycle Q Clear(g_c), s	0.9	36.3	37.2	2.3	23.6	23.6	6.2	0.0	3.9	8.2	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.04	1.00		1.00	0.80		0.10
Lane Grp Cap(c), veh/h	219	2531	1362	168	2551	1392	154	0	111	112	0	0
V/C Ratio(X)	0.21	0.66	0.67	0.71	0.52	0.52	0.43	0.00	0.40	0.44	0.00	0.00
Avail Cap(c_a), veh/h	229	2531	1362	196	2551	1392	185	0	145	143	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	9.5	9.6	26.7	7.5	7.5	66.1	0.0	65.0	68.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.8	1.6	9.3	0.8	1.4	1.9	0.0	2.3	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	16.0	17.7	6.5	12.0	13.2	4.5	0.0	3.0	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	10.3	11.2	35.9	8.3	9.0	68.0	0.0	67.3	70.8	0.0	0.0
LnGrp LOS	A	B	B	D	A	A	E	A	E	E	A	A
Approach Vol, veh/h		2635			2182			111			49	
Approach Delay, s/veh		10.6			10.0			67.7			70.8	
Approach LOS		B			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	116.3		17.8	12.8	115.4		17.8				
Change Period (Y+Rc), s	* 7.7	6.9		7.6	7.8	6.9		7.6				
Max Green Setting (Gmax), s	* 5	105.4		13.4	7.2	103.1		13.4				
Max Q Clear Time (g_c+I1), s	2.9	25.6		8.2	4.3	39.2		10.2				
Green Ext Time (p_c), s	0.0	36.6		0.1	0.1	47.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		12.2
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Volume (vph)	0	2257	578	0	1812	405	0	0	395	0	0	404
Future Volume (vph)	0	2257	578	0	1812	405	0	0	395	0	0	404
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		450	0		900	0		0	0		0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		45			45			25			30	
Link Distance (ft)		487			1599			339			391	
Travel Time (s)		7.4			24.2			9.2			8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Free			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	2257	578	0	1812	405	0	0	395	0	0	404
Future Vol, veh/h	0	2257	578	0	1812	405	0	0	395	0	0	404
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	Free	-	-	Free	-	-	Free
Storage Length	-	-	450	-	-	900	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	16965	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	2376	608	0	1907	426	0	0	416	0	0	425

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	-	-	-	0			-	-	-
Stage 1	-	-	-	-	-	-			-	-	-
Stage 2	-	-	-	-	-	-			-	-	-
Critical Hdwy	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			-	-	-
Follow-up Hdwy	-	-	-	-	-	-			-	-	-
Pot Cap-1 Maneuver	0	-	0	0	-	0			0	0	0
Stage 1	0	-	0	0	-	0			0	0	0
Stage 2	0	-	0	0	-	0			0	0	0
Platoon blocked, %		-			-						
Mov Cap-1 Maneuver	-	-	-	-	-	-			-	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-			-	0	-
Stage 1	-	-	-	-	-	-			-	0	-
Stage 2	-	-	-	-	-	-			-	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

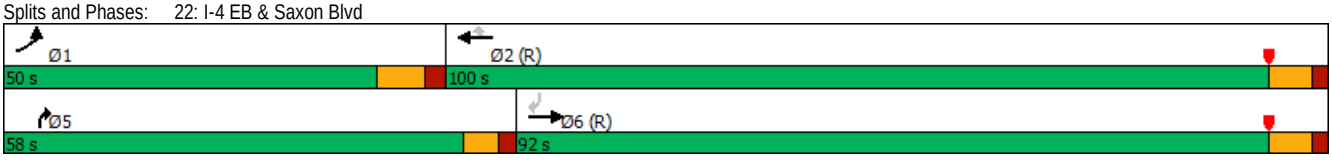
Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	448	3223	0	0	1502	268	0	0	1096	0	0	577
Future Volume (vph)	448	3223	0	0	1502	268	0	0	1096	0	0	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		160	0		0	0		0
Storage Lanes	1		0	0		1	0		3	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1599			1257			900			503	
Travel Time (s)		24.2			19.0			13.6			7.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	477	3429	0	0	1598	285	0	0	1166	0	0	614
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Detector Phase	1	6			2	2			5			6
Switch Phase												
Minimum Initial (s)	5.0	15.0			17.0	17.0			6.0			15.0
Minimum Split (s)	12.7	21.8			23.8	23.8			12.0			21.8
Total Split (s)	50.0	92.0			100.0	100.0			58.0			92.0
Total Split (%)	33.3%	61.3%			66.7%	66.7%			38.7%			61.3%
Yellow Time (s)	5.4	4.8			4.8	4.8			4.0			4.8
All-Red Time (s)	2.3	2.0			2.0	2.0			2.0			2.0
Lost Time Adjust (s)	0.0	0.0			0.0	0.0			0.0			0.0
Total Lost Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lead/Lag	Lead	Lag			Lag	Lag			Lead			Lag
Lead-Lag Optimize?	Yes	Yes			Yes	Yes			Yes			Yes
Recall Mode	None	C-Min			C-Min	C-Min			None			C-Min
v/c Ratio	0.97	0.93			0.72	0.28			0.94			0.45
Control Delay	86.8	34.8			14.0	2.5			61.7			1.1
Queue Delay	0.0	0.0			0.0	0.0			0.0			0.0
Total Delay	86.8	34.8			14.0	2.5			61.7			1.1
Queue Length 50th (ft)	18	35			5	0			18			0
Queue Length 95th (ft)	#27	36			8	1			#23			0
Internal Link Dist (ft)		1519			1177			820			423	
Turn Bay Length (ft)	700					160						
Base Capacity (vph)	499	3693			2212	1033			1269			1370
Starvation Cap Reductn	0	0			0	0			0			0
Spillback Cap Reductn	0	0			0	0			0			0
Storage Cap Reductn	0	0			0	0			0			0
Reduced v/c Ratio	0.96	0.93			0.72	0.28			0.92			0.45

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 26 (17%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 22: I-4 EB & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	448	3223	0	0	1502	268	0	0	1096	0	0	577
Future Volume (vph)	448	3223	0	0	1502	268	0	0	1096	0	0	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Lane Util. Factor	1.00	0.86			0.95	1.00			0.76			1.00
Frt	1.00	1.00			1.00	0.85			0.85			0.86
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			3539	1583			3610			1611
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			3539	1583			3610			1611
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	477	3429	0	0	1598	285	0	0	1166	0	0	614
RTOR Reduction (vph)	0	0	0	0	0	44	0	0	19	0	0	260
Lane Group Flow (vph)	477	3429	0	0	1598	241	0	0	1147	0	0	354
Turn Type	Prot	NA			NA	Perm			Prot			Perm
Protected Phases	1	6			2				5			
Permitted Phases						2						6
Actuated Green, G (s)	41.7	86.5			93.8	93.8			50.7			86.5
Effective Green, g (s)	41.7	86.5			93.8	93.8			50.7			86.5
Actuated g/C Ratio	0.28	0.58			0.63	0.63			0.34			0.58
Clearance Time (s)	7.7	6.8			6.8	6.8			6.0			6.8
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0			3.0
Lane Grp Cap (vph)	492	3695			2213	989			1220			929
v/s Ratio Prot	0.27	c0.54			0.45				c0.32			
v/s Ratio Perm						0.15						0.22
v/c Ratio	0.97	0.93			0.72	0.24			0.94			0.38
Uniform Delay, d1	53.5	28.9			19.2	12.4			48.2			17.2
Progression Factor	1.00	1.00			0.62	0.26			1.00			1.00
Incremental Delay, d2	32.4	5.4			1.8	0.5			13.9			1.2
Delay (s)	85.9	34.3			13.7	3.7			62.1			18.4
Level of Service	F	C			B	A			E			B
Approach Delay (s)		40.6			12.2			62.1			18.4	
Approach LOS		D			B			E			B	

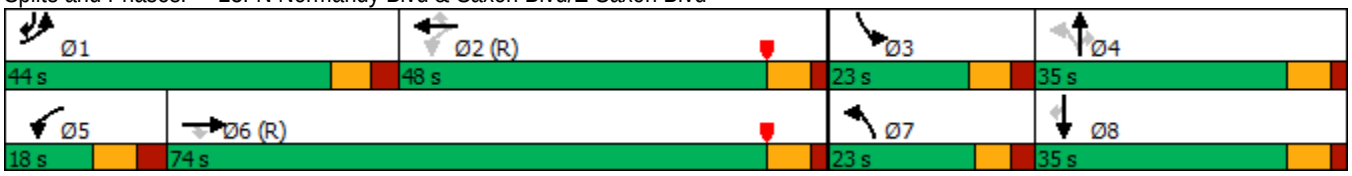
Intersection Summary			
HCM 2000 Control Delay	35.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

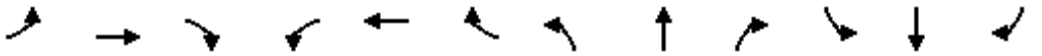
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	764	1527	360	34	688	253	195	317	48	338	337	581
Future Volume (vph)	764	1527	360	34	688	253	195	317	48	338	337	581
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	520		220	470		0	260		0	0		385
Storage Lanes	2		1	1		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1876			7172			3746			5140	
Travel Time (s)		32.0			122.3			73.0			100.1	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6	2		2	4		4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	12.6	21.9	21.9	13.1	21.9	21.9	11.8	16.9	16.9	12.5	16.9	12.6
Total Split (s)	44.0	74.0	74.0	18.0	48.0	48.0	23.0	35.0	35.0	23.0	35.0	44.0
Total Split (%)	29.3%	49.3%	49.3%	12.0%	32.0%	32.0%	15.3%	23.3%	23.3%	15.3%	23.3%	29.3%
Yellow Time (s)	4.4	4.9	4.9	4.9	4.9	4.9	4.0	4.8	4.8	4.8	4.8	4.4
All-Red Time (s)	3.2	2.0	2.0	3.2	2.0	2.0	2.8	2.1	2.1	2.7	2.1	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.6	6.9	6.9	8.1	6.9	6.9	6.8	6.9	6.9	7.5	6.9	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 95 (63%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: N Normandy Blvd & Saxon Blvd/E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	764	1527	360	34	688	253	195	317	48	338	337	581
Future Volume (veh/h)	764	1527	360	34	688	253	195	317	48	338	337	581
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	796	1591	315	35	717	262	203	330	42	352	351	479
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	839	1733	773	105	974	434	236	348	295	357	356	686
Arrive On Green	0.08	0.16	0.16	0.03	0.27	0.27	0.11	0.19	0.19	0.10	0.19	0.19
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1767	1856	1572	3456	1870	1585
Grp Volume(v), veh/h	796	1591	315	35	717	262	203	330	42	352	351	479
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1767	1856	1572	1728	1870	1585
Q Serve(g_s), s	34.4	66.1	26.8	2.1	27.5	21.6	13.8	26.4	3.3	15.3	28.1	28.5
Cycle Q Clear(g_c), s	34.4	66.1	26.8	2.1	27.5	21.6	13.8	26.4	3.3	15.3	28.1	28.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	839	1733	773	105	974	434	236	348	295	357	356	686
V/C Ratio(X)	0.95	0.92	0.41	0.33	0.74	0.60	0.86	0.95	0.14	0.99	0.99	0.70
Avail Cap(c_a), veh/h	839	1733	773	177	974	434	241	348	295	357	356	686
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.57	0.57	0.57	0.22	0.22	0.22	0.72	0.72	0.72	0.81	0.81	0.81
Uniform Delay (d), s/veh	68.1	60.0	43.5	42.1	49.5	47.4	45.0	60.2	50.9	67.1	60.6	34.6
Incr Delay (d2), s/veh	13.3	5.7	0.9	0.4	1.1	1.4	19.5	28.7	0.2	39.0	39.5	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	22.8	40.1	15.9	1.7	14.9	10.9	11.1	20.5	2.4	13.0	23.2	20.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.4	65.7	44.4	42.5	50.6	48.7	64.5	89.0	51.1	106.1	100.1	37.4
LnGrp LOS	F	E	D	D	D	D	E	F	D	F	F	D
Approach Vol, veh/h		2702			1014			575			1182	
Approach Delay, s/veh		67.8			49.9			77.6			76.5	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.0	48.0	23.0	35.0	11.9	80.1	22.6	35.4
Change Period (Y+Rc), s	* 7.6	6.9	* 7.5	6.9	* 8.1	6.9	* 6.8	6.9
Max Green Setting (Gmax), s	* 36	41.1	* 16	28.1	* 9.9	67.1	* 16	28.1
Max Q Clear Time (g_c+I1), s	36.4	29.5	17.3	28.4	4.1	68.1	15.8	30.5
Green Ext Time (p_c), s	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	67.4
HCM 6th LOS	E

Notes

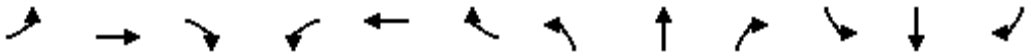
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	474	627	109	6	412	14	84	111	8	5	87	288
Future Volume (vph)	474	627	109	6	412	14	84	111	8	5	87	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	390		0	120		0	265		0	150		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			30			30	
Link Distance (ft)		7172			644			704			1061	
Travel Time (s)		122.3			12.5			16.0			24.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	5	2	2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	11.0	11.0	11.0	11.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	12.0	17.5	17.5	17.5	17.5		11.5	11.5		11.5	11.5	
Total Split (s)	25.0	51.0	51.0	26.0	26.0		24.0	24.0		24.0	24.0	
Total Split (%)	33.3%	68.0%	68.0%	34.7%	34.7%		32.0%	32.0%		32.0%	32.0%	
Yellow Time (s)	4.5	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	6.5	6.5	6.5	6.5		6.5	6.5		6.5	6.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	Min	Min	Min	Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 74.5	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 24: Tivoli Dr & E Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	627	109	6	412	14	84	111	8	5	87	288
Future Volume (veh/h)	474	627	109	6	412	14	84	111	8	5	87	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	510	674	84	6	443	14	90	119	7	5	94	207
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	539	1110	940	278	465	15	165	408	24	320	121	267
Arrive On Green	0.24	0.59	0.59	0.26	0.26	0.26	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	1870	1585	701	1789	57	1078	1749	103	1265	520	1145
Grp Volume(v), veh/h	510	674	84	6	0	457	90	0	126	5	0	301
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	701	0	1845	1078	0	1852	1265	0	1664
Q Serve(g_s), s	16.3	17.2	1.7	0.5	0.0	18.3	4.8	0.0	4.2	0.2	0.0	12.7
Cycle Q Clear(g_c), s	16.3	17.2	1.7	0.5	0.0	18.3	17.5	0.0	4.2	4.4	0.0	12.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.06	1.00		0.69
Lane Grp Cap(c), veh/h	539	1110	940	278	0	480	165	0	432	320	0	388
V/C Ratio(X)	0.95	0.61	0.09	0.02	0.00	0.95	0.55	0.00	0.29	0.02	0.00	0.78
Avail Cap(c_a), veh/h	539	1110	940	278	0	480	165	0	432	320	0	388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.3	9.7	6.5	20.7	0.0	27.3	35.7	0.0	23.7	25.5	0.0	26.9
Incr Delay (d2), s/veh	26.0	1.1	0.1	0.0	0.0	29.5	3.7	0.0	0.4	0.0	0.0	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.6	9.7	0.8	0.1	0.0	16.9	3.2	0.0	3.3	0.1	0.0	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	10.8	6.6	20.8	0.0	56.8	39.3	0.0	24.0	25.5	0.0	36.4
LnGrp LOS	D	B	A	C	A	E	D	A	C	C	A	D
Approach Vol, veh/h		1268			463			216			306	
Approach Delay, s/veh		24.0			56.3			30.4			36.2	
Approach LOS		C			E			C			D	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		51.0		24.0	25.0	26.0		24.0				
Change Period (Y+Rc), s		6.5		6.5	7.0	6.5		6.5				
Max Green Setting (Gmax), s		44.5		17.5	18.0	19.5		17.5				
Max Q Clear Time (g_c+I1), s		19.2		19.5	18.3	20.3		14.7				
Green Ext Time (p_c), s		6.2		0.0	0.0	0.0		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			32.9									
HCM 6th LOS			C									

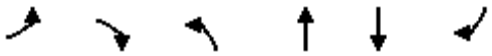
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	356	365	198	204	310	344
Future Volume (vph)	356	365	198	204	310	344
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	230			350
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Right Turn on Red		Yes				Yes
Link Speed (mph)	35			30	35	
Link Distance (ft)	908			839	3746	
Travel Time (s)	17.7			19.1	73.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	3.0	10.0	10.0	10.0
Minimum Split (s)	10.0	10.0	9.5	16.5	17.0	17.0
Total Split (s)	20.0	20.0	15.0	40.0	25.0	25.0
Total Split (%)	33.3%	33.3%	25.0%	66.7%	41.7%	41.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.5	4.5
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	7.0	7.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 56.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 25: N Normandy Blvd & Deltona Blvd





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	356	365	198	204	310	344
Future Volume (veh/h)	356	365	198	204	310	344
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	379	167	211	217	330	266
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	444	395	415	908	441	374
Arrive On Green	0.25	0.25	0.12	0.49	0.24	0.24
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	379	167	211	217	330	266
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	9.9	4.3	4.0	3.3	8.0	7.5
Cycle Q Clear(g_c), s	9.9	4.3	4.0	3.3	8.0	7.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	444	395	415	908	441	374
V/C Ratio(X)	0.85	0.42	0.51	0.24	0.75	0.71
Avail Cap(c_a), veh/h	509	453	515	1279	687	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	15.4	11.6	7.3	17.4	17.2
Incr Delay (d2), s/veh	11.5	0.5	0.7	0.1	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	7.3	2.4	1.9	5.8	4.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.1	16.0	12.3	7.5	19.9	19.7
LnGrp LOS	C	B	B	A	B	B
Approach Vol, veh/h	546			428	596	
Approach Delay, s/veh	25.1			9.9	19.8	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		30.8		18.2	12.2	18.6
Change Period (Y+Rc), s		* 7		6.0	6.5	7.0
Max Green Setting (Gmax), s		* 34		14.0	8.5	18.0
Max Q Clear Time (g_c+I1), s		5.3		11.9	6.0	10.0
Green Ext Time (p_c), s		1.0		0.3	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

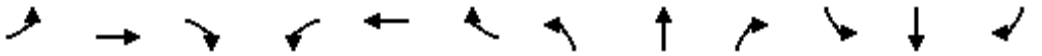
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	188	3018	15	50	1591	22	82	22	59	16	13	116
Future Volume (vph)	188	3018	15	50	1591	22	82	22	59	16	13	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	300		0	180		0	170		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1067			1295			380			416	
Travel Time (s)		16.2			19.6			8.6			9.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Detector Phase	1	6	6	5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	13.5	38.5	38.5	13.5	38.5		48.5	48.5		48.5	48.5	
Total Split (s)	25.0	85.0	85.0	25.0	85.0		40.0	40.0		40.0	40.0	
Total Split (%)	16.7%	56.7%	56.7%	16.7%	56.7%		26.7%	26.7%		26.7%	26.7%	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5	8.5	8.5	8.5		7.5	7.5		7.5	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 112 (75%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 26: Forest Edge Dr & Howland Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	3018	15	50	1591	22	82	22	59	16	13	116
Future Volume (veh/h)	188	3018	15	50	1591	22	82	22	59	16	13	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	196	3144	16	52	1657	23	85	23	61	17	14	121
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	329	3306	1026	106	3228	45	151	72	190	198	27	231
Arrive On Green	0.05	0.65	0.65	0.06	1.00	1.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	5106	1585	1781	5189	72	1244	449	1192	1314	167	1444
Grp Volume(v), veh/h	196	3144	16	52	1087	593	85	0	84	17	0	135
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1857	1244	0	1641	1314	0	1611
Q Serve(g_s), s	6.0	84.7	0.5	1.6	0.0	0.0	10.1	0.0	6.8	1.7	0.0	11.5
Cycle Q Clear(g_c), s	6.0	84.7	0.5	1.6	0.0	0.0	21.6	0.0	6.8	8.5	0.0	11.5
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.73	1.00		0.90
Lane Grp Cap(c), veh/h	329	3306	1026	106	2118	1155	151	0	262	198	0	257
V/C Ratio(X)	0.60	0.95	0.02	0.49	0.51	0.51	0.56	0.00	0.32	0.09	0.00	0.52
Avail Cap(c_a), veh/h	427	3306	1026	250	2118	1155	222	0	356	273	0	349
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.8	24.3	9.4	36.6	0.0	0.0	67.7	0.0	55.8	59.6	0.0	57.8
Incr Delay (d2), s/veh	0.2	0.9	0.0	3.2	0.8	1.5	3.3	0.0	0.7	0.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	33.3	0.3	2.2	0.4	0.9	6.0	0.0	5.2	1.1	0.0	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	25.2	9.4	39.7	0.8	1.5	71.0	0.0	56.5	59.8	0.0	59.5
LnGrp LOS	A	C	A	D	A	A	E	A	E	E	A	E
Approach Vol, veh/h		3356			1732			169			152	
Approach Delay, s/veh		24.1			2.2			63.8			59.5	
Approach LOS		C			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.7	101.8		31.5	12.9	105.6		31.5				
Change Period (Y+Rc), s	8.5	8.5		7.5	8.5	8.5		7.5				
Max Green Setting (Gmax), s	16.5	76.5		32.5	16.5	76.5		32.5				
Max Q Clear Time (g_c+I1), s	8.0	2.0		23.6	3.6	86.7		13.5				
Green Ext Time (p_c), s	0.3	23.8		0.4	0.0	0.0		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			19.4									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2787	282	84	1588	111	21
Future Volume (vph)	2787	282	84	1588	111	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		420	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Right Turn on Red		Yes				Yes
Link Speed (mph)	45			45	35	
Link Distance (ft)	1295			6043	499	
Travel Time (s)	19.6			91.6	9.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	6%	6%
Shared Lane Traffic (%)						
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	15.0		5.0	15.0	7.0	
Minimum Split (s)	35.5		13.5	26.5	34.5	
Total Split (s)	60.0		40.0	100.0	50.0	
Total Split (%)	40.0%		26.7%	66.7%	33.3%	
Yellow Time (s)	5.0		5.0	5.0	4.0	
All-Red Time (s)	3.5		3.5	3.5	3.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	8.5		8.5	8.5	7.5	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 108 (72%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	

Splits and Phases: 27: Wolf Pack Run & Howland Blvd





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2787	282	84	1588	111	21
Future Volume (veh/h)	2787	282	84	1588	111	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1811	1900
Adj Flow Rate, veh/h	2965	300	89	1689	139	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	6	0
Cap, veh/h	3541	347	151	4280	190	89
Arrive On Green	1.00	1.00	0.03	0.84	0.06	0.00
Sat Flow, veh/h	4896	463	1781	5274	3450	1610
Grp Volume(v), veh/h	2107	1158	89	1689	139	0
Grp Sat Flow(s),veh/h/ln	1702	1787	1781	1702	1725	1610
Q Serve(g_s), s	0.0	0.0	1.6	12.0	6.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.6	12.0	6.0	0.0
Prop In Lane		0.26	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2550	1338	151	4280	190	89
V/C Ratio(X)	0.83	0.87	0.59	0.39	0.73	0.00
Avail Cap(c_a), veh/h	2550	1338	467	4280	977	456
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.36	0.52	0.52	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	18.3	2.9	69.8	0.0
Incr Delay (d2), s/veh	1.2	3.0	1.9	0.1	5.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	2.0	3.6	4.7	5.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.2	3.0	20.2	3.1	75.1	0.0
LnGrp LOS	A	A	C	A	E	A
Approach Vol, veh/h	3265			1778	139	
Approach Delay, s/veh	1.8			3.9	75.1	
Approach LOS	A			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		134.2		15.8	13.4	120.8
Change Period (Y+Rc), s		8.5		7.5	8.5	8.5
Max Green Setting (Gmax), s		91.5		42.5	31.5	51.5
Max Q Clear Time (g_c+I1), s		14.0		8.0	3.6	2.0
Green Ext Time (p_c), s		26.1		0.4	0.2	46.4

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Notes

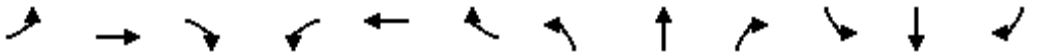
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	2211	50	97	1465	16	104	77	120	57	32	175
Future Volume (vph)	266	2211	50	97	1465	16	104	77	120	57	32	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	210		0	0		0	0		130
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			45			30			30	
Link Distance (ft)		1257			1876			487			498	
Travel Time (s)		21.4			28.4			11.1			11.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	11.0		5.0	11.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.8	34.9		11.9	36.9		35.8	35.8		38.8	38.8	38.8
Total Split (s)	40.0	92.0		18.0	70.0		40.0	40.0		40.0	40.0	40.0
Total Split (%)	26.7%	61.3%		12.0%	46.7%		26.7%	26.7%		26.7%	26.7%	26.7%
Yellow Time (s)	4.4	4.9		4.9	4.9		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.0		2.0	2.0		2.1	2.1		2.1	2.1	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	6.8	6.9		6.9	6.9		5.8	5.8			5.8	5.8
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 15 (10%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 28: Finland Dr & Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	2211	50	97	1465	16	104	77	120	57	32	175
Future Volume (veh/h)	266	2211	50	97	1465	16	104	77	120	57	32	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	2377	54	104	1575	17	112	83	129	61	34	188
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	2932	66	126	2451	26	119	150	234	141	70	361
Arrive On Green	0.34	1.00	1.00	0.02	0.16	0.16	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	5137	116	1781	5208	56	1159	660	1026	445	309	1585
Grp Volume(v), veh/h	286	1572	859	104	1029	563	112	0	212	95	0	188
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1702	1860	1159	0	1686	754	0	1585
Q Serve(g_s), s	23.3	0.0	0.0	8.7	42.6	42.6	9.2	0.0	16.7	8.4	0.0	15.6
Cycle Q Clear(g_c), s	23.3	0.0	0.0	8.7	42.6	42.6	34.2	0.0	16.7	25.0	0.0	15.6
Prop In Lane	1.00		0.06	1.00		0.03	1.00		0.61	0.64		1.00
Lane Grp Cap(c), veh/h	305	1943	1056	126	1602	875	119	0	384	211	0	361
V/C Ratio(X)	0.94	0.81	0.81	0.83	0.64	0.64	0.94	0.00	0.55	0.45	0.00	0.52
Avail Cap(c_a), veh/h	394	1943	1056	132	1602	875	119	0	384	211	0	361
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.25	0.25	0.25	0.56	0.56	0.56	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	0.0	0.0	72.3	51.5	51.5	72.1	0.0	51.1	59.2	0.0	50.7
Incr Delay (d2), s/veh	9.3	1.0	1.8	20.4	1.1	2.0	64.8	0.0	2.2	2.1	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.0	0.5	1.0	7.5	25.2	27.5	10.7	0.0	11.8	6.4	0.0	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	1.0	1.8	92.7	52.6	53.6	136.9	0.0	53.3	61.3	0.0	52.5
LnGrp LOS	E	A	A	F	D	D	F	A	D	E	A	D
Approach Vol, veh/h		2717			1696			324			283	
Approach Delay, s/veh		7.2			55.4			82.2			55.5	
Approach LOS		A			E			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.5	92.5		40.0	32.5	77.5		40.0				
Change Period (Y+Rc), s	6.9	6.9		* 5.8	6.8	6.9		* 5.8				
Max Green Setting (Gmax), s	11.1	85.1		* 34	33.2	63.1		* 34				
Max Q Clear Time (g_c+I1), s	10.7	2.0		27.0	25.3	44.6		36.2				
Green Ext Time (p_c), s	0.0	52.7		0.8	0.4	11.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		31.1
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	277	0	24	93	0	72	54	1285	45	50	1574	186
Future Volume (vph)	277	0	24	93	0	72	54	1285	45	50	1574	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	100		100	100		100
Storage Lanes	2		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		274			360			429			1035	
Travel Time (s)		6.2			8.2			6.5			15.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4						2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0		24.0	24.0		11.0	25.0	25.0	11.0	25.0	25.0
Total Split (s)	16.0	18.0		30.0	32.0		11.0	67.0	67.0	25.0	81.0	81.0
Total Split (%)	11.4%	12.9%		21.4%	22.9%		7.9%	47.9%	47.9%	17.9%	57.9%	57.9%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	5.0	5.0	4.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	7.0	7.0	6.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min

Intersection Summary

Area Type: Other

Cycle Length: 140

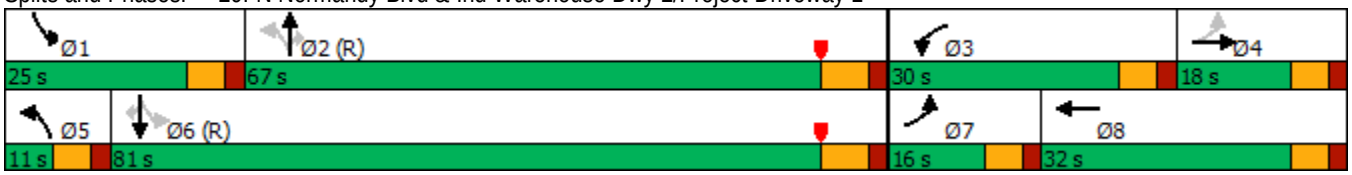
Actuated Cycle Length: 140

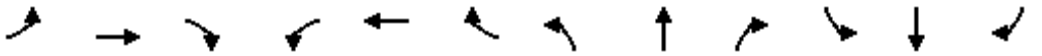
Offset: 60 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 125

Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2/Project Driveway 1





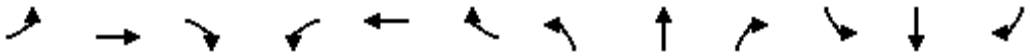
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	0	24	93	0	72	54	1285	45	50	1574	186
Future Volume (veh/h)	277	0	24	93	0	72	54	1285	45	50	1574	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	301	0	26	101	0	78	59	1397	49	54	1711	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	0	103	127	0	102	186	2324	1037	266	2322	1036
Arrive On Green	0.07	0.00	0.06	0.07	0.00	0.06	0.03	0.65	0.65	0.03	0.65	0.65
Sat Flow, veh/h	3456	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	301	0	26	101	0	78	59	1397	49	54	1711	202
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	10.0	0.0	2.2	7.8	0.0	6.8	1.5	31.4	1.5	1.4	45.1	7.1
Cycle Q Clear(g_c), s	10.0	0.0	2.2	7.8	0.0	6.8	1.5	31.4	1.5	1.4	45.1	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	391	0	103	127	0	102	186	2324	1037	266	2322	1036
V/C Ratio(X)	0.77	0.00	0.25	0.80	0.00	0.76	0.32	0.60	0.05	0.20	0.74	0.20
Avail Cap(c_a), veh/h	391	0	136	305	0	294	193	2324	1037	452	2322	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	62.2	64.0	0.0	64.4	16.9	13.8	8.6	11.3	16.2	9.6
Incr Delay (d2), s/veh	9.0	0.0	1.3	10.8	0.0	11.0	1.0	1.2	0.1	0.4	2.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	1.7	7.1	0.0	5.5	1.4	17.4	1.0	0.9	23.8	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	0.0	63.5	74.8	0.0	75.5	17.8	15.0	8.7	11.6	18.4	10.1
LnGrp LOS	E	A	E	E	A	E	B	B	A	B	B	B
Approach Vol, veh/h		327			179			1505			1967	
Approach Delay, s/veh		67.1			75.1			14.9			17.3	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	98.6	16.0	15.1	10.5	98.5	16.0	15.0
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	19.0	60.0	24.0	12.0	5.0	74.0	10.0	26.0
Max Q Clear Time (g_c+I1), s	3.4	33.4	9.8	4.2	3.5	47.1	12.0	8.8
Green Ext Time (p_c), s	0.1	9.8	0.1	0.0	0.0	13.7	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	211	0	0	45	108	1284	17	17	1683	25
Future Volume (vph)	0	0	211	0	0	45	108	1284	17	17	1683	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		100
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		357			376			378			429	
Travel Time (s)		8.1			8.5			5.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

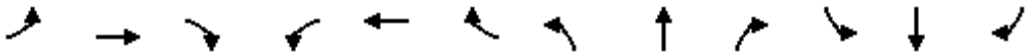
Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	211	0	0	45	108	1284	17	17	1683	25
Future Vol, veh/h	0	0	211	0	0	45	108	1284	17	17	1683	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	229	0	0	49	117	1396	18	18	1829	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	928	-	-	707	1856	0	0	1414	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	270	0	0	378	322	-	-	478	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	270	-	-	378	322	-	-	478	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.5	15.9	1.7	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	322	-	-	270	378	478	-	-
HCM Lane V/C Ratio	0.365	-	-	0.849	0.129	0.039	-	-
HCM Control Delay (s)	22.5	-	-	63.5	15.9	12.8	-	-
HCM Lane LOS	C	-	-	F	C	B	-	-
HCM 95th %tile Q(veh)	1.6	-	-	7.1	0.4	0.1	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	0	30	51	0	72	21	1337	21	42	1852	21
Future Volume (vph)	60	0	30	51	0	72	21	1337	21	42	1852	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		318			454			3703			378	
Travel Time (s)		7.2			10.3			56.1			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1339.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	0	30	51	0	72	21	1337	21	42	1852	21
Future Vol, veh/h	60	0	30	51	0	72	21	1337	21	42	1852	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	0	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	0	33	55	0	78	23	1453	23	46	2013	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3667	3639	1018	2610	3639	1465	2036	0	0	1476	0	0
Stage 1	2117	2117	-	1511	1511	-	-	-	-	-	-	-
Stage 2	1550	1522	-	1099	2128	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	~ 2	5	236	~ 14	5	157	276	-	-	454	-	-
Stage 1	~ 52	90	-	149	182	-	-	-	-	-	-	-
Stage 2	142	180	-	227	89	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 1	4	236	~ 10	4	157	276	-	-	454	-	-
Mov Cap-2 Maneuver	~ 1	4	-	~ 10	4	-	-	-	-	-	-	-
Stage 1	~ 48	81	-	137	167	-	-	-	-	-	-	-
Stage 2	~ 65	165	-	176	80	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 50552.4	$ 1181.7	0.3	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	276	-	-	1	10	157	454	-	-
HCM Lane V/C Ratio	0.083	-	-	97.826	5.543	0.498	0.101	-	-
HCM Control Delay (s)	19.2	-	-	$ 50552.4	$ 2781.2	48.8	13.8	-	-
HCM Lane LOS	C	-	-	F	F	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	14.6	8.2	2.4	0.3	-	-

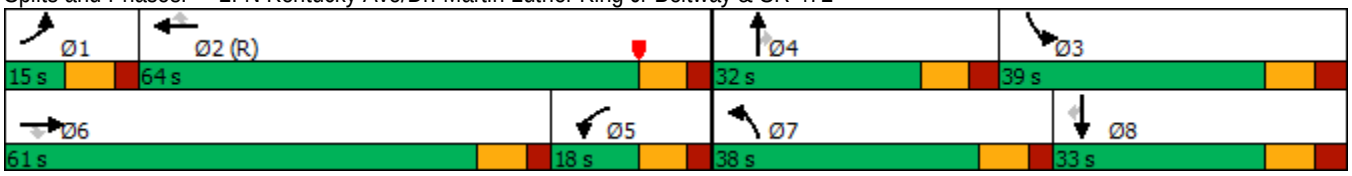
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

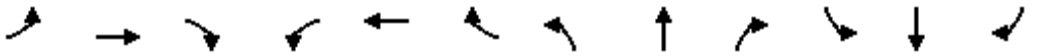
E-10: PM Peak Hour Buildout Traffic Conditions with Mitigation

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	1103	390	186	1144	380	312	428	84	317	470	51
Future Volume (vph)	61	1103	390	186	1144	380	312	428	84	317	470	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		395	425		400	0		485	350		350
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		964			2926			4220			2954	
Travel Time (s)		12.0			36.3			63.9			36.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	17.0	17.0	5.0	17.0	17.0	5.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	13.3	25.3	25.3	13.3	25.3	25.3	13.3	15.8	15.8	16.4	16.4	16.4
Total Split (s)	15.0	61.0	61.0	18.0	64.0	64.0	38.0	32.0	32.0	39.0	33.0	33.0
Total Split (%)	10.0%	40.7%	40.7%	12.0%	42.7%	42.7%	25.3%	21.3%	21.3%	26.0%	22.0%	22.0%
Yellow Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.3	3.3	3.8	3.8	3.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.8	8.8	9.4	9.4	9.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: N Kentucky Ave/Dr. Martin Luther King Jr Beltway & SR 472





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1103	390	186	1144	380	312	428	84	317	470	51
Future Volume (veh/h)	61	1103	390	186	1144	380	312	428	84	317	470	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1841	1841	1841	1870	1870	1870
Adj Flow Rate, veh/h	66	1186	302	200	1230	227	335	460	0	341	505	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	3	3	4	4	4	2	2	2
Cap, veh/h	80	1240	553	238	1318	588	347	512		362	550	
Arrive On Green	0.04	0.35	0.35	0.07	0.37	0.37	0.20	0.15	0.00	0.20	0.15	0.00
Sat Flow, veh/h	1781	3554	1585	3428	3526	1572	1753	3497	1560	1781	3554	1585
Grp Volume(v), veh/h	66	1186	302	200	1230	227	335	460	0	341	505	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1714	1763	1572	1753	1749	1560	1781	1777	1585
Q Serve(g_s), s	5.5	48.9	12.1	8.6	50.3	7.7	28.4	19.4	0.0	28.3	21.0	0.0
Cycle Q Clear(g_c), s	5.5	48.9	12.1	8.6	50.3	7.7	28.4	19.4	0.0	28.3	21.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	1240	553	238	1318	588	347	512		362	550	
V/C Ratio(X)	0.83	0.96	0.55	0.84	0.93	0.39	0.97	0.90		0.94	0.92	
Avail Cap(c_a), veh/h	80	1249	557	238	1318	588	347	541		362	559	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.61	0.61	0.61	0.60	0.60	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.1	47.7	10.9	69.0	45.2	8.2	59.6	62.9	0.0	58.9	62.5	0.0
Incr Delay (d2), s/veh	49.2	16.2	1.4	14.8	9.0	1.2	28.7	11.7	0.0	33.1	20.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	31.3	7.3	6.8	28.6	8.5	20.1	13.2	0.0	22.1	16.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.2	63.9	12.3	83.8	54.1	9.3	88.4	74.6	0.0	92.0	82.9	0.0
LnGrp LOS	F	E	B	F	D	A	F	E		F	F	
Approach Vol, veh/h		1554			1657			795	A		846	A
Approach Delay, s/veh		56.3			51.6			80.4			86.6	
Approach LOS		E			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	64.4	39.8	30.8	18.7	60.6	38.0	32.6
Change Period (Y+Rc), s	* 8.3	* 8.3	* 9.4	* 8.8	* 8.3	* 8.3	* 8.3	* 9.4
Max Green Setting (Gmax), s	* 6.7	* 56	* 30	* 23	* 9.7	* 53	* 30	* 24
Max Q Clear Time (g_c+I1), s	7.5	52.3	30.3	21.4	10.6	50.9	30.4	23.0
Green Ext Time (p_c), s	0.0	2.6	0.0	0.6	0.0	1.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	63.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

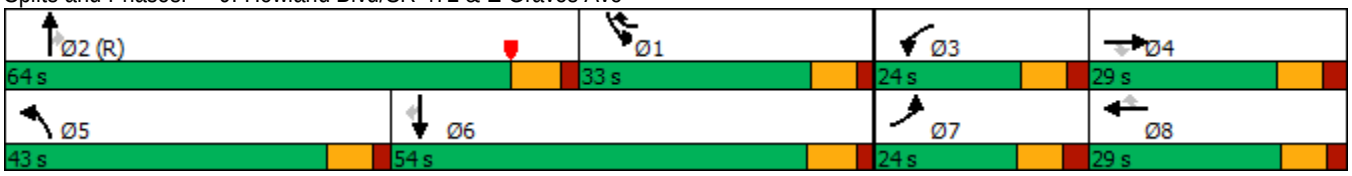
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

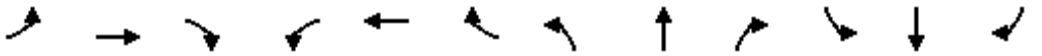
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	247	1201	247	243	302	742	957	210	259	1912	428
Future Volume (vph)	320	247	1201	247	243	302	742	957	210	259	1912	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		0	185		0	565		0	330		330
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			30			45			50	
Link Distance (ft)		649			654			1067			1453	
Travel Time (s)		12.6			14.9			16.2			19.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	5.0	17.0	17.0	7.0	17.0	17.0
Minimum Split (s)	15.0	15.0	15.0	14.5	14.5	14.0	12.0	24.5	24.5	14.0	24.5	24.5
Total Split (s)	24.0	29.0	29.0	24.0	29.0	33.0	43.0	64.0	64.0	33.0	54.0	54.0
Total Split (%)	16.0%	19.3%	19.3%	16.0%	19.3%	22.0%	28.7%	42.7%	42.7%	22.0%	36.0%	36.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.5	5.5
All-Red Time (s)	3.0	3.0	3.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.0	8.0	8.0	7.5	7.5	7.0	7.0	7.5	7.5	7.0	7.5	7.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	Min	Min

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 9: Howland Blvd/SR 472 & E Graves Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	247	1201	247	243	302	742	957	210	259	1912	428
Future Volume (veh/h)	320	247	1201	247	243	302	742	957	210	259	1912	428
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	337	260	0	260	256	318	781	1007	221	273	2013	443
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	3	3	3	2	2	2
Cap, veh/h	366	305		308	268	835	823	1384	430	1325	2145	666
Arrive On Green	0.11	0.16	0.00	0.09	0.14	0.14	0.08	0.09	0.09	0.38	0.42	0.42
Sat Flow, veh/h	3428	1856	1572	3456	1870	1585	3428	5066	1572	3456	5106	1585
Grp Volume(v), veh/h	337	260	0	260	256	318	781	1007	221	273	2013	443
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1728	1870	1585	1714	1689	1572	1728	1702	1585
Q Serve(g_s), s	14.6	20.4	0.0	11.1	20.4	6.0	34.0	29.0	18.0	7.9	56.6	33.7
Cycle Q Clear(g_c), s	14.6	20.4	0.0	11.1	20.4	6.0	34.0	29.0	18.0	7.9	56.6	33.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	366	305		308	268	835	823	1384	430	1325	2145	666
V/C Ratio(X)	0.92	0.85		0.85	0.95	0.38	0.95	0.73	0.51	0.21	0.94	0.67
Avail Cap(c_a), veh/h	366	305		380	268	835	823	1908	592	1325	2145	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.82	0.82	0.82	0.09	0.09	0.09
Uniform Delay (d), s/veh	66.4	60.9	0.0	67.3	63.8	12.2	68.1	62.8	47.1	31.0	41.6	35.0
Incr Delay (d2), s/veh	28.2	20.1	0.0	13.5	42.6	0.3	17.5	2.8	3.6	0.0	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	16.8	0.0	9.4	18.8	7.7	23.9	19.0	12.3	4.1	25.1	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	94.6	81.1	0.0	80.8	106.4	12.5	85.6	65.6	50.7	31.0	42.7	35.3
LnGrp LOS	F	F		F	F	B	F	E	D	C	D	D
Approach Vol, veh/h		597	A		834			2009			2729	
Approach Delay, s/veh		88.7			62.6			71.7			40.3	
Approach LOS		F			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	65.5	48.5	20.8	32.7	43.0	71.0	24.0	29.5
Change Period (Y+Rc), s	7.5	* 7.5	7.5	8.0	7.0	7.5	8.0	* 8
Max Green Setting (Gmax), s	26.0	* 57	16.5	21.0	36.0	46.5	16.0	* 22
Max Q Clear Time (g_c+I1), s	9.9	31.0	13.1	22.4	36.0	58.6	16.6	22.4
Green Ext Time (p_c), s	0.6	10.0	0.2	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	248	298	824	398	431	1068
Future Volume (vph)	248	298	824	398	431	1068
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460	0		0	275	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		35			45
Link Distance (ft)	7900		5140			2576
Travel Time (s)	153.9		100.1			39.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4			2	
Detector Phase	4	4	6		5	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	12.0		5.0	12.0
Minimum Split (s)	11.5	11.5	19.0		11.5	18.5
Total Split (s)	19.0	19.0	31.0		20.0	51.0
Total Split (%)	27.1%	27.1%	44.3%		28.6%	72.9%
Yellow Time (s)	4.0	4.0	4.5		4.0	4.0
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.5	6.5	7.0		6.5	6.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min		None	Min

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 69.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: N Normandy Blvd & Elkcam Blvd





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	248	298	824	398	431	1068
Future Volume (veh/h)	248	298	824	398	431	1068
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	258	867	262	454	1124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	318	283	921	278	461	2233
Arrive On Green	0.18	0.18	0.34	0.34	0.19	0.63
Sat Flow, veh/h	1781	1585	2783	812	1781	3647
Grp Volume(v), veh/h	261	258	572	557	454	1124
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1724	1781	1777
Q Serve(g_s), s	9.9	11.2	21.9	21.9	13.1	12.0
Cycle Q Clear(g_c), s	9.9	11.2	21.9	21.9	13.1	12.0
Prop In Lane	1.00	1.00		0.47	1.00	
Lane Grp Cap(c), veh/h	318	283	609	591	461	2233
V/C Ratio(X)	0.82	0.91	0.94	0.94	0.98	0.50
Avail Cap(c_a), veh/h	318	283	609	591	461	2260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	28.2	22.3	22.3	18.5	7.1
Incr Delay (d2), s/veh	15.5	31.4	22.8	23.6	37.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	17.2	17.7	17.4	14.1	5.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.2	59.6	45.1	45.9	56.2	7.2
LnGrp LOS	D	E	D	D	E	A
Approach Vol, veh/h	519		1129			1578
Approach Delay, s/veh	51.4		45.5			21.3
Approach LOS	D		D			C

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		51.0		19.0	20.0	31.0
Change Period (Y+Rc), s		* 7		6.5	6.5	7.0
Max Green Setting (Gmax), s		* 45		12.5	13.5	24.0
Max Q Clear Time (g_c+I1), s		14.0		13.2	15.1	23.9
Green Ext Time (p_c), s		7.4		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.6
HCM 6th LOS	C

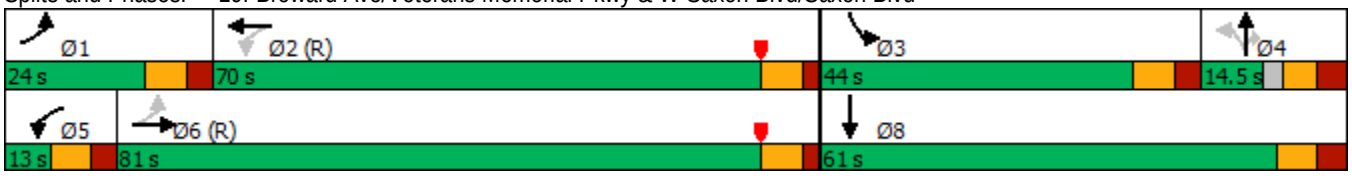
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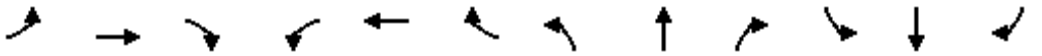
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1399	30	164	1351	565	48	49	105	732	70	197
Future Volume (vph)	210	1399	30	164	1351	565	48	49	105	732	70	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	460		0	400		0	200		445	410		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			40	
Link Distance (ft)		1037			1867			623			1923	
Travel Time (s)		15.7			28.3			14.2			32.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2			4		3	8	
Permitted Phases	6			2			4		4			
Detector Phase	1	6		5	2		4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	5.0	12.0		5.0	12.0		7.0	7.0	7.0	5.0	7.0	
Minimum Split (s)	12.9	18.8		12.8	18.8		14.5	14.5	14.5	12.9	15.3	
Total Split (s)	24.0	81.0		13.0	70.0		14.5	14.5	14.5	44.0	61.0	
Total Split (%)	15.5%	52.3%		8.4%	45.2%		9.4%	9.4%	9.4%	28.4%	39.4%	
Yellow Time (s)	4.8	4.8		4.8	4.8		3.7	3.7	3.7	4.8	4.5	
All-Red Time (s)	3.1	2.0		3.0	2.0		3.8	3.8	3.8	3.1	3.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.9	6.8		7.8	6.8		7.5	7.5	7.5	7.9	8.3	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 155	
Actuated Cycle Length: 155	
Offset: 124 (80%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 19: Broward Ave/Veterans Memorial Pkwy & W Saxon Blvd/Saxon Blvd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1399	30	164	1351	565	48	49	105	732	70	197
Future Volume (veh/h)	210	1399	30	164	1351	565	48	49	105	732	70	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	1473	23	173	1422	595	51	52	43	771	74	112
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	233	2516	39	205	1476	606	101	84	72	805	221	334
Arrive On Green	0.10	0.49	0.49	0.03	0.42	0.42	0.05	0.05	0.05	0.23	0.33	0.33
Sat Flow, veh/h	1767	5138	80	1767	3526	1446	1198	1870	1585	3456	671	1016
Grp Volume(v), veh/h	221	968	528	173	1361	656	51	52	43	771	0	186
Grp Sat Flow(s),veh/h/ln	1767	1689	1841	1767	1689	1595	1198	1870	1585	1728	0	1687
Q Serve(g_s), s	14.9	31.8	31.8	5.2	60.8	63.0	6.6	4.2	4.1	34.1	0.0	12.9
Cycle Q Clear(g_c), s	14.9	31.8	31.8	5.2	60.8	63.0	6.6	4.2	4.1	34.1	0.0	12.9
Prop In Lane	1.00		0.04	1.00		0.91	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	233	1654	902	205	1414	668	101	84	72	805	0	555
V/C Ratio(X)	0.95	0.59	0.59	0.84	0.96	0.98	0.51	0.62	0.60	0.96	0.00	0.33
Avail Cap(c_a), veh/h	233	1654	902	205	1414	668	101	84	72	805	0	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00	0.54	0.00	0.54
Uniform Delay (d), s/veh	51.3	28.3	28.3	41.7	43.9	44.5	73.8	72.7	72.6	58.7	0.0	39.2
Incr Delay (d2), s/veh	45.1	1.5	2.8	22.4	14.4	27.6	4.1	12.6	13.2	14.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.0	18.7	20.5	9.1	35.1	37.1	3.9	4.2	3.5	21.2	0.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.4	29.8	31.1	64.1	58.3	72.0	77.9	85.3	85.8	73.2	0.0	39.4
LnGrp LOS	F	C	C	E	E	E	E	F	F	E	A	D
Approach Vol, veh/h		1717			2190			146			957	
Approach Delay, s/veh		38.8			62.9			82.9			66.7	
Approach LOS		D			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	24.0	71.7	44.0	15.3	13.0	82.7		59.3				
Change Period (Y+Rc), s	7.9	6.8	7.9	* 8.3	7.8	6.8		* 8.3				
Max Green Setting (Gmax), s	16.1	63.2	36.1	* 7	5.2	74.2		* 53				
Max Q Clear Time (g_c+I1), s	16.9	65.0	36.1	8.6	7.2	33.8		14.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	10.4		0.9				

Intersection Summary	
HCM 6th Ctrl Delay	55.9
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

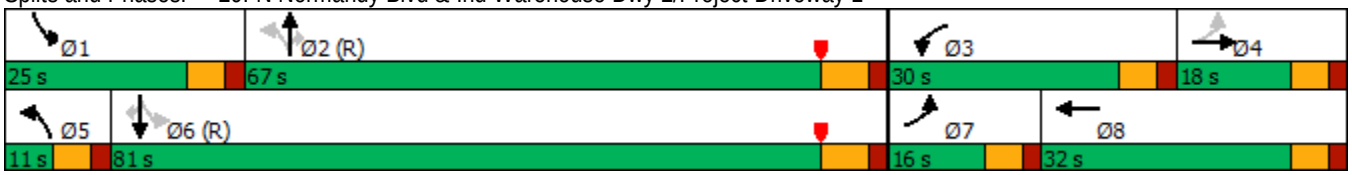
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

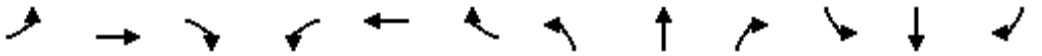
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	277	0	24	93	0	72	54	1285	45	50	1574	186
Future Volume (vph)	277	0	24	93	0	72	54	1285	45	50	1574	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	265		0	100		265
Storage Lanes	2		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		274			360			429			1035	
Travel Time (s)		6.2			8.2			6.5			15.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4						2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0		24.0	24.0		11.0	25.0	25.0	11.0	25.0	25.0
Total Split (s)	16.0	18.0		30.0	32.0		11.0	67.0	67.0	25.0	81.0	81.0
Total Split (%)	11.4%	12.9%		21.4%	22.9%		7.9%	47.9%	47.9%	17.9%	57.9%	57.9%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	5.0	5.0	4.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	7.0	7.0	6.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 60 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 29: N Normandy Blvd & Ind Warehouse Dwy 2/Project Driveway 1





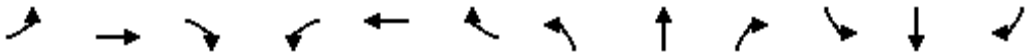
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	0	24	93	0	72	54	1285	45	50	1574	186
Future Volume (veh/h)	277	0	24	93	0	72	54	1285	45	50	1574	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	301	0	26	101	0	78	59	1397	49	54	1711	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	0	103	127	0	102	186	2324	1037	266	2322	1036
Arrive On Green	0.07	0.00	0.06	0.07	0.00	0.06	0.03	0.65	0.65	0.03	0.65	0.65
Sat Flow, veh/h	3456	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	301	0	26	101	0	78	59	1397	49	54	1711	202
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	10.0	0.0	2.2	7.8	0.0	6.8	1.5	31.4	1.5	1.4	45.1	7.1
Cycle Q Clear(g_c), s	10.0	0.0	2.2	7.8	0.0	6.8	1.5	31.4	1.5	1.4	45.1	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	391	0	103	127	0	102	186	2324	1037	266	2322	1036
V/C Ratio(X)	0.77	0.00	0.25	0.80	0.00	0.76	0.32	0.60	0.05	0.20	0.74	0.20
Avail Cap(c_a), veh/h	391	0	136	305	0	294	193	2324	1037	452	2322	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	62.2	64.0	0.0	64.4	16.9	13.8	8.6	11.3	16.2	9.6
Incr Delay (d2), s/veh	9.0	0.0	1.3	10.8	0.0	11.0	1.0	1.2	0.1	0.4	2.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	1.7	7.1	0.0	5.5	1.4	17.4	1.0	0.9	23.8	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	0.0	63.5	74.8	0.0	75.5	17.8	15.0	8.7	11.6	18.4	10.1
LnGrp LOS	E	A	E	E	A	E	B	B	A	B	B	B
Approach Vol, veh/h		327			179			1505			1967	
Approach Delay, s/veh		67.1			75.1			14.9			17.3	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	98.6	16.0	15.1	10.5	98.5	16.0	15.0
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	19.0	60.0	24.0	12.0	5.0	74.0	10.0	26.0
Max Q Clear Time (g_c+I1), s	3.4	33.4	9.8	4.2	3.5	47.1	12.0	8.8
Green Ext Time (p_c), s	0.1	9.8	0.1	0.0	0.0	13.7	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	211	0	0	45	108	1284	17	17	1683	25
Future Volume (vph)	0	0	211	0	0	45	108	1284	17	17	1683	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	265		0	100		100
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		357			376			378			429	
Travel Time (s)		8.1			8.5			5.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	211	0	0	45	108	1284	17	17	1683	25
Future Vol, veh/h	0	0	211	0	0	45	108	1284	17	17	1683	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	265	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	229	0	0	49	117	1396	18	18	1829	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	928	-	-	707	1856	0	0	1414	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	270	0	0	378	322	-	-	478	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	270	-	-	378	322	-	-	478	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

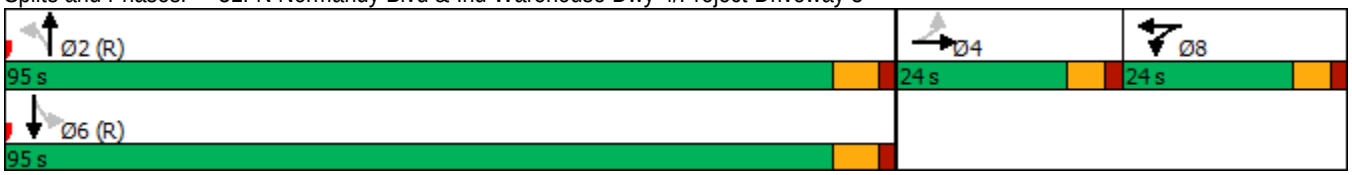
Approach	EB	WB	NB	SB
HCM Control Delay, s	63.5	15.9	1.7	0.1
HCM LOS	F	C		

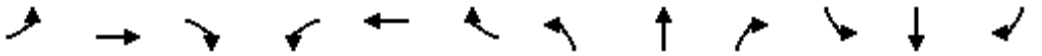
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	322	-	-	270	378	478	-	-
HCM Lane V/C Ratio	0.365	-	-	0.849	0.129	0.039	-	-
HCM Control Delay (s)	22.5	-	-	63.5	15.9	12.8	-	-
HCM Lane LOS	C	-	-	F	C	B	-	-
HCM 95th %tile Q(veh)	1.6	-	-	7.1	0.4	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	0	30	51	0	72	21	1337	21	42	1852	21
Future Volume (vph)	60	0	30	51	0	72	21	1337	21	42	1852	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	265		0	100		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		318			454			3703			378	
Travel Time (s)		7.2			10.3			56.1			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Split	NA		Perm	NA		Perm	NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4						2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		25.0	25.0		25.0	25.0	
Total Split (s)	24.0	24.0		24.0	24.0		95.0	95.0		95.0	95.0	
Total Split (%)	16.8%	16.8%		16.8%	16.8%		66.4%	66.4%		66.4%	66.4%	
Yellow Time (s)	4.0	4.0		4.0	4.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0		6.0	6.0		7.0	7.0		7.0	7.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	

Intersection Summary	
Area Type:	Other
Cycle Length: 143	
Actuated Cycle Length: 143	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: N Normandy Blvd & Ind Warehouse Dwy 4/Project Driveway 3





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	30	51	0	72	21	1337	21	42	1852	21
Future Volume (veh/h)	60	0	30	51	0	72	21	1337	21	42	1852	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	0	33	55	0	78	23	1453	23	46	2013	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	0	41	114	0	101	132	2623	41	247	2637	30
Arrive On Green	0.07	0.00	0.07	0.06	0.00	0.06	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1134	0	576	1781	0	1585	208	3580	57	358	3599	41
Grp Volume(v), veh/h	98	0	0	55	0	78	23	721	755	46	992	1044
Grp Sat Flow(s),veh/h/ln	1710	0	0	1781	0	1585	208	1777	1860	358	1777	1863
Q Serve(g_s), s	8.1	0.0	0.0	4.3	0.0	6.9	10.8	26.1	26.1	9.5	48.3	48.7
Cycle Q Clear(g_c), s	8.1	0.0	0.0	4.3	0.0	6.9	59.6	26.1	26.1	35.6	48.3	48.7
Prop In Lane	0.66		0.34	1.00		1.00	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	120	0	0	114	0	101	132	1302	1363	247	1302	1365
V/C Ratio(X)	0.81	0.00	0.00	0.48	0.00	0.77	0.17	0.55	0.55	0.19	0.76	0.76
Avail Cap(c_a), veh/h	215	0	0	224	0	200	132	1302	1363	247	1302	1365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.5	0.0	0.0	64.6	0.0	65.9	29.7	8.6	8.6	16.6	11.6	11.6
Incr Delay (d2), s/veh	12.3	0.0	0.0	3.1	0.0	11.5	2.9	1.7	1.6	1.7	4.3	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.1	0.0	0.0	3.7	0.0	5.6	1.1	14.1	14.7	1.6	24.3	25.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	0.0	0.0	67.8	0.0	77.4	32.6	10.3	10.2	18.3	15.8	15.7
LnGrp LOS	E	A	A	E	A	E	C	B	B	B	B	B
Approach Vol, veh/h		98			133			1499			2082	
Approach Delay, s/veh		77.8			73.4			10.6			15.8	
Approach LOS		E			E			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		111.8		16.1		111.8		15.1				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		88.0		18.0		88.0		18.0				
Max Q Clear Time (g_c+I1), s		61.6		10.1		50.7		8.9				
Green Ext Time (p_c), s		10.3		0.2		20.2		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			17.4									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

Arterial Level of Service: EB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
FDOT Park & Ride	II	45	33.9	13.8	47.7	0.35	26.7	C
I-4 EB	II	45	37.1	34.8	71.9	0.40	19.8	D
Finland Dr	II	40	26.2	18.7	44.9	0.24	19.1	D
N Normandy Blvd	II	40	35.2	58.7	93.9	0.36	13.6	E
Total	II		132.4	126.0	258.4	1.34	18.7	D

Arterial Level of Service: WB Saxon Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Finland Dr	II	45	34.1	25.0	59.1	0.36	21.6	D
I-4 EB	II	45	24.8	14.0	38.8	0.24	22.1	C
FDOT Park & Ride	II	45	37.1	8.9	46.0	0.40	30.9	B
Veterans Memorial Pk	II	45	33.9	64.1	98.0	0.35	13.0	F
Total	II		129.9	112.0	241.9	1.34	20.0	D

Arterial Level of Service: EB SR 472/Howland Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
N Kentucky Ave	I	55	17.7	64.0	81.7	0.18	8.0	F
I-4 WB	I	55	36.3	14.8	51.1	0.55	39.0	B
I-4 EB	I	50	30.3	18.0	48.3	0.32	23.8	D
E Graves Ave	I	50	26.1	100.5	126.6	0.28	7.8	F
Forest Edge Dr	I	45	21.0	24.9	45.9	0.20	15.8	F
Wolf Pack Run	I	45	25.5	13.2	38.7	0.25	22.8	D
Total	I		156.9	235.4	392.3	1.78	16.3	E

Arterial Level of Service: WB SR 472/Howland Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Forest Edge Dr	I	45	25.5	16.1	41.6	0.25	21.2	D
E Graves Ave	I	45	21.0	44.8	65.8	0.20	11.1	F
I-4 EB	I	50	26.1	25.7	51.8	0.28	19.1	E
I-4 WB	I	50	30.3	18.8	49.1	0.32	23.4	D
Dr. Martin Luther Ki	I	55	36.3	50.8	87.1	0.55	22.9	D
Total	I		139.2	156.2	295.4	1.60	19.4	E

APPENDIX F: COMMITTED TRANSPORTATION IMPROVEMENTS

IFZ3-1 **Howland Blvd Widening** **Non-SIS**



Work Summary: ADD LANES & RECONSTRUCT

From: Providence Blvd

To: Elkcam Blvd

Lead Agency: Volusia County

Length: 2.170 miles

Phase	Fund Source	2018/19	2019/20	2020/21	2021/22	2022/23	Total
CST	BOND	1,950,000	0	0	0	0	**1,950,000**
CST	LOGT	7,900,000	1,000,000	0	0	0	**8,900,000**
Total		**9,850,000**	**1,000,000**	**0**	**0**	**0**	**10,850,000**

Prior Cost < 2018/19: 3,250,000

Future Cost > 2022/23: 0

Total Project Cost: 14,100,000

Project Description: Howland Boulevard widening from 2 lanes to 4 lanes between Providence Boulevard and Elkcam Boulevard.

4409201 **Tivoli Dr at Providence & at Saxon Blvd Intersection Improvements** **Non-SIS**



Work Summary: ADD TURN LANE(S) **From:** at Providence Blvd

To: at Saxon Blvd

Lead Agency: City of Deltona **Length:** 0.943 mile

Phase	Fund Source	2018/19	2019/20	2020/21	2021/22	2022/23	Total
CEI	LF	198,375	0	0	0	0	**198,375**
CST	LF	197,185	0	0	0	0	**197,185**
PE	SU	5,000	0	0	0	0	**5,000**
CEI	SU	5,000	0	0	0	0	**5,000**
CST	SU	1,125,315	0	0	0	0	**1,125,315**
Total		**1,530,875**	**0**	**0**	**0**	**0**	**1,530,875**

Prior Cost < 2018/19: 158,700

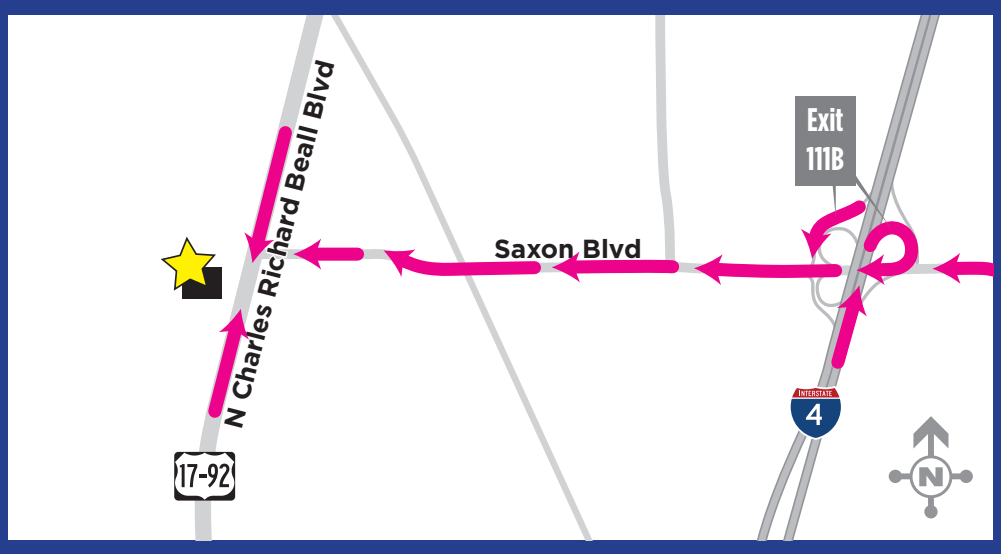
Future Cost > 2022/23: 0

Total Project Cost: 1,689,575

Project Description: The improvement for the Tivoli Dr. and Providence Blvd. intersection extends to the west about 1,050 feet to the April Dr. entrance to Tivoli Dr. The improvement to this intersection would include a right turn lane and an expanded multi-purpose straight/left turn lane onto Providence Blvd. The Tivoli Dr./Saxon Blvd. intersection is proposed to be improved 1,110 feet to the east to the entrance of Baton Dr. The intersection work needed includes a right turn lane onto Saxon and a left turn lane enhanced with greater storage. (Reference 2040 Long Range Transportation Plan, page 63 and table 31 on pg 72.)

PUBLIC INFORMATION MEETING

Wednesday, February 7, 2018
5:00 p.m. – 8:00 p.m.
Gateway Center for the Arts
800 N. U.S. Highway 17-92, DeBary, FL



Learn about improvements planned at the eastbound Interstate 4 (I-4) exit ramp to Saxon Boulevard (Exit 111A). The project will improve operations by realigning the exit ramp, adding a traffic signal at the end of the ramp, and adding a third lane on eastbound Saxon Boulevard between the ramp and the intersection of Finland Drive. These new features will provide easier access for motorists, who are exiting eastbound I-4 onto eastbound Saxon Boulevard, to reach the left turn lane at the Finland Drive intersection. Approximately 4 miles of Interstate 4 will be milled and resurfaced from west of Saxon Boulevard to east of State Road 472.

For more information, visit: fdot.tips/Saxon

Persons with disabilities who require accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Todd Helton, Project Manager, by phone at 386-943-5207, or via email at Todd.Helton@dot.state.fl.us. If you are hearing or speech impaired, please contact us by using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator at Jennifer.Smith2@dot.state.fl.us.

3141-20180124

Interstate 4 (I-4) Milling and Resurfacing

I-4 from west of Saxon Boulevard to east of State Road (S.R.) 472

Volusia County

Financial Project ID: 438038-1-52-01

Project Description

This project calls for the milling and resurfacing of nearly 5 miles of Interstate 4 (I-4) from west of Saxon Boulevard to east of State Road (S.R.) 472 in Volusia County, including the ramps and shoulders at the Saxon Boulevard and S.R. 472 interchanges.

Other improvements are replacement of existing curb cut ramps, resetting guardrail, correcting shoulder deterioration at the interchanges, placement of rumble strips and pavement markings.

> *The project is being completed with another project to improve the Saxon Boulevard interchange. More information about that project is included on the reverse side of this page.*

At a Glance

Contractor:
P&S Paving, Inc.

Total Cost:
$8 million

Project Start:
Early June

Estimated Completion:
Early 2020

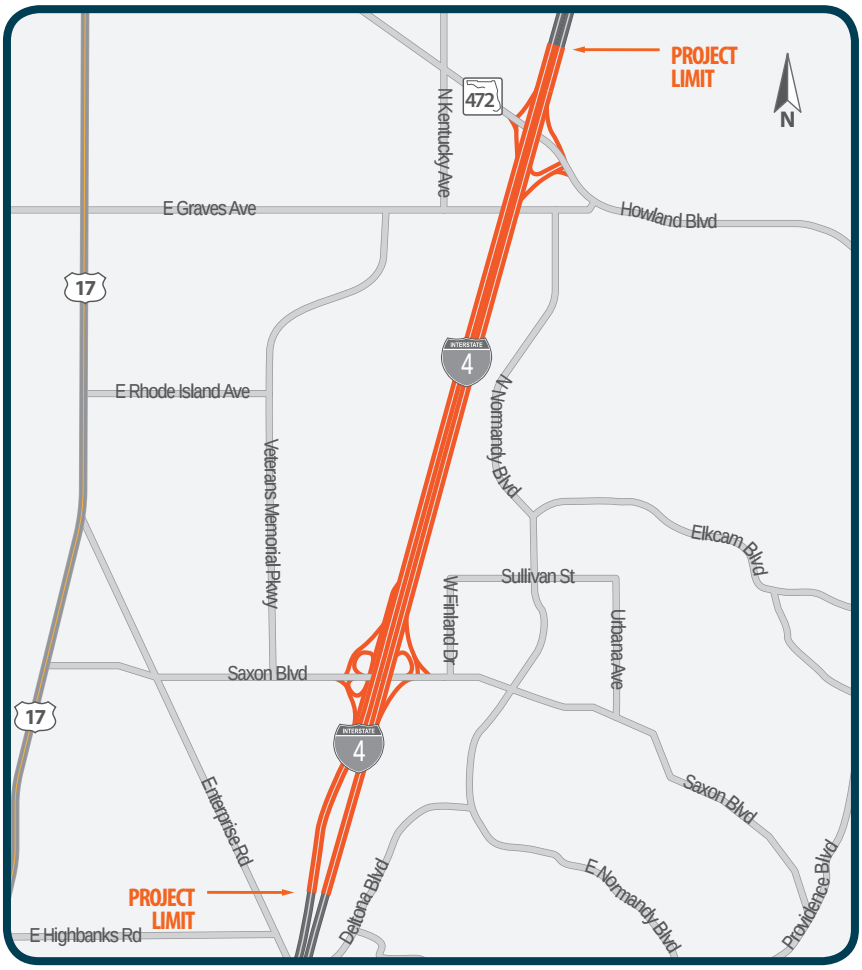
Lane Closures and Work Schedule

This project will require lane closures and detours. Lane closures along I-4 are permitted Sunday through Friday from 8 p.m. to 6 a.m. on westbound lanes and from 8:30 p.m. to 6:30 a.m. on eastbound lanes. Drivers can also expect at least one weekend detour involving the I-4 eastbound off ramp at Saxon Boulevard. Lane closures on Saxon Boulevard are possible between 11 p.m. and 5:30 a.m.

Electronic message boards and other signage will be used to help alert motorists to upcoming closures. Updates can also be found on our Central Florida website www.cflroads.com.

What to Expect During Construction

Residents whose homes are located close to I-4 may notice some increased nighttime noise and possibly some vibration during paving operations.



For more information, please contact
Carolyn Fitzwilliam,
Public Information Coordinator
(386) 740-3566
or
carolyn.fitzwilliam@dot.state.fl.us.

Interchange Improvements

Interstate 4 (I-4) at Saxon Boulevard

Volusia County

Financial Project ID: 441070-1-52-01

Project Description

This project is designed to improve operations at the Saxon Boulevard interchange with I-4. The work involves realignment of the I-4 eastbound off ramp to Saxon Boulevard, addition of a traffic signal, and widening of eastbound Saxon Boulevard to add a new third lane between the ramp and Finland Drive. These new features will provide safer access for motorists who are exiting eastbound I-4 onto eastbound Saxon Boulevard to reach the left turn lane at the Finland Drive intersection.

The project also includes minor drainage improvements, sidewalk reconstruction, signing and pavement markings, and other safety improvements.

> *This project is being completed with a project to mill and resurface I-4 from west of Saxon Boulevard to east of S.R. 472. More information on that project is included on the reverse side of this page.*

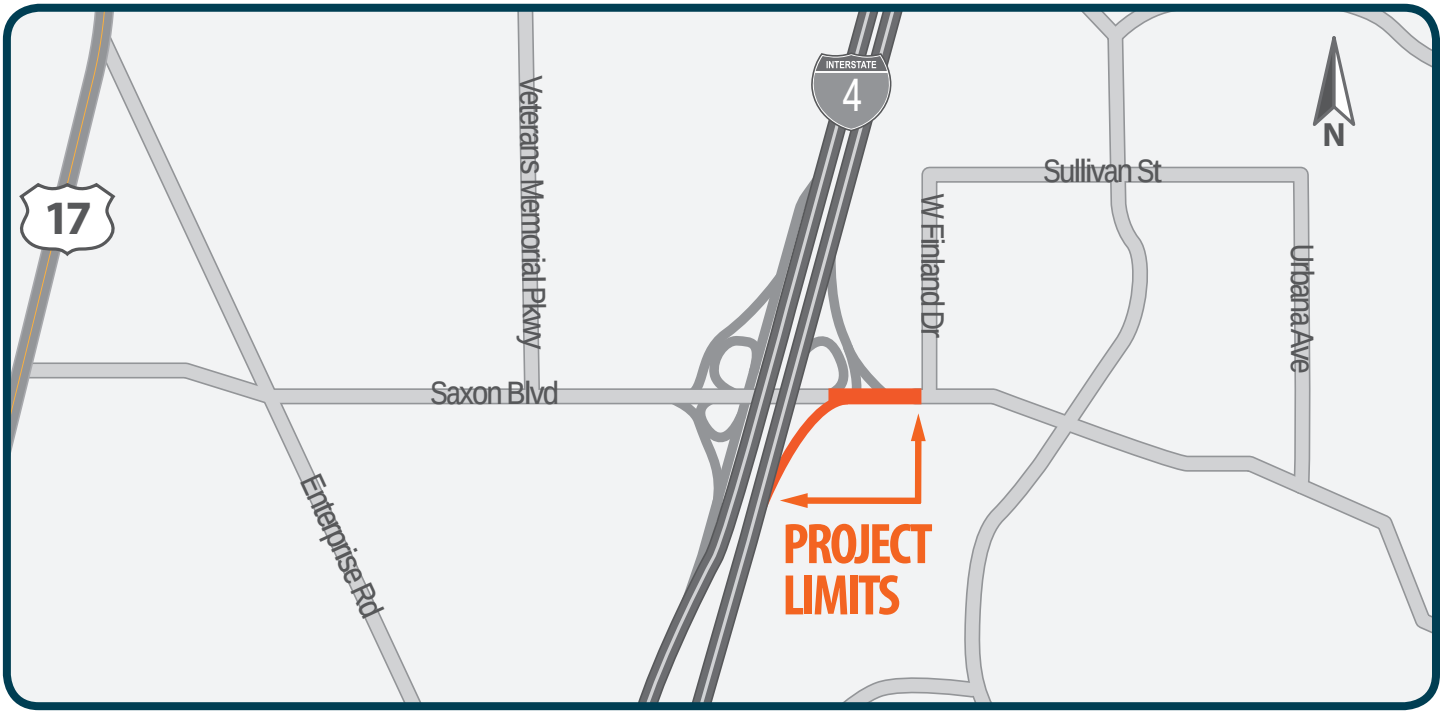
Lane Closures and Work Schedule

This project will require lane closures and detours. Lane closures along I-4 are permitted Sunday through Friday from 8 p.m. to 6 a.m. on westbound lanes and from 8:30 p.m. to 6:30 a.m. on eastbound lanes. Drivers can also expect lane closures on Saxon Boulevard between 11 p.m. and 5:30 a.m., as well as at least one weekend detour for the closure of the I-4 eastbound off ramp at Saxon Boulevard.

Electronic message boards and other signage will be used to help alert motorists to upcoming closures. Updates can also be found on our Central Florida website www.cflroads.com.

Pedestrian and Bicycle Safety

Temporary sidewalk closures are expected at the Saxon Boulevard interchange to accommodate construction of the new curb ramps. During this work, pedestrians and bicyclists will be directed around the work zone using the sidewalk on the opposite side of the road. Please do not walk or ride through active work areas.



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Prepared by and returned to:
City of Deltona, City Clerk
2345 Providence Blvd.
Deltona, FL 32725

City of Deltona
Staff Drafted
DEVELOPMENT AGREEMENT
Deltona Village BPUD
For property located in the Areawide DRI at 2160 Normandy Boulevard

THIS DEVELOPMENT AGREEMENT ("Agreement") entered into and made as of the 15th day of February, 2010, by and between the **CITY OF DELTONA, FLORIDA** (hereinafter referred to as the **"City"**), and Deltona Retail Holdings, LLC, a Florida limited liability company and Eleanor J. DeMarsh, as Trustee of the Eleanor J. DeMarsh Revocable Trust dated May 20, 1992 as Restated on March 21, 1994 (hereinafter referred to as the **"Owner/Developer"**).

W I T N E S S E T H

WHEREAS, the Owner/Developer warrants that it or an entity on whose behalf it is authorized to act hereunder holds legal title to the property described in Paragraph 2 below and that the holders of any and all liens and encumbrances affecting such property will subordinate their interests to this Agreement; and

WHEREAS, the Owner/Developer desires to facilitate the orderly development of the subject property, in compliance with the laws and regulations of the City and of other governmental authorities, and the Owner/Developer desires to ensure that its development is compatible with other properties in the area; and

WHEREAS, it is the purpose of this Agreement to clearly set forth the understanding and agreement of the parties concerning the matters contained herein; and

WHEREAS, the Owner/Developer has sought the City's approval for plans to develop the subject property, and the City Commission of the City of Deltona, Florida, has approved a Business Planned Unit Development ("**BPUD**") on February 15, 2010, with an Overall Development Plan/Master Development Plan ("**ODP/MDP**") subject to the covenants, restrictions, and easements contained herein, and in the Business Planned Unit Development rezoning ordinance, Ordinance No. 21-2009, and further subject to all other applicable requirements of law.

WHEREAS, the City of Deltona adopted Ordinance No. 05-2003 on July 7, 2003 which approved the Development Order of the Interstate 4/State Road 472 Area wide Development of Regional Impact ("DRI"), and all development shall be consistent with this adopted ordinance;

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. INCORPORATION. The recitals herein contained are true and correct and are incorporated herein by reference.

2. OWNERSHIP. The Owner/Developer represents that it or an entity on behalf of which it is authorized to act is the present owner of the following described property (hereinafter referred to as the **"Subject Property"**):

Attached hereto as Exhibit "A"

3. TITLE OPINION/CERTIFICATION. The Owner/Developer has provided to the City, in advance of the City's execution of this Agreement, a title opinion of an attorney licensed in Florida, or a certification by an abstractor or title company authorized to do business in Florida, showing marketable title to the Subject Property to be in the name of the Owner/Developer or an entity on behalf of which it is authorized to act and showing all liens, mortgages, and other encumbrances not satisfied or released of record.

4. DEVELOPMENT CONDITIONS

A. The Owner/Developer shall develop the subject property in conformance with the requirements of the approved BPUD and approved ODP/MDP. In the event of the expiration or sooner termination, or amendment to the DRI, or any of the provisions of the Code of Ordinances of the City or the Deltona Land Development Code, all rights and entitlements to which the Owner/Developer was entitled at the time of the expiration or sooner termination, or amendment to the DRI, or any of the provisions of the Code of Ordinances of the City or the Deltona Land Development Code, shall, at the option of the Owner/Developer, vest in the Owner/Developer and not be subject to the expiration, termination or amendment.

B. Site Plan(s). The Owner/Developer shall submit a Final Site Plan application for each proposed Lot and shall secure a Final Site Plan Development Order pursuant to the BPUD, ODP/MDP, and City Land Development Code. Each site proposed for development shall be platted

into one or more lots prior to commencement of development and as a condition for Final Site Plan approval.

C. **Platting.** Subdivision of any Lot or Outparcel shown on the approved Plat that creates a maximum of four (4) new conforming Lots or Parcels shall be considered a minor amendment, and shall be approved by City staff as an administrative subdivision and does not require an amendment to the BPUD, ODP/MDP, the Plat or approval of the City Commission. Any further subdivisions of any Lot or Outparcel shall be a major amendment, and shall be approved only after City Commission's approval as may be required by law in effect at the time the amendment application is submitted to the City. Combination of any whole platted Lots and/or Outparcels with one or more other whole platted Lots and/or Outparcels shall be considered a minor amendment.

The submission of a sketch plan and ODP/MDP plan prior to the application for approval of a Subdivision Preliminary Plat Development Order as required by the Code of Ordinances of the City is satisfied by the approval of the ODP/MDP, and the City shall not require the submission of any additional sketch plan nor overall development plan as a part of the Plat approval process.

A final site plan application may be accepted and reviewed concurrently with the preliminary plat application if such final site plan application shall provide all information and analyses that is determined by the City staff to be necessary to show consistency and coordination with the proposed preliminary plat, and any public and common improvements that are planned, or approved, or funded, or under construction, or required in connection with the preliminary plat, including the future phases of development.

5. PHASING. The Owner/Developer may choose to develop the Subject Property in multiple phases or sub-phases in any order the Owner/Developer desires. Stormwater calculations for the build out of each phase or sub-phase of the development shall be provided with the Preliminary Plat application, along with the design and construction details of all commonly or publicly owned or maintained stormwater facilities.

6. PERMITTED USES.

A. Permitted Land Uses.

The permitted land uses and their customary incidental and subordinate accessory uses on the Subject Property shall be as described in the BPUD Ordinance No. 21-2009 or if not specifically stated in said Ordinance, such similar uses as approved by the Development Services Director.

7. SITE DEVELOPMENT STANDARDS.

A. Site Development Standards shall be as set forth in the ODP/MDP and this Agreement. Any non-substantial or minor amendments or modifications to the ODP/MDP, as such is determined by the Planning and Development Services Director, who may request a review by the DRC, may be approved by the Planning and Development Services Director.

B. Building Architecture.

Building architecture shall conform to design guidelines as approved by the Director of Planning and Development Services.

C. Impact Fees.

The City acknowledges that the parties hereto reasonably expect any and all applications for Final Site Plan review for any phase or sub-phases of this Project to be submitted within the period in which the City has adopted a legal moratorium on the imposition of or obligation to pay any impact fees or mobility fees or similar or like fees. It is anticipated by all parties to this Agreement that no impact fees or mobility fees or any other similar or like fees or obligations shall be required by the City for the development of the Subject Property. The Owner/Developer shall be entitled to the benefit of the City moratorium so long as an application for a building permit has been submitted by the expiration date of the moratorium and the application is diligently pursued.

D. Miscellaneous.

a. The parties recognize that additional Police and Sheriff Department services shall be required for the theatre and the Subject Property. The

City hereby acknowledges the availability of such services and agrees to provide such services to the Subject Property that are consistent with or similar to services provided throughout the City.

b. The City acknowledges that the proposed alignment of Graves Avenue is no longer the preferred roadway network. The City acknowledges that the ODP/MDP contains the preferred alignment for the roadway network within and bordering the Subject Property.

8. NATURAL RESOURCE PROTECTION

A. Wetlands - There are no known wetlands on the Subject Property. The City Commission acknowledges no payment shall be due of any funds, whether a fee, charge, or otherwise, to the City and/or the City's Environmental Improvements Trust Fund, pursuant to City Resolution No. 2006-13, or any other applicable ordinance, resolution or rule.

B. Endangered Wildlife: - The Owner/Developer has submitted a report indicating that no scrub jays inhabit the site. The Owner/Developer shall submit a gopher tortoise study for each Lot as part of the final site plan approval process and if applicable, secure the appropriate permits from the applicable agencies.

C. Archeological Assessment. The Owner/Developer has complied with the standard permitting condition of the Division of Historical Resources regarding fortuitous finds or unexpected discoveries during ground disturbing activities on the property. The Division of Historical Resources letter dated September 15, 2005, DHR No. [redacted] indicates no significant archeological or historical sites or structures are within the Subject Property, and further examination of the surrounding region suggests that a low potential for the identification of archaeological resources in that area exists.

D. Open Space Requirements. The City acknowledges that due to hurricanes and other damage, and in accordance with the proper permits, the Subject Property was cleared of debris and dead trees and there were no trees on the site that could be preserved. Accordingly, the City shall not require tree preservation, except for the impervious area, landscaping and buffer specifically provided herein.

9. SITE ACCESS.

A. **Rhode Island Extension Right of Way**: The Owner/Developer shall dedicate 80' of right of way along a portion of the eastern boundary of the Property upon the City's issuance of a Preliminary Plat Development Order and a Certificate of Capacity. This 80' right of way shall be utilized for the future construction of a segment of Rhode Island Extension. In the event the City/County does not construct the Rhode Island Extension within ten years from the date hereof, that portion of the 80' right of way that has not been constructed shall revert back to the Owner/Developer without further notice or hearing. At the option of the Owner/Developer, the City/County may retain the 80' right of way upon either i) the conveyance or transfer to the Owner/Developer or its assigns, of any and all development rights as to that portion of the property; or ii) the City/County shall pay Owner/Developer a fair market value for the fee simple rights to the subject property which may be paid by the granting of impact fee credits or mobility credits or such similar or like credits which may be transferred to third parties for development within five miles of the Subject Property and the City/County shall facilitate the sale, transfer or assignment of said credits to third parties for such valuable consideration as determined by Owner/Developer. In the event the Owner/Developer elects to make any improvements beyond those required for the development of the Subject Property by Owner/Developer, the City/County shall grant to Owner/Developer such impact fee credits or mobility credits or such similar or like credits as is available pursuant to Florida Statutes and City Code of Ordinances for such additional improvements.

B. **Cross Access**: The Owner/Developer shall provide cross access and easements as may be necessary for real property surrounded by the Subject Property that is owned by third parties that are not parties to this Agreement ("surrounded parcel"), and include cross access implementation measures in the Preliminary Plat, Final Plat, and Final Site Plans submitted to the City for its review and approval. If and when the Owner/Developer acquires from said third party a surrounded parcel, then that easement to the surrounded parcel will no longer be required, and if the easement was created it may be eliminated by the Owner/Developer. Said submittals shall not be deemed to be complete until reasonable cross access provisions meeting sound engineering standards have been included on the submitted plans. If such surrounded parcels are provided access within the internal access system, the City shall require the third party owners of the

surrounded parcel(s) to pay their pro rata share of expenses related to the common area improvements and maintenance expenses within the BPUD.

C. **Mass Transit**: Owner/Developer shall provide land for a bus shelter or bus-stop adjacent to the Subject Property in a location reasonably acceptable to Owner/Developer and which does not negatively impact the value of the Subject Property or unreasonably interfere with the use of the Subject Property and Owner/Developer's plan for development of the Subject Property. Any voluntary contributions of land by Owner/Developer for mass transit facilities or parking area shall be in exchange for i) an equivalent development entitlement; or ii) the reduction or elimination of an equivalent fee imposed by the City or County.

D. **Traffic Mitigation**: The applicant has completed a Traffic Impact Analysis ("**TIA**") which identified traffic impacts and necessary mitigation measures for the approval of this BPUD. The traffic mitigation and fair share payments pursuant to Sections 163.3180(11) and 163.3180(16), *Florida Statutes* are set forth in paragraphs 10 and 11 hereinbelow. The methodology utilized for the TIA is consistent with the methodology adopted by the Deltona Activity Center DRI. The City acknowledges that due to the poor economic conditions which exist in retail development industry, the TIA phase completion dates shall be extended to coincide with the recovery of the national economy.

10. FAIR SHARE OF COSTS OF ROADWAY IMPROVEMENTS.

The overall project is a commercial project planned to consist of up to 900,000 square feet of commercial retail uses on the Subject Property and on adjacent property controlled by the Owner/Developer, subject to final site plan approvals by the City.

The Owner/Developer submitted a Traffic Impact Analysis (dated December 2009) ("TIA") prepared for the City of Deltona for the first 96,000 square feet of development within the Subject Project. The Owner/Developer submitted a TIA (dated December 2009) prepared for the County of Volusia for an additional 804,000 square feet of development within the Subject Project and on adjacent property controlled by the Owner/Developer. The TIA phases, which refer to thresholds of developable square footage, do not equate to the lot arrangement phases reflected in this Agreement and the ODP/MDP. The two (2) TIA reports submitted to the County and City take into account all phases or sub-phases of development on the Subject

Property and adjacent property controlled by Owner/Developer. The TIA includes all phases of the Subject Property and an exhibit depicting such phases is attached hereto as **Exhibit B**, which is incorporated herein by this reference.

Based upon the TIA reports, the Owner/Developer shall pay to the County or to the City as the collecting agent for the County, a fair share assessment amount prior to the issuance of building permits by the City. Payment may be in the forms authorized pursuant to Sections 163.3180(11) and 163.3180(16), *Florida Statutes*. The total fair share assessment amount due by phase is stipulated below and shall not exceed the amounts below:

	Square Feet	Mitigation
City TIA Phase	96,000	0
County TIA Phase I	301,000	$125,000
County TIA Phase II	269,000	$803,605
County TIA Phase III (Build Out)	234,000	$984,122
Cumulative Total	900,000	$1,912,727

Prior to the construction of any improvements within the County TIA Phase III, the City shall put all fair-share contributions and impact fee payments into an escrow account. The phases outlined above are defined based upon the Trip Reservations enumerated in Paragraph 11 of this Agreement. In the event that the Owner/Developer chooses to further subdivide the phases outlined above into additional sub-phases, the fair share assessment due will be calculated based on the pro-rata share of net new p.m. peak hour external trips being allocated to that specific sub-phase versus the net new p.m. peak hour external trips allocated to the entire phase of development.

Prior to the issuance of a building permit for any development within County TIA Phase III and subject to the execution of an impact fee credit agreement with the County, the Owner/Developer shall design and construct the following improvements:

a. 2nd northwest-bound left-turn lane at the Howland Boulevard/Graves Avenue intersection;

b. 2nd westbound travel lane on Graves Avenue from Howland Boulevard to the westernmost driveway of the development on the north side of Graves Avenue located approximately 400 feet east of the I-95 overpass;

c. extension of the eastbound right-turn lane on Graves Avenue such that the lane begins immediately east of an existing driveway on the south side of Graves Avenue at a location approximately 250 feet east of the I-95 overpass;

d. a 265-foot (including a 50-foot taper) westbound left-turn lane on Graves Avenue into the site at a location approximately 600 feet east of Normandy Boulevard.

The Owner/Developer and County shall enter into an impact fee credit agreement which shall provide that all eligible costs associated with improvements set forth in paragraphs a, b, and c above shall be entitled to impact fee credit against Volusia County Road Impact Fees at the time the contributions are made to the County. The costs of improvements set forth in paragraphs a, b, and c above for which the Owner/Developer shall be responsible shall be limited to $1,912,727 or such lesser mitigation costs as are required by the County. The impact fee credit agreement shall establish the process the Owner/Developer and County must follow relative to the County/City transferring of monies from the escrow account back to the Owner/Developer to allow the Owner/Developer to proceed with the design and construction of such improvements set forth in a, b, and c above. The County and the Owner/Developer shall also enter into an agreement to relocate the County owned retention pond and to convey or transfer certain surplus properties.

If the City or County modifies its Code of Ordinances with respect to the Concurrency Management System (CMS) subsequent to the execution of this Agreement, or if a change in circumstances such that the method or manner of payment of the total fair share assessment outlined above, does not represent the method most beneficial to the Owner/Developer for mitigation of transportation impacts, at the request of the Owner/Developer the City or County may pursue such other method or methods so long as the rights and obligations granted herein to

the Owner/Developer are not adversely impacted and remain unchanged and the costs to the Owner/Developer do not increase. Furthermore, should the City's CMS be eliminated or otherwise negated subsequent to the execution of this Agreement, such as, but not limited to, action of the Florida Legislature, the Owner/Developer (at Owner/Developer's option) may waive or be released from the requirement to pay the total fair share assessments by phase, subphase or otherwise, as outlined above. No such waiver or release shall eliminate the Owner/Developer's Impact Fee Credits for fair share assessments already paid. Should the City or County change to a mobility fee or similar form of transportation concurrency system, the Owner/Developer, at Owner/Developer's option, may opt to apply its fair share assessment contributions and related impact fee credits towards such fees. It is the intent of this paragraph to allow the Owner/Developer to benefit from any legislative changes that reduce the financial obligations for mitigation or fees of any nature or kind for transportation concurrency and to limit the financial exposure of the Owner/Developer to that which is stated in this Agreement.

11. TRIP RESERVATIONS.

The Subject Property is planned as a part of the Phase I of the Interstate 4/SR 472 Areawide DRI, theretofore, the trip generation rate utilized for the project, as approved by the City and County, was based on the approved total trip generation for Phase I of the DRI. The Subject Property gross trip generation rate was based on the gross trip generation rate for the retail component of Phase I of the DRI. The gross P.M. peak hour trip generation rate for Phase I of the DRI was calculated as the approved gross P.M. peak hour trips for the Phase I retail uses of the DRI (4,830 P.M. peak hour trips) divided by the retail square footage approved in Phase I of the DRI (2,200 ksf) (4,830 P.M. peak hour trips divided by 2,200 ksf equals 2.1955 gross p.m. peak hour trips per ksf). The gross daily trip generation rate for Phase I of the DRI was calculated as the total daily trip generation for the retail sues for Phase I of the DRI (49,745 daily trips) divided by the retail square footage approved in Phase I of the DRI (2,200 ksf) (49,745 daily trips divided by 2,200 ksf equals 22.6114 gross daily trips per ksf). Once the gross trip generation rates for Phase I of the DRI were calculated, the gross trip generation for the project was calculated by multiplying the gross trip generation rates for Phase I of the DRI by the project's square footage by phase.

By its approval and execution of this Agreement, the City hereby agrees to issue and vest to the Owner/Developer the following net new external daily trip reservations by phase, and the net new p.m. peak hour external trip reservations by phase within the Interstate 4/SR 472 Areawide DRI:

CUMULATIVE PHASING		Net New External Trip Ends	
	Square Feet	P.M. Peak Hour	Daily
City TIA Phase	96,000	122	1,900
County TIA Phase I	301,000	381	5,956
County TIA Phase II	570,000	723	11,278
County TIA Phase III (Build Out)	804,000	1,019	15,908
Combined City and County			
City TIA Phase	96,000	122	1,900
County TIA Phase I	397,000	503	7,856
County TIA Phase II	666,000	845	13,178
County TIA Phase III (Build Out)	900,000	1,141	17,808

BY PHASE		Net New External Trip Ends	
	Square Feet	P.M. Peak Hour	Daily
City TIA Phase	96,000	122	1,900
County TIA Phase I	301,000	381	5,956
County TIA Phase II	269,000	342	5,322
County TIA Phase III (Build Out)	234,000	296	4,630
Total County	804,000	1,019	15,908
Combined City and County			
City TIA Phase	96,000	122	1,900

County TIA Phase I	301,000	381	5,956
County TIA Phase II	269,000	342	5,322
County TIA Phase III (Build Out)	234,000	296	4,630
Total Combined City and County	900,000	1,141	17,808

The Subject Property is planned as a part of the Interstate 4/SR 472 Areawide DRI, therefore the land uses are subject to the DRI Development Equivalency Matrix. The Interstate 4/State Road 472 Activity Center DRI Development Equivalency Matrix, as obtained from the City of DeLand DRI Development Order (Resolution 2003-28), which is included in **Exhibit C,** attached hereto and incorporated by this reference. The Development Equivalency Matrix is based on the trip generation rates for the DRI, therefore utilization of the Matrix by the Applicant will not require additional traffic studies by City or County. No trip reservations hereunder shall expire if Owner/Developer submits a final site plan application for any portion of the development within the City TIA Phase I (as described above) on or before January 30, 2015 and a final site plan application for any portion of the development of County TIA Phase I on or before December 30, 2020, and Owner/Developer has paid the fair share assessment or impact/mobility fees required by the City and County for the development of such phases or sub-phases. In such an event, the Owner/Developer shall be entitled to retain all trips reserved as stated herein for all other phases or sub-phases. Upon the submittal by the Owner/Developer of any final site plans for development within the Subject Property that causes the cumulative total floor area to exceed 600,000 square feet of floor area , the Owner/Developer shall be required to seek approval for any portion of development that exceeds 600,000 square feet of floor area prior to obtaining final approval of such final site plan from the City of up to a total of 900,000 square feet in accordance with the Owner/Developer 's approved TIA, if otherwise required.

12. UTILITIES.

A. Sanitary Sewer. Owner/Developer shall install underground sanitary sewer utilities as are required to provide service to the Subject Property at Owner/Developer's cost and expense. Provided however, the City/County shall provide a sanitary sewer connection at or near the Subject Property at the City's/County's cost.

B. Water. Owner/Developer shall install underground water utilities as are required to provide service to Subject Property at Owner/Developer's cost and expense. Provided however, the City/County shall provide a connection for water at or near the Subject Property at the City's/County's cost.

C. Irrigation: If available at the boundary of the Subject Property or any Lot or phase within the Subject Property, the Subject Property shall use the following sources for non-potable water, in order of priority, for surface irrigation of common and private areas of the Subject Property.

a. Treated wastewater made available to the Subject Property by the City/County;

b. Surface water stored on-the Subject Property in surface water storage ponds; and

c. If no other source is available, private irrigation wells, or potable water shall be permitted.

d. In the event the Owner/Developer is required to construct and install any water or sewer lines for the benefit of other third parties in connection with the development of the Subject Property, Owner/Developer shall receive reimbursement from the City/County for any other users of such facilities as such users are required to connect into said system.

13. STORMWATER MANAGEMENT

Stormwater management and design for the Subject Property shall comply with City, State and Federal requirements. The Subject Property shall have a master stormwater management system in compliance with closed basin standards.

14. OBLIGATIONS. Should the Owner/Developer fail to undertake and complete its obligations as described in this Agreement to the City's specifications, the City shall give the Owner/Developer thirty (30) days' written notice to commence and ninety (90) days thereafter to complete said required obligation (provided, however, that if any such obligation takes longer than ninety (90) days to complete, in the exercise of reasonable due diligence, such time permitted shall be extended by such additional time may be required if Owner/Developer commences the obligation within the ninety (90) day period and thereafter prosecutes it to completion with due diligence). If the Owner/Developer fails to complete the obligations within

such period, the City, without further notice to the Owner/Developer or its successors in interest, may, without prejudice to any other rights or remedies it may have, perform such obligations. Further, the City is hereby authorized to assess the actual and verified cost of completing such obligations against the Subject Property. The lien of such assessments shall be superior to all others, and all existing lienholders and mortgagees, by their execution of the subordination or joinder documents, agree to subordinate their liens or mortgages to the City's said liens or assessments.

15. ENFORCEMENT. In the event that enforcement of this Agreement by the City becomes necessary, and the City is successful in such enforcement, the Owner/Developer shall be responsible for all costs and expenses, including attorneys' fees whether or not litigation is necessary and if necessary, both at trial and on appeal, incurred in enforcing or ensuring compliance with the terms and conditions of this Agreement which costs, expenses and fees shall also be a lien upon the Subject Property superior to all others. In the event that enforcement of this Agreement by the Owner/Developer becomes necessary, and the Owner/Developer is successful in such enforcement, the City shall be responsible for all costs and expenses, including attorneys' fees whether or not litigation is necessary and if necessary, both at trial and on appeal, incurred in enforcing or ensuring compliance with the terms and conditions of this Agreement.

16. COMPLIANCE. The Owner/Developer agrees that it, will abide by the provisions of this BPUD Agreement, ODP/MDP, the City's Comprehensive Plan, and the City's Land Development Code, including the site plan regulations of the City which are incorporated herein by reference. The City may, without prejudice to any other legal or equitable right or remedy it may have, withhold permits, certificates of occupancy or approvals, should the Owner/Developer fail to comply with the terms of this Agreement.

17. UTILITY EASEMENTS. The Owner/Developer shall provide to the City, prior to the City's approval of the Final Plat and Final Site Plans, such easements and other legal documentation, in form mutually acceptable to the City Attorney and the Owner/Developer, as the City may deem reasonably necessary or appropriate for the installation and maintenance of the utility and other services necessary to service the Subject Property , including but not limited to, sewer, potable water, and reclaimed water services, electric, cable, fire protection and

telecommunications. The Owner/Developer shall also provide access and utility easements to all parcels of property owned by a third party and located within the boundaries of the Subject Property. Such easements shall not unreasonably impede or impair the use of the Subject Property by the Owner/Developer or interfere with the Owner/Developer's plan of development.

18. NOTICES. Where notice is herein required to be given, it shall be by certified mail return receipt requested, hand delivery or overnight courier. Said notice shall be sent to the following, as applicable, and shall be deemed to be given and received if by hand delivery, and otherwise on the date of delivery or of first attempted delivery if delivery is impossible or refused.

OWNER/DEVELOPER'S REPRESENTATIVES:

Deltona Retail Holdings, LLC
c/o Frank DeMarsh
EPIC Theatres, Inc.
P.O. Box 2076
DeLand, Florida 32721-2076
Phone: 386-736-6830
Fax: 386-738-2596
email: fd@epictheatres.com

With a Copy to:
Kim C. Booker, Attorney at Law
Booker & Associates, P.A.
1019 Town Center Drive, Suite 201
Orange City, Florida 32763
Telephone 386-774-6552

With a Copy to:
LENDERS:
Comerica Bank
Attn.: David Sass
101 North Main Street
Suite 200 MC 9403
Ann Arbor, Michigan 48104
Telephone 734-930-2442

CITY'S REPRESENTATIVE:

City Clerk and Planning & Development Services Director
2345 Providence Boulevard
Deltona, Florida, 32725
Telephone 386-878-8600, Fax 386-878-8601

Should any party identified above change or should any party elect to add an additional person or entity to receive notices hereunder, it shall be said party's obligation to notify the remaining parties of the change or addition in a fashion as is required for notices herein.

19. CAPTIONS. The captions used herein are for convenience only and shall not be relied upon in construing this Agreement.

20. FORCE MAJURE. Notwithstanding anything contained in this Agreement, each party shall be excused from performing any obligation under this Agreement and any delay in the performance of any obligation under this Agreement shall be excused, if, but only for as long as, the performance of the obligation is prevented, delayed or otherwise hindered by acts of God, fire, earthquake, floods, explosion, actions or the elements, war, riots, mob violence, Inability to procure or a general shortage of labor, equipment, facilities, materials or supplies in the open market, failure of transportation, strikes, lockouts, actions of labor unions, condemnation, court orders, laws or orders of governmental or military authorities or any other cause, whether similar or dissimilar to the foregoing, not within the control of such party (other than lack of or inability to procure monies to fulfill its commitments and obligations under the Agreement).

Notwithstanding any specific references in certain provisions of this Agreement to this Section 20, the absence of such specific reference in any other provision shall not be deemed to diminish the general applicability of this Section 20.

21. BINDING EFFECT. This Agreement shall run with the land, shall be binding upon and inure to the benefit of the Owner/Developer and its assigns and successors in interest and the City and its assigns and successors in interest. The Owner/Developer agrees to pay the cost of recording this document in the Public Records of Volusia County, Florida. This Agreement does not, and is not intended to, prevent or impede the City from exercising its legislative authority as the same may affect the Subject Property.

22. SEVERABILITY. If any part of this Agreement is found invalid or unenforceable in any court, such invalidity or unenforceability shall not affect the other parts of this Agreement, if the rights and obligations of the parties contained herein are not materially prejudiced and if the intentions of the parties can be affected. To that end, this Agreement is declared severable.

IN WITNESS WHEREOF, the Owner/Developer and the City have executed this Agreement as of the day and year first above written.

SIGNED, SEALED AND DELIVERED IN THE PRESENCE OF:

Signature of Witness # 1
Eduardo M. Vega
Print or type name

Christine M Morris
Signature of Witness #2
Christine M. Morris
Print or type name

DELTONA RETAIL HOLDINGS, LLC
a Florida limited liability company

BY: William F DeMarsh
Print or type name: William F DeMarsh

Signature of Witness # 1
Eduardo M. Vega
Print or type name

Christine M Morris
Signature of Witness #2
Christine M. Morris
Print or type name

ELEANOR J. DEMARSH, AS TRUSTEE OF THE ELEANOR J. DEMARSH REVOCABLE TRUST DATED MAY 20, 1992, AS RESTATED MARCH 21, 1994

BY: Eleanor DeMarsh
Print or type name: Eleanor DeMarsh

ATTEST: Edith D Lawrence
Signature
Edith D. Lawrence
Print or type name
AS: Member

Mailing Address: P.O. Box 2076
DeLand, FL 32721-2076

STATE OF FLORIDA

COUNTY OF Volusia

The foregoing instrument was acknowledged before me this 23rd day of March 2010, by William Frank DeMarsh and _____, respectively, of Deltona Retail Holdings LLC, who is/are personally known to me or who has/have produced _____ as identification and who did not (did) take an oath.

Christine M Morris
Signature

(Notary Stamp) Christine M. Morris
Print or type name

CHRISTINE M. MORRIS
MY COMMISSION # DD 915978
EXPIRES: August 12, 2013
Bonded Thru Budget Notary Services

STATE OF FLORIDA

COUNTY OF Volusia

The foregoing instrument was acknowledged before me this 23rd day of March 2010, by Eleanor J. DeMarsh, as Trustee of the Eleanor J. DeMarsh Revocable Trust dated May 20, 1992, as Restated March 21, 1994, who is personally known to me or who has produced _____ as identification and who did not (did) take an oath.

Christine M Morris
Signature

(Notary Stamp) Christine M. Morris
Print or type name

CHRISTINE M. MORRIS
MY COMMISSION # DD 915978
EXPIRES: August 12, 2013
Bonded Thru Budget Notary Services

ACCEPTED FOR THE CITY OF DELTONA

By: _____

Dennis Mulder, Mayor

Date: 5-14-10

Mailing Address:
City of Deltona
2345 Providence Boulevard
Deltona, Florida, 32725

STATE OF FLORIDA

COUNTY OF VOLUSIA

The foregoing instrument was acknowledged before me this 14th day of MAY 2010, by Dennis Mulder as Mayor of the City of Deltona, Florida, who is personally known to me and acknowledges executing the same freely and voluntarily under authority vested in him.

_____
Signature of Notary

JEAN W. OERTLI
Commission DD 769452
Expires July 17, 2012
Bonded Thru Troy Fain Insurance 800-385-7019

(Notary Stamp)

JEAN W. OERTLI
Print or type name

This instrument approved by:
James Fowler, Acting City Attorney
as to form and legality for use andreliance by the
City of Deltona.

This instrument prepared by:
City of Deltona
Department of Development Services
2345 Providence Boulevard
Deltona, Florida 32725

SUBORDINATION AGREEMENT

THIS SUBORDINATION AGREEMENT made this _____day of _____ 20__, by _____whose address is _____, referred to as "Mortgagee."

WITNESSETH:

The Mortgagee of the property described in the foregoing Developer's Agreement which property is owned by _____, does hereby agree to subordinate all its interests and rights contained in the property to the foregoing Developer's Agreement which property is owned by _____ entered into by _____ as Owner/Developer and the CITY OF DELTONA. This Subordination Agreement shall bind all successors, assigns, and representatives of the Mortgagee.

SIGNED, SEALED AND DELIVERED

IN THE PRESENCE OF:

MORTGAGEE:

BY:_____

_____
Signature of Witness # 1

Signature_____
Print or type name

_____
Print or type name

_____
Signature of Witness #2

_____
Print or type name

ATTEST:

_____
Signature

_____
Print or type name

AS: _____

Mailing Address: _____

_____

_____

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____day of _____ 20___, by _____ and _____, _____ and _____, respectively, of _____, who are personally known tome or who have produced _____ as identification and who did (did not) take an oath.

_____
Signature_____
Print or type name

(Notary Stamp)

Instrument# 2010-101853 # 22
Book: 6482
Page: 4255

SUBORDINATION AGREEMENT

THIS SUBORDINATION AGREEMENT made this 12th day of March 2010, by Comerica Bank whose address is _____, referred to as "Mortgagee."

WITNESSETH:

The Mortgagee of the property described in the foregoing Developer's Agreement which property is owned by Deltona Retail Holdings, LLC, does hereby agree to subordinate all its interests and rights contained in the property to the foregoing Developer's Agreement which property is owned by Deltona Retail Holdings, LLC entered into by Deltona Retail Holdings, LLC as Owner/Developer and the CITY OF DELTONA. This Subordination Agreement shall bind all successors, assigns, and representatives of the Mortgagee.

SIGNED, SEALED AND DELIVERED
IN THE PRESENCE OF:

MORTGAGEE:
BY: _____
Signature DAVID J. SASS
Print or type name

Signature of Witness # 1
MARY ANN EMRICK
Print or type name

Signature of Witness #2
Heide L. Lewiston
Print or type name

ATTEST:

_____
Signature

_____
Print or type name
AS: _____

Mailing Address: _____
_____
_____

STATE OF MICHIGAN

COUNTY OF Washtenaw

The foregoing instrument was acknowledged before me this 12th day of March 2010, by David J. Sass, Sr Vice President respectively, of Comerica Bank, who is personally known tome or who has produced

_____ as identification and who did (did not) take an oath.

Signature Diana K Stamper

Print or type name

(Notary Stamp)

DIANA K STAMPER
Notary Public - Michigan
Washtenaw County
My Commission Expires Mar 14, 2011
Acting in the County of

EXHIBIT "A"

LEGAL DESCRIPTION:

LEGAL DESCRIPTION: OVERALL (WRITTEN)

A parcel of land lying in and being a part of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, lying East of the Easterly Right of Way of Normandy Boulevard, as now established, and South of the Southerly Right of Way of Howland Boulevard, as now established, being more particularly described as follows: Commencing at the Southwest corner of said NE 1/4 , run thence S 89°47'13" E along the South line of said NE ¼ a distance of 526.96 feet to a point lying on said Easterly Right of Way and the Point of Beginning. Run thence N 00°10'55" W along said Right of Way a distance of 169.22 feet to a point of curve, concave to the Northwest, having a radius of 1959.86 feet and a delta of 11°35'31" with a chord bearing and distance of N 05°29'05" E, 395.84 feet, run thence Northeasterly along said curve and Right of Way an arc distance of 396.51 feet; run thence N 00°18'41" W continuing along said Right of Way a distance of 765.22 feet to a point on the North line of the SW ¼ of the NE ¼ of said Section 7; run thence N 00°19'01" W continuing along said Right of Way and entering into the NW ¼ of the NE ¼ of said Section 7 a distance of 815.24 feet; run thence S 89°32'05" E along said Right of Way a distance of 20.00 feet; run thence N 00°19'01" W along said Right of Way a distance of 413.27 feet to aforesaid Southerly Right of Way of Howland Boulevard; run thence S 89°28'24" E along said Southerly Right of Way a distance of 74.70 feet; run thence N 00°20'22" W along said Right of Way a distance of 22.62 feet; run thence S 85°04'51" E along said Southerly Right of Way a distance of 135.25 feet; run thence S 00°21'46" E along said Right of Way a distance of 12.25 feet; run thence S 89°28'24" E along said Right of Way a distance of 1841.57 feet to the East line of said NE ¼; run thence S 00°37'22" E along said East line a distance of 2545.72 feet to the Southeast corner of said NE ¼; run thence N 89°47'13" W along the South line of said NE ¼ a distance of 2124.49 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

AND

A parcel of land lying in and being a part of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, lying West of the Westerly Right of Way of Normandy Boulevard, as now established, and South of the Southerly Right of Way of Howland Boulevard, as now established, being more particularly described as follows: Beginning at the Southwest corner of said NE 1/4 , run thence N 00°14'38" W along the West line of said NE ¼ a distance of 2560.14 feet to a point on said Southerly Right of Way of Howland Boulevard; run thence S 89°28'24" E along said Right of Way a distance of 464.02 feet to a point on said Westerly Right of Way of Normandy Boulevard; run thence S 00°19'01" E along said Westerly Right of Way a distance of 1228.82 feet to a point on the South line of the NW ¼ of the NE ¼ of said Section 7; run thence S 00°18'41" E continuing along said Right of Way and entering into the SW ¼ of the NE ¼ of said Section 7 a distance of 604.50 feet; run thence N 89°40'16" W along said Right of Way a distance of 15.00 feet; run thence S 00°18'41" E continuing along said Right of Way a distance of 387.24 feet; run thence S 89°43'50" E along said Right of Way a distance of 1.32 feet to a point on a curve, concave to the Northwest, having a radius of 1859.86 feet and a delta of 08°41'21", with a chord bearing and distance of S 10°59'15" W, 281.79 feet; run thence Southwesterly along said curve and Right of Way an arc distance of 282 .06 feet; run thence S 28°57'24" W continuing along said Right of Way a distance of 68.76 feet to the South line of said NE

¼; run thence N 89°47'13" W a distance along said South line a distance of 364.80 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "A" (WRITTEN)

Lots 10 through 19, inclusive, Block 8, Davis Park, Second Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 175, Public Records of Volusia County, Florida and that part of the W ½ of Persimmon Street lying East of and contiguous thereto, all being more particularly described as follows: Commencing at the Northeast corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 00°37'22" E along the East line of said NE ¼ a distance of 1172.73 feet; run thence N 89°37'03" W a distance of 495.38 feet to the Point of Beginning. Continue thence N 89°37'03" W a distance of 165.12 feet; run thence N 00°31'40" W a distance of 251.05 feet; run thence S 89°35'12" E a distance of 165.02 feet; run thence S 00°33'05" E a distance of 250.96 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "B" (WRITTEN)

Lots 12 through 15, inclusive, Block 11, Davis Park, Sixteenth Addition to Orange City, Florida, a subdivision according to map in Map Book 7, Page 68, Public Records of Volusia County, Florida and that part of Florida Avenue lying South of and contiguous thereto, and that part of the E ½ of Clara Street Lying West of and contiguous thereto, all being more particularly described as follows: Commencing at the Southwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 89°47'13" E along the South line of said NE ¼ a distance of 828.50 feet to the Point of Beginning. Run thence N 00°21'19" W a distance of 160.68 feet; run thence S 89°45'07" E a distance of 165.64 feet; run thence S 00°22'41" E a distance of 160.64 feet to said South line of the NE ¼; run thence N 89°47'13" W along said South line a distance of 165.70 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "C" (WRITTEN)

Lots 16 through 19, inclusive, Block 7, Davis Park, Sixteenth Addition to Orange City, Florida, a subdivision according to map in Map Book 7, Page 68, Public Records of Volusia County, Florida and that part of the E ½ of Araminta Street lying West of and contiguous thereto, all being more particularly described as follows: Commencing at the Southwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence N 00°14'38" W along the West line of said NE ¼ a distance of 437.94 feet; run thence S 89°43'25" E a distance of 165.53 feet to the Point of Beginning. Run thence N 00°16'01" W a distance of 100.80 feet; run thence S 89°42'47" E a distance of 165.49 feet; run thence S 00°17'23" E a distance of 100.77 feet; run thence N 89°43'25" W a distance of 165.53 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "D" (WRITTEN)

Lots 18 and 19, Block 1, Davis Park, Sixteenth Addition to Orange City, Florida, a subdivision according to map in Map Book 7, Page 68, Public Records of Volusia County, Florida and that part of the E ½ of Crystal Street lying West of and contiguous thereto, all being more particularly described as follows: Commencing at the Southeast corner of the SW ¼ of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence N 00°25'56" W along the East line of said SW ¼ of the NE ¼ a distance of 848.99 feet to the Point of Beginning. Run thence N 89°41'13" W a distance of 165.45 feet; run thence N 00°24'02" W a distance of 50.29 feet; run thence S 89°40'47" E a distance of 165.42 feet to the East line of said SW ¼ of the NW 1/4; run thence S 00°25'56" E along said East line a distance of 50.27 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "E" (WRITTEN)

Lots 1 through 46, inclusive, Block 3, Davis Park, Sixteenth Addition to Orange City, Florida, a subdivision according to map in Map Book 7, Page 68, Public Records of Volusia County, Florida and that part of the N ½ of Alabama Avenue lying South of and contiguous thereto and that part of the W ½ of Clara Street lying East of and contiguous thereto and that part of an un-named alley lying South of Lots 1 through 9, and contiguous thereto, all lying East of the Easterly Right of Way of Normandy Boulevard, as now established, and all being more particularly described as follows: Commencing at the Southwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence N 00°14'38" W along the West line of said NE ¼ a distance of 664.83 feet; run thence S 89°41'52" E a distance of 566.54 feet to the aforesaid Easterly Right of Way of Normandy Boulevard; run thence N 00°18'41" W along said Right of Way a distance of 30.00 feet to the Point of Beginning. Continue thence N 00°18'41" W a distance of 634.16 feet; run thence S 89°37'50" E a distance of 260.16 feet; run thence S 00°21'23" E a distance of 633.86 feet; run thence N 89°41'52" W a distance of 260.66 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "F" (WRITTEN)

Lot 24, Block 4, Davis Park, Sixteenth Addition to Orange City, Florida, a subdivision according to map in Map Book 7, Page 68, Public Records of Volusia County, Florida, lying West of the Westerly Right of Way of Normandy Boulevard, as now established, and being more particularly described as follows: Commencing at the Southwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence N 00°14'38" W along the West line of said NE ¼ a distance of 825.63 feet; run thence S 89°41'27" E a distance of 330.91 feet to the Point of Beginning. Run thence N 00°17'23" W a distance of 25.19 feet; run thence S 89°41'11" E a distance of 135.44 feet to the aforesaid Westerly Right of Way of Normandy Boulevard; run thence S 00°18'41" E along said Right of Way a distance of 25.18 feet; run thence N 89°41'27" W a distance of 135.45 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "G" (WRITTEN)

Lots 11 through 20, inclusive, Block 4, Davis Park, Sixteenth Addition to Orange City, Florida, a subdivision according to map in Map Book 7, Page 68, Public Records of Volusia County, Florida, and that part of the S ½ of an un-named alley lying North of and contiguous thereto, all lying West of the Westerly Right of Way of Normandy Boulevard, as now established, and all being more particularly described as follows: Commencing at the Southwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence N 00°14'38" W along the West line of said NE ¼ a distance of 926.48 feet; run thence S 89°40'25" E a distance of 330.83 feet to the Point of Beginning. Run thence N 00°17'23" W a distance of 259.40 feet; run thence S 89°38'37" E a distance of 135.31 feet to the aforesaid Westerly Right of Way of Normandy Boulevard; run thence S 00°18'41" E along said Right of Way a distance of 259.33 feet; run thence N 89°40'25" W a distance of 135.41 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "H" (WRITTEN)

Lots 16 and 17, Block 6, Davis Park, First Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 167, Public Records of Volusia County, Florida, lying West of the Westerly Right of Way of Normandy Boulevard as now established, and being more particularly described as follows: Commencing at the Northwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, run thence S 00°14'38" E along the West line of said NE ¼ a distance of 1081.75 feet; run thence S 89°36'17" E a distance of 330.19 feet to the Point of Beginning. Continue thence S 89°36'17" E a distance of 135.08 feet to the aforesaid Westerly Right of Way of Normandy Boulevard; run thence S 00°19'01" E along said Right of Way a distance of 50.84 feet; run thence N 89°36'40" W a distance of 135.10 feet; run thence N 00°17'39" W a distance of 50.86 feet to the Point of Beginning. Being subject to any Easement or Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "I" (WRITTEN)

Lots 20, 21 and 22, Block 4, Davis Park, First Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 167, Public Records of Volusia County, Florida, and that part of Araminta Street lying West of and contiguous thereto, all being more particularly described as follows: Commencing at the Northwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 00°14'38" E along the West line of said NE ¼ a distance of 513.90 feet; run thence S 89°32'05" E a distance of 164.83 feet to the Point of Beginning. Run thence N 00°16'16" W a distance of 75.64 feet; run thence S 89°31'26" E a distance of 164.83 feet; run thence S 00°17'39" E a distance of 75.62 feet; run thence N 89°32'05" W a distance of 164.86 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "J" (WRITTEN)

Lot 6, Block 3, Davis Park, Second Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 175, Public Records of Volusia County, Florida, and that part of the N ½ of an unnamed driveway lying South of and contiguous thereto, all lying South of the Southerly Right of Way of Howland Boulevard, as now established, and being more particularly described as follows: Commencing at the Northeast corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 00°37'22" E along the East line of said NE ¼ a distance of 100.00 feet to a point on said Southerly Right of Way of Howland Boulevard; run thence N 89°28'24" W along said Southerly Right of Way a distance of 658.75 feet to the Point of Beginning. Run thence S 00°34'31" E a distance of 102.85 feet; run thence N 89°28'43" W a distance of 24.95 feet; run thence N 00°34'14" W a distance of 102.85 feet to the aforesaid Southerly Right of Way; run thence S 89°28'24" E along said Right of Way a distance of 24.95 feet to the Point of Beginning. Being subject to any Easements of Record.

LEGAL DESCRIPTION: EXCEPTION "K" (WRITTEN)

Block 4, Davis Park, Second Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 175, Public Records of Volusia County, Florida, and that part of the E ½ of Grape Street lying West of and contiguous thereto, and the W ½ of Orange Street lying East of and contiguous thereof and the N ½ of Tennessee Avenue lying South of and contiguous thereto and that certain un-named alley lying South of Lots 1 through 10, and contiguous thereto, all lying South of the Southerly Right of Way of Howland Boulevard, as now established, and being more particularly described as follows: Commencing at the Northeast corner of the NE ¼ of section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 00°37'22" E along the East line of said NE ¼ a distance of 100.00 feet to a point on said Southerly Right of Way of Howland Boulevard; run thence N 89°28'24" W along said Southerly Right of Way a distance of 823.43 feet to the Point of Beginning; run thence S 00°30'15" E a distance of 567.57 feet; run thence N 89°33'07" W a distance of 329.83 feet; run thence N 00°27'24" W a distance of 568.02 feet to the aforesaid Southerly Right of Way; run thence S 89°28'24" E along said Right of Way a distance of 329.37 feet to the Point of Beginning. Being subject to any Easement of Record.

LEGAL DESCRIPTION: EXCEPTION "L" (WRITTEN)

Lots 6 through 10,inclusive, Block 3, Davis Park, First Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 167, Public Records of Volusia County, Florida, and that part of the N ½ of an un-named driveway lying South of and contiguous thereto, all lying South of the Southerly Right of Way of Howland Boulevard, as now established and East of the Easterly Right of Way of Normandy Boulevard, as now established and being more particularly described as follows: Commencing at the Northwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 89°28'24" E along the North line of said NE ¼ a distance of 583.89 feet; run thence S 00°19'01" E a distance of 100.00 feet to the Point of Beginning lying on said Southerly Right of Way of Howland Boulevard; run thence S 89°28'24" E along said Right of Way a distance of 74.70 feet; run thence S 00°20'22" E a distance of 103.49 feet; run thence N 89°29'34" W a distance of 74.74 feet to said Easterly Right of Way of Normandy Boulevard; run thence N 00°19'01" W along said Easterly Right of Way a distance of 103.51 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "M" (WRITTEN)

Lots 15, and 16, inclusive, Block 3, Davis Park, First Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 167, Public Records of Volusia County, Florida, lying East of the Easterly Right of Way of Normandy Boulevard as now established and being more particularly described as follows: Commencing at the Northwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 89°28'24" E along the North line of said NE ¼ a distance of 583.89 feet; run thence S 00°19'01" E a distance of 100.00 feet to a point lying on the Southerly Right of Way of Howland Boulevard, as now established, said point also lying on said Easterly Right of Way of Normandy Boulevard; run thence S 00°19'01" E along said Easterly Right of Way a distance of 211.75 feet to the Point of Beginning. Run thence S 89°30'10" E a distance of 74.78 feet; run thence S 00°20'24" E a distance of 50.37 feet; run thence N 89°30'38" W a distance of 74.80 feet to aforesaid Easterly Right of Way; run thence N 00°19'01" W along said Right of Way a distance of 50.38 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "N" (WRITTEN)

Lots 19, and 20, inclusive, Block 3, Davis Park, First Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 167, Public Records of Volusia County, Florida, lying East of the Easterly Right of Way of Normandy Boulevard as now established and being more particularly described as follows: Commencing at the Northwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 89°28'24" E along the North line of said NE ¼ a distance of 583.89 feet; run thence S 00°19'01" E a distance of 100.00 feet to a point lying on the Southerly Right of Way of Howland Boulevard, as now established, said point also lying on said Easterly Right of Way of Normandy Boulevard; run thence S 00°19'01" E along said Easterly Right of Way a distance of 312.51 feet to the Point of Beginning. Run thence S 89°31'06" E a distance of 74.82 feet; run thence S 00°20'24" E a distance of 50.37 feet; run thence N 89°31'35" W a distance of 74.84 feet to aforesaid Easterly Right of Way; run thence N 00°19'01" W along said Right of Way a distance of 50.38 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "O" (WRITTEN)

Lots 23 through 34, inclusive, Block 3, Davis Park, First Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 167, Public Records of Volusia County, Florida, and that part of the W ½ of Clara Street lying East of and contiguous thereto and the N ½ of Tennessee Avenue lying South of and contiguous thereto, all lying East of the Easterly Right of Way of Normandy Boulevard as now established and being more particularly described as follows: Commencing at the Northwest corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 89°28'24" E along the North line of said NE ¼ a distance of 583.89 feet; run thence S 00°19'01" E a distance of 100.00 feet to a point lying on the Southerly Right of Way of Howland Boulevard, as now established, said point also lying on said Easterly Right of Way of Normandy Boulevard; run thence S 00°19'01" E along said Easterly Right of Way a distance of 413.27 feet to the Point of Beginning. Run thence S 89°32'05" E a distance of 74.86 feet; run thence N 00°20'24" E a distance of 50.37 feet; run thence S 89°31'35" E a distance of 164.84 feet; run thence S 00°21'46" E a distance of 202.15 feet; run thence S 89°33'07" W a distance of 259.82 feet to the aforesaid Easterly Right of Way of Normandy Boulevard; run thence N 00°19'01" W along said Right of Way a distance of 155.95 feet; run thence S 89°32'05" E continuing along said Right of Way a distance of 20.00 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "P" (WRITTEN)

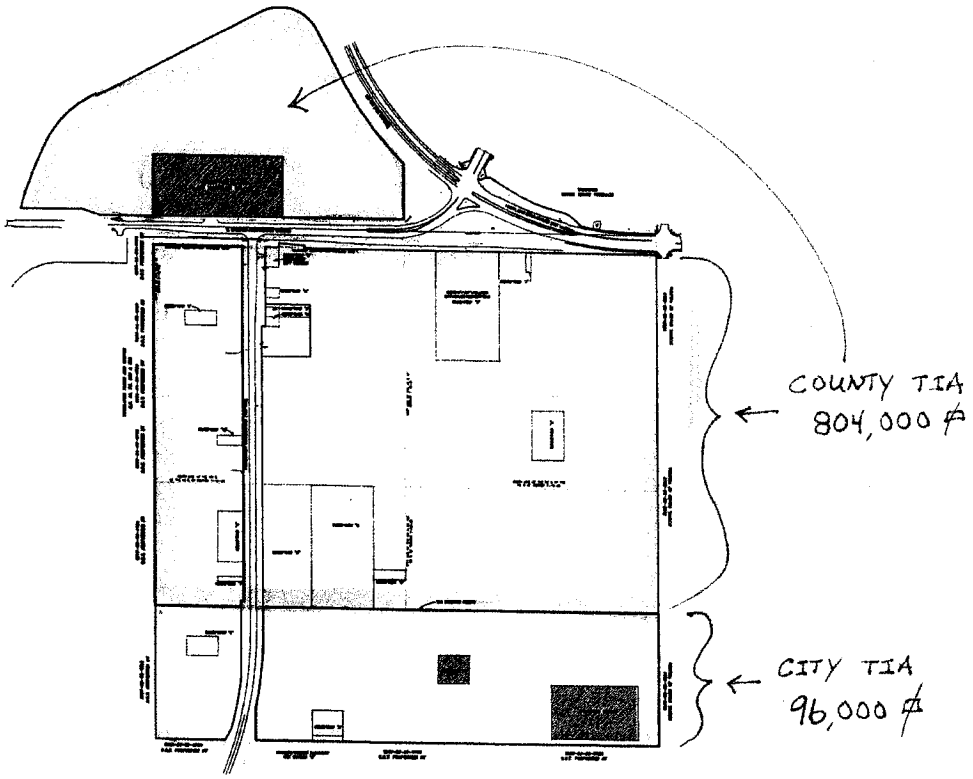
A parcel of land lying in and being a part of Blocks 8, 9 and 10 and Mangoe Street, Persimmon Street and Florida Avenue, Davis Park, Fourth Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 222, Public Records of Volusia County, Florida, being more particularly described as follows: Commencing at the Southeast corner of said Davis Park, Fourth Addition said point also being the Southeast corner of the SE ¼ of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence N 89°47'13" W along the Southerly boundary of said Fourth Addition also being the South line of said SE ¼ of the NE ¼ a distance of 110.00 feet; run thence N 00°36'47" W a distance of 30.00 feet to a point on the centerline of said Florida Avenue and the Point of Beginning. Run thence N 89°47'13" W along said centerline a distance of 460.00 feet; run thence N 00°36'47" W a distance of 280.00 feet; run thence S 89°47'00" E a distance of 460.00 feet; run thence S 00°36'47" E a distance of 280.00 feet to the Point of Beginning. Being subject to any Easement and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "Q" (WRITTEN)

Lots 35 through 40, inclusive, Block 7, Davis Park, Fourth Addition to Orange City, Florida, a subdivision according to map in Map Book 6, Page 222, Public Records of Volusia County, Florida, and the East ½ of Grape Street lying West of and contiguous thereto and being more particularly described as follows: Commencing at the Southeast corner of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence N 89°47'13" W along the South line of said NE ¼ a distance of 994.38 feet; run thence N 00°28'48" W a distance of 311.16 feet to the Point of Beginning; run thence N 89°45'11" W a distance of 165.60 feet; run thence N 00°27'23" W a distance of 150.75 feet; run thence S 89°44'09" E a distance of 165.54 feet; run thence S 00°28'48" E a distance of 150.70 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.

LEGAL DESCRIPTION: EXCEPTION "R" (WRITTEN)

Lots 1 through 46, inclusive, Block 2, Davis Park, Sixteenth Addition to Orange City, Florida, a subdivision according to map in Map Book 7, Page 68, Public Records of Volusia County, Florida, and the East ½ of Clara Street lying West of and contiguous thereto and the North ½ of Alabama Avenue lying South of and contiguous thereto and the West ½ of Crystal Street lying East of and contiguous thereto and that certain alley lying South of Lots 1 through 10, and contiguous thereto and being more particularly described as follows: Commencing at the Northeast corner of the SW ¼ of the NE ¼ of Section 7, Township 18 South, Range 31 East, Volusia County, Florida, run thence S 89°37'50" W along the North line of said SW ¼ of the NE ¼ a distance of 165.19 feet to the Point of Beginning; run thence S 00°24'02" E a distance of 633.48 feet; run thence N 89°41'52" W a distance of 330.86 feet; run thence N 00°21'23" W a distance of 633.86 feet to said North line; run thence S 89°37'50" E along said North line a distance of 330.38 feet to the Point of Beginning. Being subject to any Easements and Rights of Way of Record.



"B"

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to mean land uses which generate five percent (5%) of the external daily trips allocated to the respective local government during this time frame. Infrastructure shall include, but not limited to, the construction of roads, water and sewer utilities, and stormwater management systems.

9. This development order shall comply with the requirements of the Volusia Growth Management Commission as articulated in their resolution No. 95-06 dated May 24, 1995, as such requirements may be amended and in effect from time to time.

Development Equivalency Matrix

10. The City may approve an increase or decrease of a particular land use within the approved development program identified on Exhibit B by using a conversion table, attached as Exhibit C, which is based on equivalent peak hour directional trip ends. Use of the matrix may increase or decrease the total amount of each land use by no more than the amount allowed for in the substantial deviation criteria identified in Chapter 380.06(19)(b) 1-14, Florida Statutes, unless the Development Order is amended to accommodate such a change. Greater changes than those discussed above, considered cumulatively, shall be subject to normal Development Order amendment processes. Any time the matrix is used, DCA, ECFRPC, and the FDOT must be provided notice of the proposal at least 30 days in advance of the change. Use of the matrix will be reported on an individual and cumulative basis and Project Impacts documented in the biennial report. The change notice shall show that there are not additional impacts to schools, affordable housing or other public facilities. Any future Notice of Proposed Change (NOPC) shall incorporate any changes due to the use of the matrix.

Archeological Resources

11. Prior to initiating project related land clearing or ground disturbing activities within the project area, a systematic professional archaeological and historical survey shall be conducted for that area is to locate and assess the significance of archaeological and historic properties present. The resultant survey report shall be consistent with Rule 9J2-043, F.A.C. and shall conform to the specifications set forth in Chapter 1A-46, FAC and shall be forwarded to the Florida Department of State, Division of Historical Resources (DHR). All correspondence with DHR regarding the survey and findings will be copied to the DCA, and the local government of jurisdiction, City of DeLand.

12. Project construction personnel shall be notified, through posted advisories or other methods, of the potential for artifact discoveries on the site and to report suspected findings to the project manager. In the event of discovery of artifacts of historic or archaeological significance during project construction, the developer shall stop construction at the site of discovery and notify the local government of jurisdiction and the Division of Historic Resources (DHR) of the Florida Department of State. From the date of notification, construction shall be suspended within a 100-foot radius of the site of discovery for a period of up to 120 days to allow evaluation of the site. The developer shall provide proper protection of the discovery, to the satisfaction of the DHR consistent with Rule 9J-2.043, F.A.C.

"C"

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Diane M. Matousek
Volusia County, Clerk of Court

Diane M. Matousek
Volusia County, Clerk of Court

SENT BY: CITY OF DELAND ; 3867405771; OCT-27-04 10:57AM; PAGE 25/25

EXHIBIT C

Interstate 4/State Road 472 Activity Center DRI
Development Equivalency Matrix

Change To	Change From >	Light Industrial (KSF)	Office (KSF)	Retail (KSF)	Multi Family (Unit)	Single Family (Unit)	Hotel (Room)	PM Peak Hour External Outbound Trip Rate per Unit of Land Use *	
Light Industrial (KSF)		N/A	1.170	1.394	6.341	3.264	4.010	1.005	per 1 KSF Light Industrial
Office (KSF)		0.855	N/A	1.191	5.420	2.790	3.428	0.859	per 1 KSF Office
Retail (KSF)		0.717	0.839	N/A	4.549	2.342	2.877	0.721	per 1 KSF Retail
Multi Family (Unit)		0.158	0.184	0.220	N/A	0.515	0.632	0.158	per 1 Unit Multi Family
Single Family (Unit)		0.306	0.358	0.427	1.943	N/A	1.229	0.308	per 1 Unit Single Family
Hotel (Room)		0.249	0.292	0.348	1.581	0.814	N/A	0.251	per 1 Room Hotel

* Land use exchanges based on net external PM peak hour outbound project traffic
Trip rates derived from Table 21-6 per DRI Second Sufficiency Response - December 2002
Industrial, Office & Retail trip rates are averaged from multiple phase external trip totals (refer to Tab 21-6)

Example Exchanges:

To Add 10 KSF Retail by Reducing Office Space:
10 KSF Retail x .839 KSF Office = 8.39315 ; Reduce Office by 8.39 KSF

To Add 25 KSF Office by Reducing Hotel Rooms:
25 KSF x 3.428 Rooms/KSF = 85.6894 Rooms; Reduce Hotel Rooms by 86 Rooms

"C"

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Prepared by and returned to:
City of Deltona, City Clerk
2345 Providence Blvd.
Deltona, FL 32725

DEVELOPMENT AGREEMENT

THIS AGREEMENT entered into and made as of the 15th day of September 2014, by and between the **CITY OF DELTONA, FLORIDA,** (hereinafter referred to as the **"City"**), and TRAFALGAR HOLDINGS, LLC (hereinafter referred to as the **"Owner/Developer"**).

W I T N E S S E T H

WHEREAS, the Owner/Developer warrants that it holds legal title to the property described in Paragraph 2 below and that the holders of any and all liens and encumbrances affecting such property will subordinate their interests to this Agreement; and

WHEREAS, the Owner/Developer desires to facilitate the orderly development of the subject property, in compliance with the laws and regulations of the City and of other governmental authorities, and the Owner/Developer desires to ensure that its development is compatible with other properties in the area and planned traffic patterns; and

WHEREAS, it is the purpose of this Agreement to clearly set forth the understanding and agreement of the parties concerning the matters contained herein; and

WHEREAS, the Owner/Developer has sought the City's approval for plans to develop its property, and the City Commission of the City of Deltona has approved a Master Development Plan ("MDP") contemporaneously with the approval of this Agreement, subject to the covenants and restrictions offered by the Owner/Developer and contained herein. A copy of the MDP is attached hereto as Exhibit "B".

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

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1. Incorporation. The recitals herein contained are true and correct and are incorporated herein by reference.

2. Ownership. The Owner/Developer represents that it is the present owner of the following described property (hereinafter referred to as the "Subject Property"):

See legal description attached hereto as Exhibit "A"

3. Title Opinion/Certification. The Owner/Developer will provide to the City, in advance of the City's execution of this Agreement, a title opinion of an attorney licensed in the State of Florida, or a certification by an abstractor or title company authorized to do business in the State of Florida, showing marketable title to the Subject Property to be in the name of the Owner/Developer and showing all liens, mortgages, and other encumbrances not satisfied or released of record.

4. Subordination/Joinder. Unless otherwise agreed to by the City, all liens, mortgages, and other encumbrances not satisfied or released of record, must be subordinated to the terms of this Agreement or the lienholder must join in this Agreement. It shall be the responsibility of the Owner/Developer to promptly obtain the said subordination or joinder, in form and substance acceptable to the City Attorney, prior to the City's execution of the Agreement.

5. Internal Roadway Improvements. The road(s) depicted on the MDP attached hereto shall be dedicated to the public through the platting process. The City of Deltona shall not be required to accept such roadways, and any related infrastructure, until such time as construction of the roads have been completed and the City of Deltona determines that the construction was completed in conformity with all applicable regulations. In addition, the Owner/Developer shall provide a temporary ingress/egress easement to the parcel of property which is surrounded by the Subject Property but which is not owned by the Owner/Developer and which is otherwise not subject

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to this Agreement. The temporary ingress/egress easement shall expire upon Owner/Developer providing alternative access to an improved public street.

6. **Development Conditions.**

1. Minimum lot area: 0.50 acres

2. Minimum lot width: 100 ft.

3. Minimum building setbacks:

   a. Front yard: 35 ft.

   b. Rear yard: 10 ft. / 40 ft. if abutting residential

   c. Side yard: 10 ft. / 40 ft. if abutting residential

   d. Yards for buildings over 75 ft.: 100 ft. adjacent to residential areas and half the height of building for side yards abutting other uses

4. Maximum density/intensity: 20 units per acre/0.55 FAR

5. Maximum building coverage: 35%

6. Maximum impervious surface over entire site: 75%

7. Maximum building height (excluding towers and antennae): 100 ft. for Lot 12 depicted on the Master Development Plan; 75 ft. all other lots.

8. Landscape buffer requirements: Consistent with Section 110-808; however a 40 ft. landscape buffer will be afforded to abutting residential areas. The subject 40 ft. landscape buffer shall consist of undisturbed, natural, scrub-type vegetation including, but not limited to, an over-story of long leaf and/or sand pine; a mid-story of sand live oak, myrtle oak,

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etc.; and an understory of saw palmetto, rusty lyonia, scrub palm, etc., that currently exists naturally on-site. The protection and affordance of a 40-ft. wide native vegetation landscape buffer is subject to any fire protection actions taken by the State of Florida Division of Forestry (DOF) or fire safety agency.

9. Minimum building separation: 10 ft. or comply with Development Condition 3(d); as applicable.

10. Project open space requirements for residential development, inclusive of retention pond buffers and green space: 25% of the site proposed for residential type development (i.e. living facilities).

11. Off-street parking requirements: Consistent with Section 110-828 and Section 110-829, excluding subsection "K" of Section 110-829 of the City Code, as it may be amended from time to time.

13. Signage: Consistent with Chapter 102 of the City Code, as it may be amended from time to time.

7. **Architectural Controls.** A common architectural theme shall be established by harmoniously coordinating the general appearance of all buildings and accessory structures and should, to the extent practicable, be designed consistent with the City of Deltona's Urban Design Pattern Book and Urban Design Master Plan, as it may be updated from time to time, to provide visual compatibility and functional continuity with other adjacent developments within the Activity Center. For purposes herein, general appearance includes, but is not limited to, exterior wall finishes, construction materials, roof styles, slopes, architectural details and ornamentation. The

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following general requirements shall apply to development on the Subject Property:

a. All structures shall complement one another and shall convey a sense of quality and permanence.

b. Exterior walls facing public rights-of-way shall be constructed of finished materials such as stucco, natural brick or stone, finished concrete, wood, or concrete fiberboard, or other similar material on all sides.

c. All amenities, accessory structures, and signage shall be consistent with the overall theme of the project.

d. All drive-through canopies shall be compatible with the architectural design of the principle structure.

e. All service areas and mechanical equipment visible from public rights-of-way (ground or roof) including, but not limited to, air conditioning condensers, heating units, electric meters, satellite dishes, irrigation pumps, ice machines and dispensers, outdoor vending machines, and propane tanks, displays and refilling areas and other mechanicals, shall be screened using architectural features consistent with the structure, or landscaping of sufficient density and maturity at planting to provide opaque screening.

f. Loading docks shall be located away from the street and screened from public view.

Architectural elevations shall be submitted with a Final Site Plan application for each lot and the Development Review Committee (DRC) shall determine compliance before issuing a Development Order.

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8. **Environmental and Tree Preservation.** The property contains habitat that may be suitable for scrub jays and gopher tortoises. As part of the site plan review process, the property shall be surveyed to determine the presence and/or population density of jays and tortoises. If tortoises are found to inhabit a development area then the removal and location shall be required in lieu of a 'take' consistent with all permitting requirements. If scrub jays are noted on site, then any modification of that habitat shall be permitted consistent with the requirements of the U.S. Fish and Wildlife Service. Tree protection shall be in accordance with Chapter 98 of the City Code as it may be amended from time to time. Tree protection areas and habitat protection set aside land may coincide with buffer yards and other open space acreage. All stormwater shall be managed by stormwater systems (which may include common systems and systems servicing a single parcel) that are permitted by the City, the St. Johns River Water Management District, etc. Irrigation shall comply with the requirements of the utility servicing the project and applicable permitting agencies. However, the use of potable water for irrigation shall be prohibited. Owner/Developer shall install appropriate reuse irrigation lines/infrastructure, including stub-outs, throughout the project as development occurs. Upon reclaimed water lines being available at the intersection of Graves Ave. and Howland Blvd. with sufficient capacity to service the development, Owner/Developer shall connect to the reclaimed water source and irrigation by means other than reclaimed water shall be discontinued.

9. **Permitted Uses.** The uses permitted on the Subject Property are those uses set forth in the use list attached hereto as Exhibit "C". Consistent with the City Future Land Use Map, more intensive permitted uses (business and medical) shall be located towards the Interstate 4/Howland Blvd. corridors in 'Area A'. 'Area A' shall be described as follows: All of the south half

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of Government Lot 7 east of I-4; the west 850 feet of Davis Park 5th Addition, except lots 1-5 Block 3 Davis Park 5th Addition and less and except the north 60' of the west 134.50' of the east 660' of Davis Park 5th Addition, AKA non-vacated 60' Walter Av right of way extending from the northwest corner of Lot 1 Block 3 to the northeast corner of Lot 1 Block 3 Davis Park 5th Addition; less and except the north 125.98' of the south 1,271.05' of the west 60' of the east 530' of Davis Park 5th Addition, AKA non-vacated 60' Persimmon St. right of way extending from the northeast corner of Lot 1 Block 3 to the southeast corner of Lot 5 Block 3 Davis Park 5th Addition; and Lots 40, 41, 46, 47, 48, 55, 56, and 63, all lying north and east of Howland Blvd./SR 472 and I-4, Yourlando Farms and Groves, less and except the Graves Av. right of way; and lots 24 – 37 Block 3 Davis Park 3rd Addition, including vacated portion of the 60' Illinois Av. right of way extending between the southwest corner of Lot 24 and the southeast corner of Lot 24 Block 3, Davis Park 3rd Addition, including the vacated portion of the 60' Orange St. right of way extending between the northwest corner of Lot 37 Block 3, Davis Park 3rd Addition to the Graves Av. right of way; All of Block 4, Davis Park 3rd Addition, including the vacated portion of the 60' Wisconsin Av extending from the northeast corner of Lot 1, Block 4, Davis Park 3rd Addition to the northwest corner of Lot 46, Block 4, Davis Park 3rd Addition, including the vacated 60' Illinois Av from the southwest corner of Lot 24 to the Graves Av. right of way; and Lots 1 and 4 – 23 Block 5 Davis Park 3rd Addition, including the Grape St. right of way from the Graves Av. right of way south to the Howland Blvd./SR 472 right of way, and including the Illinois right of way from the southeast corner of lot 23 Block 5, Davis Park 3rd Addition to the Howland Blvd./SR 472 right of way; and Lots 1 – 12 and Lots 35 – 46 Block 8, Davis Park 3rd Addition. Less and except the Graves Av right of way. Lots 1-3 lying North and East of Howland Blvd./ SR 472, Davis Park 3rd Addition and Lots 1-4 and Lots 46-42 lying North of

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Howland Blvd./SR 472 less and except Graves Avenue right of way. All located in Section 6, Township 18 South, Range 31 East.

Less intensive uses (living facilities and office) shall be sited in the eastern sections of the property referred to as 'Area B'. 'Area B' will be described as follows: All of the south half of Government Lot 8, AKA Lots 32 – 39 Yourlando Farms and Groves; and the east 455' of Davis Park 5th Addition, AKA all of Blocks 1, 2, 9, and 10 and vacated 60' Mangoe St. right of way and the vacated 60' Walter Av. right of way between the northwest corner of Lot 48, Block 2 and the northeast corner of Lot 1 Block 1 Davis Park 5th Addition; and all of the 60' Wamber Av. right of way between the northwest corner of Lot 48, Block 9 and the northeast corner of Lot 1, Block 10, Davis Park 5th Addition. All located in Section 6, Township 18 South, Range 31 East.

10. Property Owners Association. The charter and by-laws of any property owners association which will be formed for the Subject Property and any deed restrictions related thereto, shall be furnished to the City of Deltona and recorded before a Certificate of Occupancy is issued for the first development project on land covered by this BPUD Development Agreement. The property owner association shall, at minimum be responsible for maintaining the common open space. The Owner/Developer shall be responsible for establishing the POA and recording said information in the Public Records of Volusia County, Florida. Also, the Owner/Developer shall bear and pay all costs for recording all of the aforementioned documents.

The City of Deltona will have no responsibility for the enforcement of said agreements or deed restrictions entered into between owners or occupiers of the Subject Property.

11. Enforcement. In the event that enforcement of this Agreement by the City becomes necessary, the City reserves the right to issue development orders only upon full compliance with the

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terms of this agreement.

12. **Compliance.** The Owner/Developer agrees that it, and its successors and assigns, will abide by the provisions of this Agreement, the City's Comprehensive Plan, and the City's Land Development Code, including but not limited to, the site plan regulations of the City as amended from time to time, which are incorporated herein by reference and such subsequent amendments hereto as may be applicable. Further, all required improvements, including landscaping, shall be continuously maintained by the Owner/Developer, or its successors and assigns, in accordance with the City's Land Development Code. The City may, without prejudice to any other legal or equitable right or remedy it may have, withhold permits, certificates of occupancy or approvals, etc. should the Owner/Developer fail to comply with the terms of this Agreement.

13. **Utility Easements.** The Owner/Developer shall provide to the City or the County, as applicable, such easements and other legal documentation, in form mutually acceptable to the City/County Attorney and the Owner/Developer, as the City/County may deem reasonably necessary or appropriate for the installation and maintenance of the utility and other services, including but not limited to, sewer, potable water, and reclaimed water services, electric, cable, fire protection and telecommunications.

14. **Concurrency and Vested Rights.** The Owner/Developer acknowledges and agrees that prior to the issuance of any building permit(s) for the Subject Property, the Owner/Developer must have received and be in the possession of a valid and unexpired Certificate of Capacity. The Certificate of Capacity verifies the reservation of infrastructure capacity sufficient to permit development pursuant to the approved site plan for the Subject Property without causing a reduction in the levels of service adopted in the City's Comprehensive Plan. The Certificate of Capacity shall

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be effective for a term as defined in the Land Development Code. Except as specifically provided herein, neither this Development Agreement nor the site plan approved shall create or result in a vested right or rights to develop the Subject Property without a current and valid Certificate of Capacity.

15. Transportation. Traffic generated from the overall project is hereby capped at 17,415 total daily trips, of which no more than 5,400 total daily trips shall be generated from Lot 12 as depicted on the Master Development Plan (trip generation rates shall be determined utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual 9th Edition.) The overall trip cap of 17,415 and the 5,400 total daily trip allocation of Lot 12 shall limit land use intensity/density notwithstanding the 0.55 FAR intensity/20 units per acre allowance within a two (2) phase project. Traffic generated from Phase I of the Development shall not exceed 13,567 total daily trips of which daily trips from Lot 12 as depicted on the Master Development Plan shall not exceed 5,400 total daily trips. A schedule of trip entitlements controlled by the Institute of Transportation Engineers Trip Generation Manual, 9th Edition, shall be maintained by the City in a concurrency management system and the Owner/Developer and/or individual developments shall be responsible for paying for peer review to verify trip generation characteristics from individual developments. As used herein "ADT" following a number shall mean the number of average annual daily trips being generated by the Project.

Phase I and Phase II of the Project is vested for Traffic Concurrency for the total daily trips set forth herein above. Phase I and Phase II adversely impacts Graves Ave from Kentucky to Howland. Based upon the TIA reports, the Owner/Developer shall pay to the County or, as per the County, perform improvements of equivalent value to the applicable segment of Graves Av., a fair

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share assessment amount as contemplated by Florida Statutes 163.3180 to mitigate for the adverse traffic impacts as follows:

Upon consumption of 6,500 ADT in the Project	$ 606,540.98
Upon consumption of 15,500 ADT in the Project	$ 792,071.16
Cumulative Total	$1,398,612.14

The payments/equivalent improvements are authorized upon the consumption of the Average Daily Trips referenced in the above three lines. If the above thresholds are tripped, and the above referenced payments/equivalent improvements are not made in full, no site plan development orders or building permits shall be issued until the respective proportionate fair share contributions are made.

Public transportation and other multimodal methods shall be accommodated consistent with the City's Codes of Ordinances. The transportation elements of this agreement, including the daily trip end limitation set forth herein, the amount of trip ends generated per project, etc. shall be submitted as development review material to be analyzed in the site plan review process regardless if a project is projected to generate less than 1,000 daily trip ends per day.

Finally, the intersection of SR 472-Howland Blvd./Graves Ave. will need to be improved in a timely and uniform manner. The following improvements are required of the Owner/Developer to accomplish as per the specific traffic thresholds articulated below:

1) SR 472 at the SR 472/Graves Av. intersection eastbound direction: Install dual left turn lanes, 24 feet in width, with 200 feet of storage and 100 feet of transition when the cumulative development program reaches 8,664 ADT or when the project development program generates 200 peak hour left turn movements at the intersection.

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2) Howland Blvd. at the Howland Blvd. /Graves Av. intersection westbound direction: Install one right turn lane, 12 feet in width, storage and transition to be symmetrical with the left turn lane from Howland Blvd. to Graves Av. when the cumulative development program reaches 4,237 ADT or when the project development program generates 75 peak hour right turn movements at the intersection.

3) Graves Av. at the Graves Av. /Howland Blvd. intersection southbound direction: install dual left turn lanes, 24 feet in width, with 200 feet of storage and 100 feet of transition when the cumulative development program reaches 13,567 ADT or when the development program generates 200 peak hour left turn movements at the intersection.

4) Graves Av. at the Graves Av. /Howland Blvd. intersection, southbound direction, is currently designed and constructed with a right turn lane, a through lane and a left turn lane. The right turn lane and through lane shall be maintained even after the improvements illustrated in subsection 3 above are accomplished.

Owner/Developer and County may enter into an impact fee credit agreement which may provide that all eligible cost associated with the improvements set forth in subparagraphs 1, 2 and 3 above as well as the proportionate fair share payments shall be entitled to impact fee credits against Volusia County Road Impact Fees at the time the improvements are made or the contributions are paid. Owner/Developer shall not be entitled to any credits against the City of Deltona Road or other Impact Fees.

16. **Access.** Access to the property, internal and external, shall comply with City Codes. No access to the property from Howland Blvd. /SR 472 shall be allowed westward of the Graves Ave./Howland Blvd. intersection in keeping with the Interstate 4 limited access right of way.

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In addition, there shall be one (1) emergency vehicular access point provided to the residential neighborhood at Tealwood Terrace right of way that is a stabilized base to support at minimum 32 tons and is no more than 20 feet wide. To encourage multi-model transportation the Owner/Developer shall construct bicycle/pedestrian access to the Timbercrest and Arbor Ridge neighborhoods at east property line of the Development. The bicycle/pedestrian accesses shall be constructed before any site plan approvals are issued within the east 800' of the Development property.

17. **Notices.** Where notice is herein required to be given, it shall be by certified mail return receipt requested, addressee only, hand delivery or couriered. Said notice shall be sent to the following, as applicable:

OWNER/DEVELOPER'S REPRESENTATIVES:

William E. Barfield, PA
225 South Westmont Avenue, Suite 2040
Altamonte Springs, Florida 32714

CITY'S REPRESENTATIVES:

Joyce Raftery, CMC, City Clerk
City of Deltona
2345 Providence Boulevard
Deltona, Florida 32725

Gretchen R. H. (Becky) Vose, Esq., City Attorney
City of Deltona
2345 Providence Boulevard
Deltona, Florida 32725

Should any party identified above change, it shall be said party's obligation to notify the remaining parties of the change in a fashion as is required for notices herein. It shall be the Owner/Developer's obligation to identify its lender(s) to all parties in a fashion as is required for

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notices herein.

18. Captions. The captions used herein are for convenience only and shall not be relied upon in construing this Agreement.

19. Binding Effect. This Agreement shall run with the land, shall be binding upon and inure to the benefit of the Owner/Developer and its assigns and successors in interest, and the City and its assigns and successors in interest. The Owner/Developer agrees to pay the cost of recording this document in the Public Records of Volusia County, Florida, and shall reimburse the City for the preparation of this Agreement in such amount to be determined by the City. This Agreement does not, and is not intended to, prevent or impede the City from exercising its legislative authority as the same may affect the Subject Property.

20. Severability. If any part of this Development Agreement is found invalid or unenforceable in any court, such invalidity or unenforceability shall not affect the other parts of this Development Agreement, if the rights and obligations of the parties contained herein are not materially prejudiced and if the intentions of the parties can be affected. To that end, this Development Agreement is declared severable.

Remainder of this page intentionally left blank.

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Deltona, FL 32725

IN WITNESS WHEREOF, the Owner/Developer and the City have executed this Agreement as of the day and year first above written.

OWNER/DEVELOPER
TRAFALGAR HOLDINGS, LLC.

By: _____
Printed name: Sadique Jaffer
Title: Managing Member

_____
Signature of Witness # 1
William E Barfield
Print or type name

_____
Signature of Witness #2
LISA SHULTZ
Print or type name

STATE OF Florida
COUNTY OF Seminole

The foregoing instrument was acknowledged before me this 20 day of November, 2014, by Sadique Jaffer, of TRAFALGAR HOLDINGS, LLC, who is personally known to me or who has/have produced _____ as identification and who did not (did) take an oath.

_____
Signature of Notary
Print or type name: LISA SHULTZ

Print or Type Name

(NOTARY SEAL)

LISA SHULTZ
MY COMMISSION # EE 203685
EXPIRES: May 30, 2016
Bonded Thru Notary Public Underwriters

Instrument# 2014-219695 # 16
Book: 7061
Page: 2457

Prepared by and returned to:
City of Deltona, City Clerk
2345 Providence Blvd.
Deltona, FL 32725

SUBORDINANTION/JOINDER

Centennial Bank, an Arkansas banking corporation, as successor in interest to Old Southern Bank by virtue of an Assignment of Security Instruments and Other Loan Documents executed by the FDIC as receiver of Old Southern Bank, recorded in Official Record Book 6988, Page 3923, Public Records of Volusia County, Florida, hereby subordinates its interests to the terms of this Agreement and join in this Agreement.

CENTENIAL BANK, AN ARKANSAS BANKING CORPORATION

By: _____
Printed name: DAVID FELKER
Title: SENIOR VICE PRESIDENT

_____
Signature of Witness # 1
_____
Print or type name

_____
Signature of Witness #2
_____
Print or type name

STATE OF Florida
COUNTY OF Orange

The foregoing instrument was acknowledged before me this 21 day of November, 2014, by David A. Felker, SVP, of CENTENIAL BANK, an Arkansas Banking Corporation, who is personally known to me or who has/have produced _____ as identification and who did not (did) take an oath.

_____
Signature of Notary
Print or type name: _____
Diane M. Straight
Print or Type Name

(NOTARY SEAL)

DIANE M. STRAIGHT
NOTARY PUBLIC
My Comm. Expires April 30, 2016
No. 911883
STATE OF FLORIDA

ACCEPTED FOR THE CITY OF DELTONA:

Prepared by and returned to:
City of Deltona, City Clerk
2345 Providence Blvd.
Deltona, FL 32725

By: _____
John C. Masiarczyk, Sr., Mayor

Date: 12/5/14

ATTEST: _____
Joyce Raftery, CMC, City Clerk

Date 12/5/14

Mailing Address: City of Deltona
2345 Providence Boulevard
Deltona, Florida, 32725

Instrument# 2014-219695 # 18
Book: 7061
Page: 2459

Prepared by and returned to:
City of Deltona, City Clerk
2345 Providence Blvd.
Deltona, FL 32725

STATE OF FLORIDA
COUNTY OF Volusia

The foregoing instrument was acknowledged before me this 5 day of December, 2014, by John C. Masiarczyk, Sr., Mayor, and Joyce Raftery, CMC, City Clerk, who are personally known to me and acknowledge executing the same freely and voluntarily under authority vested in them and that the seal affixed thereto is the true and corporate seal of the City of Deltona, Florida.

SHERI M. SALLADE
MY COMMISSION # FF 136140
EXPIRES: September 2, 2018
Bonded Thru Notary Public Underwriters

(NOTARY SEAL)

Signature of Notary

Print or type name

Approved as to form and legality for use and reliance by the City of Deltona, Florida

GRETCHEN R.H. VOSE, City Attorney

This instrument approved by:
Gretchen R. H. Vose, City Attorney
as to form and legality for use and
reliance by the City of Deltona.

This instrument prepared by:
City of Deltona
Department of Planning & Development Services
2345 Providence Boulevard
Deltona, Florida 32725

Instrument# 2014-219695 # 19
Book: 7061
Page: 2460

Prepared by and returned to:
City of Deltona, City Clerk
2345 Providence Blvd.
Deltona, FL 32725

EXHIBIT "A"

LEGAL DESCRIPTION

COMMENCING AT THE NORTHEAST CORNER OF GOVERNMENT LOT 8, SECTION 6, TOWNSHIP 18 SOUTH, RANGE 31 EAST, VOLUSIA COUNTY, FLORIDA; THENCE RUN SOUTH 00°18'12" WEST, ALONG THE EAST LINE OF SAID GOVERNMENT LOT 8, FOR A DISTANCE OF 1323.00 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH ½ OF SAID GOVERNMENT LOT 8 AND THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 00°18'12" WEST, ALONG SAID EAST LINE OF GOVERNMENT LOT 8, FOR A DISTANCE OF 1323.00 FEET TO A POINT ON THE SOUTHEAST CORNER OF THE SOUTH HALF OF SAID GOVERNMENT LOT 8, SAID POINT ALSO BEING THE NORTHEAST CORNER OF GOVERNMENT LOT 9 AND SAID POINT ALSO BEING THE NORTHEAST CORNER OF DAVIS PARK FIFTH ADDITION, AS RECORDED IN MAP BOOK 18, PAGE 147 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN SOUTH 00°18'23" EAST, ALONG THE EASTERLY LINE OF SAID DAVIS PARK FIFTH ADDITION, ALSO BEING THE WESTERLY LINE OF TIMBERCREST, AS RECORDED IN MAP BOOK 43, PAGES 178 THROUGH 179 OF THE AFORESAID PUBLIC RECORDS OF VOLUSIA COUNTY, FOR A DISTANCE OF 1331.05 FEET TO THE SOUTHEAST CORNER OF LOT 24, BLOCK 10 OF SAID DAVIS PARK FIFTH ADDITION, SAID POINT ALSO BEING ON THE NORTHERLY RIGHT OF WAY LINE OF WISCONSIN AVENUE, A 60.00 FOOT WIDE RIGHT OF WAY ACCORDING TO THE PLAT OF DAVIS PARK THIRD ADDITION AS RECORDED IN MAP BOOK 18, PAGE 117 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE DEPARTING THE EASTERLY LINE OF BLOCK 10, DAVIS PARK FIFTH ADDITION AND SAID WESTERLY LINE OF TIMBERCREST, RUN NORTH 89°33'17" WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 852.84 FEET TO THE SOUTHEAST CORNER OF LOT 24, BLOCK 7, DAVIS PARK FIFTH ADDITION; THENCE DEPARTING SAID NORTHERLY RIGHT OF WAY LINE, RUN SOUTH 00°17'38" EAST FOR A DISTANCE OF 301.64 FEET TO THE SOUTHEAST CORNER OF LOT 9, BLOCK 4 OF SAID DAVIS PARK THIRD ADDITION; THENCE RUN SOUTH 89°30'54" EAST, ALONG THE SOUTHERLY LINE OF LOT 38, BLOCK 3 OF SAID DAVIS PARK THIRD ADDITION, AND ITS WESTERLY PROJECTION, FOR A DISTANCE OF 194.58 FEET TO THE SOUTHEAST CORNER OF SAID LOT 38, BLOCK 3; THENCE RUN SOUTH 00°17'47" EAST, ALONG THE EASTERLY LINE OF LOTS 24 THROUGH 37 OF SAID BLOCK 3 AND ITS SOUTHERLY PROJECTION, FOR A DISTANCE OF 412.60 FEET TO THE NORTHWEST CORNER OF LOT 1, BLOCK 8 OF SAID DAVIS PARK THIRD ADDITION ; THENCE RUN SOUTH 89°27'21" EAST ALONG THE NORTH LINE OF SAID LOT 1, BLOCK 8, FOR A DISTANCE OF 134.60 FEET TO THE NORTHEAST CORNER OF LOT 1 OF SAID BLOCK 8; THENCE RUN SOUTH 00°17'56" EAST, ALONG THE EAST LINE OF SAID BLOCK 8, DAVIS PARK THIRD ADDITION, FOR A DISTANCE OF 312.41 FEET TO THE SOUTHEAST CORNER OF LOT 12 OF SAID BLOCK 8; THENCE RUN NORTH 89°24'16" WEST, ALONG THE SOUTHERLY LINE OF LOT 12 AND 35 OF SAID BLOCK 8, FOR A DISTANCE OF 269.24 FEET TO THE SOUTHWEST CORNER OF SAID LOT 35, BLOCK 8; THENCE RUN NORTH 00°17'38" WEST, ALONG THE WESTERLY LINE OF SAID BLOCK 8, FOR A DISTANCE OF 201.40 FEET TO THE SOUTHWEST CORNER OF LOT 43 OF SAID BLOCK 8; THENCE RUN NORTH 89°26'18" WEST, ALONG THE SOUTHERLY LINE OF LOT 4, BLOCK 7 OF SAID DAVIS PARK THIRD ADDITION, AND ITS EASTERLY PROJECTION, FOR A DISTANCE OF 194.61 FEET TO THE NORTHEAST CORNER OF LOT 42 OF SAID BLOCK 7; THENCE RUN SOUTH 00°17'29" EAST, ALONG THE EASTERLY LINE OF LOT 42 OF SAID BLOCK 7, FOR A DISTANCE OF 25.16 FEET TO THE SOUTHEAST CORNER OF SAID LOT 42, BLOCK 7; THENCE RUN NORTH 89°26'01" WEST, ALONG

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THE SOUTHERLY LINE OF SAID LOT 42, BLOCK 7, FOR A DISTANCE OF 134.61 FEET TO THE WESTERLY LINE OF SAID BLOCK 7 AND A POINT THE NORTHEASTERLY RIGHT OF WAY LINE OF HOWLAND ROAD, ALSO KNOWN AS STATE ROAD NUMBER 472; THENCE RUN NORTH 54°43'27" WEST ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, 73.75 FEET TO THE EASTERLY LINE OF BLOCK 6; THENCE RUN NORTH 00°17'20" WEST ALONG SAID EASTERLY LINE OF BLOCK 6, 93.79 FEET TO THE NORTHEAST CORNER OF LOT 1 OF SAID BLOCK 6; THENCE RUN NORTH 89°27'21" WEST ALONG THE NORTH LINE OF SAID LOT 1, BLOCK 6, 84.74 FEET TO A POINT THE NORTHEASTERLY RIGHT OF WAY LINE OF SAID HOWLAND ROAD, ALSO KNOWN AS STATE ROAD NUMBER 472, SAID POINT ALSO BEING A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1537.02 FEET, A CHORD BEARING OF NORTH 33°57'14" WEST, AND A CHORD DISTANCE OF 304.43 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 11°22'01" FOR AN ARC DISTANCE OF 304.93 FEET TO A POINT OF TANGENCY; THENCE RUN NORTH 28°16'13" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 150.00 FEET; THENCE RUN NORTH 25°06'50" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 272.40 FEET; THENCE RUN NORTH 28°16'13" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE; FOR A DISTANCE OF 150.00 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 2979.79 FEET, A CHORD BEARING OF NORTH 32°58'36" WEST, AND A CHORD DISTANCE OF 488.95 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 09°24'44" FOR AN ARC DISTANCE OF 489.50 FEET TO A POINT OF TANGENCY; THENCE RUN NORTH 00°16'34" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 227.27 FEET; THENCE RUN NORTH 89°44'55" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 125.57 FEET; THENCE RUN NORTH 35°11'02" WEST, ALONG SAID NORTHEASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 575.90 FEET TO THE POINT OF CURVATURE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 607.00 FEET, A CHORD BEARING OF NORTH 09°43'14" WEST, AND A CHORD DISTANCE OF 521.94 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, AND SAID NORTHEASTERLY RIGHT OF WAY LINE, THROUGH A CENTRAL ANGLE OF 50°55'36" FOR AN ARC DISTANCE OF 539.53 FEET TO A POINT OF TANGENCY, SAID POINT ALSO BEING A POINT ON THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE 4, ALSO KNOWN AS STATE ROAD NUMBER 400; THENCE RUN NORTH 15°44'27" EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 1019.63 FEET TO A POINT ON THE AFORESAID NORTH LINE OF THE SOUTH ½ OF GOVERNMENT LOT 7; THENCE DEPARTING SAID EASTERLY RIGHT OF WAY LINE, RUN SOUTH 89°43'54" EAST, ALONG SAID NORTH LINE, A DISTANCE OF 2226.87 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT

A PORTION OF DAVIS PARK FIFTH ADDITION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN MAP BOOK 18, PAGE 147 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF LOT 1, BLOCK 3 OF DAVIS PARK FIFTH ADDITION; THENCE RUN SOUTH 89°45'12" EAST, A DISTANCE OF 60.00 FEET TO THE NORTHWEST CORNER OF LOT 48, BLOCK 2 SAID DAVIS PARK FIFTH ADDITION; THENCE RUN SOUTH

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00°17'56" EAST ALONG THE EAST RIGHT OF WAY LINE OF PERSIMMON STREET, A DISTANCE OF 125.98 FEET TO THE SOUTHWEST CORNER OF LOT 44, BLOCK 2 SAID DAVIS PARK FIFTH ADDITION; THENCE RUN NORTH 89°43'58" WEST, A DISTANCE OF 194.51 FEET TO THE SOUTHWEST CORNER OF LOT 5, BLOCK 3 SAID DAVIS PARK FIFTH ADDITION; THENCE RUN NORTH 00°17'47" WEST ALONG THE WEST LINE OF LOTS 1 THROUGH 5, BLOCK 3 SAID DAVIS PARK FIFTH ADDITION AND THE NORTHERLY EXTENSION THEREOF, A DISTANCE OF 185.92 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF WALTER AVENUE; THENCE RUN SOUTH 89°45'12" EAST ALONG SAID NORTHERLY RIGHT OF WAY LINE, A DISTANCE OF 134.50 FEET; THENCE DEPARTING SAID NORTHERLY RIGHT OF WAY LINE RUN SOUTH 00°17'56" EAST, A DISTANCE OF 60.00 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT (GRAVES AVENUE)

A TRACT OF LAND LYING IN SECTION 6, TOWNSHIP 18 SOUTH, RANGE 31 EAST BEING DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF LOT 43, BLOCK 8, DAVIS PARK THIRD ADDITION ACCORDING TO THE PLAT THEREOF AS RECORDED IN MAP BOOK 18, PAGE 117 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN NORTH 89°26'18" WEST, 123.84 FEET; THENCE RUN NORTH 15°43'35" EAST, 52.14 FEET; THENCE RUN NORTH 09°31'41" EAST, 25.48 FEET; THENCE RUN NORTH 18°58'06" WEST, 37.37 FEET; THENCE RUN NORTH 02°56'41" WEST, 60.11 FEET; THENCE RUN NORTH 40°48'48" EAST, 19.41 FEET; THENCE RUN NORTHWESTERLY, ALONG A NON-TANGENT CURVE HAVING A RADIUS OF 359.00 FEET, A CENTRAL ANGLE OF 35°42'36", AN ARC LENGTH OF 223.75 FEET, A CHORD LENGTH OF 220.15 FEET, AND A CHORD BEARING OF NORTH 28°00'00" WEST TO A POINT OF TANGENCY; THENCE RUN NORTH 45°51'18" WEST, 559.12 FEET; THENCE RUN NORTH 44°08'42" EAST, 100.00 FEET; THENCE RUN SOUTH 45°51'18" EAST, 559.12 FEET; TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, THENCE RUN SOUTHEAST, ALONG SAID CURVE, HAVING A RADIUS OF 459.00 FEET, A CENTRAL ANGLE OF 12°55'58", AN ARC LENGTH OF 103.61 FEET, A CHORD LENGTH OF 103.39 FEET, AND A CHORD BEARING OF SOUTH 39°23'19" EAST; THENCE RUN SOUTH 89°29'23" EAST, 11.09 FEET; THENCE RUN NORTHEASTERLY, ALONG A NON-TANGENT CURVE HAVING A RADIUS OF 220.00 FEET, A CENTRAL ANGLE OF 09°39'46", AN ARC LENGTH OF 37.10 FEET, A CHORD LENGTH OF 37.06 FEET, AND A CHORD BEARING OF NORTH 04°35'13" EAST; THENCE RUN NORTH 89°42'22" EAST, 59.97 FEET; THENCE RUN SOUTH 00°17'38" EAST, 409.98 FEET TO THE POINT OF BEGINNING.

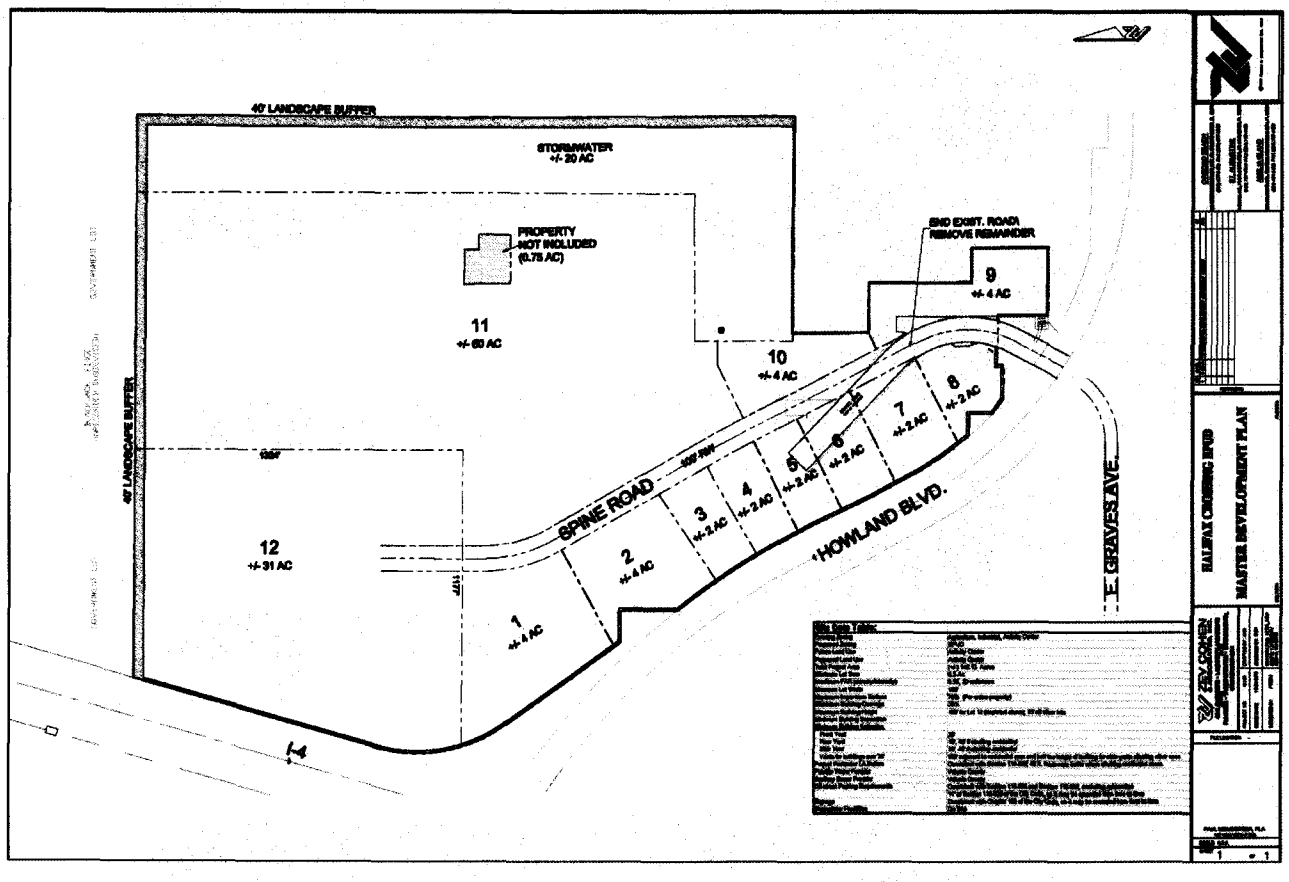
CONTAINING 6,441,632.14 SQUARE FEET, OR 147.87 ACRES, MORE OR LESS.

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EXHIBIT "B"

MASTER DEVELOPMENT PLAN



Instrument# 2014-219695 # 23
Book: 7061
Page: 2464

Prepared by and returned to:
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Deltona, FL 32725

EXHIBIT "C"

LIST OF PERMITTED USES

Permitted Uses for Area A:

1. Adult family-care home.
2. Antique shops.
3. Art, dance, modeling, and music schools.
4. Artist studios.
5. Assisted living facility.
6. Automobile body and repair shops associated with car dealerships.
7. Automobile new parts, equipment and accessories; sales only.
8. Automobile rental agencies associated with car dealerships.
9. Automobile sales, new and used.
10. Automobile service stations, type A and C; permitted only on building sites with not less than 150 feet frontage on all abutting streets.
11. Bakeries, retail (including preparation of products for sale on the premises).
12. Banks and other financial businesses.
13. Barber and beauty shop.
14. Bicycle stores.
15. Bowling alleys.
16. Bus stations.
17. Catering services.
18. Cigar stores.
19. Confectionery and ice cream stores.
20. Conservatories.
21. Convenience stores.
22. Cultural, historical, and art centers and museums.
23. Day care centers.
24. Dental offices, clinics, and laboratories.

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25. Diagnostic imaging centers.
26. Drug and sundry stores.
27. Dry cleaning establishments.
28. Electronic sales.
29. Essential utility services.
30. Excavations only for stormwater retention ponds, subject to applicable permitting requirements.
31. Exempt excavations.
32. Fire stations.
33. Florist shops.
34. Funeral homes.
35. Furniture stores.
36. General, professional, and business offices.
37. Grocery stores.
38. Hardware stores (retail only).
39. Hospitals (shall be limited to Lot 12 on the MDP).
40. Houses of worship ancillary to primary uses.
41. Interior decorating, costuming, draperies.
42. Jewelry stores, watch repairs.
43. Libraries.
44. Medical offices and clinics.
45. Motels and hotels.
46. Non-profit membership and charitable organizations.
47. Paint stores.
48. Pest exterminators.
49. Pet stores.
50. Photograph galleries.
51. Physical fitness centers.
52. Police and sheriff stations.

53. Printing and engraving, including photo-stating and publishing.
54. Professional or trade schools related to permitted uses.
55. Publicly owned parks and recreational areas.
56. Radio and television broadcasting stations (Related towers or antennae must be consistent with Chapter 82 of the City Code).
57. Restaurants, types A and B.
58. Retail sales and services.
59. Schools, parochial or private.
60. Surgery centers.
61. Tailor shops.
62. Taxicab stands.
63. Theaters.
64. Travel agencies.
65. Utility offices.
66. Veterinary clinics without outside kennels, runs, etc.
67. Silviculture/Forestry: The property may be used for silviculture/forestry utilizing best management practices as prescribed by the State of Florida. However, the use of the property for silviculture/forestry will be allowed for a period of five years. At the end of five years, the City shall readdress the silviculture/forestry use of the property. The owner/developer will be responsible for formally requesting the City Commission review the silviculture/forestry use six months (April 15, 2019) before the end of the five year period (September 15, 2019). Failure of the owner/developer to request the City to review the silviculture/forestry use shall result in the property not being eligible for silviculture/forestry as a permitted use. As part of the City Commission five year review, the owner/developer, at minimum, shall be responsible for submitting a detailed timber/land management plan (same plan submitted to

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the Volusia County Property Appraiser's Office); proof that the timber operation is ongoing, including financial documentation; and other data as deemed appropriate.

Permitted Uses for Area B:

1) Adult family-care home.
2) Art, dance, modeling and music schools.
3) Artist studio.
4) Assisted Living Facilities.
5) Bakeries (retail only).
6) Barber and beauty shops.
7) Bicycle stores.
8) Cigar stores.
9) Coffee shops.
10) Convenience stores.
11) Confectionary and ice cream stores.
12) Day care center.
13) Dental offices, clinics and laboratories.
14) Diagnostic and imaging centers.
15) Electronic shops
16) Essential utilities.
17) Excavation only for stormwater retention ponds subject to applicable permitting requirements.
18) Exempt excavations.
19) Florist shops.
20) Funeral Homes, without cremation activities.
21) General, professional and business office.
22) Jewelry stores.
23) Medical offices and clinics.

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Diane M. Matousek
Volusia County, Clerk of Court

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24) Non-profit membership and charitable organizations.
25) Physical fitness center.
26) Publically owned parks and recreation areas.
27) Restaurants, type A.
28) Schools parochial/private.
29) Taxicab stands.
30) Travel agencies.
31) Utility office.
32) Veterinary clinics without outside kennels, runs, etc.
33) Silviculture/Forestry: The property may be used for silviculture/forestry utilizing best management practices as prescribed by the State of Florida. However, the use of the property for silviculture/forestry will be allowed for a period of five years. At the end of five years, the City shall readdress the silviculture/forestry use of the property. The owner/developer will be responsible for formally requesting the City Commission review the silviculture/forestry use six months (April 15, 2019) before the end of the five year period (September 15, 2019). Failure of the owner/developer to request the City to review the silviculture/forestry use shall result in the property not being eligible for silviculture/forestry as a permitted use. As part of the City Commission five year review, the owner/developer, at minimum, shall be responsible for submitting a detailed timber/land management plan (same plan submitted to the Volusia County Property Appraiser's Office); proof that the timber operation is ongoing, including financial documentation; and other data as deemed appropriate.

EXHIBIT O

LEGEND: TEXT COLORS

ON-SITE IMPROVEMENTS

OFF-SITE IMPROVEMENTS

330 feet, per FDOT

670'

ADD 1 RIGHT TURN LANE

ADD 1 LEFT TURN LANE

570'

TRANSITION THROUGH LANE

600'

URBAN SECTION

1200'

NORTH

GRAVES AVE.

HOWLAND BLVD

545'

ADD 1 RIGHT TURN LANE W/ CURB & GUTTER

ADD 1 570' LEFT TURN LANE
ADD 1 THROUGH LANE

NORTHBOUND DUAL RIGHT TURN LANES
NORTHBOUND 1 LEFT TURN LANE
SOUTHBOUND 2 THROUGH LANES

1150'

4 LANE DIVIDED W/ 16' MEDIAN - URBAN SECTION

DRIVEWAY #1
315' DROP RIGHT TURN LANE
W/ CURB & GUTTER
NEW SIGNAL

20' SOUTH RADIUS

NORMANDY BLVD

CONNECT TO EXISTING 3 LANE SECTION

END TRANSITION

DRIVEWAY #2 - FULL ACCESS
265' RIGHT TURN LANE
W/ CURB & GUTTER
NEW SIGNAL

12' PAVEMENT WIDENING WITH 4' PAVED SHOULDER ON EACH SIDE TO ACCOMMODATE LEFT TURN LANES AT DRIVEWAYS

2630'

CONC. SIDEWALK ADJACENT TO SITE

DRIVEWAY #3 - NO LEFT OUT
265' RIGHT TURN LANE
W/ CURB & GUTTER

DRIVEWAY #4 - FULL ACCESS
265' RIGHT TURN LANE
W/ CURB & GUTTER
SIGNAL WARRANT AFTER 1 YEAR

BEGIN TRANSITION

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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116 S. KENTUCKY AVENUE, LAKELAND, FL 33801
PHONE: 863-701-8702
WWW.KIMLEY-HORN.COM
CA 00000696

NORMANDY SITE

ROADWAY IMPROVEMENTS

SHEET NUMBER
1 OF 1
10/7/2019

Table 22 – Candidate Project Needs Scoring Matrix (As Approved by LRTP Subcommittee Meeting (6-12-15))

Project	Limits	2040 V/C Ratio	Facility	Safety	Emergency	Intermodal	Truck	Transit	Pedestrian	Bike	Land Use	Activity Center	Social	Regional	Total	Ranking
LPGA - widen to 3 lanes	Nova Road to US 1	5	8	10	10	0	10	10	5	8	0	0	10	0	**76**	1
Howland Blvd - widen to 4 lanes	Providence Blvd to Elkcam Dr	10	8	10	0	0	10	10	5	8	0	0	10	0	**71**	2
Providence Blvd widen to 4 lanes	Debary/Doyle Rd to Elkcam Rd	5	8	8	0	0	10	10	0	8	0	0	10	0	**59**	3
North Entrance DeLand Airport - Industrial Park	Industrial Dr to SR 11	0	0	0	0	10	10	0	10	8	0	10	10	0	**58**	4
Old Kings Rd - widen to 4 lanes	Town Center Blvd to Palm Coast Pkwy	0	8	10	0	0	0	0	10	8	10	10	0	0	**56**	5
Beresford Ave Extension	Blue Lake Rd to SR 44	5	4	8	0	0	10	0	10	8	0	10	0	0	**55**	6
Palm Coast Pkwy - widen to 6 lanes	SR 5 (US 1) to Belle Terre Pkwy	5	8	8	10	0	0	0	5	8	0	0	10	0	**54**	7
Fort Smith Blvd widen to 3 lanes	Elkcam Dr to Providence Blvd	0	4	10	0	0	0	10	10	8	0	0	10	0	**52**	8
Saxon Blvd - widen to 4 lanes	Tivoli Dr to Providence Blvd	5	8	10	0	0	10	0	0	8	0	0	10	0	**51**	9
Normandy - widen to 4 lanes	Firwood Dr to Howland Blvd	5	4	0	0	0	0	0	10	0	10	10	10	0	**49**	10
Tivoli Dr widen to 3 lanes	Saxon Blvd to Providence Blvd	0	4	10	0	0	0	10	5	8	0	0	10	0	**47**	11
Old Kings Rd South - widen to 4 lanes	SR 100 to Old Dixie Hwy	0	8	0	0	0	10	0	10	8	0	10	0	0	**46**	12
Hand Ave Extension	Williamson Blvd to Tymber Creek Rd ext	5	4	8	0	0	10	0	10	8	0	0	0	0	**45**	13
Elkcam Blvd - widen to 3 lanes	Normandy Blvd to Fort Smith Blvd	0	4	8	0	0	0	10	5	8	0	0	10	0	**45**	13
Park Ave Extension	To Restoration Development (1.84 mi)	0	4	0	0	0	10	0	10	8	0	10	0	0	**42**	15
Hand Ave - widen to 4 lanes	Williamson Blvd to Nova Rd	5	4	0	0	0	10	10	10	0	0	0	0	0	**39**	16
Deltona Blvd - widen to 4 lanes	Doyle Rd to Enterprise Rd	5	4	10	0	0	0	0	0	8	0	0	10	0	**37**	17
Matanzas Woods Pkwy (east) - widen to 4 lanes	NB I-95 ramps to Old Kings Rd extension	5	8	0	0	0	0	0	5	8	0	0	10	0	**36**	18
Old Mission Road - widen to 3 lanes	Park Ave to Josephine St	0	4	0	0	0	10	0	10	8	0	0	0	0	**32**	19
Courtland Blvd widen to 3 lanes	Fort Smith Blvd to Howland Blvd	0	4	8	0	0	0	0	0	8	0	0	10	0	**30**	20
Tymber Creek Rd - widen to 4 lanes	Peruvian Lane to Airport Rd	0	4	0	0	0	10	0	5	8	0	0	0	0	**27**	21

Table 28 – 2040 LRTP SIS Cost Feasible Projects List (State/Federal Funding)

Map No.	Facility	From	To	Source	ROW Cost[1] (PDC)	CST Cost[1] (PDC)	Project Cost[1] (PDC)	2019-2020[2] ROW	2019-2020[2] CST	2021-2025[2] ROW	2021-2025[2] CST	2026-2030[2] ROW	2026-2030[2] CST	2031-2040[2] ROW	2031-2040[2] CST	Y.O.E. Project Cost Total[2]
1	**I-4 widen to 10 Lanes (I-4 Beyond the Ultimate)[3]**	Seminole County	SR 472	SIS	$46.36	$372.07	$418.43					$71.39	$572.99			**$644.38**
2	**SR 472 widen from 4 to 6 lanes[3]**	Graves Ave	Kentucky/MLK Blvd	SIS		$40.48[4]	$40.48						$62.34			**$62.34**
3	**Saxon Blvd Ramp/Roadway[3]**	I-4	Normandy Blvd	SIS		$35.38[4]	$35.38						$54.49			**$54.49**
4	**Rhode Island Extension[3]**	Veterans Memorial	Normandy Blvd	SIS		$34.87[4]	$34.87						$53.70			**$53.70**
5	**SR 15 (US 17) widen to 4 lanes**	Ponce De Leon Blvd	SR 40	SIS		$39.40	$39.40								$77.62	**$77.62**
6	**SR 40 - widen to 6 lanes**	Williamson Blvd	Breakaway Trails	SIS	$7.43	$22.99	$30.42							$14.64	$45.29	**$59.93**
7	**SR 40 - widen to 4 lanes**	Cone Rd	SR 11	SIS	$2.30	$41.50	$43.80							$4.39	$79.27	**$83.66**
8	**SR 40 - widen to 4 lanes**	SR 11	SR 15 (US 17)	SIS	$7.50	$30.40	$37.90							$14.33	$58.06	**$72.39**
9	**SR 100 - widen to 6 lanes**	Old Kings Rd	Belle Terre Parkway	SIS	$3.17	$31.70	$34.87							$6.05	$60.55	**$66.60**
10	**I-95 Interchange (Farmton Interchange)[5]**	At Maytown Rd		SIS												
11	**I-95/LPGA Blvd Interchange Modifications**	Williamson Blvd	Tymber Creek Ext.	SIS		$20.00	$20.00								$32.50	$32.50
12	**I-95/Pioneer Trail New Interchange**	At Pioneer Trail		SIS		$18.50	$18.50								$30.06	$30.06
					$754.05			$0.00	$0.00	$0.00	$0.00	$71.39	$743.51	$39.41	$383.35	
	Total By Period							**$0.00**		**$0.00**		**$814.91**		**$422.76**		**$1,237.67**

Notes:
[1] In millions; shown in present day costs (PDC)/"constant" 2013, 2014 or 2015 dollars (Added projects 11 & 12 are in 2017 dollars)
[2] In millions; inflated to year of expenditure (YOE) dollars per Revenue Forecast Handbook
[3] Part of the I-4 Beyond the Ultimate Project
[4] Cost estimates were sourced from the FDOT SR 400 (I-4) PD&E Study, Preliminary Engineering Report for I-4 Beyond the Ultimate, Segment 4 (December 2014)
[5] **Developer Funded -** $12.9 million (informational purposes)

Amendment 1: Per Resolution 2019-01, the 2040 LRTP was amended by the River to Sea TPO Board on January 23, 2019, moving two projects from the Unfunded Needs List (Table 32) to the SIS Cost-Feasible Projects List (above)

Table 29 – 2040 LRTP Other Arterial Cost Feasible Projects List (State/Federal Funding)

MAP No.	Facility	From	To	Source	PD&E/PE Cost[1] (PDC)	ROW Cost[1] (PDC)	CST Cost[1] (PDC)	Project Cost[1] (PDC)	2019-2020[2]			2021-2025[2]			2026-2030[2]			2031-2040[2]			Y.O.E. Project Cost Total[2]
									PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	PE/PDE	ROW	CST	
11	**SR 483 – Clyde Morris Blvd – widening to 6 lane**	Beville Road	US 92	Other Arterial			$30.60	$30.60						$38.86							**$38.86**
12	**Old Kings Rd – widen from 2 to 4 lanes**	Palm Coast Parkway	Forest Grove Dr	Other Arterial			$14.85	$14.85			$17.37										**$17.37**
13	**SR 44 – Miscellaneous upgrades to improve access to DeLand SunRail**	SR 15A	DeLand SunRail Station	Other Arterial		$1.74	$17.36	$19.10		$1.98				$22.05							**$24.03**
14	**US 92 – widen from 4 to 6 lanes**	I-4 EB Ramps	CR 415 (Tomoka Farms Rd)	Other Arterial			$25.43	$25.43									$40.43				**$40.43**
15	**Old Kings Rd – extension roadway (Phase II)**	Matanzas Woods Pkwy	Old Kings Rd	Other Arterial			$5.00	$5.00						$6.35							**$6.35**
16	**Commerce Pkwy Connector Road – new 2 lane roadway**	SR 100	SR 5 (US 1)	Other Arterial			$4.07	$4.07						$4.48							**$4.48**
17	**Matanzas Woods Pkwy (west) – widen to 4 lanes**	SR 5 (US 1)	Southbound I-95 ramps	Other Arterial		$0.18	$13.95	$14.13		$0.21				$18.27							**$18.48**
18	**SR 600/SR 15 (US 17/92) - emerging SIS**	SR 472	SR 15A (Taylor Rd)	Other Arterial		$3.00	$27.00	$30.00								$4.50				$51.57	**$56.07**
19	**LPGA Blvd – widen to 3 lanes**	Nova Rd	SR 5 (US 1)	Other Arterial		$3.50	$9.00	$12.50								$5.25	$13.50				**$18.75**
20	**Howland Blvd – widen to 4 lanes**	Providence Blvd	Elkcam Blvd	Other Arterial		$2.50	$11.82	$14.32								$3.75	$17.73				**$21.48**
21	**North Entrance DeLand Airport (Industrial Park)**	Industrial Dr	SR 11	Other Arterial			$0.97	$0.97									$1.46				**$1.46**
6	**SR 40 – widen to 6 lanes**	Williamson Blvd	Breakaway Trails	Other Arterial		$7.43	$22.99	$30.42											$14.64	$45.29	**$59.93**
9	**SR 100 – widen to 6 lanes**	Old Kings Rd	Belle Terre Parkway	Other Arterial		$3.17	$31.70	$34.87											$6.05	$60.55	**$66.60**
22	**SR 442 – extend roadway (Edgewater or Deltona)**	SR 442	SR 415 (alignment not set)	Other Arterial	$10.00			$10.00										$19.10			**$19.10**
On System Projects							**$246.26**		$0.00	$2.19	$17.37	$0.00	$0.00	$90.01	$0.00	$13.50	$73.11	$19.10	$20.69	$157.41	
Off System Projects							**Total By Period**		**$19.56**			**$90.01**			**$86.61**			**$197.20**			**$393.38**
							2040 Revenue Forecast		$22.80			$101.90			$96.30			$210.80			**$431.80**
							Local Corridor Initiatives		*$3.24*			*$11.89*			*$9.69*			*$13.60*			***$38.42***

[1] In millions; shown in present day costs (PDC)/"constant" 2013, 2014 or 2015 dollars

[2] In millions; inflated to year of expenditure (YOE) dollars per Revenue Forecast Handbook

Note: Project costs do not includes phases previously completed

Note: The first three (3) years of the Cost Feasible Plan includes FY 2016, 2017 & 2018. Projects in these years are already programmed in the adopted Transportation Improvement Program (TIP) and are represented by the Existing Plus Committed set of projects shown in Appendix M.

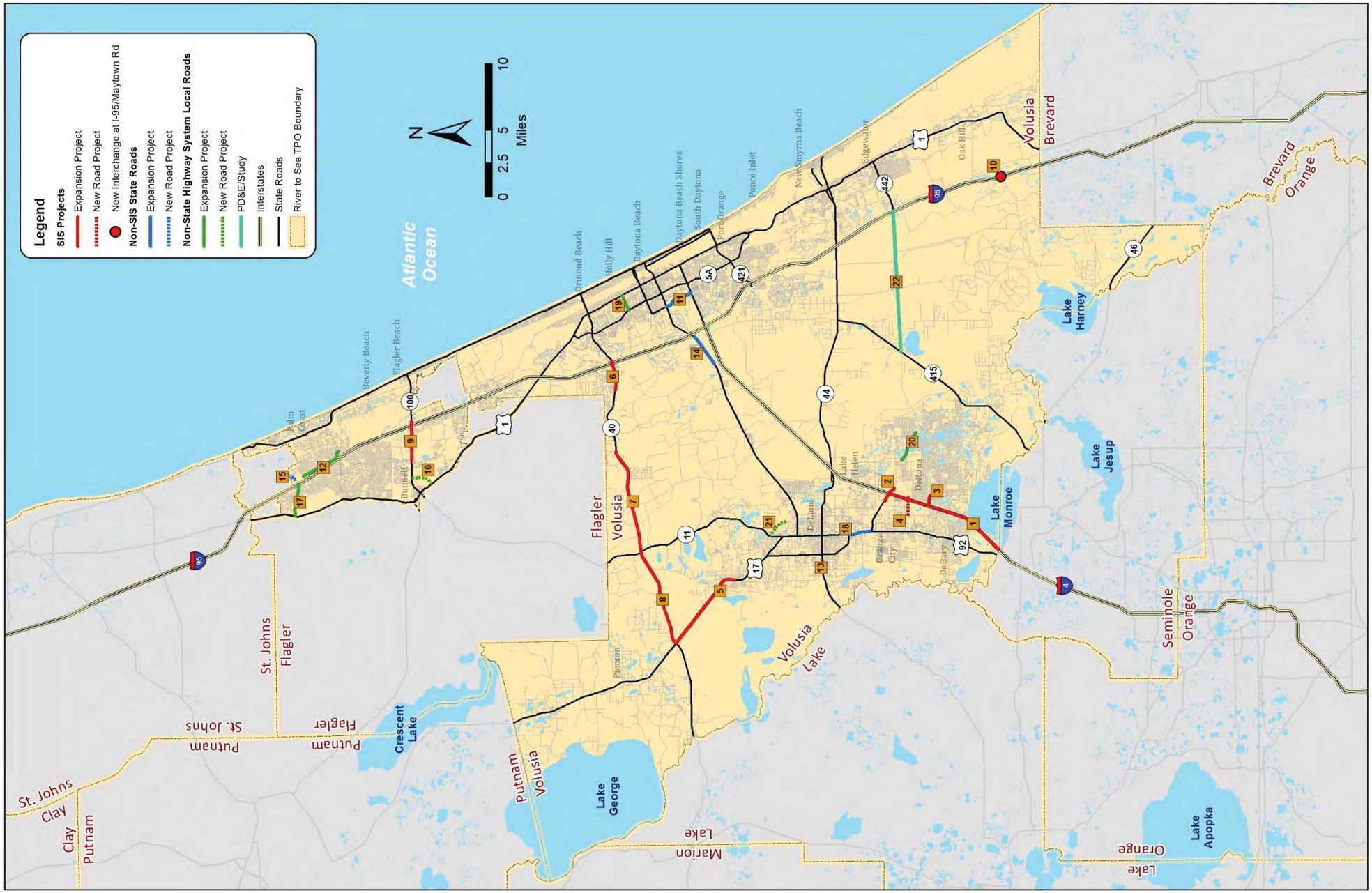


Figure 5 – Major Capacity Enhancing Projects

Table 30 – Local (Volusia County) Projects[1]

Map Number	Project	Limits	Capital Cost (in millions)
1	Tymber Creek Rd - widening to 4 lanes	Peruvian Ln to Airport Rd	$8.0
2	Tymber Creek Rd - extend as 2 lane road	South of SR 40 to LPGA Blvd	$15.5
3	Dunn Ave - widening to 4 lanes	Williamson Blvd to Clyde Morris Blvd	$15.0
4	Williamson Blvd - widening to 4 lanes	LPGA Blvd to Hand Ave	$13.5
5	Williamson Blvd - widening to 4 lanes	SR 400/Beville Rd to Summertree Rd	$30.6
6	Josephine St - widening to 4 lanes	Old Mission Rd to Tatum St	$4.5
7	Pioneer Trail - widening to 4 lanes	Airport Rd to I-95	$12.5
8	I-95 & Pioneer Trail Interchange	Williamson Blvd to Turnbull Bay Rd	$22.0
9	Park Ave - adding bi-directional turn lanes & paved shoulder	Old Mission Rd to Massey Ranch Rd	$3.9
10	W. Volusia Beltway (Kentucky Ave) - widening to 4 lanes and realign facility	SR 472 to Harley Strickland	$24.2
11	Doyle Rd - widening to 4 lanes	Providence Blvd to Saxon Blvd	$11.1
12	Westside Pkwy - extend road	French Ave to Rhode Island Ave	$7.8
13	Howland Blvd - widening to 4 lanes	Providence Blvd to Elkcam Blvd	$13.0
14	Rhode Island Extension with I-4 overpass - extend as 2 lane road	Veterans Memorial Pkwy to Normandy Blvd	$15.5
15	W. Volusia Beltway (Kepler Rd) - widening to 4 lanes	US 92 to Beresford Ave Extension	$21.1
16	W. Volusia Beltway (Dr. MLK Jr) - widening to 4 lanes	Taylor Rd to Orange Camp Rd	$6.2
17	Beresford Ave - extend road	Blue Lake Ave to SR 44	$10.8
18	Old New York Ave - safety & paved shoulders	SR 44 to DeLand SunRail Station	$4.0

[1] List provided by Volusia County staff

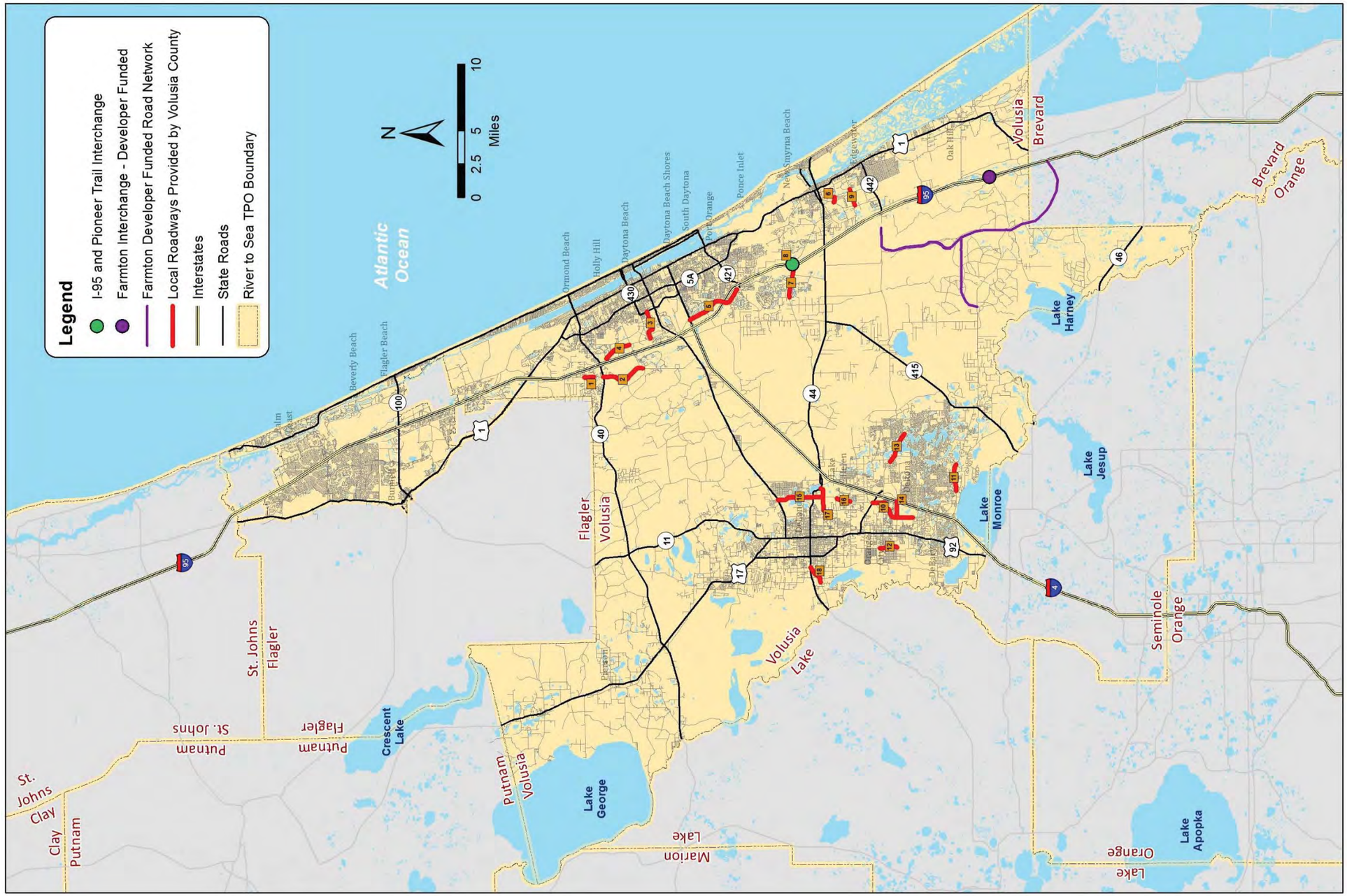


Figure 6 – Volusia County Local Road Projects

APPENDIX G: VESTED TRAFFIC INFORMATION

Orange City Concurrency Management System database

Roadway	Segment	2016 peak hour by VCTE*	Peak Hour Capacity	2016 ADT by VCTE	ADT Capacity	2020 Parc Hill	Sparkman Ridge 153 SFR (74 phase 1)	Target Outparcel	SWAC Phase IA Trips	WVRC-106 MF units	FL Hospital tower expansion	Store Right Self Storage	Center at Deltona	Blue Springs Ridge-148 SFR	*Total Vested Trips*	Lastest Peak Hour plus Vested trips	V/C with Vested trips	V/C without Vested Trips
STATE ROADS																		
I-4	Seminole to Dirksen		10,060	110,000	93,000													
I-4	Dirksen to Saxon	n/a	10,060	108,000	9,300	120	31		69	3				10	*233*			
I-4	Saxon to SR 472	7,468	10,060			50	0		57	3					*110*	7578	0.75	0.74
I-4	SR 472 to Orange Camp	5,690	10,060			50			46						*96*	5786	0.58	0.57
I-4	Orange Camp to SR 44	5,259	10,060			0									*0*	5259	0.52	0.52
US 17-92	SR 472 to New York	2,403	3,580	29,000	39,800				34						*34*			
US 17-92	new york to graves	2,396	3,580	29,500	39,800				23						*23*			
US 17-92	graves to Rhode island	2,459	3,580	31,000	39,800				23					37	*60*			
US 17-92	Rhode island to Enterprise	2,554	3,580	31,500	39,800				11					59	*70*			
US 17-92	enterprise to saxon	1,786	3,580	21,000	39,800									30	*30*			
US 17-92	saxon to DeBary Plantation	2,584	3,580	30,500	37,900										*0*			
SR 472	17/92- VMP	1,846	5,900	24,000	65,600				80						*80*			
SR 472	VMP to I-4	2,409	3,580	29,000	39,800				103				5	13	*121*			
SR 472	CR4101/MLK to I-4													13	*13*			
COUNTY ROADS																		
Graves	17/92 to leavitt	556	1,330	6,390	14,740				11						*11*			
Graves	leavitt to VMP	679	1,020	7,970	13,640				23						*23*			
Graves Ave	VMP to Kentucky Ave	1,644	1,620	19,180	17,900	75	9		46	3	15			27	*175*	1819	1.12	1.01
Graves Ave	Kentucky to Howland	1,294	1,620	15,310	17,900				92						*92*	1386	0.86	0.80
Enterprise	17/92 to harley	1,614	2,740	21,370	30,420				11					30	*41*			
Enterprise	Harley to Saxon	1,786	3,410	23,900	37,970			35	23					30	*88*			
Enterprise	Saxon to Highbanks	1,739	3,410	20,510	37,970				34					22	*56*			
Highbanks	17/92 to Enterprise													1	*1*			
Orange Camp	17/92 to Princeton													3	*3*			
W. French Ave	State park to city limits														*0*			
W. French Ave	City limits to 17-92			4,870	13,640										*0*			
Rhode Island	Westside to Sparkman	1,011	1,330	6,810	14,740		57							86	*143*			
Rhode Island	Sparkman to Carpenter	271	1,330	3,260	14,740		112							81	*193*			
Rhode Island	Carpenter to 17/92	559	1,330	7,340	14,740		112							81	*193*			
Rhode Island	VMP to Normandy	0		0	13,640										*0*			
Rhode Island	17/92 to VMP								69					44	*113*			
W. Holly	Twin Lakes to 17/92	173	987											59	*59*			
saxon	westside to 17/92	2,295	4,280	14,580	30,420										*0*			
saxon	17/92 to Enterprise	3,043	4,280	31,620	47,560				23						*23*			
saxon	Enterprise to VMP	3,001	3,410	40,360	47,560				34						*34*			
Saxon Blvd	VMP to FDOT Park n Ride	3,001	3,410	39,570	37,970	242			57	14					*313*	3314	0.97	0.88
Saxon Blvd	Park n Ride to I-4	3,222	3,410	39,790	37,970	237	37		57	14				7	*352*	3574	1.05	0.94
Saxon Blvd	I-4 to Finland													4	*4*			
Saxon Blvd	Finland to Normandy													3	*3*			
Kentucky	SR 472 to Graves	984	1,540	10,670	17,050				92						*92*			
VMP	Graves Ave to Rhode Island	1,339	1,620	16,430	17,900	98	3		103	4	24			37	*269*	1608	0.99	0.83
VMP	Rhode Island to Harley Strickland	1,625	1,540	20,170	17,050	469	22		92	4	30			7	*624*	2249	1.46	1.06
VMP	Harley to Saxon	965	3,410	13,150	37,970					15	25				*40*			

CITY ROADS

		2017 Peak Hour	Peak Hour Capacity	2017 ADT	ADT Capacity													
Harley Strickland	Enterprise to VMP	1,268	1,540	13,540	17,050			16		24	29				*69*			
Rhode Island	17/92 to VMP		1,230		13,640				69						*69*			
Leavitt	French to Graves														*0*			
Leavitt	Graves to Ohio														*0*			
Leavitt	Ohio to Rhode Island														*0*			
Wisconsin	17/92 to leavitt														*0*			
Sparkman	Blue Springs to Rhode Island													4	*4*			
W. Blue Springs	Sparkman to 17/92														*0*			

Orange City Area/Deltona/DeBary/Deland/Lake Helen

Roadway	Segment	2018 peak hour by VCTE*	Capacity	2020 Parc Hill	Huntington Downs REMOVED 39.21%	Sparkman Ridge OC	SWAC Phase 1A Trips	Victoria Park Ph 2 Remaining Trips per city 12/18	Victoria Park Ph 3 trips per city 12/18	Halifax Crossing s BPUD (14% Removed)	Deltona Wawa	Osteen Pet and Feed	Hawthorne Landing	Canterwood ALF	Fernanda Place	Integra Dunes Apts	Fl Hospital ER Site 2018	Liberty Station, Orange City 2019	Store Right Self Storage	Center at Deltona	The Crossings, Orange City 2020	Total Vested Trips	Lastest Peak Hour plus Vested trips	V/C with Vested trips	V/C without Vested Trips
I-4 Segments based on AADT V/C																									
I-4	*Seminole County to Dirksen*	*114,000*	*111,800*											*20*						*5*		25	*114025*	*1.02*	*1.02*
I-4	*Dirksen to Saxon*	*112,000*	*111,800*	*1140*	*122*	*285*	*655*	*1358*					*123*					*12*				3695	*115695*	1.03	1.00
I-4	*Saxon to SR 472*	*94,000*	*111,800*	*475*	*122*		*541*	*1852*			*313*					*21*						3324	*97324*	0.87	0.84
I-4	*SR 472 to Orange Camp*	*74,000*	*111,800*	*475*			*437*	*1216*														2128	*76128*	0.68	0.66
I-4	*Orange Camp to SR 44*	*79,000*	*111,800*					*788*														788	*79788*	0.71	0.71
I-4	Dirksen to Saxon		10060	120	13	30	69	25	50	66			13	2		21		10		10		429	429	0.04	0.00
I-4	Saxon to SR 472		10060	50	13	0	57	45	90	105	33						6			15		414	414	0.04	0.00
I-4	SR 472 to Orange Camp		10060	50	0		46	50	100	81							9			15		351	351	0.03	0.00
I-4	Orange Camp to SR 44	5705	10060	0				25	50											10		85	5790	0.58	0.57
Graves Ave	VMP to Kentucky Ave	1600	1620	75	0	13	46	4	10	155	10					18	14	33			57	435	2035	1.26	0.99
Graves Ave	Kentucky to Howland	1400	1620				92	4	10	490	28						22				39	685	2085	1.29	0.86
Saxon Blvd	VMP to FDOT Park n Ride	2660	3410	242			57	11	25	41								9				385	3045	0.89	0.78
Saxon Blvd	Park n Ride to I-4	3260	3410	237	6	36	57	11	25	40								9				421	3681	1.08	0.96
Saxon Blvd	I-4 to Normandy Blvd	3140	3410	68	4	21	69	7	16	52								2				239	3379	0.99	0.92
Highbanks Rd	Westside Connector to US 17-92		2740										2									2	2	0.00	0.00
Dirksen Drive	US 17/92 to Sunrise Blvd	940	2060										28									28	968	0.47	0.46
Dirksen Drive	Sunrise Blvd to WB I-4 Ramps	1400	2740	1			69						30									100	1500	0.55	0.51
DeBary Ave	WB I-4 Ramps to EB I-4 ramps	1730	2740										22									22	1752	0.64	0.63
DeBary Ave	I-4 to Deltona Blvd	1910	2740										15	9								24	1934	0.71	0.70
DeBary Ave	Deltona Blvd to Enterprise St	1630	2740										15									15	1645	0.60	0.59
DeBary Ave	Enterprise St to Main St	1890	2740										22									22	1912	0.70	0.69
DeBary Ave	Main St to Providence Blvd	1880	2740	1			69						30									100	1980	0.72	0.69
Doyle Road	Providence Blvd to Garfield	1340	2530										28		27							55	1395	0.55	0.53
Doyle Road	Garfield to Saxon Blvd	920	2530																			0	920	0.36	0.36
Doyle Road	Saxon Blvd to Courtland	780	2530																			0	780	0.31	0.31
Doyle Road	Courtland Blvd to SR 415	580	2530																			0	580		
Howland Blvd	I-4 to Wolf Pack Run	2900	3410		2		149	48		354					27		27	10	7	35	114	773	3673	1.08	0.85
Howland Blvd	Wolf Pack Run to Catalina Blvd	2530	3410				137			332					28		50		15	69	51	682	3212	0.94	0.74
Howland Blvd	Catalina Blvd to Providence Blvd	1830	3410		2		137			198					30		32		7	35	35	476	2306	0.68	0.54
Howland Blvd	Providence Blvd to Elkcam	1420	1230		2			0		118		17			46		18		5	25	23	254	1674	1.36	1.15
Providence Blvd	Howland Blvd to Elkcam Blvd	850	1270							74					1		5		2	10		92	942	0.74	0.67
Providence Blvd	Elkcam Blvd to Fort Smith Blvd	1160	1020					0		70					1		5					76	1236	1.21	1.14
Providence Blvd	Fort Smith Blvd to Tivoli Drive	1430	2740																			0	1430	0.52	0.52
Providence Blvd	Tivoli Drive to Saxon Blvd	670	1330																			0	670	0.50	0.50
Providence Blvd	Saxon Blvd to Normandy	680	1020																			0	680	0.67	0.67
Providence Blvd	Normandy to Anderson Drive	1060	1020																			0	1060	1.04	1.04
Providence Blvd	Anderson Drive to Doyle Rd	1160	1020																			0	1160	1.14	1.14
Main Street	I-4 to Lakeview Drive	780	950	0				3	7								1	2				13	793	0.83	0.82
Orange Camp Rd	17-92 to Princeton	1160	1270	0	54		23	27	63							5		3			4	179	1339	1.05	0.91
Orange Camp Rd	Princeton to Blue Lake Ave	1060	1540	0	39		23	27	63									3			3	158	1218	0.79	0.69
Orange Camp Rd	Blue Lake Ave to MLK	1270	1540	0	33		23	38	89								1	3			11	198	1468	0.95	0.82
Orange Camp Rd	MLK to I-4	1390	1540				46	56	129							25	2	3				261	1651	1.07	0.90
Kepler Road	US 92 to Minnesota Ave	1200	1540	0																		0	1200	0.78	0.78
Kepler Road	Minnesota Ave to SR 44	1660	1540	0				4	10													14	1674	1.09	1.08
MLK	SR 44 to Beresford Rd ext	950	1540					6	13													19	969	0.63	0.62
MLK	Beresford to Taylor Rd	890	1540					9	20													29	919	0.60	0.58
MLK	Taylor to Orange Camp	1150	1540					28	65								1					94	1244	0.81	0.75
MLK	Orange Camp to Cassadaga Rd	1010	1540	0			103	40	92		3					65	4	14			27	348	1358	0.88	0.66
MLK	Cassadaga to SR 472	1080	1540	0			126	21	48		4						5	16			36	256	1336	0.87	0.70
Kentucky	SR 472 to Graves	950	1540															67			104	171			0.62
VMP	Graves Ave to Rhode Island	1120	1620	98	2	0	103	4	11		6					14		48				286	1406	0.87	0.69
VMP	Rhode Island to Harley Strickland	1570	1540	469	0	3	92	1	3		3						3	35			25	634	2204	1.43	1.02
SR 44	Blue Lake Ave to Kepler Rd	1464	1712					8	18													26	1490	0.87	0.86
SR 44	Kepler Rd to Summit Ave	1892	1712					6	14													20	1912	1.12	1.11
US 17-92	Valencia to Dirksen	2275	3580																			0	2275	0.64	0.64
US 17-92	Dirksen to Ft Florida	2681	3580																			0	2681	0.75	0.75
US 17-92	Ft Florida to Barwick	3122	3580																			0	3122	0.87	0.87
US 17-92	Barwick Rd to Seminole County	3122	3580																			0	3122	0.87	0.87
US 17-92	Beresford Ave to Euclid Ave	1693	1480					5	12													17	1710	1.16	1.14
US 17-92	Euclid Ave to SR 44	1003	1410					4	9													13	1016	0.72	0.71
US 17-92	SR 44 to Plymouth Ave	1913	1410					6	14													20	1933	1.37	1.36
US 17-92	Taylor Rd to SR 427																				61	61			
Ft Florida Rd	Highbanks to Ft Florida	230	1020																			0	230	0.23	0.23
Ft Florida Rd	Ft Florida to Barwick	305	1020																			0	305	0.30	0.30
Ft Florida Rd	Barwick Rd to US 17-92	305	1020																			0	305	0.30	0.30
Blue Lake Ave	Orange Camp to Taylor	470	1540					28	65													93	563	0.37	0.31
Blue Lake Ave	Taylor to Beresford	770	1230					38	87													125	895	0.73	0.63
Blue Lake Ave	Beresford to Voorhis	520	1020					20	46													66	586	0.57	0.51
Blue Lake Ave	Voorhis to SR 44	440	1020					19	44													63	503	0.49	0.43
Taylor Rd	Stratford to Blue Lake	580	1020					23	54													77	657	0.64	0.57
Taylor Rd	Blue Lake to MLK	620	1230					33	76													109	729	0.59	0.50
Plymouth Ave	Stone Street to Clara Ave																					0	0	#DIV/0!	#DIV/0!
Plymouth Ave	Clara Ave to US 17-92																					0	0	#DIV/0!	#DIV/0!
Lake Helen Osteen	Catalina Blvd to Haulover Blvd	1080	1020																			0	1080	1.06	1.06
Lake Helen Osteen	Haulover Blvd to Elkcam Blvd	850	1020																			0	850	0.83	0.83
Catalina Blvd	Howland Blvd to Sixma Road	1002	960																		9	9	1011	1.05	1.04
Catalina Blvd	Sixma Rd to Lake Helen Osteen	856	960																		7	7	863	0.90	0.89
Normandy Blvd	Graves Ave to Rhode Island	787	1150																			0	787	0.68	0.68
Normandy Blvd	Rhode Island to Elkcam Blvd	636	2630																			0	636	0.24	0.24
Normandy Blvd	Elkcam Blvd to Saxon Blvd	599	2630																			0	599	0.23	0.23
Normandy Blvd	Saxon Blvd to Deltona Blvd	936	960																			0	936	0.98	0.98

APPENDIX H: INTERSECTION VOLUME DEVELOPMENT WORKSHEETS

INTERSECTION VOLUME DEVELOPMENT
Dr. Martin Luther King Jr Boulevard @ Orange Camp Road
AM Peak Hour

Case	Dr. Martin Luther King Jr Boulevard Northbound			Dr. Martin Luther King Jr Boulevard Southbound			Orange Camp Road Eastbound			Orange Camp Road Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	110	297	35	242	183	39	29	379	58	29	243	145
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	116	312	37	254	192	41	30	398	61	30	255	152
Growth Factor	1.03	1.03	1.03	1.01	1.01	1.01	1.09	1.09	1.09	1.09	1.09	1.09
2020 Peak Season Volumes	120	323	38	257	194	41	33	432	66	33	278	166
Growth Factor	1.07	1.07	1.07	1.02	1.02	1.02	1.18	1.18	1.18	1.19	1.19	1.19
2022 Peak Season Volumes	128	346	41	262	198	42	39	509	78	39	332	198
Vested Trips	48	122	16	25	37	4	6	81	30	19	76	46
2022 Background Traffic	176	468	57	287	235	46	45	590	108	58	408	244
Project Assignment	2.0%	2.0%	1.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	2.0%	0.0%	0.0%
	OUT	OUT	OUT	--	IN	--	--	--	IN	IN	--	--
Project Traffic (Non-Truck)	3	3	2	0	8	0	0	0	8	8	0	0
Total Build-Out Volumes	179	471	59	287	243	46	45	590	116	66	408	244

INTERSECTION VOLUME DEVELOPMENT
N. Kentucky Avenue @ SR 472
AM Peak Hour

Case	N. Kentucky Avenue Northbound			Dr. Martin Luther King Jr Boulevard Southbound			SR 472 Eastbound			SR 472 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	129	133	46	135	166	30	24	841	71	87	964	227
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	135	140	48	142	174	32	25	883	75	91	1,012	238
Growth Factor	1.03	1.03	1.03	1.05	1.05	1.05	1.01	1.01	1.01	1.04	1.04	1.04
2020 Peak Season Volumes	140	145	50	148	182	33	25	892	76	95	1,057	249
Growth Factor	1.07	1.07	1.07	1.09	1.09	1.09	1.02	1.02	1.02	1.09	1.09	1.09
2022 Peak Season Volumes	150	155	53	162	199	36	26	910	78	104	1,153	272
Vested Trips	40	34	11	52	120	12	1	36	88	14	46	11
2022 Background Traffic	190	189	64	214	319	48	27	946	166	118	1,199	283
Truck Assignment	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	--	OUT	--	--	--	--	--	--	--	--	--
Project Traffic (Trucks)	0	0	6	0	0	0	0	0	0	0	0	0
Project Assignment	10.0%	6.0%	0.0%	1.0%	6.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%
	OUT	OUT	--	IN	IN	--	--	--	IN	--	--	--
Project Traffic (Non-Truck)	16	9	0	4	24	0	0	0	40	0	0	0
Total Build-Out Volumes	206	198	70	218	343	48	27	946	206	118	1,199	283

INTERSECTION VOLUME DEVELOPMENT
I-4 WB Ramp @ SR 472
AM Peak Hour

Case	I-4 WB Ramp Northbound			I-4 WB Ramp Southbound			SR 472 Eastbound			SR 472 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	0	0	0	119	0	122	0	340	713	781	1,106	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	0	0	125	0	128	0	357	749	820	1,161	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	0	0	0	129	0	132	0	373	782	857	1,213	0
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.09	1.09	1.09	1.09	1.09	1.09
2022 Peak Season Volumes	0	0	0	137	0	140	0	407	853	935	1,324	0
Vested Trips	0	0	0	34	0	18	0	22	43	141	188	0
2022 Background Traffic	0	0	0	171	0	158	0	429	896	1,076	1,512	0
Truck Assignment	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%
	--	--	--	IN	--	--	--	--	OUT	--	--	--
Project Traffic (Trucks)	0	0	0	21	0	0	0	0	6	0	0	0
Project Assignment	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	1.0%	0.0%
	--	--	--	IN	--	--	--	IN	--	--	OUT	--
Project Traffic (Non-Truck)	0	0	0	40	0	0	0	4	0	0	2	0
Total Build-Out Volumes	0	0	0	232	0	158	0	433	902	1,076	1,514	0

INTERSECTION VOLUME DEVELOPMENT
I-4 EB Ramp @ SR 472
AM Peak Hour

Case	I-4 EB Ramp Northbound			I-4 EB Ramp Southbound			SR 472 Eastbound			SR 472 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	545	0	148	0	0	0	0	336	113	0	1,880	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	572	0	155	0	0	0	0	353	119	0	1,974	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	578	0	157	0	0	0	0	369	124	0	2,062	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.09	1.09	1.09	1.09	1.09	1.09
2022 Peak Season Volumes	590	0	160	0	0	0	0	403	135	0	2,250	0
Vested Trips	28	0	55	0	0	0	0	71	16	0	399	0
2022 Background Traffic	618	0	215	0	0	0	0	474	151	0	2,649	0
Truck Assignment	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	50.0%	0.0%
	--	--	IN	--	--	--	--	IN	--	--	OUT	--
Project Traffic (Trucks)	0	0	20	0	0	0	0	21	0	0	5	0
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.0%	0.0%	0.0%	1.0%	10.0%
	--	--	--	--	--	--	--	IN	--	--	OUT	OUT
Project Traffic (Non-Truck)	0	0	0	0	0	0	0	44	0	0	2	16
Total Build-Out Volumes	618	0	235	0	0	0	0	539	151	0	2,656	16

INTERSECTION VOLUME DEVELOPMENT
US 17/92 @ Graves Avenue
AM Peak Hour

Case	US 17/92 Northbound			US 17/92 Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/19/19 Observed Volumes	6	729	56	60	953	8	21	27	30	107	29	88
Peak Season Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2019 Peak Season Volumes	6	773	59	64	1,010	8	22	29	32	113	31	93
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.06	1.06	1.06
2020 Peak Season Volumes	6	781	60	65	1,020	8	22	29	32	119	33	98
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.12	1.12	1.12
2022 Peak Season Volumes	6	797	61	66	1,041	8	22	30	33	133	37	109
Vested Trips	0	28	2	1	11	0	4	15	5	3	3	2
2022 Background Traffic	6	825	63	67	1,052	8	26	45	38	136	40	111
Project Assignment	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
	--	--	IN	--	--	--	--	--	--	OUT	--	--
Project Traffic (Non-Truck)	0	0	4	0	0	0	0	0	0	2	0	0
Total Build-Out Volumes	6	825	67	67	1,052	8	26	45	38	138	40	111

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Graves Avenue
AM Peak Hour

Case	Veterans Memorial Parkway Northbound			-- Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	28	0	199	0	0	0	0	163	31	494	218	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	29	0	209	0	0	0	0	171	33	519	229	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.03	1.03	1.03
2020 Peak Season Volumes	29	0	211	0	0	0	0	173	33	534	235	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.06	1.06	1.06
2022 Peak Season Volumes	30	0	215	0	0	0	0	176	34	564	248	0
Vested Trips	28	0	286	0	0	0	0	38	2	260	113	0
2022 Background Traffic	58	0	501	0	0	0	0	214	36	824	361	0
Project Assignment	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	5.0%	0.0%
	--	--	IN	--	--	--	--	IN	--	OUT	OUT	--
Project Traffic (Non-Truck)	0	0	8	0	0	0	0	20	0	3	8	0
Total Build-Out Volumes	58	0	509	0	0	0	0	234	36	827	369	0

INTERSECTION VOLUME DEVELOPMENT
N. Kentucky Avenue @ Graves Avenue
AM Peak Hour

Case	N. Kentucky Avenue Northbound			N. Kentucky Avenue Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	16	11	5	65	6	286	117	226	5	7	430	158
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	17	12	5	68	6	300	123	237	5	7	452	166
Growth Factor	1.01	1.01	1.01	1.03	1.03	1.03	1.03	1.03	1.03	1.04	1.04	1.04
2020 Peak Season Volumes	17	12	5	70	6	310	126	244	5	7	471	173
Growth Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.06	1.06	1.06	1.09	1.09	1.09
2022 Peak Season Volumes	17	12	5	75	6	332	133	258	5	8	512	188
Vested Trips	0	0	0	159	1	37	109	323	5	5	308	142
2022 Background Traffic	17	12	5	234	7	369	242	581	10	13	820	330
Truck Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%
	--	--	--	--	--	--	--	--	--	--	--	OUT
Project Traffic (Trucks)	0	0	0	0	0	0	0	0	0	0	0	6
Project Assignment	0.0%	0.0%	2.0%	16.0%	0.0%	0.0%	0.0%	7.0%	0.0%	2.0%	7.0%	16.0%
	--	--	IN	IN	--	--	--	IN	--	OUT	OUT	OUT
Project Traffic (Non-Truck)	0	0	8	65	0	0	0	28	0	3	11	25
Total Build-Out Volumes	17	12	13	299	7	369	242	609	10	16	831	361

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Graves Avenue
AM Peak Hour

Case	Normandy Boulevard Northbound			-- Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	242	0	199	0	0	0	0	216	112	69	321	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	254	0	209	0	0	0	0	227	118	72	337	0
Growth Factor	1.12	1.12	1.12	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	284	0	233	0	0	0	0	237	123	75	351	0
Growth Factor	1.25	1.25	1.25	1.02	1.02	1.02	1.09	1.09	1.09	1.09	1.09	1.09
2022 Peak Season Volumes	354	0	291	0	0	0	0	258	134	82	382	0
Vested Trips	69	0	62	0	0	0	0	256	406	315	320	0
2022 Background Traffic	423	0	353	0	0	0	0	514	540	397	702	0
Truck Assignment	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
	OUT	--	OUT	--	--	--	--	--	--	IN	--	--
Project Traffic (Trucks)	6	0	5	0	0	0	0	0	0	41	0	0
Project Assignment	25.0%	0.0%	27.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	27.0%	0.0%	0.0%
	OUT	--	OUT	--	--	--	--	--	IN	IN	--	--
Project Traffic (Non-Truck)	39	0	42	0	0	0	0	0	101	109	0	0
Total Build-Out Volumes	468	0	400	0	0	0	0	514	641	547	702	0

INTERSECTION VOLUME DEVELOPMENT
Howland Boulevard @ Graves Avenue
AM Peak Hour

Case	Howland Boulevard Northbound			SR 472 Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	301	1,470	10	44	393	35	235	27	160	18	30	115
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	316	1,544	11	46	413	37	247	28	168	19	32	121
Growth Factor	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04	1.01	1.01	1.01
2020 Peak Season Volumes	319	1,559	11	48	431	39	258	29	175	19	32	122
Growth Factor	1.02	1.02	1.02	1.09	1.09	1.09	1.09	1.09	1.09	1.02	1.02	1.02
2022 Peak Season Volumes	325	1,590	11	52	470	43	281	32	190	19	33	124
Vested Trips	168	157	191	208	158	91	140	211	138	190	205	190
2022 Background Traffic	493	1,747	202	260	628	134	421	243	328	209	238	314
Truck Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
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Project Traffic (Trucks)	0	0	0	0	0	41	5	0	0	0	0	0
Project Assignment	14.0%	0.0%	0.0%	0.0%	0.0%	11.0%	11.0%	2.0%	14.0%	0.0%	2.0%	0.0%
	IN	--	--	--	--	IN	OUT	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	57	0	0	0	0	44	17	3	22	0	8	0
Total Build-Out Volumes	550	1,747	202	260	628	219	443	246	350	209	246	314

INTERSECTION VOLUME DEVELOPMENT
Catalina Boulevard @ Howland Boulevard
AM Peak Hour

Case	Catalina Boulevard Northbound			Catalina Boulevard Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	98	22	12	37	33	505	98	351	18	25	969	9
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	103	23	13	39	35	530	103	369	19	26	1,017	9
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.03	1.03	1.03	1.01	1.01	1.01
2020 Peak Season Volumes	104	23	13	39	35	535	106	379	20	26	1,027	9
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.06	1.06	1.06	1.02	1.02	1.02
2022 Peak Season Volumes	106	23	13	40	36	546	112	401	21	27	1,048	9
Vested Trips	18	0	0	0	0	48	80	264	18	6	290	2
2022 Background Traffic	124	23	13	40	36	594	192	665	39	33	1,338	11
Project Assignment	2.0%	0.0%	0.0%	0.0%	0.0%	4.0%	4.0%	6.0%	2.0%	0.0%	6.0%	0.0%
	IN	--	--	--	--	IN	OUT	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	8	0	0	0	0	16	6	9	3	0	24	0
Total Build-Out Volumes	132	23	13	40	36	610	198	674	42	33	1,362	11

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INTERSECTION VOLUME DEVELOPMENT
Lake Helen-Osteen Road @ Catalina Boulevard
AM Peak Hour

Case	Lake Helen-Osteen Road Northbound			Lake Helen-Osteen Road Southbound			Catalina Boulevard Eastbound			-- Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	367	252	0	0	78	150	32	0	69	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	385	265	0	0	82	158	34	0	72	0	0	0
Growth Factor	1.06	1.06	1.06	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	410	282	0	0	83	160	34	0	73	0	0	0
Growth Factor	1.13	1.13	1.13	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	464	319	0	0	85	163	35	0	74	0	0	0
Vested Trips	28	0	0	0	0	10	2	0	7	0	0	0
2022 Background Traffic	492	319	0	0	85	173	37	0	81	0	0	0
Project Assignment	3.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	0.0%	3.0%	0.0%	0.0%	0.0%
	IN	--	--	--	--	IN	OUT	--	OUT	--	--	--
Project Traffic (Non-Truck)	12	0	0	0	0	4	2	0	5	0	0	0
Total Build-Out Volumes	504	319	0	0	85	177	39	0	86	0	0	0

INTERSECTION VOLUME DEVELOPMENT
Providence Boulevard @ Howland Boulevard
AM Peak Hour

Case	Providence Boulevard Northbound			Providence Boulevard Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/13/19 Observed Volumes	217	0	18	1	0	2	0	283	178	26	673	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	228	0	19	1	0	2	0	297	187	27	707	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04
2020 Peak Season Volumes	230	0	19	1	0	2	0	300	189	28	738	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.09	1.09	1.09
2022 Peak Season Volumes	235	0	19	1	0	2	0	306	193	30	803	0
Vested Trips	40	0	3	0	0	0	0	158	90	5	183	0
2022 Background Traffic	275	0	22	1	0	2	0	464	283	35	986	0
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	6.0%	0.0%
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Project Traffic (Non-Truck)	0	0	0	0	0	0	0	9	0	0	24	0
Total Build-Out Volumes	275	0	22	1	0	2	0	473	283	35	1,010	0

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Rhode Island Avenue
AM Peak Hour

Case	Veterans Memorial Parkway Northbound			Veterans Memorial Parkway Southbound			Rhode Island Avenue Eastbound			-- Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	163	162	0	0	465	198	91	0	149	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	171	170	0	0	488	208	96	0	156	0	0	0
Growth Factor	1.05	1.05	1.05	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	180	179	0	0	493	210	97	0	158	0	0	0
Growth Factor	1.11	1.11	1.11	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	200	199	0	0	503	214	99	0	161	0	0	0
Vested Trips	198	215	0	0	166	82	78	0	35	0	0	0
2022 Background Traffic	398	414	0	0	669	296	177	0	196	0	0	0
Project Assignment	0.0%	1.0%	0.0%	0.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	IN	--	--	OUT	OUT	IN	--	--	--	--	--
Project Traffic (Non-Truck)	0	4	0	0	2	2	4	0	0	0	0	0
Total Build-Out Volumes	398	418	0	0	671	298	181	0	196	0	0	0

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Elkcam Boulevard
AM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			Elkcam Boulevard Eastbound			Elkcam Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	2	177	88	60	133	0	0	0	0	285	0	187
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	2	186	92	63	140	0	0	0	0	299	0	196
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.08	1.08	1.08
2020 Peak Season Volumes	2	188	93	64	141	0	0	0	0	324	0	213
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.18	1.18	1.18
2022 Peak Season Volumes	2	192	95	65	144	0	0	0	0	381	0	250
Vested Trips	0	293	0	21	72	0	0	0	0	0	0	85
2022 Background Traffic	2	485	95	86	216	0	0	0	0	381	0	335
Project Assignment	0.0%	36.0%	0.0%	9.0%	36.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%
	--	IN	--	OUT	OUT	--	--	--	--	--	--	IN
Project Traffic (Non-Truck)	0	145	0	14	56	0	0	0	0	0	0	36
Total Build-Out Volumes	2	630	95	100	272	0	0	0	0	381	0	371

INTERSECTION VOLUME DEVELOPMENT
Fort Smith Boulevard @ Elkcam Boulevard
AM Peak Hour

Case	Fort Smith Boulevard Northbound			-- Southbound			Elkcam Boulevard Eastbound			Elkcam Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	118	0	5	0	0	0	0	92	51	7	230	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	124	0	5	0	0	0	0	97	54	7	242	0
Growth Factor	1.01	1.01	1.01	1.00	1.00	1.00	1.08	1.08	1.08	1.05	1.05	1.05
2020 Peak Season Volumes	125	0	5	0	0	0	0	105	59	7	254	0
Growth Factor	1.02	1.02	1.02	1.00	1.00	1.00	1.18	1.18	1.18	1.10	1.10	1.10
2022 Peak Season Volumes	128	0	5	0	0	0	0	123	69	8	280	0
Vested Trips	38	0	0	0	0	0	0	7	9	0	28	0
2022 Background Traffic	166	0	5	0	0	0	0	130	78	8	308	0
Project Assignment	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	4.0%	0.0%	3.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	16	0	0	0	0	0	0	5	6	0	12	0
Total Build-Out Volumes	182	0	5	0	0	0	0	135	84	8	320	0

INTERSECTION VOLUME DEVELOPMENT
Providence Boulevard @ Elkcam Boulevard
AM Peak Hour

Case	Providence Boulevard Northbound			Providence Boulevard Southbound			Elkcam Boulevard Eastbound			Elkcam Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	18	241	89	36	171	26	41	72	18	117	143	69
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	19	253	93	38	180	27	43	76	19	123	150	72
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.05	1.05	1.05	1.01	1.01	1.01
2020 Peak Season Volumes	19	256	94	38	182	27	45	80	20	124	152	73
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.10	1.10	1.10	1.02	1.02	1.02
2022 Peak Season Volumes	19	261	96	39	186	28	50	88	22	126	155	74
Vested Trips	12	26	10	7	32	15	2	0	2	0	0	0
2022 Background Traffic	31	287	106	46	218	43	52	88	24	126	155	74
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	0.0%	1.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	4	0	0	0	0	0	0	2	2	0	4	0
Total Build-Out Volumes	35	287	106	46	218	43	52	90	26	126	159	74

INTERSECTION VOLUME DEVELOPMENT
Providence Boulevard @ Fort Smith Boulevard
AM Peak Hour

Case	Providence Boulevard Northbound			Providence Boulevard Southbound			Fort Smith Boulevard Eastbound			Fort Smith Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	18	171	79	34	265	5	8	52	18	299	78	89
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	19	180	83	36	278	5	8	55	19	314	82	93
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.12	1.12	1.12
2020 Peak Season Volumes	19	182	84	36	281	5	8	56	19	351	92	104
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.25	1.25	1.25
2022 Peak Season Volumes	19	186	86	37	287	5	8	57	19	438	115	130
Vested Trips	10	0	0	4	33	1	0	7	2	0	28	0
2022 Background Traffic	29	186	86	41	320	6	8	64	21	438	143	130
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	1.0%	0.0%	3.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	4	0	0	0	0	0	0	5	2	0	12	0
Total Build-Out Volumes	33	186	86	41	320	6	8	69	23	438	155	130

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Harley Strickland Boulevard
AM Peak Hour

Case	Veterans Memorial Parkway Northbound			Veterans Memorial Parkway Southbound			Harley Strickland Boulevard Eastbound			Harley Strickland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	119	233	4	51	322	175	68	20	68	34	29	35
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	125	245	4	54	338	184	71	21	71	36	30	37
Growth Factor	1.01	1.01	1.01	1.05	1.05	1.05	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	126	247	4	57	356	194	72	21	72	36	30	37
Growth Factor	1.02	1.02	1.02	1.11	1.11	1.11	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	129	252	4	63	395	215	73	21	73	36	30	37
Vested Trips	12	13	0	37	232	126	15	4	33	0	0	0
2022 Background Traffic	141	265	4	100	627	341	88	25	106	36	30	37
Project Assignment	1.0%	1.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	OUT	OUT	--	--	IN	--	--	--	IN	--	--	--
Project Traffic (Non-Truck)	2	2	0	0	4	0	0	0	4	0	0	0
Total Build-Out Volumes	143	267	4	100	631	341	88	25	110	36	30	37

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Saxon Boulevard
AM Peak Hour

Case	Veterans Memorial Parkway Northbound			Veterans Memorial Parkway Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	46	49	63	241	41	127	115	542	11	106	999	369
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	48	51	66	253	43	133	121	569	12	111	1,049	387
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	48	52	67	256	43	134	122	575	12	112	1,059	391
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	49	53	68	261	44	137	124	587	12	114	1,080	399
Vested Trips	0	0	0	30	2	6	3	70	0	16	169	62
2022 Background Traffic	49	53	68	291	46	143	127	657	12	130	1,249	461
Project Assignment	0.0%	0.0%	1.0%	2.0%	0.0%	0.0%	0.0%	4.0%	0.0%	1.0%	4.0%	2.0%
	--	--	IN	IN	--	--	--	IN	--	OUT	OUT	OUT
Project Traffic (Non-Truck)	0	0	4	8	0	0	0	16	0	2	6	3
Total Build-Out Volumes	49	53	72	299	46	143	127	673	12	132	1,255	464

INTERSECTION VOLUME DEVELOPMENT
FDOT Park & Ride @ Saxon Boulevard
AM Peak Hour

Case	FDOT Park & Ride Northbound			FDOT Park & Ride Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/19/19 Observed Volumes	45	1	76	9	4	8	15	863	40	77	1,507	20
Peak Season Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2019 Peak Season Volumes	48	1	81	10	4	8	16	915	42	82	1,597	21
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04	1.01	1.01	1.01
2020 Peak Season Volumes	48	1	82	10	4	8	17	951	44	83	1,613	21
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.02	1.02	1.02
2022 Peak Season Volumes	49	1	84	10	4	8	18	1,028	48	85	1,645	21
Vested Trips	0	0	0	0	0	0	4	290	10	13	270	3
2022 Background Traffic	49	1	84	10	4	8	22	1,318	58	98	1,915	24
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	0.0%
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Project Traffic (Non-Truck)	0	0	0	0	0	0	0	28	0	0	11	0
Total Build-Out Volumes	49	1	84	10	4	8	22	1,346	58	98	1,926	24

INTERSECTION VOLUME DEVELOPMENT
I-4 WB Ramp @ Saxon Boulevard
AM Peak Hour

Case	I-4 WB Ramp Northbound			I-4 WB Ramp Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	0	0	286	0	0	454	0	555	270	0	1,567	516
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	0	300	0	0	477	0	583	284	0	1,645	542
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	0	0	303	0	0	482	0	606	295	0	1,710	563
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08	1.08
2022 Peak Season Volumes	0	0	309	0	0	492	0	655	319	0	1,848	608
Vested Trips	0	0	24	0	0	13	0	271	95	0	129	41
2022 Background Traffic	0	0	333	0	0	505	0	926	414	0	1,977	649
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	9.0%
	--	--	--	--	--	--	--	IN	--	--	OUT	OUT
Project Traffic (Non-Truck)	0	0	0	0	0	0	0	28	0	0	11	14
Total Build-Out Volumes	0	0	333	0	0	505	0	954	414	0	1,988	663

INTERSECTION VOLUME DEVELOPMENT
I-4 EB Ramp @ Saxon Boulevard
AM Peak Hour

Case	I-4 EB Ramp Northbound			I-4 EB Ramp Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	0	0	178	0	0	316	271	589	0	0	1,681	333
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	0	187	0	0	332	285	618	0	0	1,765	350
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	0	0	192	0	0	341	288	624	0	0	1,783	354
Growth Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	0	0	203	0	0	360	294	637	0	0	1,819	361
Vested Trips	0	0	35	0	0	14	93	296	0	0	125	25
2022 Background Traffic	0	0	238	0	0	374	387	933	0	0	1,944	386
Project Assignment	0.0%	0.0%	9.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	16.0%	0.0%
	--	--	IN	--	--	--	--	IN	--	--	OUT	--
Project Traffic (Non-Truck)	0	0	36	0	0	0	0	28	0	0	25	0
Total Build-Out Volumes	0	0	274	0	0	374	387	961	0	0	1,969	386

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Saxon Boulevard
AM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	203	101	17	48	123	411	100	344	86	28	1,108	43
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	213	106	18	50	129	432	105	361	90	29	1,163	45
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	215	107	18	51	130	436	106	365	91	29	1,175	45
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	219	109	18	52	133	445	108	372	93	30	1,199	46
Vested Trips	0	56	0	23	14	27	136	79	20	0	0	94
2022 Background Traffic	219	165	18	75	147	472	244	451	113	30	1,199	140
Project Assignment	0.0%	9.0%	0.0%	8.0%	9.0%	16.0%	16.0%	0.0%	0.0%	0.0%	0.0%	8.0%
	--	IN	--	OUT	OUT	OUT	IN	--	--	--	--	IN
Project Traffic (Non-Truck)	0	36	0	12	14	25	65	0	0	0	0	32
Total Build-Out Volumes	219	201	18	87	161	497	309	451	113	30	1,199	172

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INTERSECTION VOLUME DEVELOPMENT
Tivoli Drive @ Saxon Boulevard
AM Peak Hour

Case	Tivoli Drive Northbound			Tivoli Drive Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/13/19 Observed Volumes	53	48	9	8	92	308	133	195	111	6	441	3
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	56	50	9	8	97	323	140	205	117	6	463	3
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	57	51	9	8	98	326	141	207	118	6	468	3
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	58	52	9	8	100	333	144	211	120	6	477	3
Vested Trips	10	0	0	0	0	0	0	9	2	0	38	0
2022 Background Traffic	68	52	9	8	100	333	144	220	122	6	515	3
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	1.0%	0.0%	5.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	4	0	0	0	0	0	0	8	2	0	20	0
Total Build-Out Volumes	72	52	9	8	100	333	144	228	124	6	535	3

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INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Deltona Boulevard
AM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			Deltona Boulevard Eastbound			N/A Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	258	136	0	0	54	202	128	0	67	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	271	143	0	0	57	212	134	0	70	0	0	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	274	144	0	0	58	214	135	0	71	0	0	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	280	147	0	0	59	218	138	0	72	0	0	0
Vested Trips	0	18	0	0	5	7	28	0	0	0	0	0
2022 Background Traffic	280	165	0	0	64	225	166	0	72	0	0	0
Project Assignment	0.0%	2.0%	0.0%	0.0%	2.0%	6.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	IN	--	--	OUT	OUT	IN	--	--	--	--	--
Project Traffic (Non-Truck)	0	8	0	0	3	9	24	0	0	0	0	0
Total Build-Out Volumes	280	173	0	0	67	234	190	0	72	0	0	0

INTERSECTION VOLUME DEVELOPMENT
Forest Edge Drive @ Howland Boulevard
AM Peak Hour

Case	Forest Edge Drive Northbound			Forest Edge Drive Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
12/14/17 Observed Volumes	54	7	58	55	20	122	57	608	54	60	1,711	60
Peak Season Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
2017 Peak Season Volumes	58	7	62	59	21	131	61	651	58	64	1,831	64
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2020 Peak Season Volumes	63	8	68	64	23	143	67	711	63	70	2,001	70
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	64	8	69	65	23	146	68	725	64	71	2,041	71
Vested Trips	0	0	0	0	0	0	30	353	29	12	487	12
2022 Background Traffic	64	8	69	65	23	146	98	1,078	93	83	2,528	83
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	13.0%	0.0%	0.0%	13.0%	0.0%
	--	--	--	--	--	IN	OUT	OUT	--	--	IN	--
Project Traffic (Non-Truck)	0	0	0	0	0	4	2	20	0	0	53	0
Total Build-Out Volumes	64	8	69	65	23	150	100	1,098	93	83	2,581	83

INTERSECTION VOLUME DEVELOPMENT
Wolf Pack Run @ Howland Boulevard
AM Peak Hour

Case	Wolf Pack Run Northbound			N/A Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
12/14/17 Observed Volumes	198	0	66	0	0	0	0	608	172	133	1,676	0
Peak Season Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
2017 Peak Season Volumes	212	0	71	0	0	0	0	651	184	142	1,793	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.08	1.08	1.08
2020 Peak Season Volumes	232	0	78	0	0	0	0	711	201	181	2,284	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.06	1.06	1.06
2022 Peak Season Volumes	237	0	80	0	0	0	0	725	205	191	2,414	0
Vested Trips	0	0	0	0	0	0	0	328	84	24	438	0
2022 Background Traffic	237	0	80	0	0	0	0	1,053	289	215	2,852	0
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.0%	1.0%	0.0%	12.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	4	0	0	0	0	0	0	19	2	0	48	0
Total Build-Out Volumes	241	0	80	0	0	0	0	1,072	291	215	2,900	0

INTERSECTION VOLUME DEVELOPMENT
W Finland Drive @ Saxon Boulevard
AM Peak Hour

Case	W Finland Drive Northbound			W Finland Drive Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/1/18 Observed Volumes	142	31	16	36	14	418	68	563	14	24	1,760	5
Peak Season Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2018 Peak Season Volumes	146	32	16	37	14	431	70	580	14	25	1,813	5
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2020 Peak Season Volumes	152	33	17	38	15	448	73	603	15	26	1,886	5
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	155	34	17	39	15	457	74	615	15	27	1,924	5
Vested Trips	0	0	0	0	0	0	13	219	3	2	146	0
2022 Background Traffic	155	34	17	39	15	457	87	834	18	29	2,070	5
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	0.0%	16.0%	0.0%
	--	--	--	--	--	--	--	IN	--	--	OUT	--
Project Traffic (Non-Truck)	0	0	0	0	0	0	0	65	0	0	25	0
Total Build-Out Volumes	155	34	17	39	15	457	87	899	18	29	2,095	5

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Project Driveway 1
AM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			-- Eastbound			Project Driveway 1 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	0	441	0	0	181	0	0	0	0	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	463	0	0	190	0	0	0	0	0	0	0
Growth Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.00	1.00	1.00	1.00	1.00	1.00
2020 Peak Season Volumes	0	517	0	0	212	0	0	0	0	0	0	0
Growth Factor	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
2022 Peak Season Volumes	0	645	0	0	265	0	0	0	0	0	0	0
Vested Trips	74	115	0	0	250	257	1	0	0	0	0	0
2022 Background Traffic	74	760	0	0	515	257	1	0	0	0	0	0
Truck Assignment	0.00%	100%	0.00%	0.00%	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	--	OUT	--	--	IN	--	--	--	--	--	--	--
Project Traffic (Trucks)	0	12	0	0	41	0	0	0	0	0	0	0
Project Assignment	0.0%	28.0%	26.0%	29.0%	23.0%	0.0%	0.0%	0.0%	0.0%	31.0%	0.0%	24.0%
	--	OUT	IN	IN	IN	--	--	--	--	OUT	--	OUT
Project Traffic (Non-Truck)	0	43	105	117	93	0	0	0	0	48	0	37
Total Build-Out Volumes	74	815	105	117	649	257	1	0	0	48	0	37

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Project Driveway 2
AM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			-- Eastbound			Project Driveway 2 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	0	441	0	0	181	0	0	0	0	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	463	0	0	190	0	0	0	0	0	0	0
Growth Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.00	1.00	1.00	1.00	1.00	1.00
2020 Peak Season Volumes	0	517	0	0	212	0	0	0	0	0	0	0
Growth Factor	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
2022 Peak Season Volumes	0	645	0	0	265	0	0	0	0	0	0	0
Vested Trips	148	261	0	0	115	34	0	0	1	0	0	0
2022 Background Traffic	148	906	0	0	380	34	0	0	1	0	0	0
Truck Assignment	0.00%	100%	0.00%	0.00%	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	--	OUT	--	--	IN	--	--	--	--	--	--	--
Project Traffic (Trucks)	0	12	0	0	41	0	0	0	0	0	0	0
Project Assignment	0.0%	39.0%	10.0%	10.0%	44.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%
	--	IN & OUT	IN	IN	IN & OUT	--	--	--	--	--	--	OUT
Project Traffic (Non-Truck)	0	125	40	40	101	0	0	0	0	0	0	23
Total Build-Out Volumes	148	1,043	40	40	522	34	0	0	1	0	0	23

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Project Driveway 3
AM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			-- Eastbound			Project Driveway 3 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	0	441	0	0	181	0	0	0	0	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	463	0	0	190	0	0	0	0	0	0	0
Growth Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.00	1.00	1.00	1.00	1.00	1.00
2020 Peak Season Volumes	0	517	0	0	212	0	0	0	0	0	0	0
Growth Factor	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
2022 Peak Season Volumes	0	645	0	0	265	0	0	0	0	0	0	0
Vested Trips	29	409	0	0	116	29	0	0	0	0	0	0
2022 Background Traffic	29	1,054	0	0	381	29	0	0	0	0	0	0
Truck Assignment	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	--	--	--	IN	--	--	--	--	--	--	--	OUT
Project Traffic (Trucks)	0	0	0	41	0	0	0	0	0	0	0	12
Project Assignment	0.0%	36.0%	12.0%	13.0%	31.0%	0.0%	0.0%	0.0%	0.0%	17.0%	0.0%	13.0%
	--	IN	IN	IN	OUT	--	--	--	--	OUT	--	OUT
Project Traffic (Non-Truck)	0	145	48	53	48	0	0	0	0	26	0	20
Total Build-Out Volumes	29	1,199	48	94	429	29	0	0	0	26	0	32

INTERSECTION VOLUME DEVELOPMENT
Dr. Martin Luther King Jr Boulevard @ Orange Camp Road
PM Peak Hour

Case	Dr. Martin Luther King Jr Boulevard Northbound			Dr. Martin Luther King Jr Boulevard Southbound			Orange Camp Road Eastbound			Orange Camp Road Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	176	314	27	228	362	61	45	325	91	40	461	166
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	185	330	28	239	380	64	47	341	96	42	484	174
Growth Factor	1.03	1.03	1.03	1.01	1.01	1.01	1.09	1.09	1.09	1.09	1.09	1.09
2020 Peak Season Volumes	191	341	29	241	384	65	51	370	104	46	529	190
Growth Factor	1.07	1.07	1.07	1.02	1.02	1.02	1.18	1.18	1.18	1.19	1.19	1.19
2022 Peak Season Volumes	204	365	31	246	392	66	60	436	122	55	631	227
Vested Trips	100	147	29	16	61	4	10	70	55	25	91	33
2022 Background Traffic	304	512	60	262	453	70	70	506	177	80	722	260
Project Assignment	2.0%	2.0%	1.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	2.0%	0.0%	0.0%
	OUT	OUT	OUT	--	IN	--	--	--	IN	IN	--	--
Project Traffic (Non-Truck)	6	6	3	0	3	0	0	0	3	3	0	0
Total Build-Out Volumes	310	518	63	262	456	70	70	506	180	83	722	260

INTERSECTION VOLUME DEVELOPMENT
N. Kentucky Avenue @ SR 472
PM Peak Hour

Case	N. Kentucky Avenue Northbound			Dr. Martin Luther King Jr Boulevard Southbound			SR 472 Eastbound			SR 472 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	76	221	36	216	243	34	54	990	195	136	922	306
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	80	232	38	227	255	36	57	1,040	205	143	968	321
Growth Factor	1.03	1.03	1.03	1.05	1.05	1.05	1.01	1.01	1.01	1.04	1.04	1.04
2020 Peak Season Volumes	83	240	39	237	267	38	58	1,050	207	149	1,011	335
Growth Factor	1.07	1.07	1.07	1.09	1.09	1.09	1.02	1.02	1.02	1.09	1.09	1.09
2022 Peak Season Volumes	89	257	42	259	292	42	59	1,071	211	163	1,103	366
Vested Trips	193	153	25	56	168	9	2	32	162	23	41	14
2022 Background Traffic	282	410	67	315	460	51	61	1,103	373	186	1,144	380
Truck Assignment	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	--	OUT	--	--	--	--	--	--	--	--	--
Project Traffic (Trucks)	0	0	17	0	0	0	0	0	0	0	0	0
Project Assignment	10.0%	6.0%	0.0%	1.0%	6.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%
	OUT	OUT	--	IN	IN	--	--	--	IN	--	--	--
Project Traffic (Non-Truck)	30	18	0	2	10	0	0	0	17	0	0	0
Total Build-Out Volumes	312	428	84	317	470	51	61	1,103	390	186	1,144	380

INTERSECTION VOLUME DEVELOPMENT
I-4 WB Ramp @ SR 472
PM Peak Hour

Case	I-4 WB Ramp Northbound			I-4 WB Ramp Southbound			SR 472 Eastbound			SR 472 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	0	0	0	315	0	254	0	660	605	323	1,104	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	0	0	331	0	267	0	693	635	339	1,159	0
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	0	0	0	341	0	275	0	724	663	354	1,211	0
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.09	1.09	1.09	1.09	1.09	1.09
2022 Peak Season Volumes	0	0	0	362	0	292	0	790	723	386	1,321	0
Vested Trips	0	0	0	59	0	23	0	52	29	155	252	0
2022 Background Traffic	0	0	0	421	0	315	0	842	752	541	1,573	0
Truck Assignment	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%
	--	--	--	IN	--		--	--	OUT	--	--	--
Project Traffic (Trucks)	0	0	0	10	0	0	0	0	17	0	0	0
Project Assignment	0.0%	0.0%	0.0%	10.0%	0.0%	10.0%	0.0%	1.0%	0.0%	0.0%	1.0%	0.0%
	--	--	--	IN	--	OUT	--	IN	--	--	OUT	--
Project Traffic (Non-Truck)	0	0	0	17	0	30	0	2	0	0	3	0
Total Build-Out Volumes	0	0	0	448	0	345	0	844	769	541	1,576	0

INTERSECTION VOLUME DEVELOPMENT
I-4 EB Ramp @ SR 472
PM Peak Hour

Case	I-4 EB Ramp Northbound			I-4 EB Ramp Southbound			SR 472 Eastbound			SR 472 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	728	0	778	0	0	0	0	927	70	0	870	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	764	0	817	0	0	0	0	973	74	0	914	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	772	0	825	0	0	0	0	1,016	77	0	955	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.09	1.09	1.09	1.09	1.09	1.09
2022 Peak Season Volumes	788	0	842	0	0	0	0	1,109	84	0	1,042	0
Vested Trips	18	0	106	0	0	0	0	155	28	0	550	0
2022 Background Traffic	806	0	948	0	0	0	0	1,264	112	0	1,592	0
Truck Assignment	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	50.0%	0.0%
	--	--	IN	--	--	--	--	IN	--	--	OUT	--
Project Traffic (Trucks)	0	0	10	0	0	0	0	9	0	0	16	0
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.0%	0.0%	0.0%	1.0%	10.0%
	--	--	--	--	--	--	--	IN	--	--	OUT	OUT
Project Traffic (Non-Truck)	0	0	0	0	0	0	0	19	0	0	3	30
Total Build-Out Volumes	806	0	958	0	0	0	0	1,292	112	0	1,611	30

INTERSECTION VOLUME DEVELOPMENT
US 17/92 @ Graves Avenue
PM Peak Hour

Case	US 17/92 Northbound			US 17/92 Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/19/19 Observed Volumes	13	1,141	110	99	971	36	24	31	17	109	55	121
Peak Season Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2019 Peak Season Volumes	14	1,209	117	105	1,029	38	25	33	18	116	58	128
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.06	1.06	1.06
2020 Peak Season Volumes	14	1,221	118	106	1,039	38	25	33	18	122	61	135
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.12	1.12	1.12
2022 Peak Season Volumes	14	1,246	120	108	1,060	39	26	34	18	136	68	151
Vested Trips	0	27	3	1	10	0	4	23	3	2	21	3
2022 Background Traffic	14	1,273	123	109	1,070	39	30	57	21	138	89	154
Project Assignment	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
	--	--	IN	--	--	--	--	--	--	OUT	--	--
Project Traffic (Non-Truck)	0	0	2	0	0	0	0	0	0	3	0	0
Total Build-Out Volumes	14	1,273	125	109	1,070	39	30	57	21	141	89	154

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Graves Avenue
PM Peak Hour

Case	Veterans Memorial Parkway Northbound			-- Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	51	0	623	0	0	0	0	253	41	426	289	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	54	0	654	0	0	0	0	266	43	447	303	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.03	1.03	1.03
2020 Peak Season Volumes	55	0	661	0	0	0	0	269	43	460	312	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.06	1.06	1.06
2022 Peak Season Volumes	56	0	674	0	0	0	0	274	44	486	330	0
Vested Trips	17	0	368	0	0	0	0	62	2	518	289	0
2022 Background Traffic	73	0	1,042	0	0	0	0	336	46	1,004	619	0
Project Assignment	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	2.0%	5.0%	0.0%
	--	--	IN	--	--	--	--	IN	--	OUT	OUT	--
Project Traffic (Non-Truck)	0	0	3	0	0	0	0	9	0	6	15	0
Total Build-Out Volumes	73	0	1,045	0	0	0	0	345	46	1,010	634	0

INTERSECTION VOLUME DEVELOPMENT
N. Kentucky Avenue @ Graves Avenue
PM Peak Hour

Case	N. Kentucky Avenue Northbound			N. Kentucky Avenue Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	14	9	16	256	17	296	225	640	18	17	398	110
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	15	9	17	269	18	311	236	672	19	18	418	116
Growth Factor	1.01	1.01	1.01	1.03	1.03	1.03	1.03	1.03	1.03	1.04	1.04	1.04
2020 Peak Season Volumes	15	9	17	278	19	322	243	691	20	19	436	121
Growth Factor	1.02	1.02	1.02	1.07	1.07	1.07	1.06	1.06	1.06	1.09	1.09	1.09
2022 Peak Season Volumes	15	9	17	297	20	345	257	730	21	21	474	132
Vested Trips	0	0	0	299	1	24	110	521	9	13	539	408
2022 Background Traffic	15	9	17	596	21	369	367	1,251	30	34	1,013	540
Truck Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%
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Project Traffic (Trucks)	0	0	0	0	0	0	0	0	0	0	0	17
Project Assignment	0.0%	0.0%	2.0%	16.0%	0.0%	0.0%	0.0%	7.0%	0.0%	2.0%	7.0%	16.0%
	--	--	IN	IN	--	--	--	IN	--	OUT	OUT	OUT
Project Traffic (Non-Truck)	0	0	3	28	0	0	0	12	0	6	21	48
Total Build-Out Volumes	15	9	20	624	21	369	367	1,263	30	40	1,034	605

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Graves Avenue
PM Peak Hour

Case	Normandy Boulevard Northbound			-- Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	154	0	154	0	0	0	0	500	369	181	358	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	162	0	162	0	0	0	0	525	387	190	376	0
Growth Factor	1.12	1.12	1.12	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	181	0	181	0	0	0	0	548	404	198	392	0
Growth Factor	1.25	1.25	1.25	1.02	1.02	1.02	1.09	1.09	1.09	1.09	1.09	1.09
2022 Peak Season Volumes	226	0	226	0	0	0	0	596	439	215	426	0
Vested Trips	591	0	530	0	0	0	0	224	670	584	258	0
2022 Background Traffic	817	0	756	0	0	0	0	820	1,109	799	684	0
Truck Assignment	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
	OUT	--	OUT	--	--	--	--	--	--	IN	--	--
Project Traffic (Trucks)	17	0	16	0	0	0	0	0	0	19	0	0
Project Assignment	25.0%	0.0%	27.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	27.0%	0.0%	0.0%
	OUT	--	OUT	--	--	--	--	--	IN	IN	--	--
Project Traffic (Non-Truck)	75	0	81	0	0	0	0	0	44	47	0	0
Total Build-Out Volumes	909	0	853	0	0	0	0	820	1,153	865	684	0

INTERSECTION VOLUME DEVELOPMENT
Howland Boulevard @ Graves Avenue
PM Peak Hour

Case	Howland Boulevard Northbound			SR 472 Southbound			Graves Avenue Eastbound			Graves Avenue Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	321	761	13	50	1,459	191	78	18	558	49	26	100
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	337	799	14	53	1,532	201	82	19	586	51	27	105
Growth Factor	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04	1.01	1.01	1.01
2020 Peak Season Volumes	340	807	14	55	1,600	210	86	20	611	52	27	106
Growth Factor	1.02	1.02	1.02	1.09	1.09	1.09	1.09	1.09	1.09	1.02	1.02	1.02
2022 Peak Season Volumes	347	823	14	60	1,746	229	94	22	665	53	28	108
Vested Trips	371	134	196	199	166	161	177	219	494	194	212	194
2022 Background Traffic	718	957	210	259	1,912	390	271	241	1,159	247	240	302
Truck Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	--	--	--	--	IN	OUT	--	--	--	--	--
Project Traffic (Trucks)	0	0	0	0	0	19	16	0	0	0	0	0
Project Assignment	14.0%	0.0%	0.0%	0.0%	0.0%	11.0%	11.0%	2.0%	14.0%	0.0%	2.0%	0.0%
	IN	--	--	--	--	IN	OUT	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	24	0	0	0	0	19	33	6	42	0	3	0
Total Build-Out Volumes	742	957	210	259	1,912	428	320	247	1,201	247	243	302

INTERSECTION VOLUME DEVELOPMENT
Catalina Boulevard @ Howland Boulevard
PM Peak Hour

Case	Catalina Boulevard Northbound			Catalina Boulevard Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	48	67	29	86	67	249	448	1,026	50	38	555	59
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	50	70	30	90	70	261	470	1,077	53	40	583	62
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.03	1.03	1.03	1.01	1.01	1.01
2020 Peak Season Volumes	51	71	30	91	71	264	483	1,107	54	40	589	63
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.06	1.06	1.06	1.02	1.02	1.02
2022 Peak Season Volumes	52	72	31	93	72	269	510	1,170	57	41	601	64
Vested Trips	35	0	0	0	0	87	202	373	52	14	325	22
2022 Background Traffic	87	72	31	93	72	356	712	1,543	109	55	926	86
Project Assignment	2.0%	0.0%	0.0%	0.0%	0.0%	4.0%	4.0%	6.0%	2.0%	0.0%	6.0%	0.0%
	IN	--	--	--	--	IN	OUT	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	3	0	0	0	0	7	12	18	6	0	10	0
Total Build-Out Volumes	90	72	31	93	72	363	724	1,561	115	55	936	86

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INTERSECTION VOLUME DEVELOPMENT
Lake Helen-Osteen Road @ Catalina Boulevard
PM Peak Hour

Case	Lake Helen-Osteen Road Northbound			Lake Helen-Osteen Road Southbound			Catalina Boulevard Eastbound			-- Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	179	160	0	0	296	81	138	0	384	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	188	168	0	0	311	85	145	0	403	0	0	0
Growth Factor	1.06	1.06	1.06	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	200	179	0	0	314	86	146	0	407	0	0	0
Growth Factor	1.13	1.13	1.13	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	226	203	0	0	320	88	149	0	415	0	0	0
Vested Trips	52	0	0	0	0	17	20	0	61	0	0	0
2022 Background Traffic	278	203	0	0	320	105	169	0	476	0	0	0
Project Assignment	3.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	0.0%	3.0%	0.0%	0.0%	0.0%
	IN	--	--	--	--	IN	OUT	--	OUT	--	--	--
Project Traffic (Non-Truck)	5	0	0	0	0	2	3	0	9	0	0	0
Total Build-Out Volumes	283	203	0	0	320	107	172	0	485	0	0	0

INTERSECTION VOLUME DEVELOPMENT
Providence Boulevard @ Howland Boulevard
PM Peak Hour

Case	Providence Boulevard Northbound			Idelweise Drive Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/13/19 Observed Volumes	192	1	50	1	0	2	1	824	300	34	433	1
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	202	1	53	1	0	2	1	865	315	36	455	1
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04
2020 Peak Season Volumes	204	1	54	1	0	2	1	874	318	38	475	1
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.09	1.09	1.09
2022 Peak Season Volumes	208	1	55	1	0	2	1	892	324	41	517	1
Vested Trips	36	0	9	0	0	0	0	317	63	9	240	0
2022 Background Traffic	244	1	64	1	0	2	1	1,209	387	50	757	1
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	6.0%	0.0%
	--	--	--	--	--	--	--	OUT	--	--	IN	--
Project Traffic (Non-Truck)	0	0	0	0	0	0	0	18	0	0	10	0
Total Build-Out Volumes	244	1	64	1	0	2	1	1,227	387	50	767	1

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Rhode Island Avenue
PM Peak Hour

Case	Veterans Memorial Parkway Northbound			Veterans Memorial Parkway Southbound			Rhode Island Avenue Eastbound			-- Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	258	609	0	0	419	124	166	0	243	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	271	639	0	0	440	130	174	0	255	0	0	0
Growth Factor	1.05	1.05	1.05	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	285	673	0	0	444	131	176	0	258	0	0	0
Growth Factor	1.11	1.11	1.11	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	316	747	0	0	453	134	180	0	263	0	0	0
Vested Trips	117	312	0	0	218	174	128	0	34	0	0	0
2022 Background Traffic	433	1,059	0	0	671	308	308	0	297	0	0	0
Project Assignment	0.0%	1.0%	0.0%	0.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	IN	--	--	OUT	OUT	IN	--	--	--	--	--
Project Traffic (Non-Truck)	0	2	0	0	3	3	2	0	0	0	0	0
Total Build-Out Volumes	433	1,061	0	0	674	311	310	0	297	0	0	0

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Elkcam Boulevard
PM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			Elkcam Boulevard Eastbound			Elkcam Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	6	206	368	205	304	0	0	0	0	186	0	94
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	6	216	386	215	319	0	0	0	0	195	0	99
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.08	1.08	1.08
2020 Peak Season Volumes	6	218	390	217	322	0	0	0	0	211	0	107
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.18	1.18	1.18
2022 Peak Season Volumes	6	222	398	221	328	0	0	0	0	248	0	126
Vested Trips	0	539	0	183	632	0	0	0	0	0	0	156
2022 Background Traffic	6	761	398	404	960	0	0	0	0	248	0	282
Project Assignment	0.0%	36.0%	0.0%	9.0%	36.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%
	--	IN	--	OUT	OUT	--	--	--	--	--	--	IN
Project Traffic (Non-Truck)	0	63	0	27	108	0	0	0	0	0	0	16
Total Build-Out Volumes	6	824	398	431	1,068	0	0	0	0	248	0	298

INTERSECTION VOLUME DEVELOPMENT
Fort Smith Boulevard @ Elkcam Boulevard
PM Peak Hour

Case	Fort Smith Boulevard Northbound			-- Southbound			Elkcam Boulevard Eastbound			Elkcam Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	99	0	10	0	0	0	0	279	154	5	159	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	104	0	11	0	0	0	0	293	162	5	167	0
Growth Factor	1.01	1.01	1.01	1.00	1.00	1.00	1.08	1.08	1.08	1.05	1.05	1.05
2020 Peak Season Volumes	105	0	11	0	0	0	0	318	176	5	175	0
Growth Factor	1.02	1.02	1.02	1.00	1.00	1.00	1.18	1.18	1.18	1.10	1.10	1.10
2022 Peak Season Volumes	107	0	11	0	0	0	0	374	207	6	193	0
Vested Trips	70	0	0	0	0	0	0	61	81	0	52	0
2022 Background Traffic	177	0	11	0	0	0	0	435	288	6	245	0
Project Assignment	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	4.0%	0.0%	3.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	7	0	0	0	0	0	0	9	12	0	5	0
Total Build-Out Volumes	184	0	11	0	0	0	0	444	300	6	250	0

INTERSECTION VOLUME DEVELOPMENT
Providence Boulevard @ Elkcam Boulevard
PM Peak Hour

Case	Providence Boulevard Northbound			Providence Boulevard Southbound			Elkcam Boulevard Eastbound			Elkcam Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	44	240	177	63	303	33	62	198	62	170	145	39
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	46	252	186	66	318	35	65	208	65	179	152	41
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.05	1.05	1.05	1.01	1.01	1.01
2020 Peak Season Volumes	46	255	188	67	321	35	68	218	68	181	154	41
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.10	1.10	1.10	1.02	1.02	1.02
2022 Peak Season Volumes	47	260	192	68	327	36	75	240	75	185	157	42
Vested Trips	21	20	15	7	35	21	20	0	20	0	0	0
2022 Background Traffic	68	280	207	75	362	57	95	240	95	185	157	42
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	0.0%	1.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	2	0	0	0	0	0	0	3	3	0	2	0
Total Build-Out Volumes	70	280	207	75	362	57	95	243	98	185	159	42

INTERSECTION VOLUME DEVELOPMENT
Providence Boulevard @ Fort Smith Boulevard
PM Peak Hour

Case	Providence Boulevard Northbound			Providence Boulevard Southbound			Fort Smith Boulevard Eastbound			Fort Smith Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	37	389	372	114	344	4	9	95	40	209	78	102
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	39	408	391	120	361	4	9	100	42	219	82	107
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.12	1.12	1.12
2020 Peak Season Volumes	39	412	395	121	365	4	9	101	42	245	92	120
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.25	1.25	1.25
2022 Peak Season Volumes	40	420	403	123	372	4	9	103	43	306	115	150
Vested Trips	17	0	0	9	28	0	0	61	20	0	52	0
2022 Background Traffic	57	420	403	132	400	4	9	164	63	306	167	150
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	1.0%	0.0%	3.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	2	0	0	0	0	0	0	9	3	0	5	0
Total Build-Out Volumes	59	420	403	132	400	4	9	173	66	306	172	150

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Harley Strickland Boulevard
PM Peak Hour

Case	Veterans Memorial Parkway Northbound			Veterans Memorial Parkway Southbound			Harley Strickland Boulevard Eastbound			Harley Strickland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	206	407	2	100	404	144	305	53	235	71	39	102
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	216	427	2	105	424	151	320	56	247	75	41	107
Growth Factor	1.01	1.01	1.01	1.05	1.05	1.05	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	218	431	2	111	447	159	323	57	249	75	41	107
Growth Factor	1.02	1.02	1.02	1.11	1.11	1.11	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	222	440	2	123	496	176	329	58	254	75	41	107
Vested Trips	48	13	0	61	246	88	18	3	49	0	0	0
2022 Background Traffic	270	453	2	184	742	264	347	61	303	75	41	107
Project Assignment	1.0%	1.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
	OUT	OUT	--	--	IN	--	--	--	IN	--	--	--
Project Traffic (Non-Truck)	3	3	0	0	2	0	0	0	2	0	0	0
Total Build-Out Volumes	273	456	2	184	744	264	347	61	305	75	41	107

INTERSECTION VOLUME DEVELOPMENT
Veterans Memorial Parkway @ Saxon Boulevard
PM Peak Hour

Case	Veterans Memorial Parkway Northbound			Veterans Memorial Parkway Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	45	46	95	629	64	178	192	1,177	28	131	990	422
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	47	48	100	660	67	187	202	1,236	29	138	1,040	443
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	47	48	101	667	68	189	204	1,248	29	139	1,050	447
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	48	49	103	680	69	193	208	1,273	30	142	1,071	456
Vested Trips	0	0	0	49	1	4	2	119	0	19	268	103
2022 Background Traffic	48	49	103	729	70	197	210	1,392	30	161	1,339	559
Project Assignment	0.0%	0.0%	1.0%	2.0%	0.0%	0.0%	0.0%	4.0%	0.0%	1.0%	4.0%	2.0%
	--	--	IN	IN	--	--	--	IN	--	OUT	OUT	OUT
Project Traffic (Non-Truck)	0	0	2	3	0	0	0	7	0	3	12	6
Total Build-Out Volumes	48	49	105	732	70	197	210	1,399	30	164	1,351	565

INTERSECTION VOLUME DEVELOPMENT
FDOT Park & Ride @ Saxon Boulevard
PM Peak Hour

Case	FDOT Park & Ride Northbound			FDOT Park & Ride Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/19/19 Observed Volumes	57	0	93	33	5	14	32	1,635	76	87	1,337	23
Peak Season Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2019 Peak Season Volumes	60	0	99	35	5	15	34	1,733	81	92	1,417	24
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04	1.01	1.01	1.01
2020 Peak Season Volumes	61	0	100	35	5	15	35	1,801	84	93	1,431	24
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.02	1.02	1.02
2022 Peak Season Volumes	62	0	102	36	5	15	38	1,946	91	95	1,460	24
Vested Trips	0	0	0	0	0	0	4	353	10	16	411	4
2022 Background Traffic	62	0	102	36	5	15	42	2,299	101	111	1,871	28
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	0.0%
	--	--	--	--	--	--	--	IN	--	--	OUT	--
Project Traffic (Non-Truck)	0	0	0	0	0	0	0	12	0	0	21	0
Total Build-Out Volumes	62	0	102	36	5	15	42	2,311	101	111	1,892	28

INTERSECTION VOLUME DEVELOPMENT
I-4 WB Ramp @ Saxon Boulevard
PM Peak Hour

Case	I-4 WB Ramp Northbound			I-4 WB Ramp Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	0	0	328	0	0	361	0	1,551	426	0	1,277	265
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	0	344	0	0	379	0	1,629	447	0	1,341	278
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.04	1.04	1.04	1.04	1.04	1.04
2020 Peak Season Volumes	0	0	347	0	0	383	0	1,693	465	0	1,394	289
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08	1.08
2022 Peak Season Volumes	0	0	354	0	0	391	0	1,829	502	0	1,506	312
Vested Trips	0	0	41	0	0	13	0	416	76	0	285	66
2022 Background Traffic	0	0	395	0	0	404	0	2,245	578	0	1,791	378
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	7.0%	9.0%
	--	--	--	--	--	--	--	IN	--	--	OUT	OUT
Project Traffic (Non-Truck)	0	0	0	0	0	0	0	12	0	0	21	27
Total Build-Out Volumes	0	0	395	0	0	404	0	2,257	578	0	1,812	405

INTERSECTION VOLUME DEVELOPMENT
I-4 EB Ramp @ Saxon Boulevard
PM Peak Hour

Case	I-4 EB Ramp Northbound			I-4 EB Ramp Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	0	0	903	0	0	495	359	2,439	0	0	1,060	192
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	0	948	0	0	520	377	2,561	0	0	1,113	202
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	0	0	974	0	0	534	381	2,587	0	0	1,124	204
Growth Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	0	0	1,028	0	0	563	389	2,639	0	0	1,147	208
Vested Trips	0	0	52	0	0	14	59	572	0	0	307	60
2022 Background Traffic	0	0	1,080	0	0	577	448	3,211	0	0	1,454	268
Project Assignment	0.0%	0.0%	9.0%	0.0%	0.0%	0.0%	0.0%	7.0%	0.0%	0.0%	16.0%	0.0%
	--	--	IN	--	--	--	--	IN	--	--	OUT	--
Project Traffic (Non-Truck)	0	0	16	0	0	0	0	12	0	0	48	0
Total Build-Out Volumes	0	0	1,096	0	0	577	448	3,223	0	0	1,502	268

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Saxon Boulevard
PM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/11/19 Observed Volumes	180	181	45	102	173	267	463	1,340	316	31	635	60
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	189	190	47	107	182	280	486	1,407	332	33	667	63
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	191	192	47	108	184	283	491	1,421	335	33	674	64
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	195	196	48	110	188	289	501	1,450	342	34	688	65
Vested Trips	0	105	0	204	122	244	235	77	18	0	0	174
2022 Background Traffic	195	301	48	314	310	533	736	1,527	360	34	688	239
Project Assignment	0.0%	9.0%	0.0%	8.0%	9.0%	16.0%	16.0%	0.0%	0.0%	0.0%	0.0%	8.0%
	--	IN	--	OUT	OUT	OUT	IN	--	--	--	--	IN
Project Traffic (Non-Truck)	0	16	0	24	27	48	28	0	0	0	0	14
Total Build-Out Volumes	195	317	48	338	337	581	764	1,527	360	34	688	253

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INTERSECTION VOLUME DEVELOPMENT
Tivoli Drive @ Saxon Boulevard
PM Peak Hour

Case	Tivoli Drive Northbound			Tivoli Drive Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/13/19 Observed Volumes	60	103	8	5	80	266	438	491	79	6	308	13
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	63	108	8	5	84	279	460	516	83	6	323	14
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	64	109	8	5	85	282	465	521	84	6	326	14
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	65	111	8	5	87	288	474	531	86	6	333	14
Vested Trips	17	0	0	0	0	0	0	81	20	0	70	0
2022 Background Traffic	82	111	8	5	87	288	474	612	106	6	403	14
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	1.0%	0.0%	5.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	2	0	0	0	0	0	0	15	3	0	9	0
Total Build-Out Volumes	84	111	8	5	87	288	474	627	109	6	412	14

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INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Deltona Boulevard
PM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			Deltona Boulevard Eastbound			N/A Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6/6/19 Observed Volumes	183	153	0	0	243	245	271	0	337	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	192	161	0	0	255	257	285	0	354	0	0	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
2020 Peak Season Volumes	194	163	0	0	258	260	288	0	358	0	0	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00
2022 Peak Season Volumes	198	166	0	0	263	265	294	0	365	0	0	0
Vested Trips	0	35	0	0	41	61	52	0	0	0	0	0
2022 Background Traffic	198	201	0	0	304	326	346	0	365	0	0	0
Project Assignment	0.0%	2.0%	0.0%	0.0%	2.0%	6.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	IN	--	--	OUT	OUT	IN	--	--	--	--	--
Project Traffic (Non-Truck)	0	3	0	0	6	18	10	0	0	0	0	0
Total Build-Out Volumes	198	204	0	0	310	344	356	0	365	0	0	0

INTERSECTION VOLUME DEVELOPMENT
Forest Edge Drive @ Howland Boulevard
PM Peak Hour

Case	Forest Edge Drive Northbound			Forest Edge Drive Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/23/17 Observed Volumes	74	20	53	15	12	104	145	2,114	12	32	867	15
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2017 Peak Season Volumes	78	21	56	16	13	109	152	2,220	13	34	910	16
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	80	22	58	16	13	112	157	2,287	13	35	938	16
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	82	22	59	16	13	114	160	2,333	13	36	957	16
Vested Trips	0	0	0	0	0	0	25	646	2	14	611	6
2022 Background Traffic	82	22	59	16	13	114	185	2,979	15	50	1,568	22
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	13.0%	0.0%	0.0%	13.0%	0.0%
	--	--	--	--	--	IN	OUT	OUT	--	--	IN	--
Project Traffic (Non-Truck)	0	0	0	0	0	2	3	39	0	0	23	0
Total Build-Out Volumes	82	22	59	16	13	116	188	3,018	15	50	1,591	22

INTERSECTION VOLUME DEVELOPMENT
Wolf Pack Run @ Howland Boulevard
PM Peak Hour

Case	Wolf Pack Run Northbound			N/A Southbound			Howland Boulevard Eastbound			Howland Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/23/17 Observed Volumes	99	0	19	0	0	0	0	1,918	217	53	831	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2017 Peak Season Volumes	104	0	20	0	0	0	0	2,014	228	56	873	0
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.03	1.03	1.03
2020 Peak Season Volumes	107	0	21	0	0	0	0	2,075	235	61	948	0
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.06	1.06	1.06
2022 Peak Season Volumes	109	0	21	0	0	0	0	2,117	240	64	1,002	0
Vested Trips	0	0	0	0	0	0	0	634	39	20	565	0
2022 Background Traffic	109	0	21	0	0	0	0	2,751	279	84	1,567	0
Project Assignment	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.0%	1.0%	0.0%	12.0%	0.0%
	IN	--	--	--	--	--	--	OUT	OUT	--	IN	--
Project Traffic (Non-Truck)	2	0	0	0	0	0	0	36	3	0	21	0
Total Build-Out Volumes	111	0	21	0	0	0	0	2,787	282	84	1,588	0

INTERSECTION VOLUME DEVELOPMENT
W Finland Drive @ Saxon Boulevard
PM Peak Hour

Case	W Finland Drive Northbound			W Finland Drive Southbound			Saxon Boulevard Eastbound			Saxon Boulevard Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/1/18 Observed Volumes	97	72	113	53	29	164	235	1,744	44	82	991	14
Peak Season Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2018 Peak Season Volumes	100	74	116	55	30	169	242	1,796	45	84	1,021	14
Growth Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
2020 Peak Season Volumes	102	75	118	56	31	172	247	1,832	46	86	1,042	14
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2022 Peak Season Volumes	104	77	120	57	32	175	252	1,869	47	88	1,063	14
Vested Trips	0	0	0	0	0	0	14	314	3	9	354	2
2022 Background Traffic	104	77	120	57	32	175	266	2,183	50	97	1,417	16
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	0.0%	16.0%	0.0%
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Project Traffic (Non-Truck)	0	0	0	0	0	0	0	28	0	0	48	0
Total Build-Out Volumes	104	77	120	57	32	175	266	2,211	50	97	1,465	16

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Project Driveway 1
PM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			-- Eastbound			Project Driveway 1 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1/0/00 Observed Volumes	0	308	0	0	550	0	0	0	0	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	323	0	0	578	0	0	0	0	0	0	0
Growth Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.00	1.00	1.00	1.00	1.00	1.00
2020 Peak Season Volumes	0	361	0	0	646	0	0	0	0	0	0	0
Growth Factor	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
2022 Peak Season Volumes	0	450	0	0	806	0	0	0	0	0	0	0
Vested Trips	54	718	0	0	709	186	277	0	24	0	0	0
2022 Background Traffic	54	1,168	0	0	1,515	186	277	0	24	0	0	0
Truck Assignment	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	OUT	--	--	IN	--	--	--	--	--	--	--
Project Traffic (Trucks)	0	33	0	0	19	0	0	0	0	0	0	0
Project Assignment	0.0%	28.0%	26.0%	29.0%	23.0%	0.0%	0.0%	0.0%	0.0%	31.0%	0.0%	24.0%
	--	OUT	IN	IN	IN	--	--	--	--	OUT	--	OUT
Project Traffic (Non-Truck)	0	84	45	50	40	0	0	0	0	93	0	72
Total Build-Out Volumes	54	1,285	45	50	1,574	186	277	0	24	93	0	72

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Project Driveway 2
PM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			-- Eastbound			Project Driveway 2 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1/0/00 Observed Volumes	0	308	0	0	550	0	0	0	0	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	323	0	0	578	0	0	0	0	0	0	0
Growth Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.00	1.00	1.00	1.00	1.00	1.00
2020 Peak Season Volumes	0	361	0	0	646	0	0	0	0	0	0	0
Growth Factor	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
2022 Peak Season Volumes	0	450	0	0	806	0	0	0	0	0	0	0
Vested Trips	108	717	0	0	742	25	0	0	211	0	0	0
2022 Background Traffic	108	1,167	0	0	1,548	25	0	0	211	0	0	0
Truck Assignment	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	OUT	--	--	IN	--	--	--	--	--	--	--
Project Traffic (Trucks)	0	33	0	0	19	0	0	0	0	0	0	0
Project Assignment	0.0%	39.0%	10.0%	10.0%	44.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%
	--	IN & OUT	IN	IN	IN & OUT	--	--	--	--	--	--	OUT
Project Traffic (Non-Truck)	0	84	17	17	116	0	0	0	0	0	0	45
Total Build-Out Volumes	108	1,284	17	17	1,683	25	0	0	211	0	0	45

INTERSECTION VOLUME DEVELOPMENT
Normandy Boulevard @ Project Driveway 3
PM Peak Hour

Case	Normandy Boulevard Northbound			Normandy Boulevard Southbound			-- Eastbound			Project Driveway 3 Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1/0/00 Observed Volumes	0	308	0	0	550	0	0	0	0	0	0	0
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2019 Peak Season Volumes	0	323	0	0	578	0	0	0	0	0	0	0
Growth Factor	1.12	1.12	1.12	1.12	1.12	1.12	1.00	1.00	1.00	1.00	1.00	1.00
2020 Peak Season Volumes	0	361	0	0	646	0	0	0	0	0	0	0
Growth Factor	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.00	1.00	1.00	1.00
2022 Peak Season Volumes	0	450	0	0	806	0	0	0	0	0	0	0
Vested Trips	21	824	0	0	953	21	60	0	30	0	0	0
2022 Background Traffic	21	1,274	0	0	1,759	21	60	0	30	0	0	0
Truck Assignment	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	--	--	--	IN	--	--	--	--	--	--	--	OUT
Project Traffic (Trucks)	0	0	0	19	0	0	0	0	0	0	0	33
Project Assignment	0.0%	36.0%	12.0%	13.0%	31.0%	0.0%	0.0%	0.0%	0.0%	17.0%	0.0%	13.0%
	--	IN	IN	IN	OUT	--	--	--	--	OUT	--	OUT
Project Traffic (Non-Truck)	0	63	21	23	93	0	0	0	0	51	0	39
Total Build-Out Volumes	21	1,337	21	42	1,852	21	60	0	30	51	0	72

APPENDIX I: PRELIMINARY SIGNAL WARRANT ANALYSIS WORKSHEET

TABLE 3
TRAFFIC SIGNAL WARRANT SUMMARY

City: Deltona | Engineer: Kimley-Horn
County: Volusia | Date: July 2, 2020

Major Street: Normandy Boulevard | Lanes: 2 | Critical Approach Speed: 45
Minor Street: Portland Industrial Park Driveway 3 | Lanes: 1

Volume Level Criteria

1. Is the critical speed of major street traffic > 70 km/h (40 mph) ? ■ Yes ☐ No
2. Is the intersection in a built-up area of isolated community of <10,000 population? ☐ Yes ■ No

If Question 1 or 2 above is answered "Yes", then use "70%" volume level ■ 70% ☐ 100%

WARRANT 3 - PEAK HOUR

Applicable: ■ Yes ☐ No
Satisfied: ■ Yes ☐ No

If all three criteria are fullfilled or the plotted point lies above the appropriate line, then the warrant is satisfed.

Unusual condition justifying use of warrant:

N/A

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour Volumes	
5:00 PM - 6:00 PM	
Major Street	3,294
Minor Street	123

Criteria

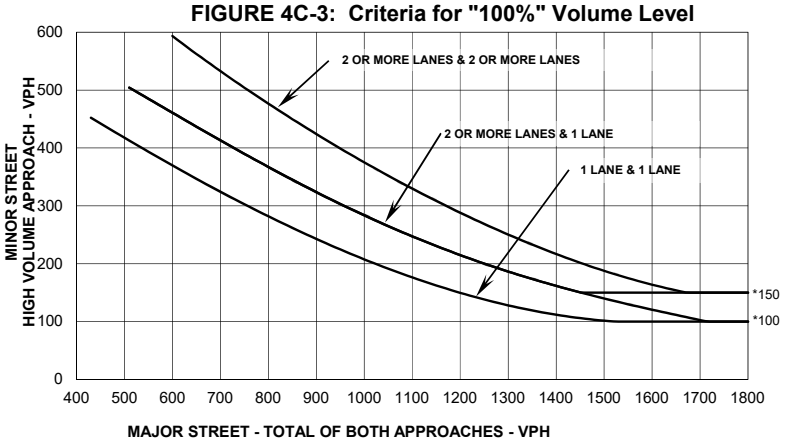
1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	**1**	2
Delay Criteria*	**4.0**	5.0
Delay*	**19.9**	
Fulfilled?: ■ Yes	☐ No	

2. Volume on Minor Approach *(vehicles per hour)		
Approach Lanes	**1**	2
Volume Criteria*	**75**	100
Volume*	**123**	
Fulfilled?: ■ Yes	☐ No	

3. Total Entering Volume *(vehicles per hour)		
No. of Approaches	3	**4**
Volume Criteria*	650	**800**
Volume*		**3,507**
Fulfilled?: ■ Yes	☐ No	

Plot volume combination on the applicable figure below.

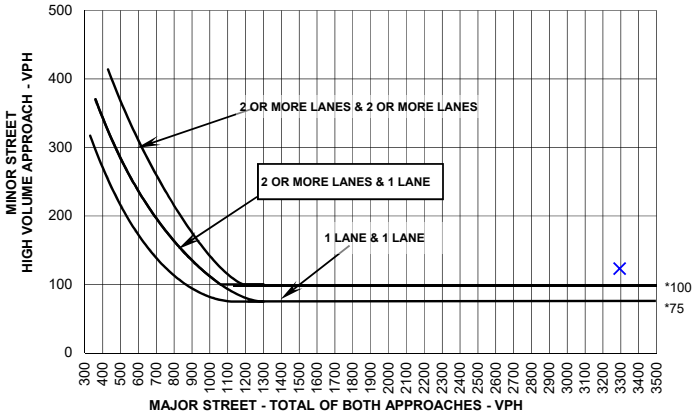
FIGURE 4C-3: Criteria for "100%" Volume Level



** Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.*

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



** Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.*

Source: Revised from NCHRP Report 457

C:\Users\vincent.spahr\OneDrive - KH\ORL\Portland Industrial\Calcs\SWA\[WarrantSpreadsheet_July2020_v2.xlsm]Warrant 3

APPENDIX J: RHODE ISLAND AVENUE EXTENSION TECHNICAL MEMORANDUM

Kimley»Horn

MEMORANDUM

To: Ron Paradise
Planning and Development Services Director
City of Deltona

From: James M. Taylor, P.E.
Kimley-Horn and Associates, Inc.

Date: July 2, 2020

Subject: I-4 & Rhode Island Interchange Impact Analysis

Purpose

The following memorandum was performed to evaluate the impact to future travel demand patterns anticipated by proposed Interstate 4 (I-4) and Rhode Island Avenue Interchange configurations at the request of City of Deltona.

Introduction

The analysis contained herein evaluates the impact to future travel demand patterns anticipated by proposed Interstate 4 (I-4) and Rhode Island Avenue Interchange by comparing future regional travel demand volumes from the latest adopted FDOT District Five model for the following scenarios:

1. Modified Base 2045 (w/o Rhode Island Avenue)
2. Base 2045 (w/ Rhode Island Avenue, No Interchange)
3. Partial Interchange (I-4 Express Lanes Slip Ramps)
4. Full-Access Interchange (I-4 Mainline Off- and On-Ramps)

The cost-feasible 2045 traveling demand model, Central Florida Regional Planning Model (CFRPM) version 6, was used to forecast future volume projections for each scenario. A 2045 scenario model run was developed for each interchange configuration, which included modifying the roadway network to show proposed interchange configurations and revising nearby Traffic Analysis Zones (TAZ) Zdata to account for future developments.

The regional travel demand model unadjusted daily traffic volumes were extracted and compared to determine the percent change in daily travel demand volumes on major roadway segments in the area which will be impacted.

Roadway Network Scenarios

The first scenario, Modified Base 2045, consists of future conditions without the Rhode Island Avenue connection from Veterans Memorial Highway to Normandy Boulevard. By removing Rhode Island Avenue from the future network, the impact of future improvements can be compared to this No-Build scenario.

The second scenario, Base 2045, consists of future conditions with the Rhode Island Avenue connection from Veterans Memorial Highway to Normandy Boulevard with no I-4 interchange.

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This is the base assumption in the CFRPMv6 Cost Feasible network. However, any future Rhode Island Avenue connection improvement will likely include a new I-4 interchange.

The third scenario consists of a Partial Interchange that provides a northbound off-ramp and a southbound on-ramp from the I-4 express lanes to Rhode Island Avenue. This scenario is the preferred alternative from the SR-400 (I-4) Beyond the Ultimate PD&E Study (see Attachment A).

And lastly, the fourth scenario consists of a Full-Access Interchange that has both northbound and southbound on- and off-ramps between I-4 mainline and Rhode Island Avenue.

Socioeconomic Data Development

TAZs near the Rhode Island Improvement area were revised to include socioeconomic data for planned future developments within the study area in the year 2045. Figure 1 shows the five (5) TAZs that were revised; the TAZ locations and model node numbers are shown in red. The socioeconomic data (Zdata) in the regional model is divided into attractions and production. Productions are the land activity that creates trips (e.g., residential developments). Attractions represent land activity that attract trips (e.g., retail, industrial, commercial, and institution developments). Zdata was revised to account for the following future developments:

- Portland Industrial Park
- Normandy Industrial West
- Deltona Village

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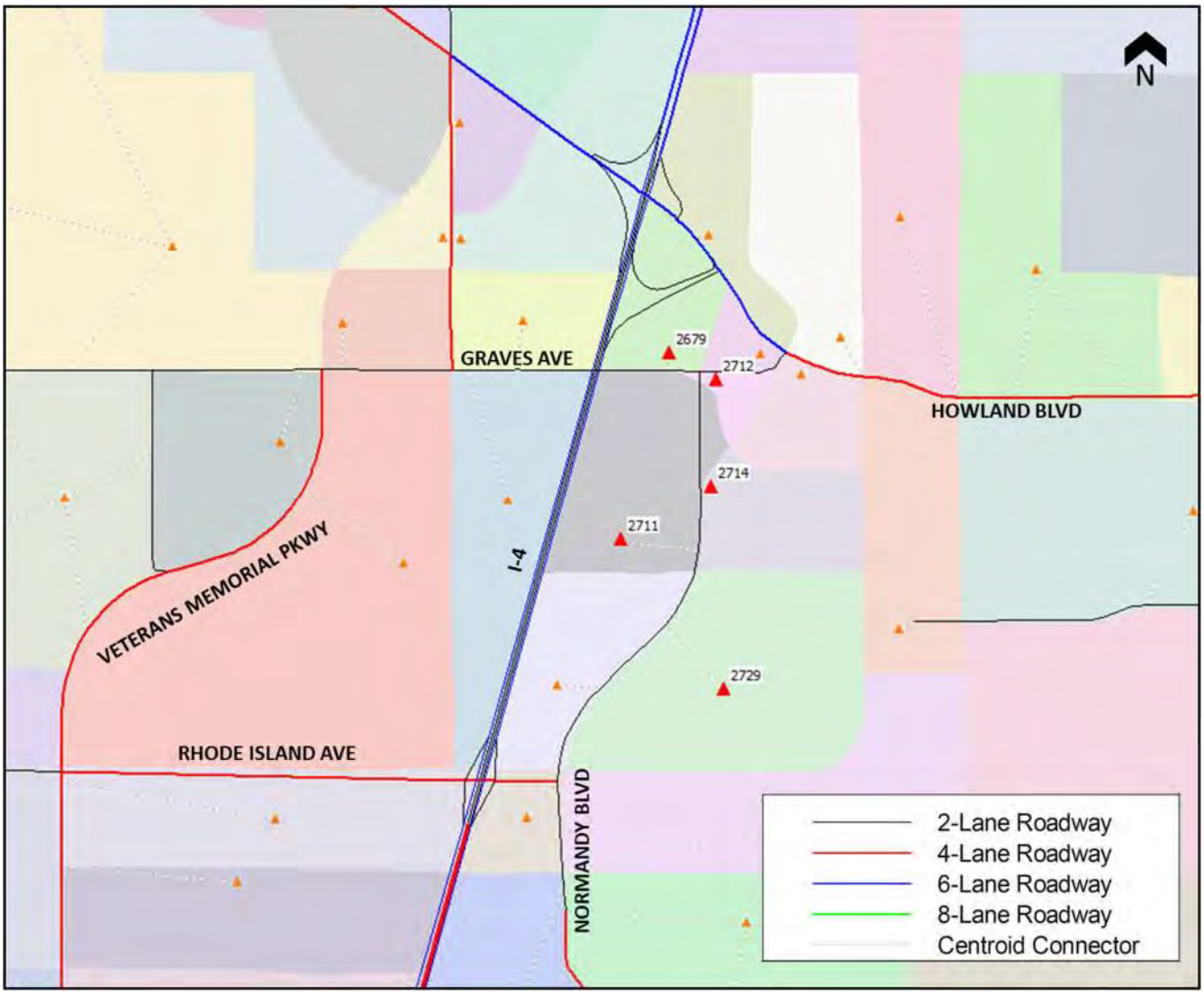


Figure 1: 2045 CFRPM Network (Full-Access Interchange)

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Table 1 shows the land use intensities and Zdata development. The five (5) TAZs shown in Figure 1 were revised to include the three (3) future developments shown in the table. Table 2 shows the revised Zdata. TAZs were then updated with the revised Zdata and included in all future regional planning model runs.

Table 1: Land Use Intensities and Socioeconomic Data Development

Development	Land Use Size			Socioeconomic Data			
	Warehouse (SF)	Retail (SF)	Office (SF)	Industrial Employees	Commercial Employees	Service Employees	Total Employees
Portland Industrial	1,382,500		593,500	2,765		1,781	4,546
Normandy Industrial West	1,094,865			2,083			2,083
Deltona Village		900,000			2,250		2,250

Table 2: Revised TAZ Socioeconomic Data

TAZ		Industrial Employees	Commercial Employees	Service Employees	Total Employees	Location
2679						NW of Graves & Normandy
	Existing	31	79	0	110	
	Revised	31	675	0	706	
2711						West of Normandy
	Existing	0	73	476	549	
	Revised	2,083	450	476	3,009	
2712						SE of Graves and Normandy
	Existing	0	13	3	16	
	Revised	0	563	3	566	
2714						East of Normandy
	Existing	0	20	286	306	
	Revised	0	563	286	849	
2729						Portland Ind., east of Normandy
	Existing	0	187	1,172		
	Revised	2,765	187	1,781	4,733	

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Interchange Impact Analysis

The impact of proposed I-4 and Rhode Island Avenue Interchange configurations on future conditions were evaluated by comparing future regional travel demand volumes from the latest adopted FDOT District Five model for each improvement scenario to the No-Build scenario. The Modified Base 2045 model run (w/o Rhode Island Avenue) was evaluated as a No-Build scenario to provide a reference of measure for each future improvement scenario.

Next, three (3) improvement scenarios were coded into the model and evaluated – the Base No Interchange model run with the Rhode Island Avenue extension in place, the Partial Interchange run with on- and off-ramps to the I-4 express lanes to and from the south, and the full-access interchange configuration.

Unadjusted model traffic volumes were extracted and compared with the Modified Base 2045 (No-Build) model run. The resulting model plots showing daily volumes are provided in Attachment B. Table 3 shows the unadjusted daily model volumes for each run and the percent change in volumes compared to the No-Build scenario.

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Table 3: Daily Traffic Volumes Analysis

Roadway Segment	Unadjusted 2045 Model Daily Volumes[1]							
	Modified Base (w/o Rhode Island Ave)		Base - No Interchange (w/ Rhode Island Ave)		Partial Interchange (w/ Rhode Island Ave)		Full-Access Interchange (w/ Rhode Island Ave)	
	Daily Volume	*% Change*	Daily Volume	*% Change*	Daily Volume	*% Change*	Daily Volume	*% Change*
Graves Ave / CR 4053								
West of Veterans Memorial Pkwy	6,892	-	8,119	*17.80%*	6,228	*-9.63%*	6,876	*-0.23%*
Veterans Memorial Pkwy to Kentucky Ave	20,898	-	20,934	*0.17%*	21,128	*1.10%*	20,924	*0.12%*
Kentucky Ave to Normandy Blvd	29,150	-	30,824	*5.74%*	30,934	*6.12%*	30,190	*3.57%*
Normandy Blvd to Howland	30,449	-	29,149	*-4.27%*	28,947	*-4.93%*	27,923	*-8.30%*
Normandy Blvd								
Graves Ave to Rhode Island Ave	32,952	-	31,229	*-5.23%*	31,586	*-4.15%*	32,284	*-2.03%*
Rhode Island Ave to Elkcam Blvd	34,792	-	25,104	*-27.85%*	19,722	*-43.31%*	15,294	*-56.04%*
Elkcam Blvd to Saxon Blvd	41,906	-	35,510	*-15.26%*	25,496	*-39.16%*	21,791	*-48.00%*
Saxon Blvd								
West of Veterans Memorial Pkwy	51,377	-	49,248	*-4.14%*	51,682	*0.59%*	53,474	*4.08%*
Veterans Memorial Pkwy to I-4	72,719	-	72,574	*-0.20%*	68,592	*-5.68%*	67,129	*-7.69%*
I-4 to Normandy Blvd	68,643	-	64,360	*-6.24%*	61,776	*-10.00%*	58,732	*-14.44%*
East of Normandy	36,193	-	36,539	*0.96%*	37,290	*3.03%*	37,952	*4.86%*
SR 472								
West of Kentucky Ave	68,447	-	69,584	*1.66%*	67,760	*-1.00%*	68,844	*0.58%*
Kentucky Ave to I-4	84,132	-	83,345	*-0.94%*	81,658	*-2.94%*	77,010	*-8.47%*
Howland Ave								
I-4 to Graves Ave	55,244	-	55,004	*-0.43%*	52,471	*-5.02%*	49,931	*-9.62%*
East of Graves Ave	46,652	-	47,240	*1.26%*	46,358	*-0.63%*	45,459	*-2.56%*
Veterans Memorial Pkwy								
Graves Ave to Rhode Island Ave	34,724	-	34,242	*-1.39%*	40,136	*15.59%*	39,748	*14.47%*
Rhode Island Ave to Saxon Blvd	48,985	-	50,979	*4.07%*	43,077	*-12.06%*	38,355	*-21.70%*
Rhode Island Ave								
West of Veterans Memorial Pkwy	17,163	-	17,867	*4.10%*	18,850	*9.83%*	19,053	*11.01%*
Veterans memorial Pkwy to I-4	n/a	-	18,212	-	33,464	-	31,142	-
I-4 to Normandy Blvd	n/a	-	18,212	-	30,454	-	37,590	-
I-4 (Mainline)								
South of Saxon Blvd	114,302	-	117,007	*2.37%*	121,781	*6.54%*	126,788	*10.92%*
Saxon Blvd to Rhode Island Ave	113,195	-	116,439	*2.87%*	131,412	*16.09%*	129,196	*14.14%*
Rhode Island Ave to SR 472/Howland Ave	113,195	-	116,439	*2.87%*	131,412	*16.09%*	116,680	*3.08%*
North of SR 472/Howland Ave	145,784	-	145,416	*-0.25%*	144,052	*-1.19%*	146,089	*0.21%*

Note:
1. Highest projected volume along the segment

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Conclusions

This traffic study was performed to evaluate the impact of proposed I-4 and Rhode Island Avenue Interchange improvements on future 2045 No-Build travel demand patterns. Upon comparison of unadjusted CFRPM daily 2045 model volumes, the analysis described above shows the following trends for study area roadways:

Base – No Interchange (w/ Rhode Island Avenue)

Major roadway volume impacts (with respect to No-Build):

- Normandy Blvd south of Rhode Island decreases 15-28% (traffic dispersed evenly to the west, north, and south)
- Saxon Blvd (I-4 to Normandy Blvd) decreases 6%

Partial Interchange

Major roadway volume impacts (with respect to No-Build):

- Normandy Blvd south of Rhode Island decreases 39-43% (traffic dispersed evenly to the west, north, and south)
- Saxon Blvd (Veterans Memorial Pkwy to Normandy Blvd) decreases 6-10%
- Veterans Memorial Pkwy south of Rhode Island decreases 12%
- Howland Ave (I-4 to Graves) decreases 5%

Full Interchange

Major roadway volume impacts (with respect to No-Build):

- Normandy Blvd south of Rhode Island decreases 48-56% (traffic dispersed evenly to the west, north, and south)
- Saxon Blvd (Veterans Memorial Pkwy to Normandy Blvd) decreases 8-14%
- Veterans Memorial Pkwy south of Rhode Island decreases 22%
- Howland Ave (I-4 to Graves) decreases 10%
- SR 472 (Kentucky Ave to I-4) decreases 8%

As shown above, it is anticipated that the installation of Rhode Island Avenue will result in a moderate decrease in future traffic volumes on Normandy Boulevard south of the new road and on Saxon Boulevard between Normandy Boulevard and I-4. If a partial interchange is added at I-4 and Rhode Island Avenue, the trend in reduced volumes on Normandy Boulevard and Saxon Boulevard becomes more pronounced and a moderate decrease in volumes is expected on Veterans Memorial Parkway south of the new road and on the portion of Howland Avenue east of I-4. A full interchange at Rhode Island Avenue is expected to further divert volumes from these roadways and show a moderate decrease in volumes on SR 472 east of I-4 when compared to the No-Build scenario.

ATTACHMENT A

SR-400 (I-4) Beyond Ultimate PD&E Study Site Plan

FDOT

SR 400 (I-4) Project Development and Environment (PD&E) Study
FM No.: 432100-1-22-01

beyond the ULTIMATE

Preliminary Engineering Report

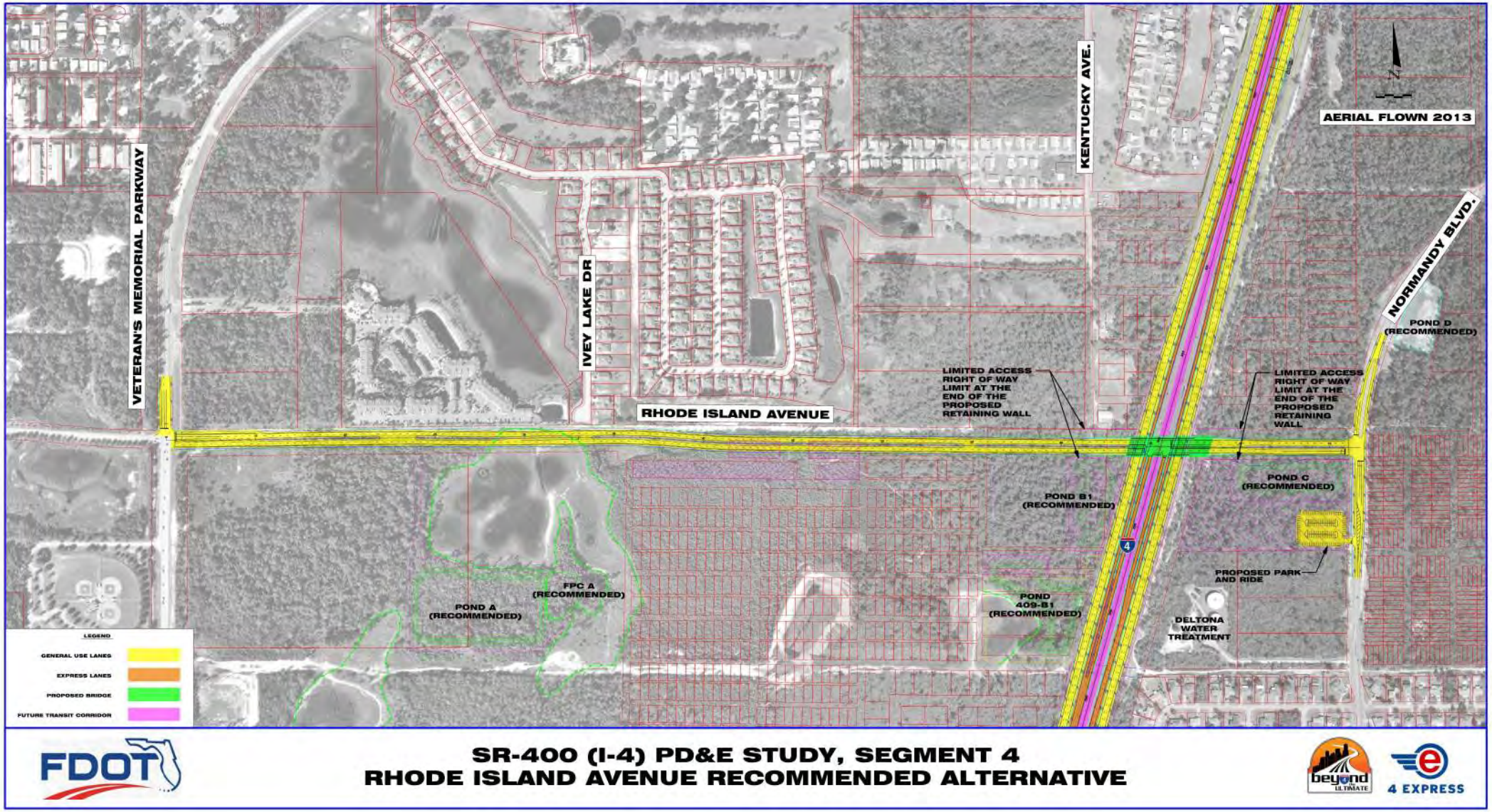
Segment 4: State Road 400 (SR 400)/Interstate 4 (I-4) from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472

Volusia County (79110), Florida

June 2, 2017

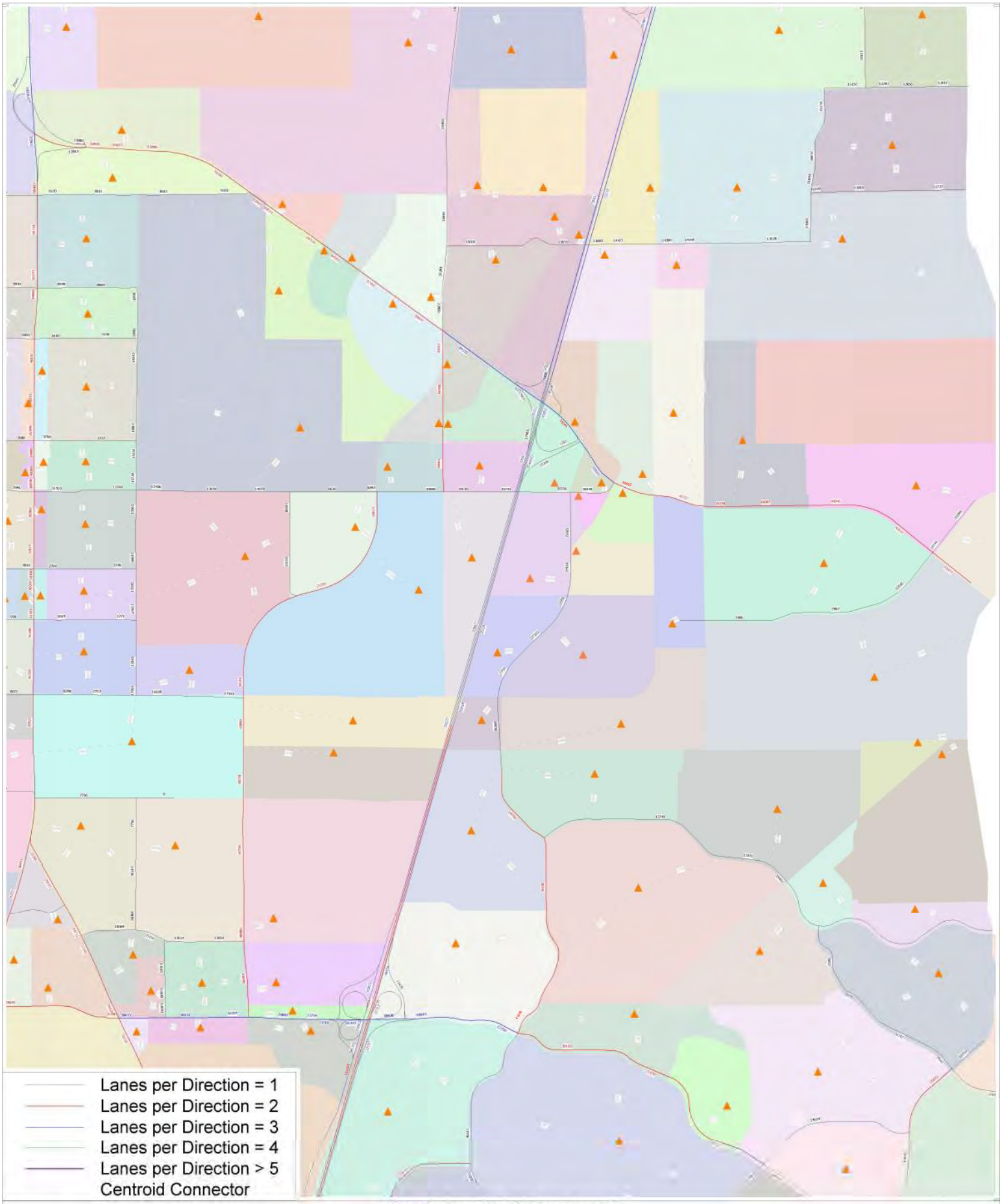
HNTB Corporation
610 Crescent Executive Court
Suite 400
Lake Mary, FL 32746

4 EXPRESS


VETERAN'S MEMORIAL PARKWAY
IVEY LAKE DR
KENTUCKY AVE.
NORMANDY BLVD.
RHODE ISLAND AVENUE
AERIAL FLOWN 2013
LIMITED ACCESS RIGHT OF WAY LIMIT AT THE END OF THE PROPOSED RETAINING WALL
LIMITED ACCESS RIGHT OF WAY LIMIT AT THE END OF THE PROPOSED RETAINING WALL
POND D (RECOMMENDED)
POND C (RECOMMENDED)
POND B1 (RECOMMENDED)
PROPOSED PARK AND RIDE
FPC A (RECOMMENDED)
POND A (RECOMMENDED)
POND 409-B1 (RECOMMENDED)
DELTONA WATER TREATMENT
LEGEND
GENERAL USE LANES
EXPRESS LANES
PROPOSED BRIDGE
FUTURE TRANSIT CORRIDOR
FDOT
SR-400 (I-4) PD&E STUDY, SEGMENT 4
RHODE ISLAND AVENUE RECOMMENDED ALTERNATIVE
beyond ULTIMATE
4 EXPRESS

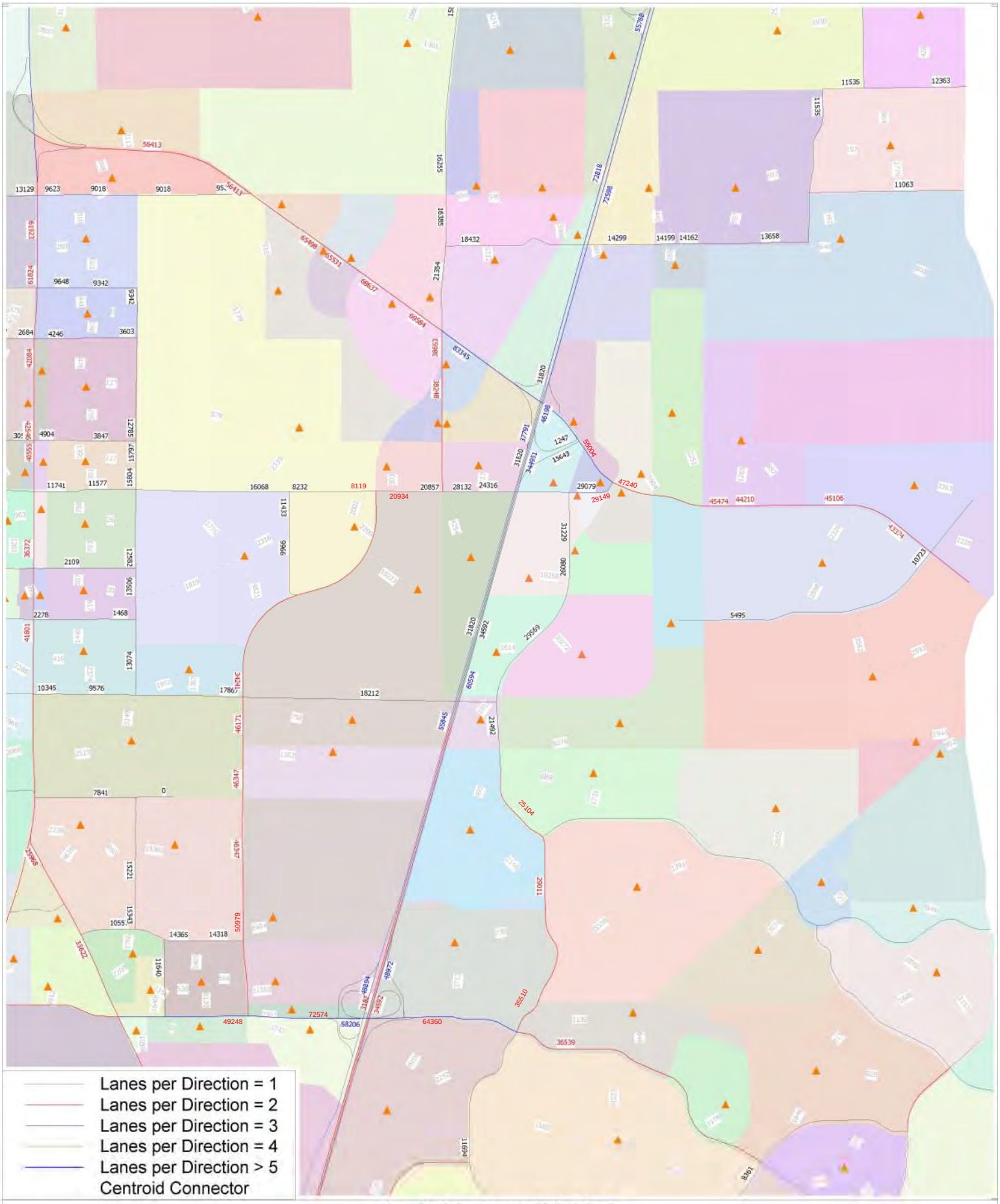
ATTACHMENT B

CFRPMv6 Model Outputs



Model 1: Base 2045 (No Interchange)
CFRPMv6 - 2045
Base.CF_2045.PIND_mbase_45 7/2/2020
C:\FSUTMS\D5\CFRPMV61_Daily\Base\CF_2045\PIND_mbase_45\Output\HWYLOAD_C45.NET

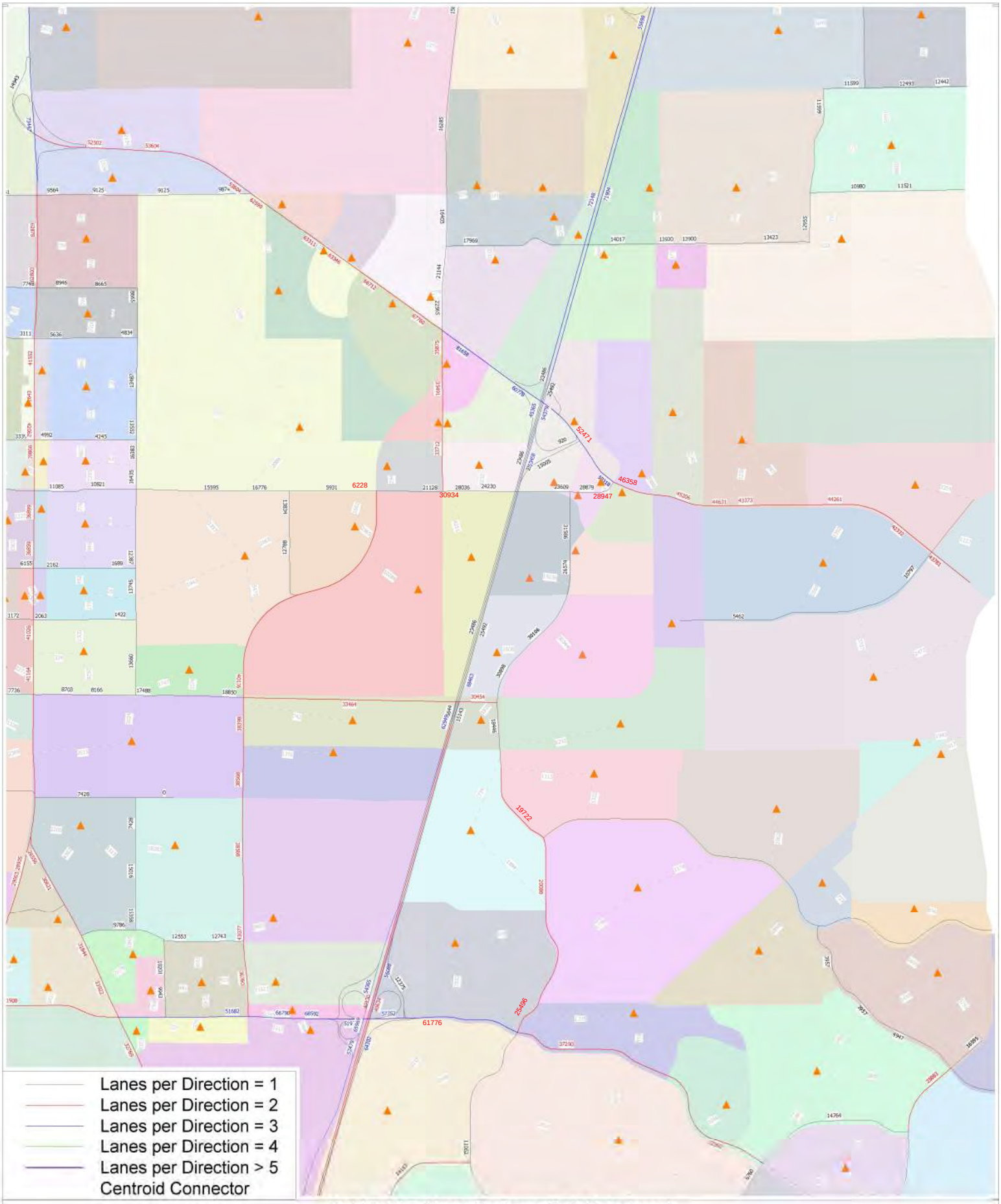
cube (Licensed to Kimley Horn and Associates Inc)



Base (No Interchange w/Hode Island)
CFRPMv6 - 2045
Base.CF_2045.PIND_base_45 7/2/2020
C:\FSUTMS\D5\CFRPMV61_Daily\Base\CF_2045\PIND_base_45\Output\HWYLOAD_C45.NET

cube

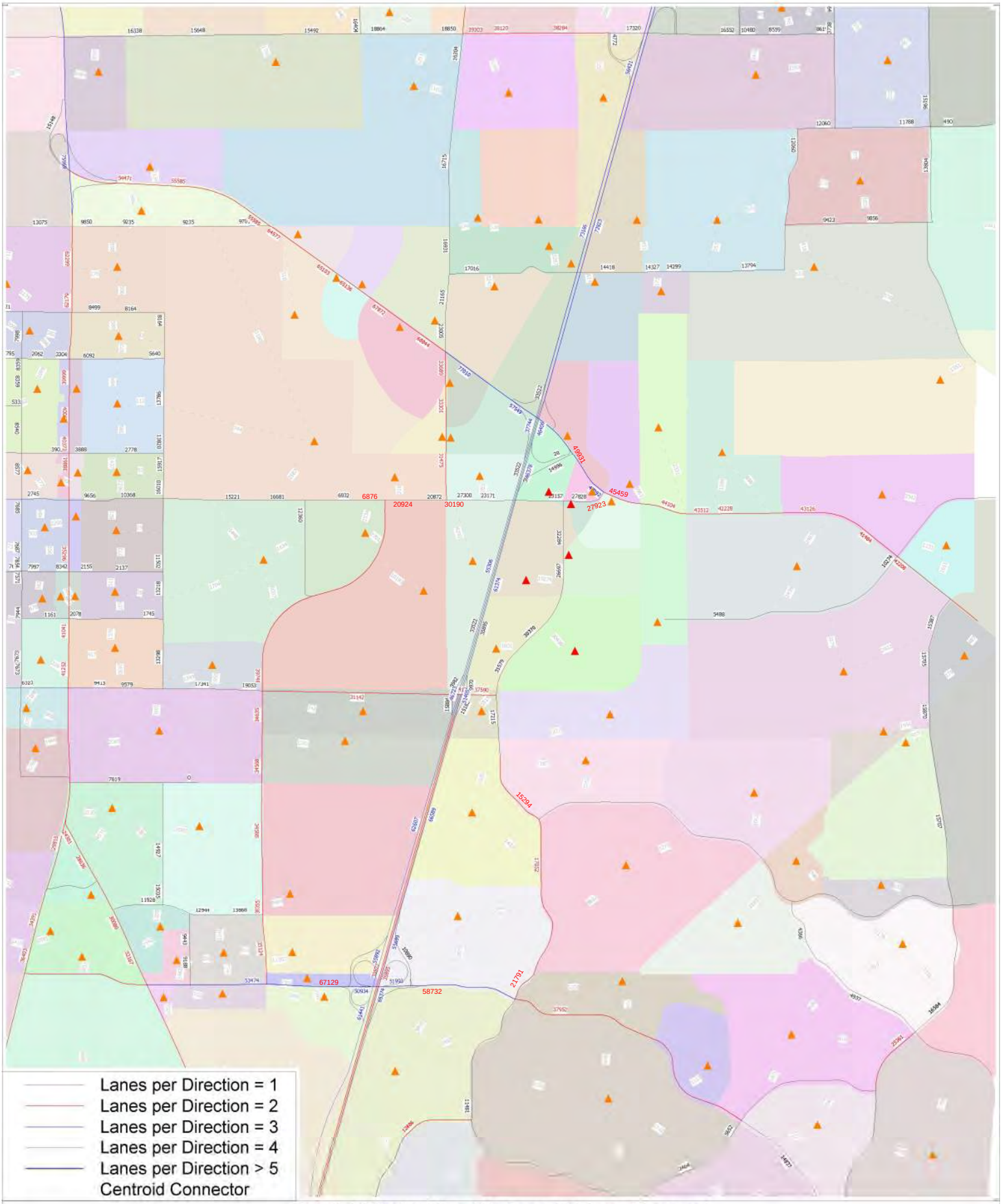
(Licensed to Kimley Horn and Associates Inc)



Model 2: I-4 Toll Lanes Slip Ramps (Partial Interchange)
CFRPMv6 - 2045
Base.CF_2045.PIND_3_45 7/2/2020
C:\FSUTMS\D5\CFRPMV61_Daily\Base\CF_2045\PIND_2_45\Output\HWYLOAD_C45.NET

cube

(Licensed to Kimley Horn and Associates Inc)



Model 3: I-4 Mainline Off- and On- Ramps (Full Access Interchange)
CFRPMv6 - 2045
Base.CF_2045.PIND_3_45 7/2/2020
C:\FSUTMS\D5\CFRPMV61_Daily\Base\CF_2045\PIND_3_45\Output\HWYLOAD_C45.NET