

Watermark

Project № 22105.1, v2.0
July 2025

**Traffic Impact Analysis
Town of Howey-In-The-Hills
Florida**

Prepared for:

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Prepared by:



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EXECUTIVE SUMMARY

Project Information

Name: Watermark
Location: Southeast corner of the SR 19 and Revels Road intersection
Jurisdiction: Town of Howey-In-The-Hills, Florida
Description: 290 Single-Family Detached Units

Findings

Trip Generation: 2,687 ADT / 196 AM Peak / 270 PM Peak
Adverse Impacts: The proposed development impacts the following adverse facilities:

- SR 19 and Revels Road
- SR 19 and CR 455

Recommendations

Access Improvements: No turn lanes are warranted at the project access driveways on Revels Road.
SR 19 and Revels Road Interim Conditions: The following turn lanes are recommended at the intersection of SR 19 and Revels Road during the interim conditions:

- 455-foot-long southbound left turn deceleration lane
- 405-foot-long northbound right turn deceleration lane
- 205-foot-long westbound left turn deceleration lane

A signal is not warranted during interim conditions.
Proportionate Share: The estimated proportionate share percentages for the signal and roundabout improvements at SR 19 and Revels Road are 9.2% and 13.1%, respectively.

The estimated proportionate share percentage for the signal improvement at SR 19 and CR 455 is 4.9%.



PROFESSIONAL ENGINEERING CERTIFICATION

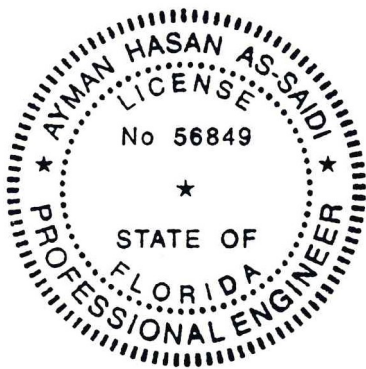
I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic & Mobility Consultants LLC, a corporation authorized to operate as an engineering business, CA-30024, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Watermark

LOCATION: Town of Howey-In-The-Hills, Florida

CLIENT: JTD Land Company LLC

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

**AYMAN H AS-
SAIDI**

Digitally signed by AYMAN H
AS-SAIDI
Date: 2025.07.16 17:20:28
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ON THE DATE ADJACENT TO THE SEAL

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TRAFFIC & MOBILITY CONSULTANTS LLC
988 WOODCOCK ROAD, SUITE 200
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CERTIFICATE OF AUTHORIZATION CA-30024

AYMAN H. AS-SAIDI, P.E. № 56849

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1.0 INTRODUCTION

This analysis was prepared in support of a development application for Watermark. The project is a residential development that includes 290 single-family units. The project's anticipated buildout date is 2027.

The site is located on the southeast corner of the SR 19 and Revels Road intersection, in the Town of Howey-In-The-Hills, Florida. **Figure 1** depicts the site location, the 1-mile influence area, and the surrounding transportation network. A conceptual site/development plan depicting the site layout, land uses, and access points is included in **Appendix A**.

The analysis was conducted in accordance with a methodology approved by Town of Howey-In-The-Hills and Lake County. The approved methodology and pertinent correspondence are included in **Appendix B**.

Information used in this analysis includes data collected by Traffic & Mobility Consultants, information provided by the project team, and/or other data and information obtained from the Town of Howey-In-The-Hills, Lake County, the Institute of Transportation Engineers (ITE), and the Florida Department of Transportation (FDOT).

2.0 PROJECT TRAFFIC

2.1 Trip Generation

The trips generated by the proposed development were projected using data published in the ITE *Trip Generation Manual, 11th Edition*. Trip generation rates and/or equations published for the land use were applied to the proposed development program to determine the total trips generated by the project. The trip generation calculations are summarized in **Table 1** and detailed information is included in **Appendix C**.

Table 1
Trip Generation Summary

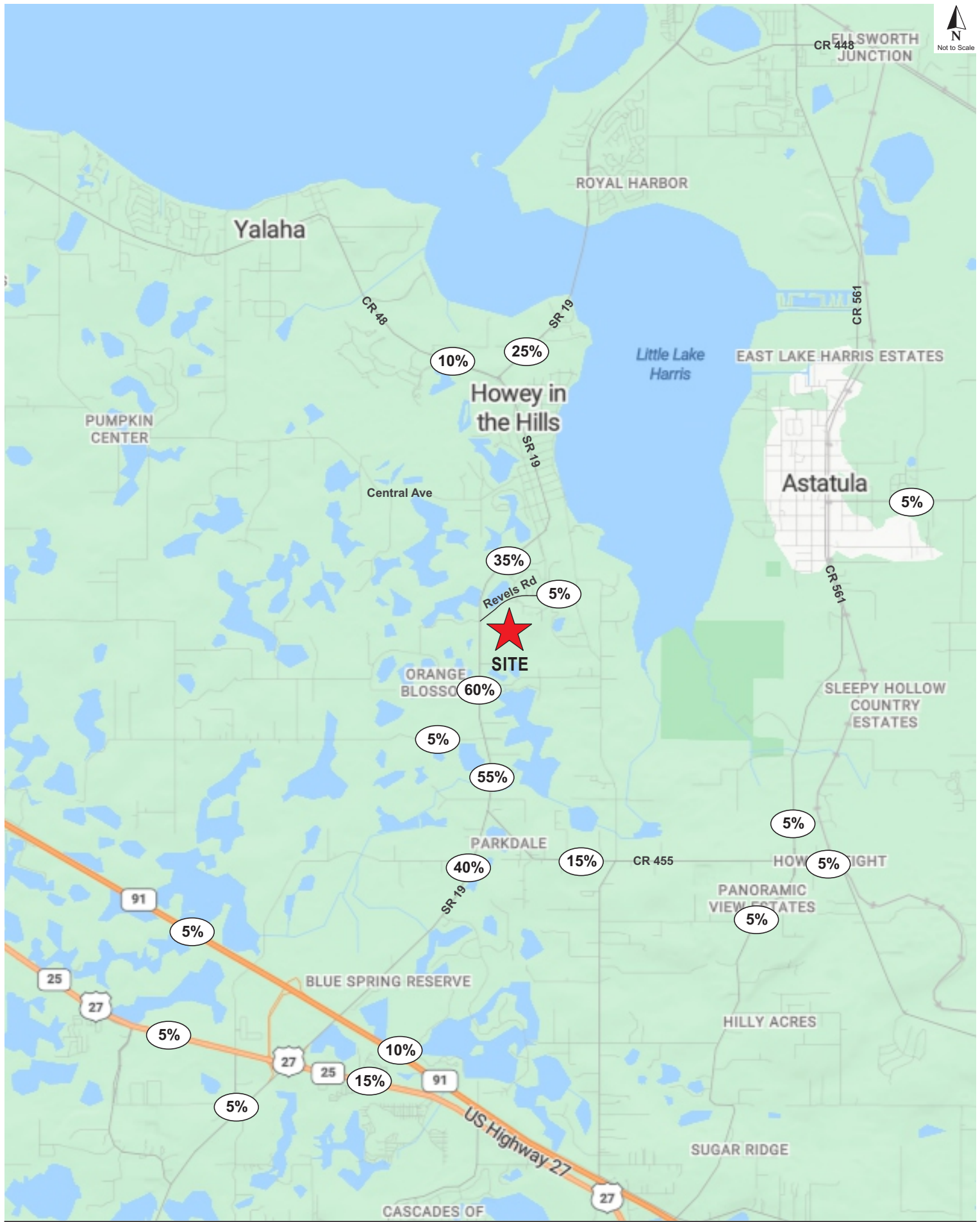
ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
210	Single-Family Detached	290 DU	9.27	2,687	0.68	196	49	147	0.93	270	170	100

Trip generation analysis based on ITE Trip Generation Manual, 11th Edition

The proposed development is projected to generate 2,687 new daily trips of which 196 trips occur during the AM peak hour, and 270 trips occur during the PM peak hour.

2.2 Trip Distribution

A preliminary trip distribution pattern was developed using the Central Florida Regional Planning Model (CFRPM). The adopted model was modified to include a project specific Traffic Analysis Zone with the corresponding socio-economic data to reflect the proposed development. A Select Zone Analysis was executed to obtain a model-generated trip distribution pattern on the surrounding transportation network. Minor manual adjustments were applied to the model generated distribution pattern to better reflect the local transportation network and prevailing travel patterns. The final trip distribution pattern is illustrated in **Figure 2** and the model output plot is included in **Appendix D**.



3.0 STUDY AREA

3.1 Study Roadways

The study area was established in accordance with the requirements of the Town of Howey-In-The-Hills and the approved methodology. The impact area includes roadway segments within the project's 1-mile influence area and where project trips are equivalent to 5% or more of the roadway segment's capacity. The project's study area determination is provided in **Table 2**. The roadway segment information and characteristics were obtained from *2025 Lake County Congestion Management Process Database* and *2023 FDOT Multimodal Quality/Level of Service (MQ/LOS)*, which is included in **Appendix E**.

Table 2
Study Segments

Seg ID	Segment Information			Exist Lns	LOS Std	Peak Cap	Proj Dist	Enter Dir	Peak Project Trips					In Study?
									PM Peak					
	Roadway	From	To						NB/EB	SB/WB	Signif	Prime		
245	CR 455	SR 19	CR 561	2	C	430	15%	SB/WB	15	26	6.0%	N	Y	
243	CR 455	CR 561	CR 561A	2	C	430	5%	SB/WB	5	9	2.1%	N	N	
264	CR 48	US 27	Lime Ave	2	D	1,049	10%	NB/EB	17	10	1.6%	N	N	
255	CR 48	Lime Ave	SR 19	2	D	999	10%	NB/EB	17	10	1.7%	N	N	
253	CR 48	CR 561	Ranch Rd	2	D	999	5%	SB/WB	5	9	0.9%	N	N	
N/A	CR 48*	Ranch Rd	CR 488A	2	C	873	5%	SB/WB	5	9	1.0%	N	N	
257	CR 561	CR 448	CR 48	2	D	677	0%	SB/WB	0	0	0.0%	N	N	
252	CR 561	CR 48	S Astatula City Limits	2	D	799	5%	SB/WB	5	9	1.1%	N	N	
N/A	CR 561*	S Astatula City Limits	CR 455	2	D	799	5%	SB/WB	5	9	1.1%	N	N	
242	CR 561	CR 455	Howey Cross Rd	2	C	430	5%	NB/EB	9	5	2.1%	N	N	
238	CR 561	Howey Cross Rd	Turnpike Rd/CR 561A	2	C	430	5%	NB/EB	9	5	2.1%	N	N	
N/A	Revels Rd**	SR 19	6th Ave	2	C	430	95%	NB/EB	162	95	37.7%	Y	Y	
N/A	SR 19**	Lane Park Rd	CR 48	2	D	890	25%	SB/WB	25	43	4.8%	N	N	
110495	SR 19**	CR 48	Central Ave	2	D	890	35%	SB/WB	35	60	6.7%	N	Y	
110255	SR 19**	Central Ave	Revels Rd	2	C	780	35%	SB/WB	35	60	7.7%	Y	Y	
110255	SR 19**	Revels Rd	CR 455	2	C	450	60%	NB/EB	102	60	22.7%	Y	Y	
110255	SR 19**	CR 455	US 27/SR 25	2	C	450	40%	NB/EB	68	40	15.1%	N	Y	
N/A	SR 19**	US 27/SR 25	CR 478	2	C	450	5%	NB/EB	9	5	2.0%	N	N	
240	US 27/SR 25	Florida Turnpike	SR 19	4	D	1,880	5%	SB/WB	5	9	0.5%	N	N	
N/A	US 27/SR 25*	SR 19	CR 561	4	D	1,880	15%	NB/EB	26	15	1.4%	N	N	

* Peak hour Directional Capacity Based on Adjacent Roadway

** Peak Hour Directional Capacity Based on 2023 FDOT MQ/LOS Tables

Study Roadway Segments:

- CR 455
 - SR 19 and CR 561
- Revel Road
 - SR 19 to 6th Avenue
- SR 19
 - CR 48 to Central Avenue
 - Central Avenue to Revels Road
 - Revels Road to CR 455
 - CR 455 to US 27/SR 25

3.2 Study Intersections

The study area encompasses major intersections that were identified in the approved methodology. Additionally, the site is proposed to be served by two (2) full access driveways on Revels Road. The study intersections and access points are presented in **Table 3**.

Table 3
Study Intersections

Int #	Intersection		Traffic Control
	Major Road	Minor Road	
1	SR 19	CR 48	Signal
2	SR 19	Central Ave	Two-Way Stop
3	SR 19	Revels Rd	Two-Way Stop
4	SR 19	CR 455	Two-Way Stop
5	Revels Rd	West Project Access	Two-Way Stop
6	Revels Rd	East Project Access	Two-Way Stop

4.0 TRANSPORTATION IMPROVEMENTS

Transportation improvement programs published by Town of Howey-In-The-Hills, LSMPO, and the FDOT work program were reviewed to determine if any transportation improvements that influence the project's study area are planned or programmed. Improvements that are funded for construction within three (3) years are considered programmed and will be incorporated in the analysis. SR 19, from CR 561 to CR 48, is undergoing a Project Development and Environment study to be widened to four lanes. This improvement will not be included in the analysis. The *Transportation Improvement Program* excerpt is included in **Appendix F**.

5.0 TRAFFIC PROJECTIONS

5.1 Projected Roadway Volumes

The segment data, adopted LOS standard, and the capacity was obtained from the *2025 Lake County Congestion Management Process Database* and *2023 FDOT Multimodal Quality/Level of Service (MQ/LOS)*. The existing traffic volumes were obtained from the *2025 Lake County Traffic Counts*. Vested trips were determined using traffic studies for development in the surrounding area obtained from the Town of Howey-In-The-Hills. The roadway volumes for Revels Road was calculated using the PM peak hour turning moving counts.

Projected background traffic in the buildout year 2027 was derived from historical growth rate trends, with a minimum growth rate of 2%, and vested trips. Historical traffic count data on SR 19 was obtained from *Florida Traffic Online*, the resultant growth calculations, and the roadway vested trips are included in **Appendix G**.

The total projected volumes on the roadway segments include background traffic and project trips, which are calculated based on the project's trip generation and distribution pattern. The total background traffic volumes by roadway segment are presented in **Table 4**.

5.2 Projected Intersection Volumes

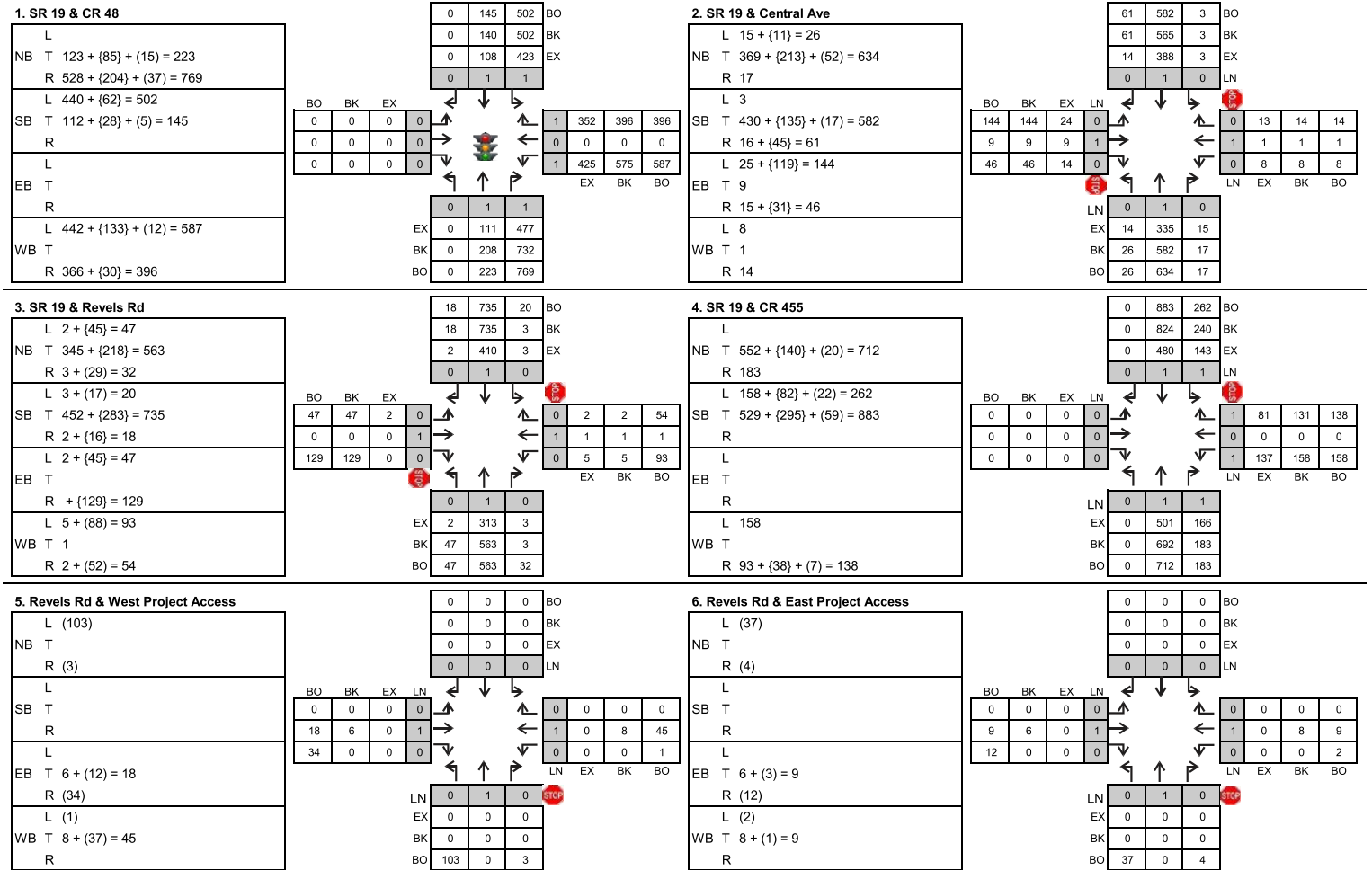
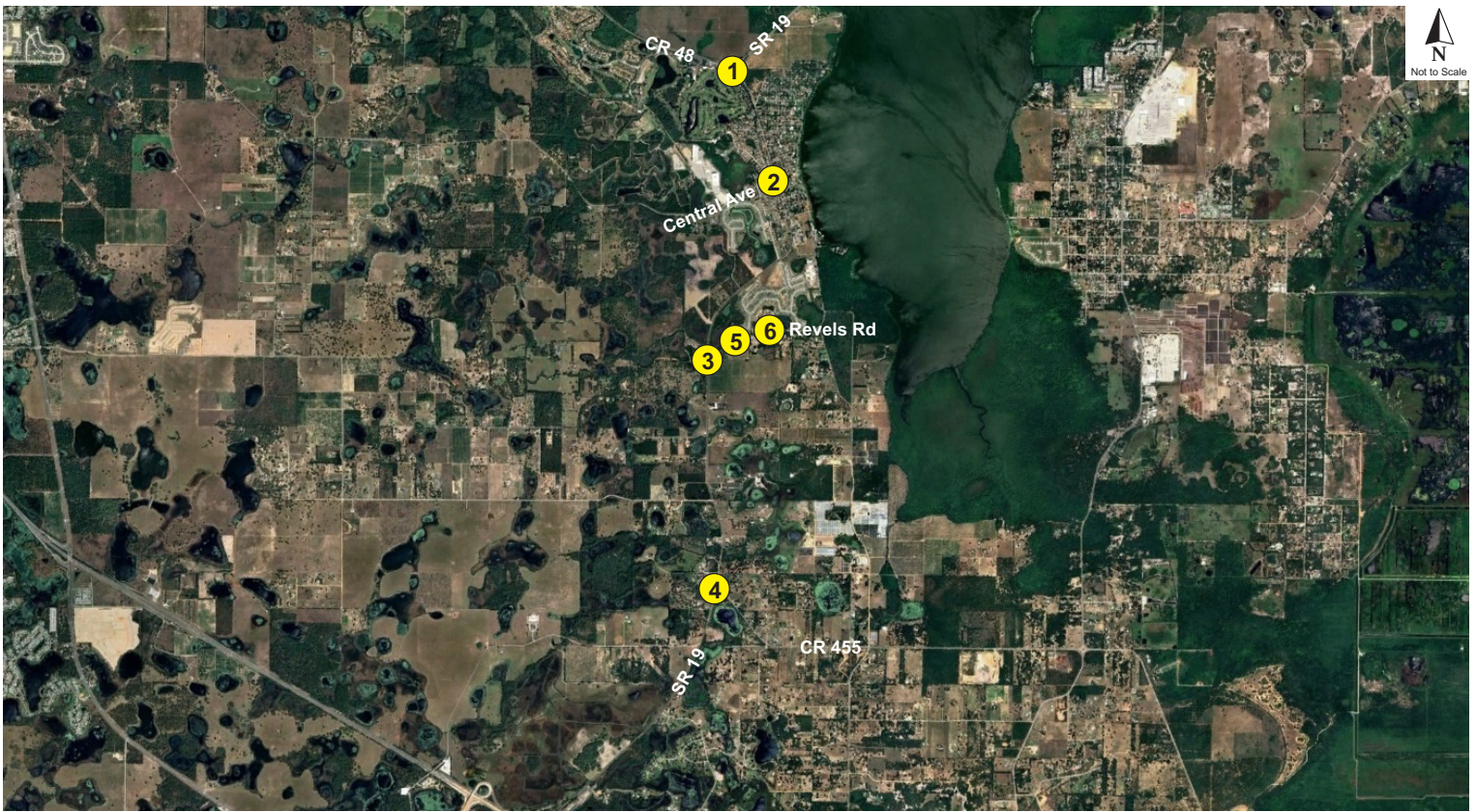
Existing AM and PM peak hour turning movement volumes were obtained at the study intersections on May 29, 2025. The counts were seasonally adjusted using the peak season factor of 1.01, obtained from the *FDOT Traffic Online* data. The raw turning movement volumes, supporting information, and the vested trips are provided in **Appendix H**.

Projected background intersection volumes in the buildout year 2027 were calculated by applying the corresponding growth rates on the adjacent segments to the existing turning volumes at the study intersections and adding vested trips. The total projected intersection volumes include background traffic and project trips, which are calculated based on the project's trip generation and assignment at each intersection. Detailed intersection volume calculations are provided in **Appendix I** and the resulting existing, background, and buildout volumes are illustrated in **Figures 3 and 4** for the AM and PM peak hour, respectively.

Table 4
Projected Background Volumes

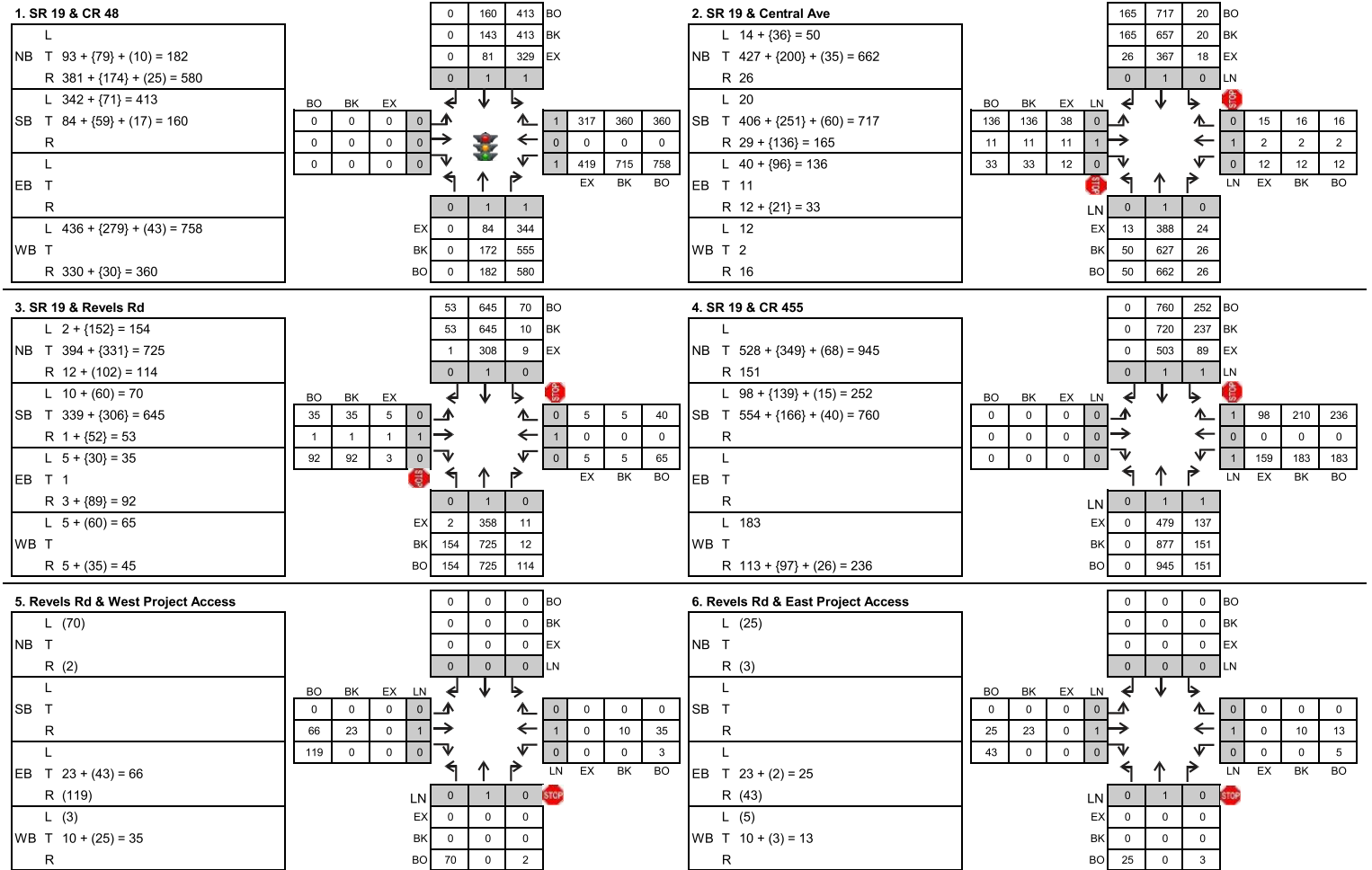
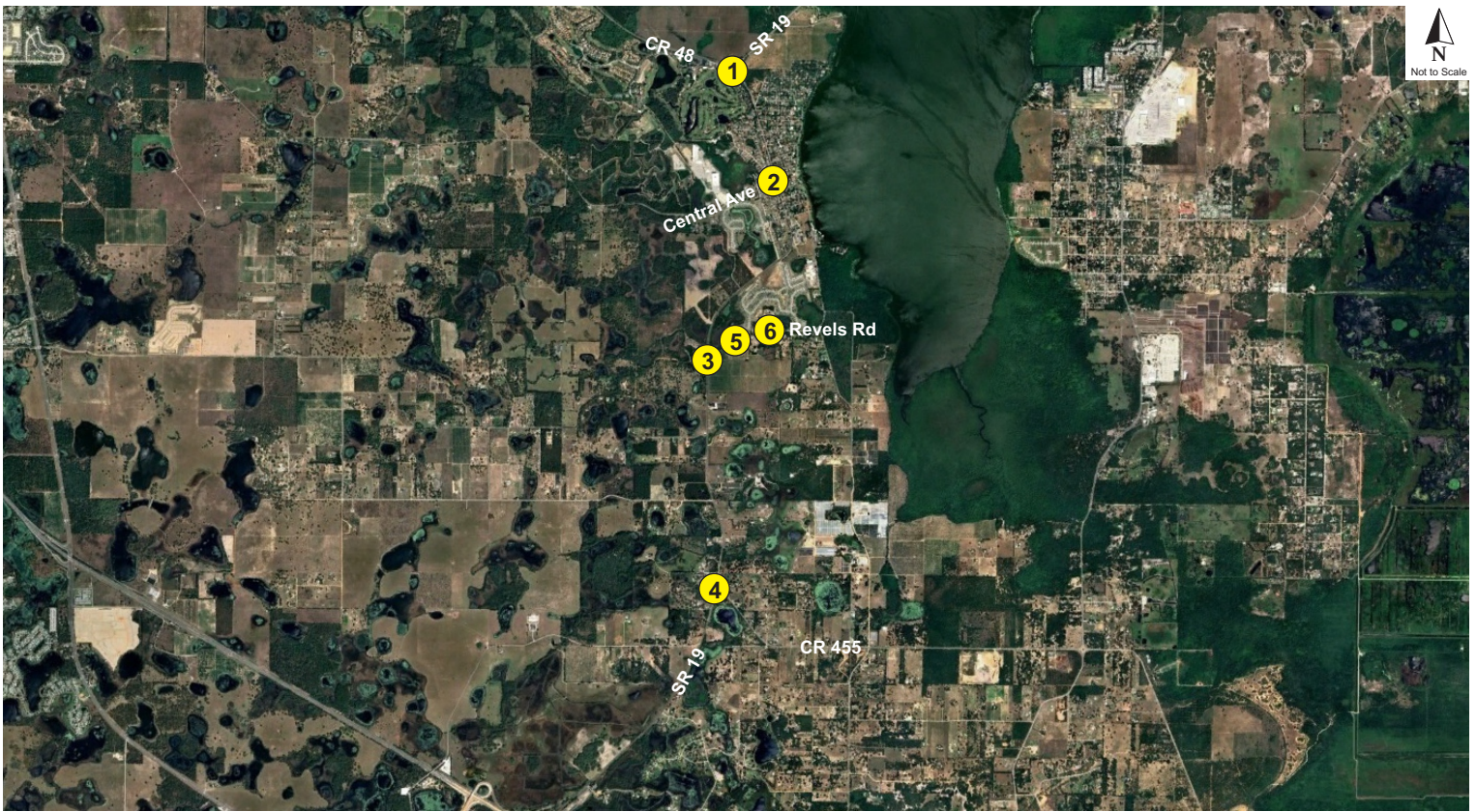
Seg ID	Segment Information			Existing Volumes		AGR	Committed Trips		2027 Bkgnd Volumes	
				PM Peak			PM Peak		PM Peak	
	Roadway	From	To	NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB
245	CR 455	SR 19	CR 561	244	249	2.0%	60	43	329	328
N/A	Revels Rd*	SR 19	6th Ave	21	10	2.0%	0	0	184	105
110495	SR 19*	CR 48	Central Ave	458	532	5.4%	273	366	816	1,015
110255	SR 19*	Central Ave	Revels Rd	567	658	5.1%	538	426	1,198	1,211
110255	SR 19*	Revels Rd	CR 455	567	658	5.1%	538	426	1,265	1,211
110255	SR 19*	CR 455	US 27/SR 25	567	658	5.1%	400	337	1,093	1,102

* Peak Hour Volumes Based on Florida Traffic Online Data



Legend: Background + {Vested} + (Project) = Total

1 Lanes by movement



Legend: Background + {Vested} + (Project) = Total

1 Lanes by movement

6.0 CAPACITY ANALYSIS

6.1 Roadway Segments

Roadway segment capacity was analyzed based on the adopted service volumes, capacity, and the corresponding traffic volumes to determine the resulting LOS, as summarized in **Table 5**.

The results of the capacity analysis reveal the following:

- SR 19, from CR 48 to Revels Road, is projected to operate above its adopted capacity due to background traffic.
- SR 19, from Revel Road to US 27/SR 25, is currently and is projected to operate above its adopted capacity due to background traffic.
- The remaining study roadway segments are projected to operate adequately.

**Table 5
Segment Analysis**

Seg ID	Segment Information			Exist Lns	LOS Std	Peak Cap	Existing Conditions				2027 Bkg'd Conditions				Project Trips			2027 Buildout Conditions			
							PM Peak				PM Peak				Proj Dist	PM Peak		PM Peak			
	Roadway	From	To				NB/EB	SB/WB	V/C	LOS	NB/EB	SB/WB	V/C	LOS		NB/EB	SB/WB	NB/EB	SB/WB	V/C	LOS
245	CR 455	SR 19	CR 561	2	C	430	244	249	0.58	C	314	302	0.73	C	15%	15	26	329	328	0.76	C
N/A	Revels Rd	SR 19	6th Ave	2	C	430	21	10	0.05	C	22	10	0.05	C	95%	162	95	184	105	0.43	C
110495	SR 19	CR 48	Central Ave	2	D	890	458	532	0.60	C	781	955	1.07	F	35%	35	60	816	1,015	1.14	F
110255	SR 19	Central Ave	Revels Rd	2	C	780	567	658	0.84	C	1,163	1,151	1.49	F	35%	35	60	1,198	1,211	1.55	F
110255	SR 19	Revels Rd	CR 455	2	C	450	567	658	1.46	D	1,163	1,151	2.58	E	60%	102	60	1,265	1,211	2.81	E
110255	SR 19	CR 455	US 27/SR 25	2	C	450	567	658	1.46	D	1,025	1,062	2.36	E	40%	68	40	1,093	1,102	2.45	E

6.2 Intersections

The study intersections were analyzed in accordance with the methods of the *Highway Capacity Manual* (HCM) as applied in the *Synchro* analytical tool. The TIA for the Hillside Groves development recommends a northbound left turn lane at the intersection of SR 19 and Revels Road. This left turn was added to the background and buildout conditions. The analysis results for existing, background, and buildout conditions are summarized in **Table 6**, which reveals the following:

- The intersection of SR 19 and CR 48 is projected to operate above its adopted LOS at the westbound approach during the AM and PM peak hour due to background traffic. A roundabout has been designed for this intersection but has not received funding.
- The intersection of SR 19 and Central Avenue is projected to operate above its adopted LOS at the eastbound approach during the AM and PM peak hour due to background traffic.
- The intersection of SR 19 and Revels Road is projected to operate above its adopted LOS at the westbound approach during the AM and PM peak hour at project buildout.
- The intersection of SR 19 and CR 455 is projected to operate above its adopted LOS at the westbound approach during the AM and PM peak hour due to background traffic.
- The remaining study intersections, including the access driveways, are projected to operate adequately.

The *Synchro* printouts and signal timings are included in **Appendix J**.

Table 6
Intersection Analysis

Int #	Intersection		Control	Time Period	Scenario	EB		WB		NB		SB		Overall	
	Major Road	Minor Road				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	SR 19	CR 48	Signal	AM	Existing	--	--	46.5	D	26.7	C	17.1	B	33.9	C
					Backg'd	--	--	123.2	F	30.6	C	36.2	D	81.9	F
					Buildout	--	--	130.1	F	31.5	C	39.8	D	86.7	F
				PM	Existing	--	--	29.9	C	20.9	C	12.9	B	23.6	C
					Backg'd	--	--	152.3	F	26.9	C	16.5	B	98.4	F
					Buildout	--	--	179.2	F	27.2	C	16.6	B	114.6	F
2	SR 19	Central Ave	TWSC	AM	Existing	17.8	C	14.6	B	8.5	A	8.5	A	--	--
					Backg'd	>300	F	26.3	D	9.4	A	9.4	A	--	--
					Buildout	>300	F	29.3	D	9.5	A	9.7	A	--	--
				PM	Existing	20.9	C	16.6	C	8.4	A	8.4	A	--	--
					Backg'd	>300	F	47.0	E	10.3	B	9.2	A	--	--
					Buildout	>300	F	58.9	F	10.6	B	9.4	A	--	--
3	SR 19	Revels Rd	TWSC	AM	Existing	20.9	C	14.7	B	8.9	A	7.9	A	--	--
					Backg'd	26.8	D	23.3	C	9.6	A	8.6	A	--	--
					Buildout	29.4	D	62.5	F	9.6	A	8.8	A	--	--
				PM	Existing	14.9	B	14.1	B	9.3	A	8.3	A	--	--
					Backg'd	31.7	D	33.5	D	10.3	B	9.6	A	--	--
					Buildout	61.0	F	>300	F	10.3	B	10.4	B	--	--
4	SR 19	CR 455	TWSC	AM	Existing	--	--	27.7	D	0.0	A	9.8	A	--	--
					Backg'd	--	--	150.9	F	0.0	A	12.3	B	--	--
					Buildout	--	--	204.6	F	0.0	A	12.8	B	--	--
				PM	Existing	--	--	23.1	C	0.0	A	9.3	A	--	--
					Backg'd	--	--	159.1	F	0.0	A	14.0	B	--	--
					Buildout	--	--	208.1	F	0.0	A	15.4	C	--	--
5	Revels Rd	West Project Access	TWSC	AM	Buildout	0.0	A	7.3	A	9.5	A	--	--	--	--
				PM	Buildout	0.0	A	7.6	A	9.9	A	--	--	--	--
6	Revels Rd	East Project Access	TWSC	AM	Buildout	0.0	A	7.3	A	8.8	A	--	--	--	--
				PM	Buildout	0.0	A	7.4	A	9.0	A	--	--	--	--

Average delay expressed in seconds/vehicle

Per the request of the Town of Howey-In-The-Hills the intersection of SR 19 and Revels Road was analyzed as a signal and roundabout. As shown in **Table 7**, the intersections are projected to operate adequately with alternative traffic control. The mitigation analysis worksheets are included in **Appendix K**.

Table 7
Intersection Mitigation

Int #	Intersection		Control	Time Period	EB			WB			NB			SB			Overall	
	Major Road	Minor Road			Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS
3	SR 19	Revels Rd	TWSC	AM	29.4	D	0.56	62.5	F	0.75	9.6	A	0.06	8.8	A	0.02	--	--
				PM	61.0	F	0.72	>300	F	1.59	10.3	B	0.20	10.4	B	0.10	--	--
			Signal	AM	19.1	B	0.50	18.2	B	0.39	5.0	A	0.52	11.7	B	0.78	10.5	B
				PM	23.4	C	0.48	22.5	C	0.36	6.0	A	0.70	11.2	B	0.80	10.0	A
			RAB	AM	11.6	B	0.33	8.2	A	0.23	9.0	A	0.54	13.0	B	0.68	--	--
				PM	10.1	B	0.25	11.3	B	0.24	27.5	D	0.91	18.9	C	0.79	--	--
4	SR 19	CR 455	Signal	AM	--	--	--	25.3	C	0.71	13.5	B	0.83	8.2	A	0.74	12.4	B
				PM	--	--	--	44.0	D	0.86	33.5	C	0.96	17.5	B	0.88	28.8	C

Average delay expressed in seconds/vehicle

7.0 ACCESS REVIEW

The development's proposed access plan reflects two (2) full access driveways on Revels Road.

7.1 Access Treatment

Site access treatment was evaluated to determine the need for deceleration lanes and egress lanes at the project driveways. Turn lane warrants were evaluated based on the methods of the National Cooperative Highway Research Program (NCHRP) *Report 457 – Evaluating Intersection Improvements: An Engineering Study Guide*. The turn lane warrant evaluation results indicate that deceleration lanes are not warranted or necessary to adequately serve the projected traffic at the site driveways. The turn lane warrants are included in **Appendix L**.

8.0 ALTERNATIVE TRANSPORTATION MODES

A review of pedestrian, bicycle, and transit facilities was conducted. This review consists of a visual inventory of available facilities to determine the context of alternative transportation modes in the vicinity of the proposed development.

8.1 Pedestrian Facilities

A visual survey of pedestrian facilities within a ¼-mile area of the site was conducted to determine the prevailing conditions for pedestrian connectivity. Revels Road is currently not improved with crosswalks.

8.2 Bicycle Facilities

A visual survey of the surrounding network within 1-mile of the site was conducted to identify on-street and dedicated bicycle facilities in the area. The surrounding roadways are not improved with dedicated on-street bicycle facilities.

8.3 Transit Facilities

Transit services are provided by Lake Xpress. The nearest bus stops are located at SR 19 and Woodlea Road, within 7.22 miles of the site. The existing bus stops are improved with a bench. A route map showing the existing transit network and the specifics of the bus route serving the site is included in **Appendix M**. It should be noted that Lake Xpress also provides on-demand para-transit services Lake County Connection to accommodate eligible riders.

9.0 SR 19 AND REVELS ROAD INTERIM CONDITIONS ANALYSIS

The Mission Rise development agreement states that the developer is responsible for improving the SR 19 and Revels Road intersection to either a traffic signal or roundabout. Per discussion with the Town of Howey-In-The-Hills and FDOT, it is expected that the Watermark development should be built out before the Mission Rise project and the intersection improvement. To accommodate the Watermark development an interim condition was determined to be constructed at the intersection. This interim condition would include the construction of a northbound right, southbound left, and westbound left turn lane at the intersection. The turn lane dimensions are calculated below:

- Southbound Left Turn Deceleration Lane
Posted Speed = 55 mph
Deceleration = 405 ft (per FDM Table 212-1)
95th Percentile Queue Storage = 1 vehicle @ 25 ft/vehicle = 25ft (provide 50 ft min.)
Total Lane Length = Deceleration + Queue = 405 ft + 50 ft = 455 ft (Incl. 50-ft taper)
- Northbound Right Turn Deceleration Lane
Posted Speed = 55 mph
Deceleration = 405 ft (per FDM Table 212-1)
Total Lane Length = Deceleration = 405 ft (Incl. 50-ft taper)
- Westbound Left Turn Deceleration Lane
Posted Speed = 35 mph
Deceleration = 155 ft (per FDM Table 212-1)
95th Percentile Queue Storage = 2 vehicles @ 25 ft/vehicle = 50ft (provide 50 ft min.)
Total Lane Length = Deceleration + Queue = 155 ft + 50 ft = 205 ft (Incl. 50-ft taper)

The FDM Table 212-1 is provided in **Appendix N**.

For the interim conditions the Mission Rise project trips were removed from the volumes. **Table 8** reveals that the intersection is projected to operate adequately with interim improvements.

Table 8
SR 19 and Revels Road Interim Intersection Analysis

Int #	Intersection		Control	Time Period	EB			WB			NB			SB		
	Major Road	Minor Road			Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c
3	SR 19	Revels Rd	TWSC	AM	15.5	C	0.09	24.0	C	0.41	9.2	A	0.02	8.8	A	0.02
				PM	17.9	C	0.11	31.4	D	0.42	9.2	A	0.04	10.2	B	0.10

Average delay expressed in seconds/vehicle

Warrant 1 from the *Manual on Uniform Traffic Control Devices (MUTCD)* evaluated to determine if a signal is projected to be warranted at the intersection SR 19 and Revels Road. To determine the SR 19 background volumes, hourly volumes obtained from the *FTO* website were used to determine the hourly percentage on SR 19. This percentage was applied to the background roadway volumes for the SR 19 segment adjacent to the intersection. For the Watermark project trips, the temporal distribution for the projected trips was obtained from the *ITE Trip Generation Manual, 11th Edition*. This temporal distribution was applied to the daily trip generation to determine the hourly project trips at the intersection. The SR 19 background volumes and the project trips were combined for the total buildout traffic. These volumes were compared against the threshold volumes. As shown in **Table 9**, the conditions for *Warrant 1* are **not satisfied** under the buildout conditions. The supporting information is provided in **Appendix O**.

Table 9
SR 19 and Revels Road Warrant 1 Analysis

Begin Time	Total Both Approaches	Minor Road*	Warrant 1		
	Major Road		Condition A	Condition B	Both A & B
12:00 AM	80	2			
1:00 AM	58	2			
2:00 AM	75	1			
3:00 AM	114	2			
4:00 AM	221	8			
5:00 AM	609	21			
6:00 AM	886	61			
7:00 AM	1,203	104		X	
8:00 AM	922	89		X	
9:00 AM	881	60			
10:00 AM	827	58			
11:00 AM	802	53			
12:00 PM	864	60			
1:00 PM	933	62			
2:00 PM	977	64			
3:00 PM	993	65			
4:00 PM	1,265	78		X	
5:00 PM	1,281	76		X	
6:00 PM	874	61			
7:00 PM	525	44			
8:00 PM	381	33			
9:00 PM	302	25			
10:00 PM	247	11			
11:00 PM	167	7			
Hours Required			8	8	8
Hours Satisfied			0	4	0
Volume Threshold Satisfied			N	N	N
Warrant Results			Not Satisfied		

MUTCD 4C.02: On the minor street, the higher volume shall not be required to be on the same approach during each of these 8 hours.

*Note: The minor street volume was calculated with half of the right turning volumes.

10.0 PROPORTIONATE SHARE CALCULATION

The project's impacts on the adverse transportation facilities within the study area are proposed to be mitigated through a payment of the project's proportionate share of the cost to make the planned or identified mitigating improvements.

The proportionate share calculations were prepared in accordance with the requirements of Town of Howey-In-The-Hills. The project's estimated proportionate share percentage is calculated in **Table 10**. The estimated proportionate share percentages for the signal and roundabout improvement at SR 19 and Revels Road are 9.2% and 13.1%, respectively. The estimated proportionate share percentage for the signal improvement at SR 19 and CR 455 is 4.9%.

Table 10
SR 19 and Revels Road Proportionate Share Calculation

Int #	Intersection		Improv.	Existing Capacity	Improv Capacity	Change in Capacity	Project Trips	Proportionate Share %
	Major Road	Minor Road						
3	SR 19	Revels Rd	Signal	1,283	4,066	2,783	257	9.2%
			RAB		3,240	1,957		13.1%
4	SR 19	CR 455	Signal	1,009	4,032	3,023	149	4.9%

The applicant intends to enter into a proportionate share mitigation agreement with the Town of Howey-In-The-Hills to establish the payment of the mitigation funds, the allocation of impact fee credits, and any other applicable terms.

11.0 STUDY CONCLUSIONS

This traffic analysis was conducted to evaluate the impacts of Watermark, a residential development. The site is located in the southeast corner of the SR 19 and Revels Road intersection, in Town of Howey-In-The-Hills, Florida.

The analysis included a determination of trip generation, a review of transportation capacity and operations, a review of the proposed site access plan, and a review of alternative modes of transportation. The results of the traffic analysis are summarized as follows:

Summary of Findings

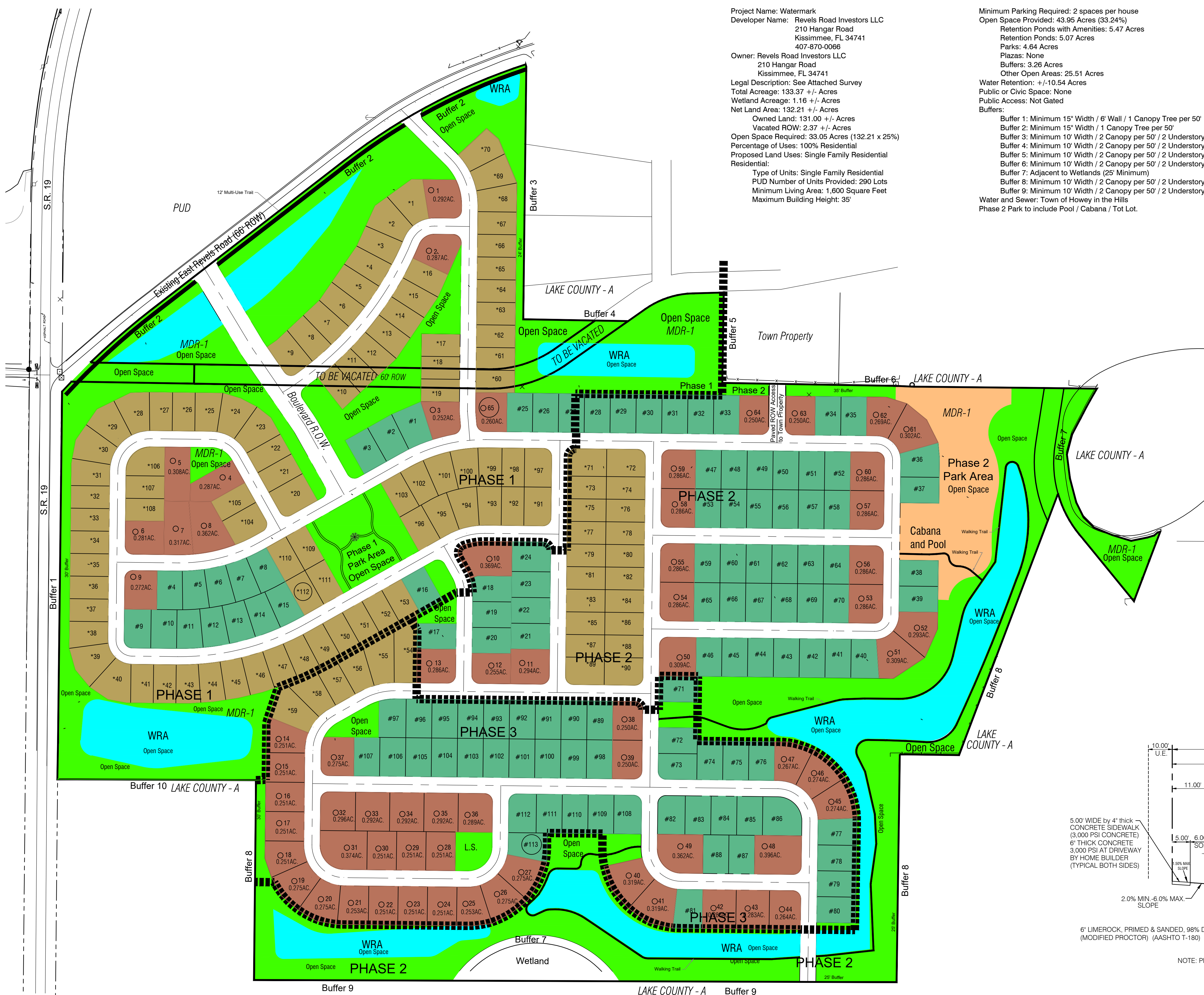
- The proposed development is projected to generate 2,687 daily trips, of which 196 trips occur during the AM peak hour and 270 trips occur during the PM peak hour.
- A review of roadway capacity conditions reveals that the proposed development is not projected to adversely impact the roadway network.
- A review of intersection operations indicates that the following adverse intersections are projected to be impacted by the proposed development:
 - SR 19 and Revels Road
 - SR 19 and CR 455
- A signal is not projected to be warranted during the interim conditions.

Summary of Recommendations

- No turn lanes are warranted at the project access driveways on Revels Road.
- The following turn lanes are recommended at the intersection of SR 19 and Revels Road during the interim conditions:
 - 455-foot-long southbound left turn deceleration lane
 - 405-foot-long northbound right turn deceleration lane
 - 205-foot-long westbound left turn deceleration lane
- The estimated proportionate share percentages for the signal and roundabout improvement at SR 19 and Revels Road are 9.2% and 13.1%, respectively.
- The estimated proportionate share percentage for the signal improvement at SR 19 and CR 455 is 4.9%.

APPENDICES

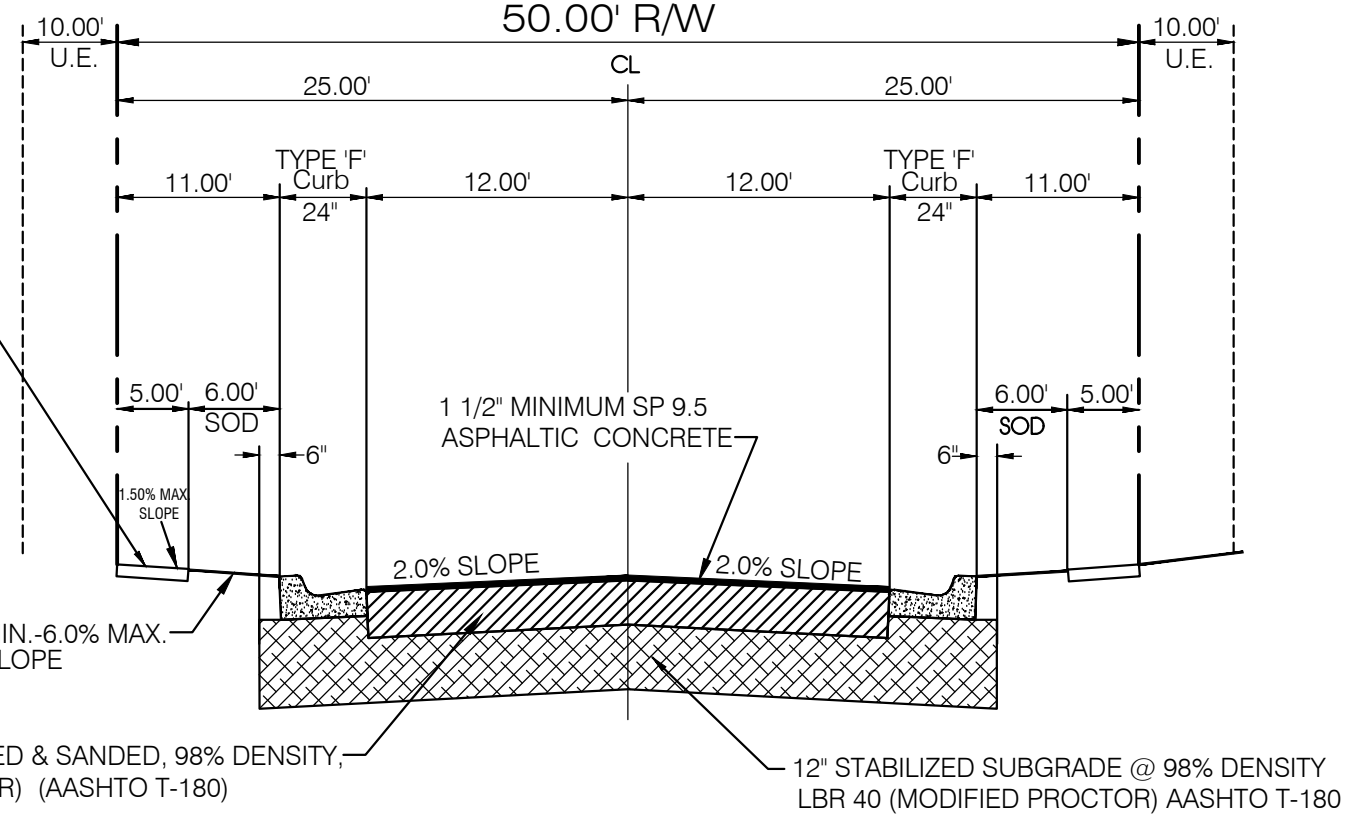
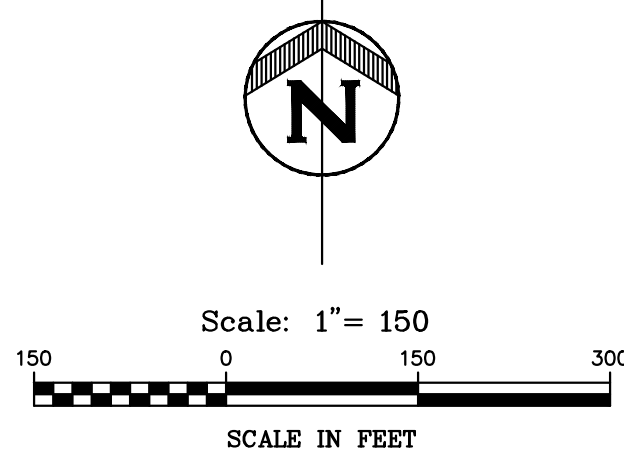
Appendix A
Site Plan/Information



Project Name: Watermark
Developer Name: Revels Road Investors LLC
210 Hangar Road
Kissimmee, FL 34741
407-870-0066
Owner: Revels Road Investors LLC
210 Hangar Road
Kissimmee, FL 34741
Legal Description: See Attached Survey
Total Acreage: 133.37 +/- Acres
Wetland Acreage: 1.16 +/- Acres
Net Land Area: 132.21 +/- Acres
Owned Land: 131.00 +/- Acres
Vacated ROW: 2.37 +/- Acres
Open Space Required: 33.05 Acres (132.21 x 25%)
Percentage of Uses: 100% Residential
Proposed Land Uses: Single Family Residential
Residential:
Type of Units: Single Family Residential
PUD Number of Units Provided: 290 Lots
Minimum Living Area: 1,600 Square Feet
Maximum Building Height: 35'

Minimum Parking Required: 2 spaces per house
Open Space Provided: 43.95 Acres (33.24%)
Retention Ponds with Amenities: 5.47 Acres
Retention Ponds: 5.07 Acres
Parks: 4.64 Acres
Plazas: None
Buffers: 3.26 Acres
Other Open Areas: 25.51 Acres
Water Retention: +/-10.54 Acres
Public or Civic Space: None
Public Access: Not Gated
Buffers:
Buffer 1: Minimum 15' Width / 6' Wall / 1 Canopy Tree per 50'
Buffer 2: Minimum 15' Width / 1 Canopy Tree per 50'
Buffer 3: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'.
Buffer 4: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'.
Buffer 5: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'.
Buffer 6: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'.
Buffer 7: Adjacent to Wetlands (25' Minimum)
Buffer 8: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'.
Buffer 9: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'.
Water and Sewer: Town of Howey in the Hills
Phase 2 Park to include Pool / Cabana / Tot Lot.

LEGEND
*70' x 120' LOTS = 112 LOTS
#80' x 120' LOTS = 113 LOTS
o MIN. 80' (1/4 AC.) LOTS = 65 LOTS
TOTAL NUMBER OF LOTS = 290 LOTS



TYPICAL ROAD SECTION
N.T.S.

WATERMARK
CONCEPTUAL LAND USE PLAN



DATE:	09/17/2024
DESIGNED BY:	SPH
DRAWN BY:	SPH
CHECKED BY:	BT
JOB NO.:	45548.002
FILE NAME:	WATERMARKMAS
Sheet 1	

Appendix B
Methodology Correspondence

MEMORANDUM

April 1, 2025

Re: Watermark

Traffic Impact Analysis Methodology, v2.1
Howey-In-The-Hills, Florida
Project № 22105.1

This methodology outlines the Traffic Impact Analysis (TIA) for the above referenced project. This methodology is consistent with the requirements of the City of Leesburg and the Lake~Sumter Metropolitan Planning Organization (LSMPO) for a Tier 2 TIA.

Project Description

The proposed project is a residential development consisting of 290 single-family units. The project buildout is anticipated to be in 2027. A preliminary site plan is included in the **Attachments**. The site is located on the southeast corner of the SR 19 and Revels Road intersection, in the Town of Howey-In-The-Hills, Florida, as shown in **Figure 1**. The project proposes two (2) full access driveways along Revels Road.

Trip Generation

The trip generation analysis was conducted using information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 11th Edition*. **Table 1** summarizes the trip generation analysis, and the detailed ITE sheets are included in the **Attachments**.

Table 1
Trip Generation Calculations

ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
210	Single-Family Detached	290 DU	9.27	2,687	0.68	196	49	147	0.93	270	170	100

Trip generation analysis based on ITE Trip Generation Manual, 11th Edition

The proposed development is projected to generate 2,687 new daily trips of which 196 trips occur during the AM peak hour, and 270 trips occur during the PM peak hour.



Watermark

Traffic Impact Analysis Methodology, v2.1

Project № 22105.1

April 1, 2025

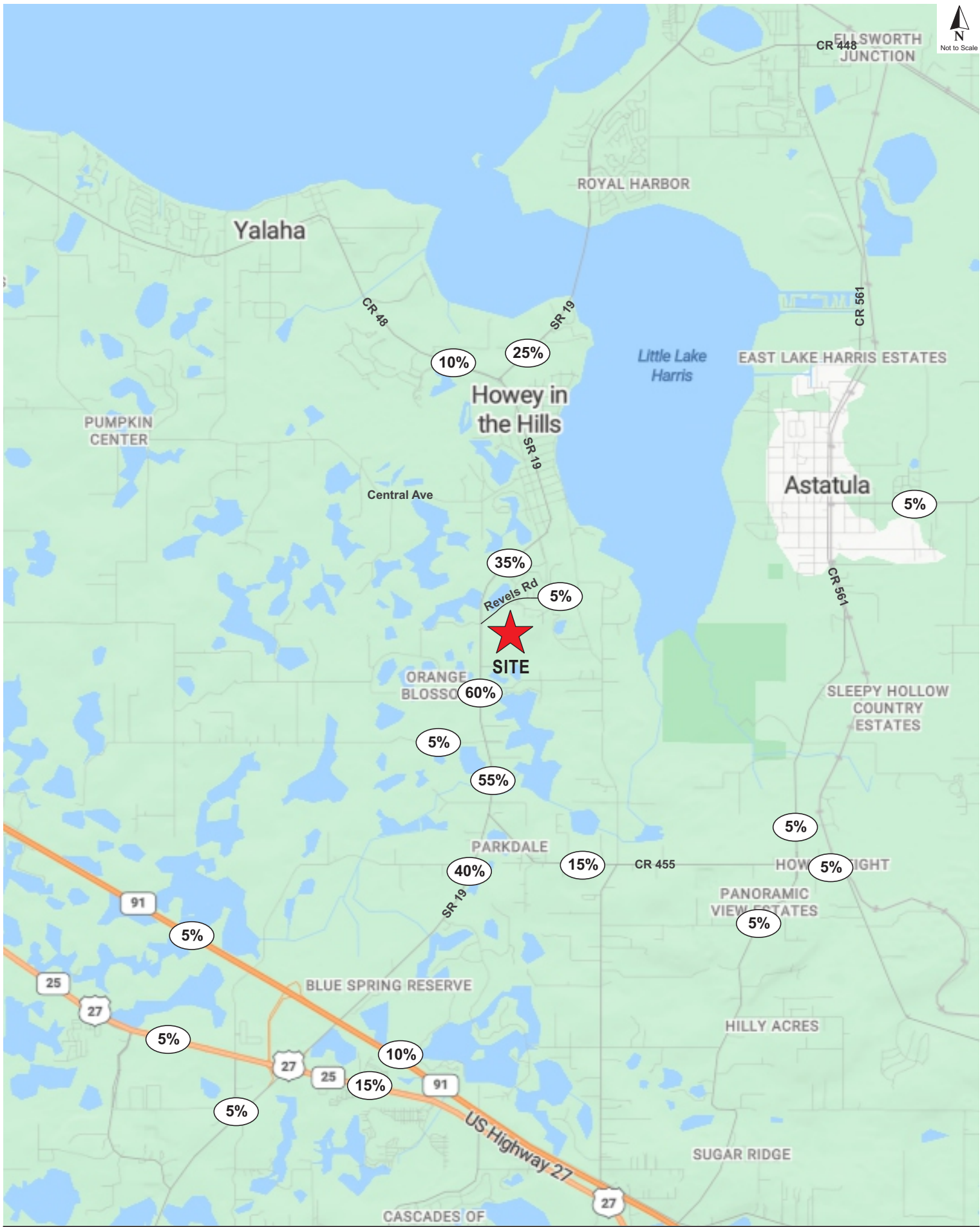
Page 3 of 7

Trip Distribution

A trip distribution pattern was estimated using the *Central Florida Regional Planning Model (CFRPMv7)*. The model distribution was adjusted to account for interacting local activity centers and to reflect the local network. The raw model output is included in the **Attachments** and the adjusted general distribution is shown in **Figure 2**.

Study Area

The development is projected to generate more than 100 net new peak hour trips and therefore a Tier 2 TIA is required. The Tier 2 TIA will have a study area of a minimum 1-mile radius plus all roadways where the project's peak hour trips consume five percent (5%) or more of a roadway's directional peak hour generalized service volume based on the adopted Level of Service (LOS) and committed number of lanes, unless otherwise specified by the County/LSMPO. The extent of the study impact area shall be determined by the area of influence of the project. The area of influence shall be established as one-half (1/2) the total trip length associated with the land use of the proposed development, based upon the *2001 Lake County Transportation Impact Fee Update Study Final Report*. Accordingly, the area of influence will encompass roadway segments up to a 4.55-mile radius. Excerpts of the *2024 Lake County Congestion Management Process Database* and *2023 FDOT MQLOS* tables are included in the **Attachments** and a summary of the study area determination is presented in **Table 2**.



Watermark

Traffic Impact Analysis Methodology, v2.1

Project № 22105.1

April 1, 2025

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Table 2
Study Area of Significance

Seg ID	Segment Information			Exist Lns	LOS Std	Peak Cap	Proj Dist	Enter Dir	Peak Project Trips				In Study?
	Roadway	From	To						NB/EB	SB/WB	Signif	Prime	
245	CR 455	SR 19	CR 561	2	C	430	15%	SB/WB	15	26	6.0%	N	Y
243	CR 455	CR 561	CR 561A	2	C	430	5%	SB/WB	5	9	2.1%	N	N
264	CR 48	US 27	Lime Ave	2	D	1,049	10%	NB/EB	17	10	1.6%	N	N
255	CR 48	Lime Ave	SR 19	2	D	999	10%	NB/EB	17	10	1.7%	N	N
253	CR 48	CR 561	Ranch Rd	2	D	999	5%	SB/WB	5	9	0.9%	N	N
N/A	CR 48*	Ranch Rd	CR 488A	2	C	873	5%	SB/WB	5	9	1.0%	N	N
257	CR 561	CR 448	CR 48	2	D	677	0%	SB/WB	0	0	0.0%	N	N
252	CR 561	CR 48	S Astatula City Limits	2	D	799	5%	SB/WB	5	9	1.1%	N	N
N/A	CR 561*	S Astatula City Limits	CR 455	2	D	799	5%	SB/WB	5	9	1.1%	N	N
242	CR 561	CR 455	Howey Cross Rd	2	C	430	5%	NB/EB	9	5	2.1%	N	N
238	CR 561	Howey Cross Rd	Turnpike Rd/CR 561A	2	C	430	5%	NB/EB	9	5	2.1%	N	N
N/A	Revels Rd**	SR 19	6th Ave	2	C	430	95%	NB/EB	162	95	37.7%	Y	Y
N/A	SR 19**	Lane Park Rd	CR 48	2	D	890	25%	SB/WB	25	43	4.8%	N	N
N/A	SR 19**	CR 48	Central Ave	2	D	890	35%	SB/WB	35	60	6.7%	N	Y
N/A	SR 19**	Central Ave	Revels Rd	2	C	780	35%	SB/WB	35	60	7.7%	Y	Y
N/A	SR 19**	Revels Rd	CR 455	2	C	450	60%	NB/EB	102	60	22.7%	Y	Y
N/A	SR 19**	CR 455	US 27/SR 25	2	C	450	40%	NB/EB	68	40	15.1%	N	Y
N/A	SR 19**	US 27/SR 25	CR 478	2	C	450	5%	NB/EB	9	5	2.0%	N	N
240	US 27/SR 25	Florida Turnpike	SR 19	4	D	1,880	5%	SB/WB	5	9	0.5%	N	N
N/A	US 27/SR 25*	SR 19	CR 561	4	D	1,880	15%	NB/EB	26	15	1.4%	N	N

* Peak Hour Directional Capacity Based on Adjacent Roadway

** Peak Hour Directional Capacity Based on 2023 FDOT MQ/LOS Tables

Study Roadway Segments:

- CR 455
 - SR 19 and CR 561
- Revels Road
 - SR 19 to 6th Avenue
- SR 19
 - CR 48 to Central Avenue
 - Central Avenue to Revels Road
 - Revels Road to CR 455
 - CR 455 to US 27/SR 25

Study Intersections:

- SR 19 and CR 48
- SR 19 and Central Avenue
- SR 19 and Revels Road
- SR 19 and CR 455
- Revels Road and Project Access Driveways

Watermark

Traffic Impact Analysis Methodology, v2.1

Project № 22105.1

April 1, 2025

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Projected Traffic

Projected background traffic for the buildout year (2027) will be calculated using the corresponding annual growth rate for each of the study roadway segments as listed in the *2024 Lake County CMP Database*. A minimum of 2% historical growth rate will be applied, consistent with the LSMPO TIA guidelines.

The committed trips for the following developments within the study area will be included in the analysis as vested trips:

- A. Blue Sky
- B. Hillside Groves
- C. Lake Hills
- D. Mission Rise
- E. Whispering Hills

Planned and Programmed Improvements

Planned and programmed improvements from the *County's Capital Improvement Program (CIP)*, the *FDOT's Work Program*, and the *LSMPO Transportation Improvement Program (TIP)* for the study segments were reviewed. No improvements were found within the study area.

Traffic Analysis

The traffic study will analyze existing and buildout conditions. Buildout condition traffic will include projected background traffic and project trips. Roadway segments will be analyzed for the PM peak hour directional volumes. The analysis will be based on Lake County adopted roadway capacities, as obtained from *2024 Lake County Congestion Management Process Database* and the *2023 FDOT MQ/LOS* tables. Intersection analysis will be conducted for the AM peak hour and PM peak hour, based on field counts, buildout traffic, *Synchro* software and/or *Highway Capacity Software (HCS)*, and the methods of *Highway Capacity Manual (HCM)*.

Turn Lane/Queue Analysis

Turn lane analysis will be conducted for the proposed study intersections, to review if the existing turn lane lengths will be adequate at project buildout. The analysis will be conducted for both AM and PM peak hours. Additionally, queue analysis will be performed at the proposed project access driveway to determine if exclusive turn lanes are required. The analysis will be based on the highest peak hour trips. If required, turn lane length will be recommended based on *FDOT Design Manual (FDM) Exhibit 212-1*. County road turn lanes will be recommended based on the *Lake County Land Development Code*.

Watermark

Traffic Impact Analysis Methodology, v2.1

Project № 22105.1

April 1, 2025

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Alternative Mode Analysis

A review of alternative modes of transportation will be conducted within proximity of the site to check the availability and accessibility of transit services. Also, a review will be conducted to check and recommend connectivity between the proposed development and external pedestrian and bicycle amenities.

Report

A traffic impact analysis report detailing the methods and findings of the study, including all associated graphics, tables, calculations, and supporting information, will be prepared for submittal to the Town of Howey-In-The-Hills.

ATTACHMENTS



April 1, 2025

John Brock
Deputy Town Manager
Town of Howey-in-the-Hills
101 North Palm Avenue
Howey-in-the-Hills
jbrock@howey.org

Re: Watermark
Response to Methodology Comments
TMC Project № 22105.1
Town of Howey-in-the-Hills, Florida

Dear Mr. Brock,

Please find below our responses to the review comments prepared by the Griffey Engineering dated March 31, 2025, regarding the above referenced Methodology dated March 7, 2025. The comments are listed in **bold** typeface and the TMC responses follow in *italic* typeface. Additionally, a revised Methodology is provided under cover reflecting the changes resulting from these comments.

- 1. The buildout condition projected traffic needs to include traffic from other soon-to-be developed projects in the town as well as historic growth of background traffic. Projects to be included are: Blue Sky, Hillside Groves, Lake Hills, Mission Rise, and Whispering Hills.**

TMC Response: The projects have been added to the projected traffic to be analyzed in the TIA.

- 2. The future condition analysis for the intersection of SR 19 and Revels Road needs to be evaluated for both a traffic signal and a roundabout.**

TMC Response: Acknowledged. The intersection of SR 19 and Revels Road will be evaluated as both as signal and roundabout in the TIA.

- 3. The study should include Mitigation Strategies as well as a Proportionate Share Calculation towards the improvement of SR 19 & Revels Road.**

TMC Response: Acknowledged. Mitigation strategies and a proportionate share calculation for the improvement of SR 19 and Revels Road will be included in the TIA.

END OF COMMENTS

We trust these responses and the revised methodology adequately address the review comments. We remain available to discuss this matter further or to answer any questions you may have.

Kind regards,

TRAFFIC & MOBILITY CONSULTANTS LLC



Ayman H. As-Saidi, PE
Director of Engineering

Appendix C
Trip Generation Information

Single-Family Detached Housing (210)

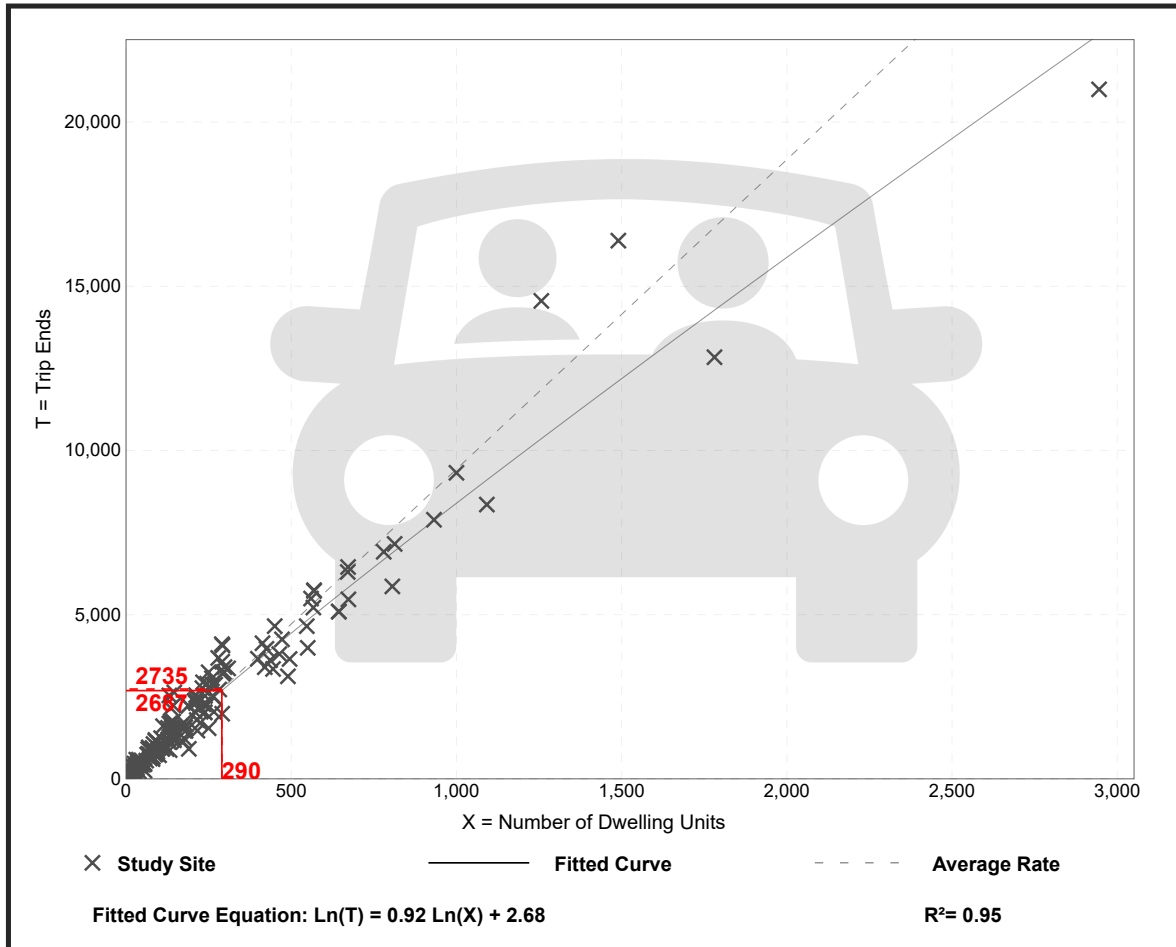
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

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: 192

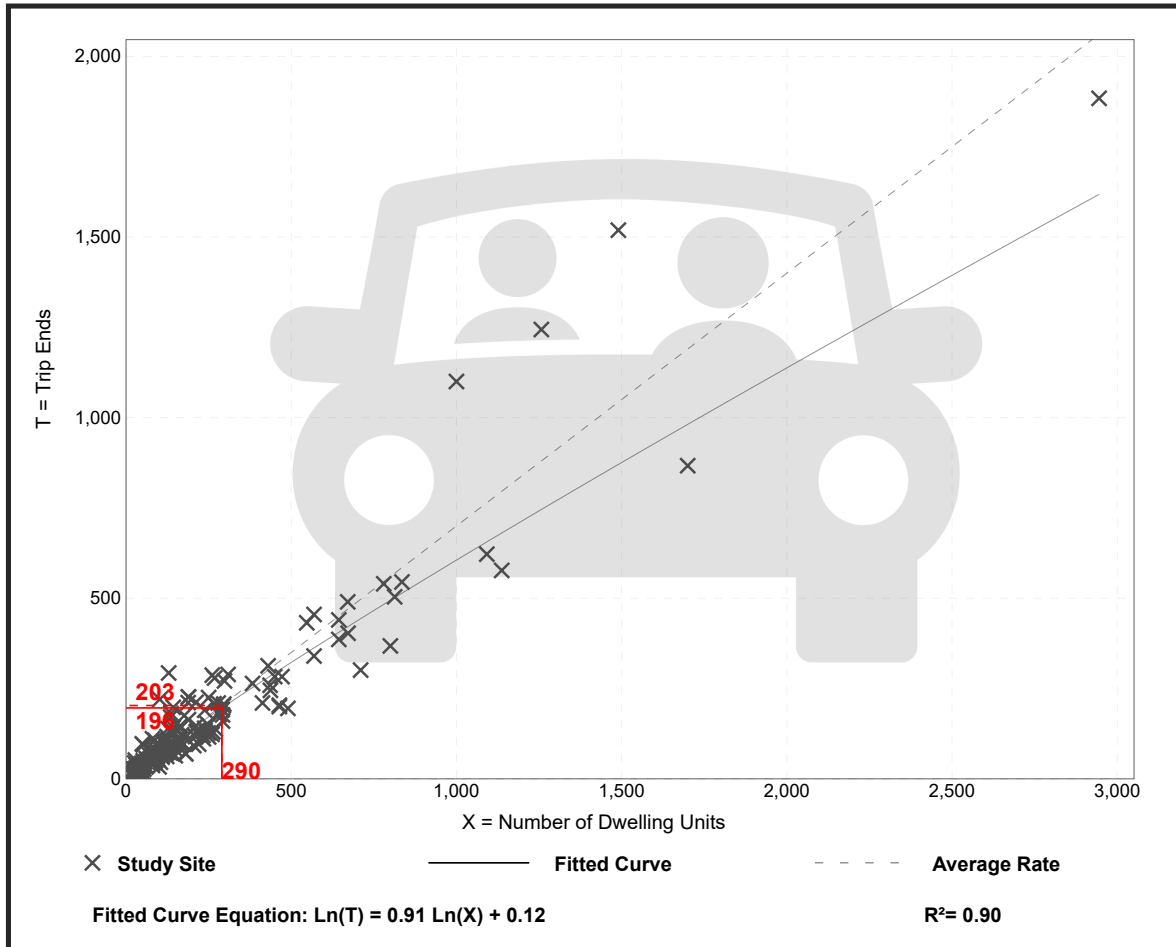
Avg. Num. of Dwelling Units: 226

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

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: 208

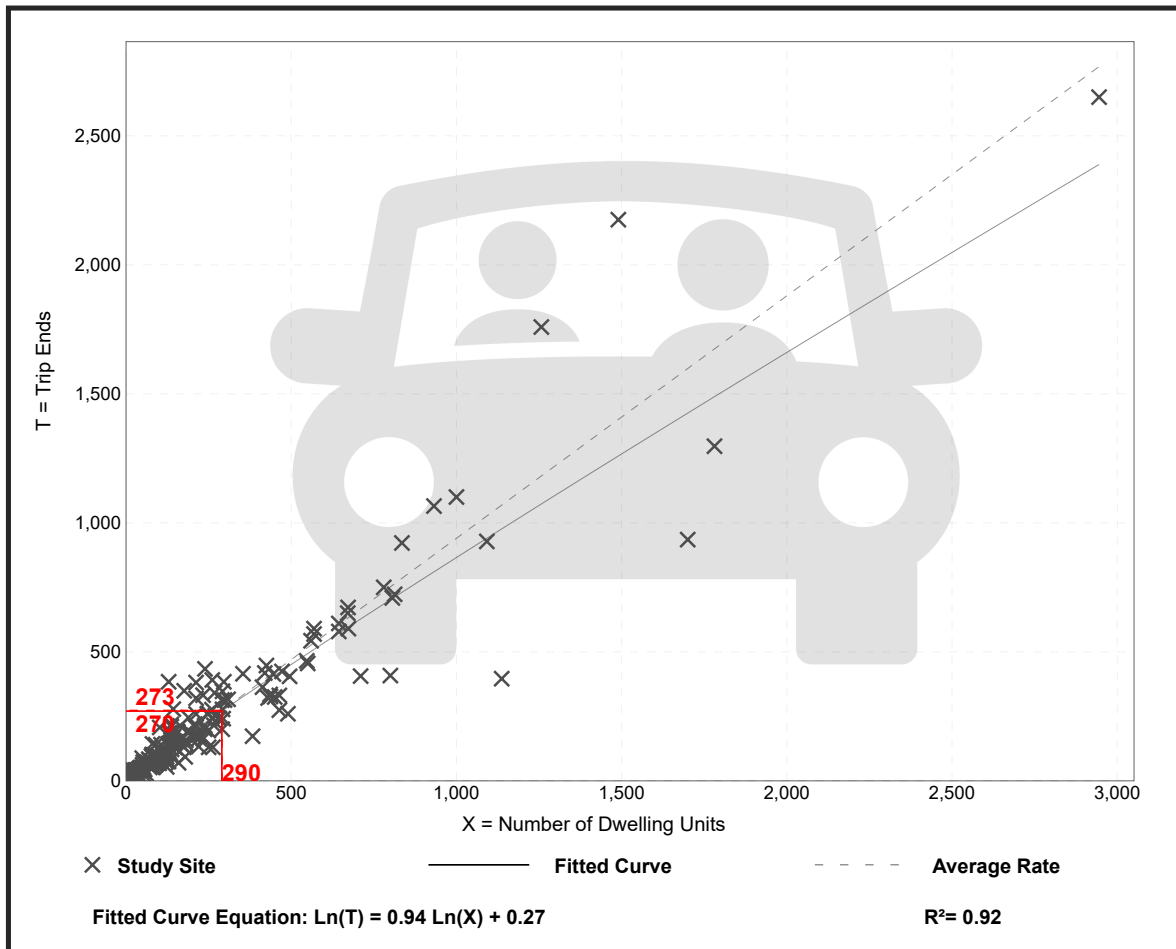
Avg. Num. of Dwelling Units: 248

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation

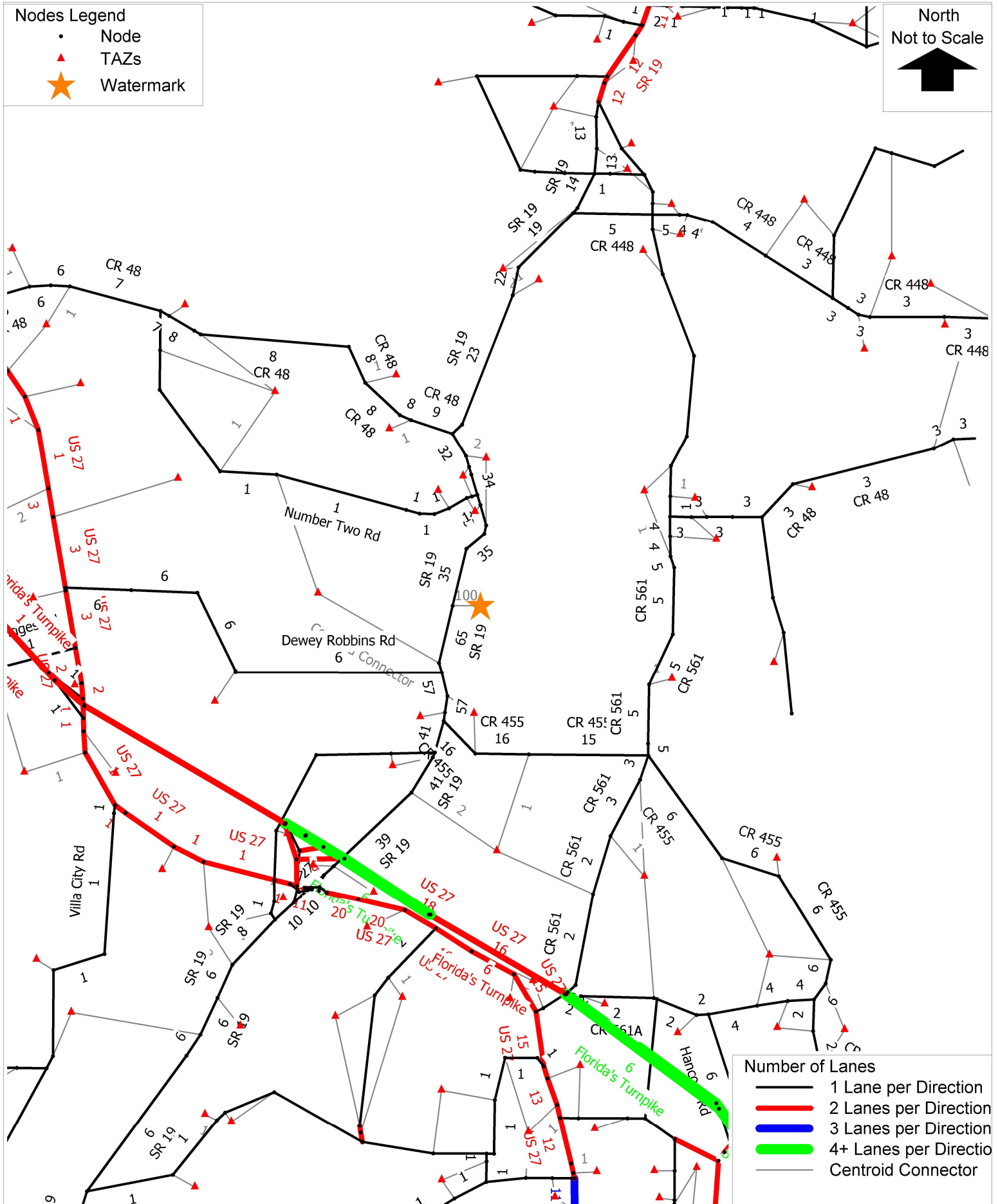


Appendix D
Model Distribution Plot

Nodes Legend

- Node
- ▲ TAZs
- ★ Watermark

North
Not to Scale



Number of Lanes

- 1 Lane per Direction
- 2 Lanes per Direction
- 3 Lanes per Direction
- 4+ Lanes per Direction
- Centroid Connector

22105.1 Watermark, Howey-In-The-Hills, FL TAZ 7676

Project Distribution

T:\AProjectFiles\2022\22105 Simpson Howey-in-the-Hills\Model\Model Files\HWYLOAD_SL_AllDay_A25.NET

Appendix E
2024 Lake County CMP & 2023 FDOT MQ/LOS

Traffic & Mobility Consultants' Summary of Lake County Roadway Parameters

County	State/County	CMS Seq ID	Roadway	Segment Information				Existing				Proposed				2025 Existing Conditions				PM Peak	S-Yearly	
				From	To	AT	FT	Post Speed	Cap Grp	Exist Lns	Imp Lns	LOS	Daily Cap	Peak Hr Cap	Daily Cap	Peak Cap	Vol	Daily V/C	LOS			NB/EV
1	State	3920	US 27/ SR 25	CR 474	US 192	U	35	C6	6L		D	57,855	2,867		30,728	0.53	D	980	933	0.34	D	-8.86%
2	State	3150	SR 33	CR 474	POLK COUNTY LINE	R	45	C2	2L	134	D	19,868	430		12,466	0.43	D	465	465	0.38	D	-12.00%
3	County	1290	CR 474	GREEN SWAMP RD	US 27	R	55	C3R	2L		C	17,640	873		5,850	0.33	C	210	268	0.34	C	-1.10%
4	County	1190	SR 474	GREEN SWAMP RD	US 27	R	55	C2	2L		C	7,380	430		5,528	0.75	C	237	323	0.75	C	-2.21%
5	State	3140	SR 33	CR 474	CR 474	R	89	C2	2L		C	8,200	430		11,430	0.84	D	499	488	1.14	D	13.87%
6	County	1530	SR 561	FLORIDA BOYS RANCH RD	SR 33	R	55	C2	2L		C	7,380	430		12,339	0.37	D	136	157	0.36	D	-15.10%
7	County	2280	LAKE ERIE RD	CR 565	SR 33	R	55	C2	2L		C	7,380	430		N/A	N/A/EV	F	N/A	N/A	0.00	B	N/A
8	County	2330	LAKE LOUISA RD (CLER)	CR 561	OSWALT RD	T	45	C2T	2L		C	13,041	680		3,556	0.27	C	142	188	0.28	C	-10.47%
9	County	2390	LAKE LOUISA RD	US 27	VISTA DEL LOGO BLVD	T	45	C2T	2L		C	21,168	1,049		1,236	0.30	D	103	124	0.23	C	-7.73%
10	County	1520	CR 561	FLORIDA BOYS RANCH RD	LAKE HOUSE RD	T	45	C3R	2L		C	21,168	1,049		3,250	0.15	C	117	202	0.19	C	-12.07%
11	County	2700	OSWALT RD	LAKEHOUSE DR	EDGEWATER DR	T	35	C3R	2L		D	21,168	1,049		4,272	0.20	C	130	255	0.24	C	-7.13%
12	County	2450	LOG HOUSE RD	CR 561	LAKEHOUSE DR	T	35	C3R	2L		D	16,128	799		4,170	0.26	C	238	186	0.30	C	-7.57%
13	County	2340	LAKEHOUSE DR (CLER)	OSWALT RD	HARDER RD	T	35	C3R	2L		D	16,128	799		4,113	0.25	C	69	124	0.17	C	-14.40%
14	County	2190	HARTWOOD MARSH RD	US 27	HANCOCK RD	T	40	C4	2L		D	16,632	822		16,953	1.02	E	35	683	0.88	D	22.35%
15	County	IN/A	HARTWOOD MARSH RD	11M E HANCOCK	IN/A	T	40	C4	2L		D	16,632	822		13,489	0.81	D	577	720	0.88	D	16.89%
16	County	2090	S. HANCOCK RD	JOHNS LAKE RD	HARTWOOD MARSH RD	T	45	C4	2L		D	16,632	822		11,852	0.71	D	486	510	0.62	D	13.90%
17	County	1640	SR 33	CR 565	CR 565	T	45	C2	2L		C	5,904	430		2,760	0.47	D	142	170	0.47	D	-4.26%
18	County	2290	LAKE LOUISA RD	R LAKEHOUSE DR	VISTA DEL LOGO BLVD	T	40	C3R	2L		D	21,168	1,049		4,225	0.20	C	196	194	0.19	C	-7.33%
19	County	2190	HARTWOOD MARSH RD	N. 90 DEGREE BEND	ORANGE COUNTY LINE	T	35	C3R	2L		D	21,168	1,049		9,765	0.46	C	612	300	0.58	C	9.57%
20	County	2050	HAMMOCK RIDGE	LAKE HOUSE RD	US 27	T	35	C4	4L		D	34,115	1,482		16,106	0.47	C	524	530	0.38	C	2.11%
21	County	2350	LAKEHOUSE DR (CLER)	HARDER RD	LAKE LOUISA RD	T	40	C3R	2L		D	21,168	1,049		1,045	0.18	C	851	811	0.81	C	21.17%
22	County	2354	LAKEHOUSE DR (CLER)	LAKE LOUISA RD	ANDERSON HILL RD	T	40	C3R	2L		D	20,160	999		6,618	0.33	C	417	413	0.42	C	1.37%
23	County	1695	CITRUS TOWER BLVD	JOHNS LAKE RD	US 27	U	40	C4	4L		D	34,115	1,482		16,201	0.53	C	767	566	0.52	C	24.10%
24	County	2180	JOHNS LAKE RD	US 27	HANCOCK RD	T	35	C4	2L		D	16,632	822		8,623	0.40	D	325	328	0.40	D	2.39%
25	County	20	ANDERSON HILL RD	LAKE SHORE DR	US 27	T	35	C3R	2L		D	16,128	799		1,538	0.10	D	130	214	0.13	D	-24.29%
26	County	1690	JOHNS TOWER BLVD	SR 50	HOOKS ST	U	40	C4	4L		D	32,490	1,411		20,745	0.64	C	932	924	0.66	C	27.39%
27	County	3569	STEVES RD	US 27	CITRUS TOWER BLVD	U	30	C4	2L		D	16,632	822		7,331	0.45	D	389	331	0.49	D	4.02%
30	County	1865	EXCALIBUR RD	HOOKS ST	CITRUS TOWER BLVD	U	35	C3R	2L		D	22,226	1,101		7,125	0.32	C	321	313	0.29	D	2.86%
31	County	2150	HOOKS ST	HOOKS ST	OAKLEY SEAVER DR	U	30	C4	2L		D	34,115	1,482		14,136	0.53	C	677	625	0.75	C	15.45%
32	County	2140	HOOKS ST	LAKEHOUSE DR	US 27	U	30	C4	2L		D	12,872	626		7,285	0.57	D	359	248	0.57	D	3.34%
33	County	2153	HOOKS ST	OAKLEY SEAVER DR	CITRUS TOWER BLVD	U	35	C4	4L		D	34,115	1,482		11,819	0.34	C	502	520	0.35	C	13.45%
34	County	2155	HOOKS ST	CITRUS TOWER BLVD	HANCOCK RD	T	35	C4	4L		D	32,490	1,411		8,915	0.27	C	368	329	0.26	C	7.60%
35	County	2090	S. HANCOCK RD	CR 561	CR 561	T	45	C2	2L		C	14,870	440		2,810	0.47	D	170	160	0.50	D	26.20%
36	County	1692	CITRUS TOWER BLVD	HOOKS ST	JOHNS LAKE RD	U	30	C4	4L		D	34,115	1,482		18,053	0.53	C	677	689	0.48	C	2.90%
37	County	1915	S. GRAND HIGHWAY	HOOKS ST	HOOKS ST	U	25	C4	4L		D	34,115	1,482		5,727	0.17	C	287	197	0.19	C	-1.52%
38	County	IN/A	HARTLE RD	0.11 SOUTH OF SR 50	IN/A	T	35	C4	4L		D	30,916	1,340		8,252	0.27	C	321	286	0.31	C	5.84%
39	County	2070	N. HANCOCK RD	N RIDGE BLVD	CR 561	T	40	C3R	2L		D	16,632	822		14,507	0.47	C	676	629	0.46	C	21.11%
40	County	1910	GRAND HIGHWAY	CITRUS TOWER BLVD	SR 50	U	35	C4	2L		D	16,632	822		6,853	0.41	D	278	278	0.41	C	2.08%
42	County	1310	SR 50	CR 455	ORANGE COUNTY LINE	U	45	C4	2L		D	16,632	822		10,586	0.64	D	341	767	0.93	D	11.36%
43	County	960	CR 455	CR 455	SR 50	U	45	C5	2L		D	13,136	650		8,941	0.73	D	676	676	0.79	D	0.79%
44	County	1680	CITRUS TOWER BLVD	OAKLEY SEAVER DR	SR 50	U	30	C4	2L		D	34,470	1,710		15,244	0.44	C	626	711	0.42	C	19.78%
45	County	1510	CR 561	SR 50	LOG HOUSE RD	U	25	C4	2L		D	16,632	822		6,441	0.39	D	335	268	0.41	D	0.82%
47	County	1630	CR 565A	SR 50	CR 565B	U	45	C4	2L		D	12,872	626		2,500	0.20	D	81	141	0.23	D	-16.57%
48	County	IN/A	WELLNESS WAY	NW US 32 & SCHOFIELD RD	IN/A	T	40	C3R	2L		D	21,168	1,049		1,038	0.10	D	103	103	0.10	C	12.29%
49	County	IN/A	WELLNESS WAY	0.51 MI. W. OF 5 MILE RD	IN/A	U	40	C3R	2L		D	22,226	1,101		N/A	N/A/EV	F	N/A	N/A	0.00	B	N/A
50	County	IN/A	WELLNESS WAY	0.20 MI. S. OF WELLNESS W	IN/A	U	40	C3R	2L		D	20,160	999		10,171	0.50	C	406	342	0.41	C	10.47%
51	County	IN/A	SCHOFIELD RD	0.57 MI. E. OF 5 MILE RD	IN/A	R	35	C2	2L		C	7,380	430		12,802	1.71	E	381	648	1.50	D	15.31%
161	County	1510	CR 565A	SR 50	CR 561A	U	40	C4	2L		D	16,632	822		8,055	0.38	C	356	356	0.38	C	9.82%
202	County	1300	CR 50	N HANCOCK RD	CR 455	U	45	C3R	2L		D	20,160	999		10,363	0.51	C	317	782	0.78	C	10.88%
203	County	1500	SR 561	CR 561A	CR 561	U	35	C3R	2L		D	21,168	1,049		5,456	0.28	C	214	302	0.29	C	-2.47%
204	County	960	CR 455	RIDGEWOOD AVE	CR 455/ CR 50	T	35	C2T	2L		D	16,200	846		8,353	0.53	C	447	325	0.53	C	6.63%
205	County	1570	CITRUS TOWER BLVD	US 27	OAKLEY SEAVER DR	T	40	C2	2L		D	16,632	822		14,930	0.72	C	676	676	0.72	C	14.65%
206	County	IN/A	CR 565A	NORTH OF SR 50	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A		7,927	0.54	IN/A	278	245	0.54	IN/A	3.63%
207	County	2060	N. HANCOCK RD	OLD HWY 50 (E)	N RIDGE BLVD	U	35	C4	4L		D	34,115	1,482		20,417	0.60	C	779	961	0.65	C	26.99%
208	County	1560	SR 565 (VILLIA CITY RD)	KJELLSTROM LANE	SR 50	U	40	C2T	2L		D	17,010	886		7,246	0.43	C	287	259	0.32	C	3.22%
209	County	150	EAST OF HANCOCK RD	CR 561	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A	IN/A		1,580	0.10	D	103	103	0.10	D	-12.00%
210	County	1290	CR 50	US 27	N HANCOCK RD	U	45	C3R	2L		D	21,168	1,049		7,537	0.36	C	309	400	0.38	C	0.04%
212	County	100	BLACKSTILL LAKE RD	FOSGATE RD	CR 50	U	35	C3R	2L		D	21,168	1,049		5,222	0.25	C	248	244	0.24	C	-3.32%
213	County	1560	CR 561A	CR 565A	JALAMY RD	U	40	C3R	2L		D	21,168	1,049		7,762	0.37	C	383	302	0.37	C	4.05%
214	County	1470	EAST AVE LAKE MINNEOLA DRAIN AVE	CR 50	EAST AVE	T	740	C2T	2L		D	16,128	799		N/A	N/A/EV	F	N/A	N/A	0.00	B	N/A
216	County	3640	TUSCANOGA RD	EGG RD	SR 50	U	40	C3R	2L		D	12,960	677		2,087	0.16	C	69	122	0.18	C	-10.52%
217	County	1280	CR 50 (SUNSET AVE)	CR 33	SR 50	U	30	C2	2L		D	10,080	730		2,028	0.20	C	94	87	0.13	C	-19.88%
218	County	290	CR 33	BRIDGES RD	PERIBLE ROCK RD	R	30	C2T	2L		D	12,420	648		7,728	0.62	C	348	309	0.53	C	4.56%
219	County	3650	UNDERPASS RD	AMERICAN LEGION RD	CR 50	U	40	C3R	2L		D	17,010	886		1,070	0.10	D	112	112	0.10	D	-23.03%
221	County	1875	GRASSY LAKE RD/FOSGATE RD	CR 50 (WASHINGTON ST)	HANCOCK RD	U	40	C3R	2L		D	21,168	1,049		N/A	N/A/EV	F	N/A	N/A	0.00	B	N/A
222	County	1210	CR 478	JAMARY RD	JAMARY RD	U	45	C2	2L		D	12,600	730		2,463	0.20	C	98	126	0.17	C	-16.81%
223	County	1570	SR 561 (LAKE MINNEOLA SHORES)	JALAMY RD	US 27	U	40	C3R	2L		D	21,168	1,049		11,838	0.65	C	67	147	0.67	C	14.09%
224	County	2170	JALAMY RD	CR 474	SR 561A	U	45	C3R	2L		D	16,128	799		N/A	N/A/EV	F	N/A	N/A	0.00	B	N/A
225	County	2055	N. HAN																			

Service Voumes Derived from MQ/LOS

Existing										Peak Service Volumes					LOS Code				
Daily Service Volumes					Peak Service Volumes					Peak Service Volumes					LOS Code				
B	C	D	E	F	B	C	D	E	F	B	C	D	E	F	B	C	D	E	F
0					0	57,855	82,370			0	2,887	3,087			0	2,887	3,087		
8,200	14,000	20,600	25,600		8,200	14,000	20,600	25,600		8,200	14,000	20,600	25,600		8,200	14,000	20,600	25,600	
17,640	20,160	20,161			873					873	999	1,000			33R	2L	U	W	L
7,380	12,600	25,600			430					430	730	1,490			33R	2L	U	W	L
8,200	14,000	25,600			430					430	730	1,490			33R	2L	U	W	L
12,600	12,600	25,600			430					430	730	1,490			33R	2L	U	W	L
7,380	12,600	25,600			430					430	730	1,490			33R	2L	U	W	L
13,041	17,010	17,011			680		888	889		680	888	889			21T	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
14,112	16,128	16,129			698					698	799	800			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
23,058	34,115	35,556			1,143	1,482	1,909			1,143	1,482	1,909			34L	4L	D	W	L
23,058	34,115	35,556			1,143	1,482	1,909			1,143	1,482	1,909			34L	4L	D	W	L
23,058	34,115	35,556			1,143	1,482	1,909			1,143	1,482	1,909			34L	4L	D	W	L
23,058	34,115	35,556			1,143	1,482	1,909			1,143	1,482	1,909			34L	4L	D	W	L
23,058	34,115	35,556			1,143	1,482	1,909			1,143	1,482	1,909			34L	4L	D	W	L
20,862	28,866	34,864			1,035	1,340	1,727			1,035	1,340	1,727			34L	4L	D	W	L
23,058	34,115	35,556			1,143	1,482	1,909			1,143	1,482	1,909			34L	4L	D	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
23,490	34,470	36,700			1,161	1,710	1,917			1,161	1,710	1,917			34L	4L	D	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
0					0	16,832	22,880			0	622	1,125			24L	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U	W	L
18,522	21,168	21,169			917					917	1,049	1,050			33R	2L	U		

C1 & C2

Motor Vehicle Highway Generalized Service Volume Tables

Adjusted Capacity

Peak Hour Directional

	B	C	D	E
1 Lane	240	430	730	1,490
2 Lane	1,670	2,390	2,910	3,340
3 Lane	2,510	3,570	4,370	5,010

Peak Hour Two-Way

	B	C	D	E
2 Lane	440	780	1,330	2,710
4 Lane	3,040	4,350	5,290	6,070
6 Lane	4,560	6,490	7,950	9,110

AADT

	B	C	D	E
2 Lane	4,600	8,200	14,000	28,500
4 Lane	32,000	45,800	55,700	63,900
6 Lane	48,000	68,300	83,700	95,900

Round results to the nearest tens (i.e. 1,754 should be rounded to 1,750)

Base Capacity

Peak Hour Directional

	B	C	D	E
1 Lane	240	430	730	1,490
2 Lane	1,670	2,390	2,910	3,340
3 Lane	2,510	3,570	4,370	5,010

Peak Hour Two-Way

	B	C	D	E
2 Lane	440	780	1,330	2,710
4 Lane	3,040	4,350	5,290	6,070
6 Lane	4,560	6,490	7,950	9,110

AADT

	B	C	D	E
2 Lane	4,600	8,200	14,000	28,500
4 Lane	32,000	45,800	55,700	63,900
6 Lane	48,000	68,300	83,700	95,900

Apply Adjustment Factors

- 2 Lane Divided Roadway with** Exclusive Left Turn Adjustment: Multiply by 1.05 ☐
- Multilane Undivided Highway with** Exclusive Left Turn Adjustment: Multiply by 0.95 ☐
- Multilane Undivided Highway without** Exclusive Left Turn Adjustment: Multiply by 0.75 ☐

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.

Source: 2023 FDOT MQ/LOS Handbook, Appendix B: Florida's Generalized Service Volume Tables

[2023 Multimodal Quality/ Level Of Service Handbook, January 2023](#)



(C1-Natural &
C2-Rural)

Revels Rd

C1 & C2

Motor Vehicle Highway Generalized Service Volume Tables

Adjusted Capacity

Peak Hour Directional

	B	C	D	E
1 Lane	252	452	767	1,565
2 Lane	1,754	2,510	3,056	3,507
3 Lane	2,636	3,749	4,589	5,261

Peak Hour Two-Way

	B	C	D	E
2 Lane	462	819	1,397	2,846
4 Lane	3,192	4,568	5,555	6,374
6 Lane	4,788	6,815	8,348	9,566

AADT

	B	C	D	E
2 Lane	4,830	8,610	14,700	29,925
4 Lane	33,600	48,090	58,485	67,095
6 Lane	50,400	71,715	87,885	100,695

Round results to the nearest tens (i.e. 1,754 should be rounded to 1,750)

Base Capacity

Peak Hour Directional

	B	C	D	E
1 Lane	240	430	730	1,490
2 Lane	1,670	2,390	2,910	3,340
3 Lane	2,510	3,570	4,370	5,010

Peak Hour Two-Way

	B	C	D	E
2 Lane	440	780	1,330	2,710
4 Lane	3,040	4,350	5,290	6,070
6 Lane	4,560	6,490	7,950	9,110

AADT

	B	C	D	E
2 Lane	4,600	8,200	14,000	28,500
4 Lane	32,000	45,800	55,700	63,900
6 Lane	48,000	68,300	83,700	95,900

Apply Adjustment Factors

2 Lane Divided Roadway with Exclusive Left Turn Adjustment: Multiply by 1.05	☒
Multilane Undivided Highway with Exclusive Left Turn Adjustment: Multiply by 0.95	☐
Multilane Undivided Highway without Exclusive Left Turn Adjustment: Multiply by 0.75	☐

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.

Source: 2023 FDOT MQ/LOS Handbook, Appendix B: Florida's Generalized Service Volume Tables

[2023 Multimodal Quality/ Level Of Service Handbook, January 2023](#)



(C1-Natural &
C2-Rural)

SR 19, from
Revels Rd to
CR 478

C3R

Motor Vehicle Highway Generalized Service Volume Tables



(C3R-Suburban Residential)

SR 19, from
Lane Park Rd
to Revels Rd

Adjusted Capacity

Peak Hour Directional

	B	C	D	E
1 Lane	*	776	888	**
2 Lane	*	1,360	1,480	**
3 Lane	*	2,096	2,184	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,408	1,616	**
4 Lane	*	2,472	2,688	**
6 Lane	*	3,808	3,968	**

AADT

	B	C	D	E
2 Lane	*	15,680	17,920	**
4 Lane	*	27,440	29,840	**
6 Lane	*	42,320	44,080	**

Round results to the nearest tens (i.e. 1,754 should be rounded to 1,750)

Base Capacity

Peak Hour Directional

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

AADT

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

Source: 2023 FDOT MQ/LOS Handbook

Apply Adjustment Factors

One-way Facility: PHDS Multiply by 1.2 ; AADT: Multiply by 0.6 ☐

2 Lane Divided Roadway **with** Exclusive Left Turn Adjustment: Multiply by 1.05 ☐

2 Lane Undivided Roadway **with No** Exclusive Left Turn Lane(s): Multiply by 0.80 ☒

Exclusive Right Turn Lane(s): Multiply by 1.05 ☐

Multilane Undivided Roadway **with** Exclusive Left Turn: Multiply by 0.95 ☐

Multilane Undivided Roadway **with No** Exclusive Left Turn Lane(s): Multiply by 0.75 ☐

Non-State Signalized Roadway ☐

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.

*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.

Source: 2023 FDOT MQ/LOS Handbook, Appendix B: Florida's Generalized Service Volume Tables

PHDS: Peak Hour Directional Service

[2023 Multimodal Quality/ Level Of Service Handbook, January 2023](#)

Appendix F
Planned & Programmed Improvements



FDOT Emergency Travel Alert: For information on the current situation, please visit the following page - [Alerts](#).



Florida Department of

TRANSPORTATION

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Web Application

Office of Work Program and Budget

Updated: 4/9/2025 9:

Five Year Work Program

Selection Criteria	
District 05	2025-2030 G1
Lake County	Item Number:238319-1

[Display current records in a Report Style](#)
[Display current records in an Excel Document](#)

Project Summary

Transportation System:

INTRASTATE STATE HIGHWAYDistrict 05 - Lake County

Description:

SR 19 FROM CR 48 TO CR 561

Type of Work:

ADD LANES & RECONSTRUCT

[View Scheduled Activities](#)

Item Number:

238319-1

Length:

4.760

[View Map of Item](#)

Project Detail

Fiscal Year:	2025	2026	2027	2028	2029	2030
Highways/PD & E						(On-Going)
Amount:	\$200					
Highways/Preliminary Engineering						(On-Going)
Amount:	\$1,883					
Highways/Environmental						(On-Going)
Amount:						
Item Total:	\$2,083					

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399.

[View Contact Information for Office of Work Program and Budget](#)

Application Home: [Work Program](#)
Office Home: [Office of Work Program and Budget](#)

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- [Performance](#)
- [Statement of Agency](#)
- [Web Policies & Notices](#)



Appendix G

2025 Lake County Traffic Counts, Historical Growth Trends, & Vested Trips

2025 Lake County Annual Traffic Counts

MAP STA #	ROAD NAME	LOCATION	Map Sheet	S E C	T W P	R N G	ANNUAL ADJUSTED DAILY TRAFFIC (AADT)						5-YEAR ANNUAL AVERAGE GROWTH RATE PERCENT
							2020	2021	2022	2023	2024	2025	
201	C.R. 565A	0.2 Mi N OF S.R. 50	B	20	22	25	9,273	9,840	8,847	11,048	9,759	9,625	0.75%
202	C.R. 50	0.5 Mi W OF C.R. 455	B	23	22	26	6,509	7,354	6,136	8,069	10,109	10,363	9.75%
203	C.R. 561	0.16 Mi S OF BRIDGE #114046	B	23	22	25	3,111	4,476	4,617	6,247	5,439	5,456	11.89%
204	C.R. 455	0.10 Mi N OF MAGNOLIA CREEK LN	B	14	22	26	7,351	7,487	6,847	7,230	7,975	8,523	3.00%
205	CITRUS TOWER BV	0.113 Mi E OF U.S. 27	B	19	22	26	12,888	11,620	11,189	11,747	10,785	11,930	-1.53%
206	CR 565A	NORTH OF SR 50	B	24	22	24	10,662	11,259	8,692	2,301	9,428	7,357	-7.15%
207	N HANCOCK RD	0.14 Mi S OF C.R. 50	B	16	22	26	15,634	14,898	15,768	20,551	19,949	20,417	5.48%
208	C.R. 565 (VILLA CITY RD)	0.134 Mi N OF S.R. 50	B	13	22	24	4,686	5,303	4,788	6,236	6,195	7,246	9.11%
209	CR 50	EAST OF HANCOCK RD	B	16	22	26	10,744	11,915	10,878	12,397	13,346	12,680	3.37%
210	C.R. 50	0.05 Mi W OF PARK TRAIL DR	B	17	22	26	7,953	6,762	6,687	8,028	7,687	7,537	-1.07%
211	TURKEY FARM RD	0.040 Mi N OF C.R. 50	B	17	22	26	209	209	209	209	209	209	0.01%
212	BLACKSTILL LAKE RD	0.16 Mi N OF C.R. 50	B	16	22	26	5,031	7,032	5,785	4,820	4,297	5,222	0.75%
213	C.R. 561	0.10 Mi N OF C.R. 565A	B	14	22	25	6,627	7,489	5,785	8,500	7,343	7,762	3.21%
214	MAIN ST	0.1 Mi N OF WASHINGTON ST	B	18	22	26	1,812	2,283	1,958	2,830	N/A	N/A	N/A
215	MASCOTTE EMPIRE RD (S. SU	.32 Mi S OF S.R. 50	B	14	22	24	800	800	800	800	800	800	0.00%
216	TUSCANOOGA RD	.25 Mi N OF S.R. 50	B	10	22	24	2,662	2,785	2,269	2,241	2,313	2,087	-4.75%
217	C.R. 50/SUNSET AV	0.03 Mi N OF S.R. 50	B	14	22	24	1,443	1,958	1,420	1,606	1,569	2,028	7.05%
218	C.R. 33	0.17 Mi N OF S.R. 50	B	14	22	24	5,931	6,503	6,785	7,300	7,001	7,728	5.44%
219	UNDERPASS RD	0.036 Mi E OF C.R. 33	B	14	22	24	1,064	1,189	964	1,310	1,440	1,670	9.43%
220	PALMETTO DR	0.043 Mi W OF C.R. 33	B	14	22	24	840	840	840	840	840	840	-0.01%
221	FOSGATE RD	0.19 Mi W OF GRASSY LAKE RD	B	8	22	26	4,061	5,678	5,455	6,330	N/A	N/A	N/A
222	C.R. 478	0.25 Mi E OF S.R. 19	B	7	22	25	1,641	2,269	2,002	2,408	2,251	2,463	8.46%
223	C.R. 561 (LAKE MINNEOLA SHO	0.11 Mi W OF U.S. 27	B	7	22	26	10,013	10,766	9,873	12,283	11,433	11,638	3.05%
224	JALARMY RD	0.29 Mi N OF C.R. 561	B	12	22	25	5,060	5,891	5,555	6,114	4,457	6,384	4.76%
225	HANCOCK RD	NORTH OF CITRUS GROVE RD	B	4	22	26	9,510	9,014	10,414	11,285	11,478	N/A	N/A
226	CITRUS GROVE ROAD	0.14 Mi E OF U.S. 27	B	6	22	26	1,584	3,987	5,149	7,481	6,780	8,251	39.11%
227	C.R. 455	0.05 Mi W OF FOSGATE RD	B	3	22	26	2,571	2,857	3,059	3,178	3,327	2,940	2.72%
228	SULLIVAN RD	EAST OF US27	B	6	22	26	263	263	263	263	263	263	-0.03%
229	SIMON BROWN	EAST OF SR 33	B	7	22	24	806	806	806	806	806	806	-0.01%
230	E ASHPAWA RD	WEST OF US27	B	36	21	25	973	973	973	973	973	973	0.00%
231	SCRUB JAY LN	SOUTH OF FLORIDA TURNPIKE BRIDGE	B	32	21	26	474	474	474	474	474	474	0.00%
232	VILLA CITY RD	0.5 MI N. OF SIMON BROWN RD	B	36	21	24	2,878	3,321	2,620	4,361	3,936	4,663	10.13%
233	HANCOCK RD	0.25 mi SOUTH OF CR 561A	B	32	21	26	5,917	5,275	5,433	7,318	7,654	7,169	3.91%
234	C.R. 561A	0.35 Mi E OF SCRUB JAY RD	B	32	21	26	5,047	5,236	4,933	5,417	6,404	6,646	5.66%
235	C.R. 561/C.R. 561A	0.09 Mi E OF U.S. 27	B	36	21	25	9,344	9,148	8,096	9,721	8,168	9,834	1.03%
236	CR 561A	0.25 Mi WEST OF CR 455	B	33	21	26	2,032	2,003	2,118	2,789	3,006	2,668	5.59%
237	C.R. 561A	0.18 Mi E OF C.R. 561	B	30	21	26	5,033	4,691	4,706	6,255	4,960	6,757	6.07%
238	C.R. 561	0.25 Mi N OF C.R. 561A	B	30	21	26	8,301	8,698	7,240	8,338	8,433	8,534	0.56%
239	WILSON LAKE PARKWAY	0.17 Mi S OF U.S. 27	B	26	21	25	2,429	2,813	2,442	3,106	3,345	3,573	8.02%
240	U.S. 27/S.R. 25	0.53 Mi E OF C.R. 565	B	20	21	25	22,314	30,743	21,771	27,160	25,919	22,244	-0.06%
241	C.R. 565	0.25 Mi S OF U.S. 27	B	18	21	25	2,037	2,523	2,115	3,151	2,549	3,140	9.04%
242	C.R. 561	0.13 Mi S OF C.R. 455	B	17	21	26	7,927	6,588	7,004	7,463	7,154	8,105	0.44%
243	C.R. 455	0.14 Mi E OF C.R. 561	B	17	21	26	1,962	1,953	1,835	1,817	1,802	2,448	4.52%
244	YOUTH CAMP RD	0.48 Mi W OF AUSTIN MERRITT RD	B	17	21	24	1,178	1,178	1,178	1,178	1,178	1,178	0.01%
245	C.R. 455	0.25 Mi E OF S.R. 19	B	11	21	25	3,350	3,066	3,555	4,008	3,816	4,837	7.63%
246	AUSTIN MERRITT RD	0.19 Mi W OF C.R. 33	B	10	21	24	1,590	1,691	1,433	2,218	2,244	2,227	6.98%
247	BRIDGES RD	0.23 Mi E OF C.R. 33	B	10	21	24	1,905	1,958	1,592	2,657	2,310	2,260	3.48%
248	CR 48	AT SUMTER COUNTY LINE	B	7	21	24	2,730	2,833	2,969	3,180	4,942	4,641	11.19%
249	C.R. 33	0.25 Mi N OF AUSTIN MERRITT RD	B	10	21	24	4,776	4,900	4,618	5,431	4,791	4,942	0.68%
250	E. DEWEY ROBBINS RD	WEST OF SR19	B	2	21	25	630	630	630	630	630	630	-0.01%
251	DEWEY ROBBINS RD	0.25 Mi EAST OF US 27	B	31	20	25	610	610	531	894	836	1,016	10.74%
252	C.R. 561	0.55 Mi S OF C.R. 48	B	32	20	26	12,032	10,209	10,871	11,088	11,217	12,993	1.55%
253	C.R. 48	0.19 Mi E OF C.R. 561	B	32	20	26	6,582	5,840	5,928	6,599	6,623	7,499	2.64%
254	C.R. 448A	0.2 Mi S OF C.R. 48	B	25	20	26	290	290	290	290	290	290	-0.01%
255	C.R. 48	0.25 Mi W OF S.R. 19	B	23	20	25	9,713	9,242	9,084	8,425	8,230	9,677	-0.07%
256	C.R. 448A	0.2 Mi N OF C.R. 48	B	24	20	26	5,458	5,088	5,330	5,858	5,806	6,812	4.53%
257	C.R. 561	0.07 Mi S OF WOODLAND DR	B	20	20	26	9,680	8,472	9,434	8,688	8,418	9,041	-1.36%
258	DUDA RD	0.16 Mi E OF C.R. 448A	B	24	20	26	6,857	6,337	6,597	6,530	5,352	7,622	2.14%
259	C.R. 48	0.12 Mi W OF C.R. 33	B	22	20	24	3,407	3,600	3,157	4,854	5,172	4,677	6.54%
260	C.R. 33	0.28 Mi S OF C.R. 470/C.R. 48	D	15	20	24	10,033	10,210	8,811	11,209	10,477	9,859	-0.35%
261	C.R. 448	AT ORANGE CO LINE	C	13	20	26	7,364	7,319	7,921	8,429	8,783	9,835	5.96%
262	C.R. 48	0.12 Mi W OF U.S. 27	C	14	20	24	10,282	9,086	8,175	10,782	10,194	10,396	0.22%

ADJUSTED PEAK HR VOLUME 2025	BEGIN PEAK HOUR 2025	ADJUSTED 2025 PM PEAK HOUR VOLUME (3-7 PM reported as 15:00-18:45)				
		Total	NB/EB	SB/WB	Pk Dir	Time
892	14:15	846	455	392	NB	17:00
1,099	16:45	1,099	317	782	WB	16:45
515	17:00	515	214	302	NB	17:00
927	7:00	773	447	325	WB	15:15
1,050	14:45	1,033	607	426	WB	16:30
532	7:00	523	278	245	EB	17:30
1,740	17:15	1,740	779	961	SB	17:15
546	15:45	546	287	259	SB	15:45
1,283	16:45	1,283	509	774	WB	16:45
760	7:30	709	309	400	EB	15:00
N/A	12:45	N/A	N/A	N/A	NB	17:30
547	7:00	491	248	244	SB	15:00
738	7:30	685	383	302	SB	16:15
N/A	0:00	N/A	N/A	N/A	SB	15:00
N/A	0:00	N/A	N/A	N/A	SB	15:00
191	17:30	191	69	122	NB	17:30
181	17:30	181	94	87	SB	17:30
656	16:00	656	346	309	NB	16:00
164	16:45	164	61	103	WB	16:45
N/A	0:00	N/A	N/A	N/A	WB	15:00
N/A	0:00	N/A	N/A	N/A	WB	15:00
233	7:15	223	98	126	WB	15:15
917	7:30	900	403	496	WB	16:15
539	16:30	539	264	275	NB	16:30
N/A	16:45	N/A	N/A	N/A	NB	16:45
662	17:00	662	240	422	EB	17:00
365	7:00	295	155	139	WB	15:00
N/A	0:00	N/A	N/A	N/A	WB	15:00
N/A	16:15	N/A	N/A	N/A	WB	16:15
N/A	16:30	N/A	N/A	N/A	WB	16:30
N/A	6:30	N/A	N/A	N/A	SB	16:45
457	7:00	456	132	323	SB	17:00
615	14:00	592	321	271	SB	16:15
549	16:30	549	236	312	WB	16:30
785	16:30	785	387	398	WB	16:30
335	7:00	264	146	118	EB	15:15
577	16:30	577	344	233	WB	16:30
766	16:30	766	398	369	NB	16:30
297	7:30	270	76	194	SB	17:00
1,634	6:45	1,623	903	721	SB	16:30
310	7:00	288	216	72	SB	17:00
759	16:45	759	351	408	NB	16:45
272	7:15	261	134	127	EB	17:00
N/A	0:00	N/A	N/A	N/A	EB	15:00
493	16:15	493	244	249	EB	16:15
203	16:30	203	140	63	WB	16:30
213	16:15	213	132	80	WB	16:15
394	16:15	394	141	252	SB	16:15
454	7:00	445	297	148	SB	16:30
N/A	0:00	N/A	N/A	N/A	EB	15:00
115	16:30	115	74	41	EB	16:30
1,282	16:30	1,282	626	655	SB	16:30
758	7:30	689	348	341	WB	16:15
N/A	0:00	N/A	N/A	N/A	NB	15:00
847	16:30	847	461	387	WB	16:30
666	16:30	666	304	362	SB	16:30
816	16:30	816	418	399	NB	16:30
722	16:45	722	329	394	WB	16:45
429	16:15	429	164	265	WB	16:15
853	16:15	853	303	551	SB	16:15
914	16:30	914	385	529	WB	16:30
894	15:45	894	429	465	WB	15:45

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 11 - LAKE

SITE: 0495 - ON SR-19, 0.326 MI. S OF CR-48 (RVL)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2024	11000	S	N 5400		S 5600	9.00	53.70	14.60
2023	10800	F	N 5300		S 5500	9.00	53.20	12.60
2022	10600	C	N 5200		S 5400	9.00	54.50	11.80
2021	9000	S	N 4500		S 4500	9.00	53.80	19.50
2020	9000	F	N 4500		S 4500	9.00	54.10	9.00
2019	9200	C	N 4600		S 4600	9.00	54.30	14.20
2018	9100	C	N 4600		S 4500	9.00	54.20	23.20
2017	9200	C	N 4600		S 4600	9.00	54.20	16.50
2016	9100	C	N 4600		S 4500	9.00	53.90	19.70
2015	8700	C	N 4400		S 4300	9.00	54.60	13.90
2014	8200	C	N 4100		S 4100	9.00	54.50	15.80
2013	8700	C	N 4400		S 4300	9.00	54.70	16.70
2012	8200	C	N 4100		S 4100	9.00	55.10	14.80
2011	7900	C	N 4000		S 3900	9.00	54.20	15.10
2010	8200	C	N 4000		S 4200	9.86	54.75	13.50
2009	9000	C	N 4700		S 4300	9.96	54.94	9.90

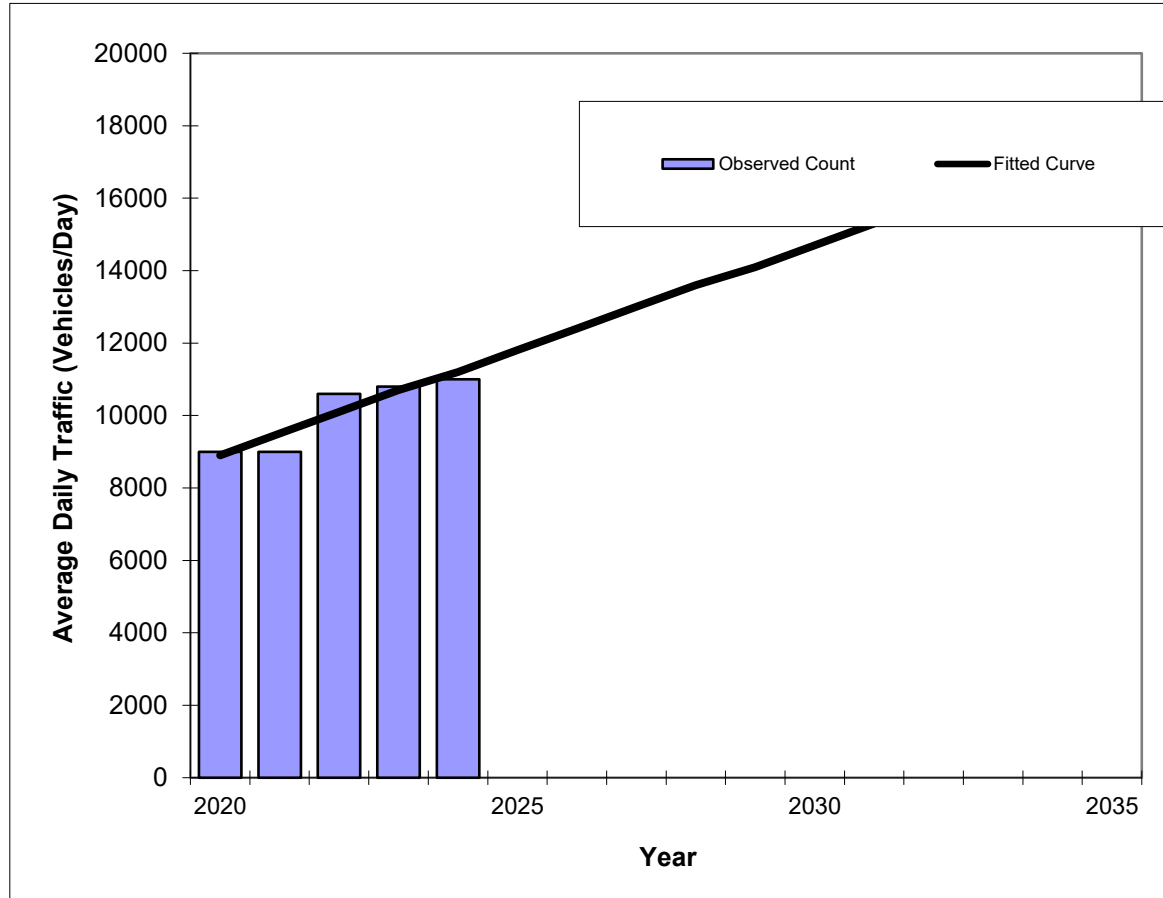
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

SR 19 -- CR 48 to Central Ave

FIN#	21100
Location	1

County:	Lake (11)
Station #:	0495
Highway:	SR 19



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2020	9000	8900
2021	9000	9500
2022	10600	10100
2023	10800	10700
2024	11000	11200
2025 Opening Year Trend		
2025	N/A	11800
2026 Mid-Year Trend		
2026	N/A	12400
2027 Design Year Trend		
2027	N/A	13000
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	580
Trend R-squared:	84.78%
Trend Annual Historic Growth Rate:	6.46%
Trend Growth Rate (2024 to Design Year):	5.36%
Printed:	6-Jun-25
Straight Line Growth Option	

*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 11 - LAKE

SITE: 0255 - ON SR-19, 0.021 MI. S OF CR-455 (RVL) CAB NW

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2024	12900	S	N 6400		S 6500	9.50	53.70	14.60
2023	12500	F	N 6200		S 6300	9.50	53.20	12.60
2022	12300	C	N 6100		S 6200	9.50	54.50	11.80
2021	10500	S	N 5200		S 5300	9.50	53.80	19.50
2020	10500	F	N 5200		S 5300	9.50	54.10	9.00
2019	10900	C	N 5400		S 5500	9.50	54.30	14.20
2018	12000	F	N 5900		S 6100	9.50	54.20	23.20
2017	11800	C	N 5800		S 6000	9.50	54.20	16.50
2016	9200	C	N 4600		S 4600	9.00	53.90	19.70
2015	8800	C	N 4400		S 4400	9.00	54.60	13.90
2014	8000	C	N 4000		S 4000	9.00	54.50	15.80
2013	8400	C	N 4100		S 4300	9.00	54.70	16.70
2012	8000	C	N 4000		S 4000	9.00	55.10	14.80
2011	7600	C	N 3800		S 3800	9.00	54.20	15.10
2010	7700	C	N 3900		S 3800	9.86	54.75	13.50
2009	7700	C	N 3900		S 3800	9.96	54.94	9.90

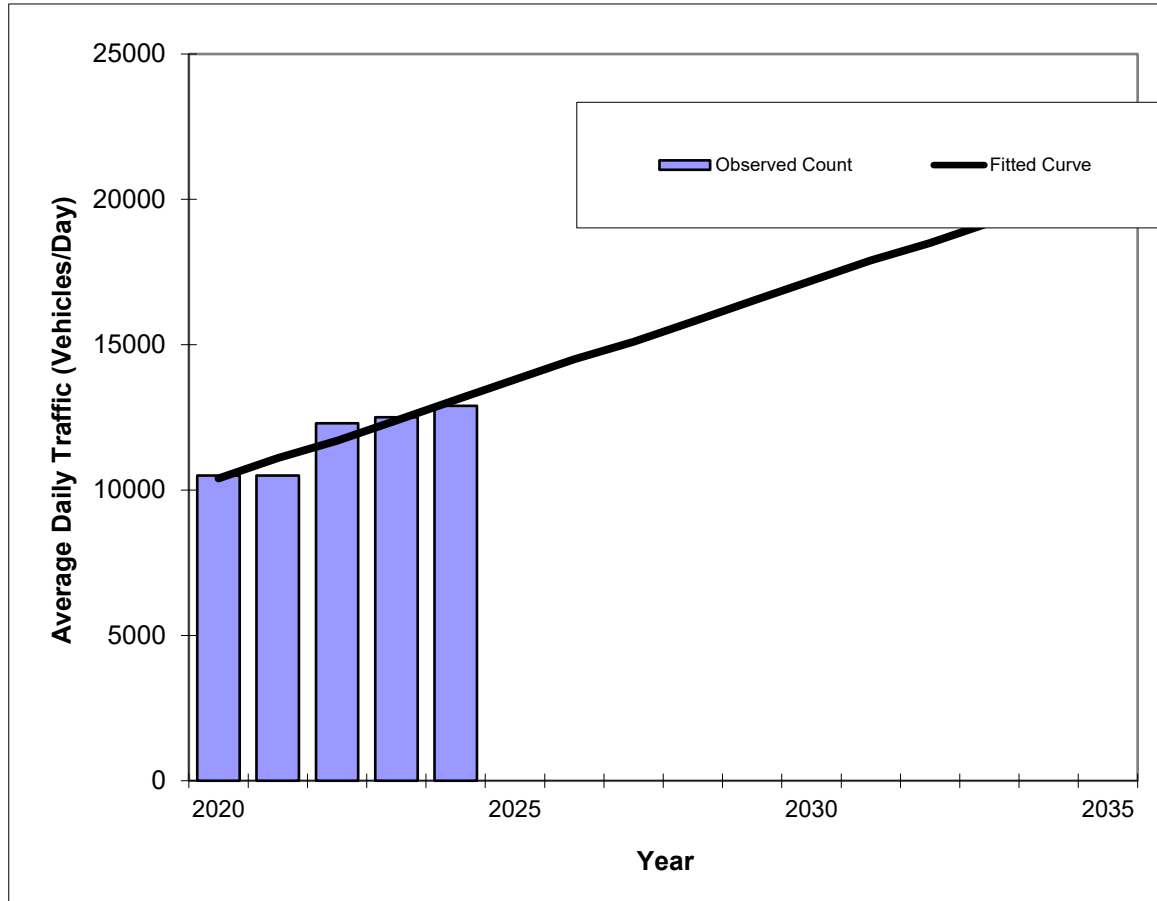
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

SR 19 -- Central Ave to US 27

FIN#	21100
Location	1

County:	Lake (11)
Station #:	0495
Highway:	SR 19



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2020	10500	10400
2021	10500	11100
2022	12300	11700
2023	12500	12400
2024	12900	13100
2025 Opening Year Trend		
2025	N/A	13800
2026 Mid-Year Trend		
2026	N/A	14500
2027 Design Year Trend		
2027	N/A	15100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	680
Trend R-squared:	87.05%
Trend Annual Historic Growth Rate:	6.49%
Trend Growth Rate (2024 to Design Year):	5.09%
Printed:	6-Jun-25
Straight Line Growth Option	

*Axle-Adjusted

Vested Trips											
Blue Sky		Hillside Groves		Lake Hills		Mission Rise		Whispering Hills		Total	
NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
0	0	46	29	0	0	0	0	14	14	60	43
0	0	0	0	0	0	0	0	0	0	0	0
20	34	87	138	89	85	49	83	28	26	273	366
36	21	231	145	89	85	167	98	15	77	538	426
36	21	231	145	89	85	167	98	15	77	538	426
36	21	161	102	71	68	117	69	15	77	400	337

Table 4
Projected Roadway Capacity Analysis

Roadway Segment	No. of Lanes	Adopted		P.M. Peak Hour Peak Direction					
		LOS	Capacity	Direction	Volume	Approved Trips*	Project Trips*	Total	LOS
CR 48									
US 27 to Lime Ave	2	D	1,080	EB	469	123	32	624	C
Lime Ave to SR 19	2	D	1,080	EB	409	159	3	571	C
SR 19									
Lane Park Rd to CR 48	2	D	920	SB	652	182	27	861	D
CR 48 to Central Ave	2	D	700	SB	415	439	34	888	F
Central Ave to CR 455	2	D	1,200	SB	415	435	21	871	C
Number 2 Road									
CR 48 to Bloomfield Ave	2	D	675	WB	26	66	21	113	C
Bloomfield Ave to SR 19	2	D	675	EB	52	212	71	335	C

* Highest Trips on the Segment

Intersection Analysis

To assess the projected operating conditions at the study intersections, intersection capacity analyses were conducted using the *Highway Capacity Software (HCS)* in accordance with the procedures of the *Highway Capacity Manual*. **Figure 5a** and **5b** show the total traffic volumes with the project trips. The projected Levels of Service are summarized in **Table 5** and the *HCS* analysis worksheets are provided in **Appendix F**. The analysis shows that the study intersections will operate at overall satisfactory Levels of Service, except for the intersection of SR 19 and CR 48, and the intersection of Palm Avenue and Central Avenue.

The intersection of SR 19 and CR 48 will have a failing westbound approach in the P.M. peak hour, but will operate satisfactorily with signal timing optimization.



Hillside Groves

Table 5
Projected Roadway Segment Capacity Analysis

Roadway Segment	No Lns	LOS Std	PH Dir Capacity	Dir	Exist Vol	Growth Rate	2028 Backg'd	Vested Trips	Trip Distr	Project Volume	Total Volume	LOS
Number 2 Rd												
CR 48 to N Mare Ave	2	D	612	NB/EB SB/WB	51 50	2.00%	58 57	26 26	15%	69 44	153 127	C C
W Central Ave												
N Mare Ave to SR 19	2	D	612	NB/EB SB/WB	51 50	2.00%	58 57	26 26	15%	69 44	153 127	C C
CR 455												
SR 19 to NF 552	2	C	740	NB/EB SB/WB	146 151	5.75%	205 212	8 13	10%	46 29	259 254	B B
SR 19												
Lane Park Rd to CR 48	4	D	1,200	NB/EB SB/WB	625 676	3.75%	789 853	229 189	5%	15 23	1,033 1,065	D D
CR 48 to Central Ave	2	D	800	NB/EB SB/WB	387 423	2.00%	441 482	177 173	30%	87 138	705 793	C D
Central Ave to CR 455	2	D	1,200	NB/EB SB/WB	387 423	2.00%	441 482	82 48	50%	231 145	754 675	C C
CR 455 to US 27/ SR 25	2	C	850	NB/EB SB/WB	419 453	2.00%	478 516	141 83	35%	161 102	780 701	C C
US 27/ SR 25 to CR 478	2	C	850	NB/EB SB/WB	481 405	2.00%	548 462	141 83	20%	92 58	781 603	C C

Source: 2020 Lake County Annual Traffic Counts

- SR 19 from CR 561 to Central Avenue and from CR 455 to US 27/SR 25 are projected to operate over their capacities due to background traffic.
- All remaining roadway segments are projected to continue to operate adequately at project buildout.

Table 6
Projected Roadway Segment Capacity Analysis

Road Name	From	To	# of Lns	LOS Std	Dir Cap	Dir	Growth Rate	Existing Volume	Vested Trips	2028 Background		Trip Distr	2028 Buildout			
										Volume	LOS		Project Trips	Volume	LOS	V/C
CR 448	SR 19	CR 561	2	D	840	NB/EB	2%	277	37	314	C	20%	68	382	C	0.46
						SB/WB		224	63	287	C	20%	71	358	C	0.43
CR 48	US 27	LIME AVENUE	2	D	1,080	NB/EB	4%	420	219	639	C	25%	89	729	C	0.67
						SB/WB		380	285	665	C	25%	85	750	C	0.69
CR 48	LIME AVENUE	SR 19	2	D	1,080	NB/EB	2%	429	219	648	C	25%	85	733	C	0.68
						SB/WB		404	285	689	C	25%	89	778	C	0.72
SR 19	CR 561	LANE PARK ROAD	2	D	920	NB/EB	2%	775	155	930	F	30%	102	1,032	F	1.12
						SB/WB		647	292	939	F	30%	107	1,046	F	1.14
SR 19	LANE PARK ROAD	CR 48	2	D	920	NB/EB	2%	775	155	930	F	50%	170	1,100	F	1.20
						SB/WB		647	292	939	F	50%	178	1,117	F	1.21
SR 19	CR 48	CENTRAL AVENUE	2	D	700	NB/EB	2%	515	269	784	F	25%	89	873	F	1.25
						SB/WB		439	352	791	F	25%	85	876	F	1.25
SR 19	CENTRAL AVENUE	CR 455	2	D	1,200	NB/EB	2%	515	434	949	D	25%	89	1,038	D	0.87
						SB/WB		439	257	696	C	25%	85	781	C	0.65
SR 19	CR 455	US 27 / SR 25	2	C	450	NB/EB	2%	637	328	965	E	20%	71	1,036	E	2.30
						SB/WB		532	207	739	E	20%	68	807	E	1.79

Source: 2022 Lake County Congestion Management Process (CMP)

Background traffic volume is based on traffic growth or vested trips from committed developments, whichever was found to be higher.

It should be noted that SR 19 from CR 48 to CR 561 is programmed in the *TIP* to be widened to four (4) lanes, which will improve the LOS. The segment of SR 19 from CR 48 to Central would potentially require to be widened to four (4) lanes to achieve acceptable LOS conditions. If context classification of the segment SR 19 from CR 455 to US 27/SR 25 changes to urbanized area, the adopted LOS capacity would increase, which would result in an acceptable LOS.

Table 6
Projected Roadway Segment Capacity Analysis

Roadway Segment	No Lns	LOS Std	PH Dir Capacity	Dir	Exist Vol	Growth Rate	2033 Backg'd	Vested Trips	Total Backg'd Volume	Backg'd LOS	Backg'd V/C	Trip Distr	Proj Dir	Project Volume	Total Volume	Final LOS	Final V/C
*Central Ave																	
SR 19 to Mare Ave	2	D	530	NB/EB SB/WB	57 59	2.00%	70 72	53 85	123 157	C C	0.23 0.30	10%	OUT IN	20 33	143 190	C C	0.27 0.36
SR 19																	
Lane Park Rd to CR 48	2	D	920	NB/EB SB/WB	610 656	2.00%	744 800	72 115	816 915	C D	0.89 0.99	23%	OUT IN	45 77	861 992	C F	0.94 1.08
CR 48 to Central Ave	2	D	700	NB/EB SB/WB	433 372	2.00%	528 454	167 268	695 722	D F	0.99 1.03	25%	OUT IN	49 83	744 805	F F	1.06 1.15
Central Ave to CR 455	2	D	1,200	NB/EB SB/WB	433 372	2.00%	528 454	266 167	794 621	C C	0.66 0.52	50%	IN OUT	167 98	961 719	D C	0.80 0.60
CR 455 to US 27/ SR 25	2	C	450	NB/EB SB/WB	507 435	2.00%	619 531	102 161	721 692	D D	1.60 1.54	35%	IN OUT	117 69	838 761	E E	1.86 1.69
US 27/ SR 25 to CR 478	2	C	450	NB/EB SB/WB	466 519	2.00%	569 633	102 161	671 794	D E	1.49 1.76	10%	IN OUT	33 20	704 814	D E	1.56 1.81
**Number 2 Rd																	
Mare Ave to Silverwood Ln	2	D	400	NB/EB SB/WB	57 59	2.00%	70 72	53 53	123 125	C C	0.31 0.31	35%	OUT IN	69 117	192 242	C D	0.48 0.61
Silverwood Ln to CR 48	2	D	400	NB/EB SB/WB	57 59	2.00%	70 72	53 53	123 125	C C	0.31 0.31	15%	IN OUT	50 29	173 154	C C	0.43 0.39

Source: 2022 Lake County Annual Traffic Counts

*Exiting Counts were obtained from PM Peak Turning Movement Counts

**A reduction of 25% was applied to the Peak Hour Directional Capacity of 530, as Number 2 Road is a substandard road

Table 4
Projected P.M. Peak Hour Roadway Analysis

Roadway Segment	# of Lns	F/Class	LOS		Peak Hour/Peak Direction							V/C Ratio	LOS
			Std	Capacity	Direction	Existing	Reserved*			Project**	Total		
							1	2	3				
SR 19													
CR 561 to Lake Harris N. End	2	ART. 1	D	1,190	NB	595	50	93	14	14	766	0.64	C
Lake Harris N. End to CR 48	2	ART. 1	C	850	NB	595	50	93	14	14	766	0.90	C
CR 48 to Central Ave	2	ART. 1	C	710	NB	362	24	167	32	28	613	0.86	C
Central Ave to CR 455	2	ART. 1	C	850	SB	446	77	171	29	37	760	0.89	C
CR 455 to US 27	2	ART. 1	C	850	SB	446	77	130	11	10	674	0.79	C
CR 48													
US 27 to Lime Ave	2	Maj. Coll.	D	792	WB	576	65	93	12	14	760	0.96	C
Lime Ave to SR 19	2	Maj. Coll.	D	792	WB	390	50	74	16	14	544	0.69	C
CR 561 to Ranch Rd	2	Maj. Coll.	D	792	WB	307	23	22	3	9	364	0.46	C
Ranch Rd to CR 448A	2	Coll.	C	670	WB	258	28	19	3	9	317	0.47	C
CR 561													
CR 448 to CR 48	2	Maj. Coll.	D	792	SB	449	52	5	2	1	509	0.64	C
CR 48 to S. Astatula City Limits	2	Maj. Coll.	D	720	SB	449	52	5	7	1	514	0.71	D
S. Astatula City Limits to CR 455	2	Maj. Coll.	D	720	SB	534	57	22	6	11	630	0.88	D
CR 455 to Howey Cross Rd	2	Maj. Coll.	D	720	NB	357	26	0	3	11	397	0.55	D
Howey Cross Rd to Turnpike Rd/CR 561A	2	Maj. Coll.	D	720	SB	542	153	7	1	11	714	0.99	E
CR 455													
SR 19 to CR 561	2	Maj. Coll.	D	1,200	EB	165	28	33	8	14	248	0.21	B
CR 561 to CR 561A	2	Maj. Coll.	D	1,200	WB	99	12	19	2	1	133	0.11	B

* 1 = MPO Database, 2 = Mission Rise, 3 = Talichet

** Highest trips on the segment



Appendix H
Intersection Traffic Counts, Seasonal Factor, & Vested Trips

TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

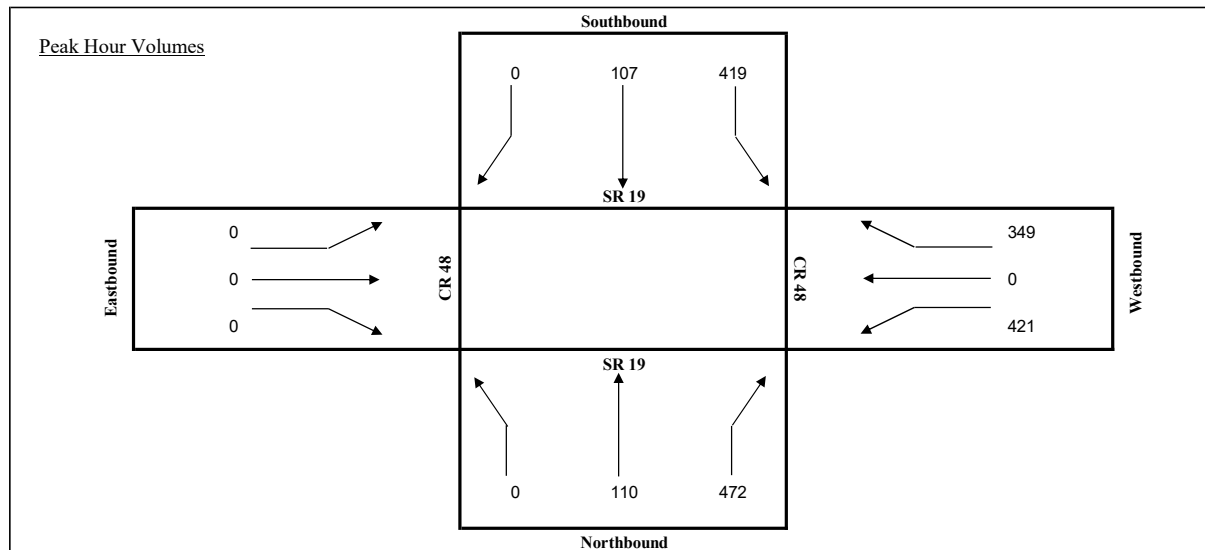
Intersection (N/S): SR 19

Intersection (E/W): CR 48

Date: 5/29/2025

		SR 19			SR 19			CR 48			CR 48			
Start	End	NB			SB			EB			WB			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	0	19	89	71	35	0	0	0	0	71	0	80	365
7:15 AM	7:30 AM	0	26	118	92	22	0	0	0	0	98	0	94	450
7:30 AM	7:45 AM	0	22	125	126	25	0	0	0	0	127	0	99	524
7:45 AM	8:00 AM	0	35	113	105	33	0	0	0	0	108	0	88	482
8:00 AM	8:15 AM	0	27	116	96	27	0	0	0	0	88	0	68	422
8:15 AM	8:30 AM	0	32	101	88	29	0	0	0	0	82	0	67	399
8:30 AM	8:45 AM	0	31	81	79	22	0	0	0	0	87	0	80	380
8:45 AM	9:00 AM	0	17	91	88	27	0	0	0	0	84	0	81	388

Total for:	7:00 AM	8:00 AM	0	102	445	394	115	0	0	0	0	404	0	361	1821
Total for:	8:00 AM	9:00 AM	0	107	389	351	105	0	0	0	0	341	0	296	1589
Tota Peak Hour:	7:15 AM	8:15 AM	0	110	472	419	107	0	0	0	0	421	0	349	1878
Overall PHF:	0.90														



TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

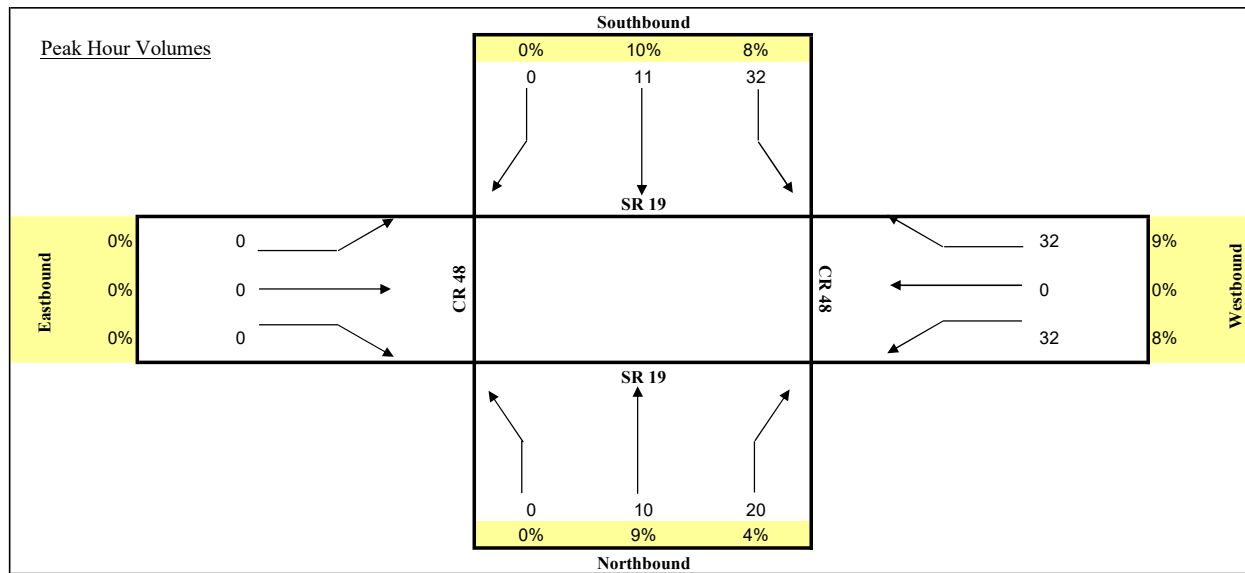
Intersection (N/S): SR 19

Intersection (E/W): CR 48

Date: 5/29/2025

SR 19				SR 19			CR 48			CR 48			TOTAL	
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T		R
7:00 AM	7:15 AM	0	4	1	5	2	0	0	0	0	5	0	5	22
7:15 AM	7:30 AM	0	4	4	7	2	0	0	0	0	8	0	6	31
7:30 AM	7:45 AM	0	2	2	10	1	0	0	0	0	12	0	9	36
7:45 AM	8:00 AM	0	3	5	5	3	0	0	0	0	10	0	10	36
8:00 AM	8:15 AM	0	1	5	9	5	0	0	0	0	4	0	5	29
8:15 AM	8:30 AM	0	4	8	8	2	0	0	0	0	6	0	8	36
8:30 AM	8:45 AM	0	3	3	10	2	0	0	0	0	8	0	9	35
8:45 AM	9:00 AM	0	1	9	6	2	0	0	0	0	4	0	11	33

Total for:	7:00 AM	8:00 AM	0	13	12	27	8	0	0	0	0	35	0	30	125
Total for:	8:00 AM	9:00 AM	0	9	25	33	11	0	0	0	0	22	0	33	133
Tota Peak Hour:	7:30 AM	8:30 AM	0	10	20	32	11	0	0	0	0	32	0	32	137
Overall PHF:	0.95														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

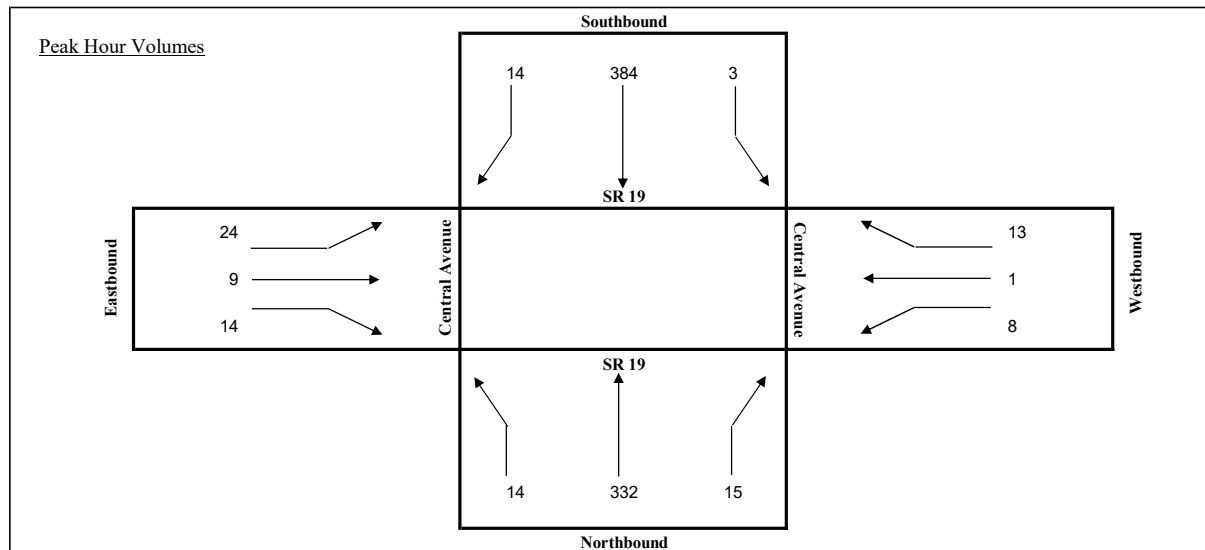
Intersection (N/S): SR 19

Intersection (E/W): Central Avenue

Date: 5/29/2025

		SR 19			SR 19			Central Avenue			Central Avenue			
Start	End	NB			SB			EB			WB			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	5	76	5	3	74	2	2	2	2	0	0	2	173
7:15 AM	7:30 AM	7	78	2	2	82	3	4	2	7	3	1	3	194
7:30 AM	7:45 AM	3	96	1	4	82	2	6	1	4	2	1	1	203
7:45 AM	8:00 AM	4	87	5	1	103	4	6	0	3	4	0	4	221
8:00 AM	8:15 AM	1	83	3	2	105	3	3	3	3	1	0	1	208
8:15 AM	8:30 AM	4	78	4	0	85	3	6	1	6	1	0	4	192
8:30 AM	8:45 AM	5	84	3	0	91	4	9	5	2	2	1	4	210
8:45 AM	9:00 AM	4	78	6	2	79	2	8	2	3	4	1	2	191

Total for:	7:00 AM	8:00 AM	19	337	13	10	341	11	18	5	16	9	2	10	791
Total for:	8:00 AM	9:00 AM	14	323	16	4	360	12	26	11	14	8	2	11	801
Tota Peak Hour:	7:45 AM	8:45 AM	14	332	15	3	384	14	24	9	14	8	1	13	831
Overall PHF:	0.94														



TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

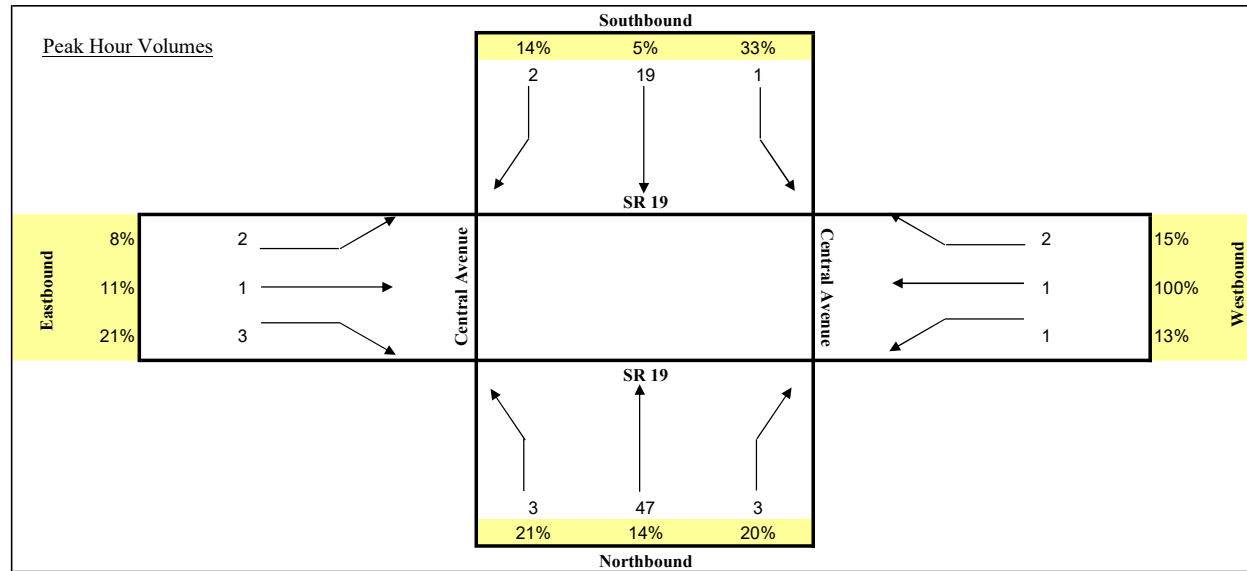
Intersection (N/S): SR 19

Intersection (E/W): Central Avenue

Date: 5/29/2025

				SR 19			SR 19			Central Avenue			Central Avenue			TOTAL
Start	End	NB			SB			EB			WB					
		R	T	L	R	T	L	R	T	L	R	T	L			
7:00 AM	7:15 AM	0	10	1	1	5	0	0	0	0	0	0	0	0	17	
7:15 AM	7:30 AM	2	8	0	1	2	1	0	0	0	1	0	0	1	16	
7:30 AM	7:45 AM	1	5	0	0	4	1	1	0	0	1	0	0	0	13	
7:45 AM	8:00 AM	0	9	0	0	7	0	1	0	0	0	0	0	0	17	
8:00 AM	8:15 AM	0	11	0	1	3	0	0	0	1	0	0	0	0	16	
8:15 AM	8:30 AM	1	10	2	0	6	1	0	0	1	0	0	0	1	22	
8:30 AM	8:45 AM	0	14	1	0	3	0	2	1	0	0	1	1	1	23	
8:45 AM	9:00 AM	2	12	0	0	7	1	0	0	1	1	0	0	0	24	

Total for:	7:00 AM	8:00 AM	3	32	1	2	18	2	2	0	0	2	0	1	63
Total for:	8:00 AM	9:00 AM	3	47	3	1	19	2	2	1	3	1	1	2	85
Tota Peak Hour:	8:00 AM	9:00 AM	3	47	3	1	19	2	2	1	3	1	1	2	85
Overall PHF:	0.89														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

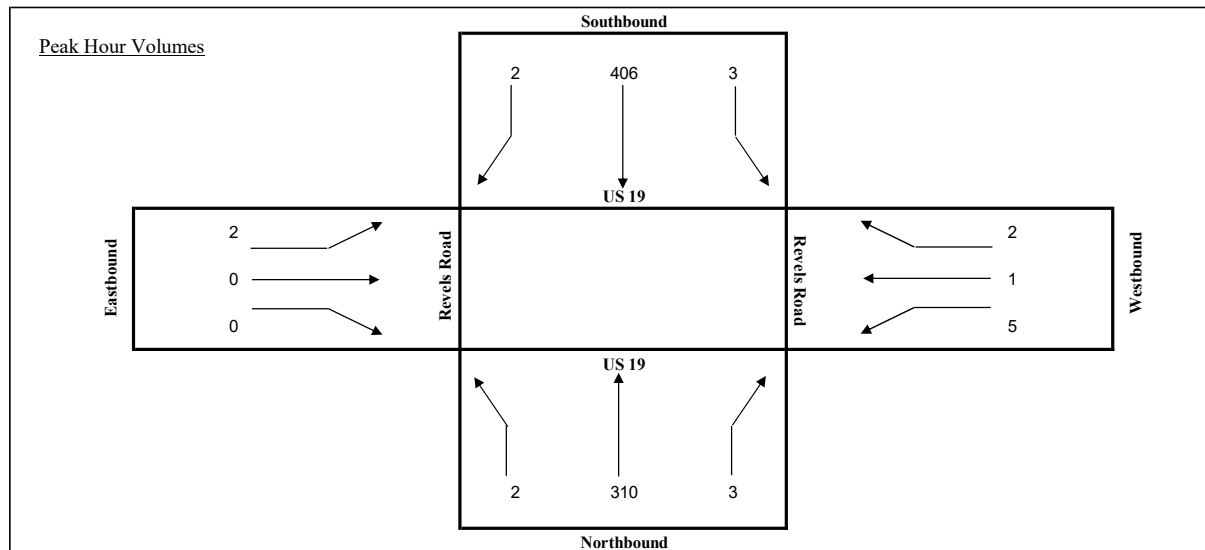
Intersection (N/S): US 19

Intersection (E/W): Revels Road

Date: 5/29/2025

		US 19			US 19			Revels Road			Revels Road			
Start	End	NB			SB			EB			WB			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	4	82	2	0	74	2	0	0	0	2	0	2	168
7:15 AM	7:30 AM	5	68	3	0	79	2	0	0	1	2	0	1	161
7:30 AM	7:45 AM	0	79	1	2	98	1	0	0	0	1	1	0	183
7:45 AM	8:00 AM	0	90	0	1	94	0	1	0	0	2	0	0	188
8:00 AM	8:15 AM	1	68	1	0	115	0	1	0	0	0	0	1	187
8:15 AM	8:30 AM	1	73	1	0	99	1	0	0	0	2	0	1	178
8:30 AM	8:45 AM	1	68	5	1	80	0	1	0	4	1	0	0	161
8:45 AM	9:00 AM	2	61	0	0	70	1	3	1	1	0	0	0	139

Total for:	7:00 AM	8:00 AM	9	319	6	3	345	5	1	0	1	7	1	3	700
Total for:	8:00 AM	9:00 AM	5	270	7	1	364	2	5	1	5	3	0	2	665
Tota Peak Hour:	7:30 AM	8:30 AM	2	310	3	3	406	2	2	0	0	5	1	2	736
Overall PHF:	0.98														



TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

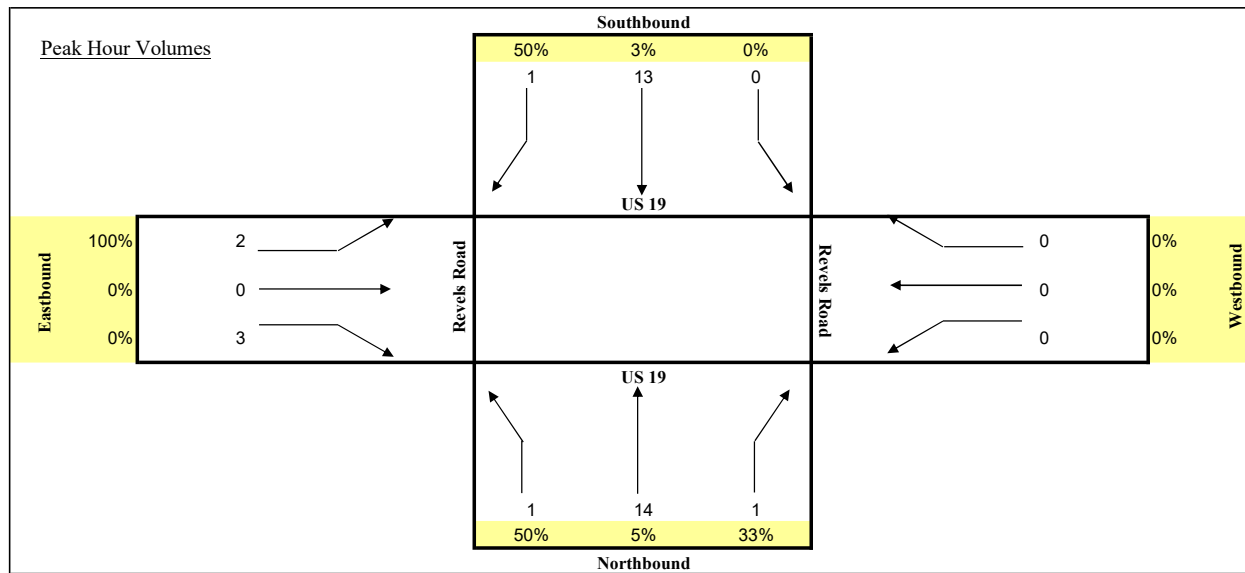
Intersection (N/S): US 19

Intersection (E/W): Revels Road

Date: 5/29/2025

		US 19			US 19			Revels Road			Revels Road			TOTAL	
Start	End	NB			SB			EB			WB				
		R	T	L	R	T	L	R	T	L	R	T	L		
7:00 AM	7:15 AM	1	2	0	0	3	1	0	0	0	0	0	0	1	8
7:15 AM	7:30 AM	1	2	0	0	4	1	0	0	0	0	0	0	0	8
7:30 AM	7:45 AM	0	5	1	0	2	0	0	0	0	0	0	0	0	8
7:45 AM	8:00 AM	0	2	0	0	2	0	0	0	0	0	1	0	0	5
8:00 AM	8:15 AM	0	4	0	0	4	0	0	0	0	0	0	0	0	8
8:15 AM	8:30 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	6
8:30 AM	8:45 AM	1	5	1	0	5	0	1	0	2	0	0	0	0	15
8:45 AM	9:00 AM	0	2	0	0	1	1	1	0	1	0	0	0	0	6

Total for:	7:00 AM	8:00 AM	2	11	1	0	11	2	0	0	0	1	0	1	29
Total for:	8:00 AM	9:00 AM	1	14	1	0	13	1	2	0	3	0	0	0	35
Tota Peak Hour:	8:00 AM	9:00 AM	1	14	1	0	13	1	2	0	3	0	0	0	35
Overall PHF:	0.58														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

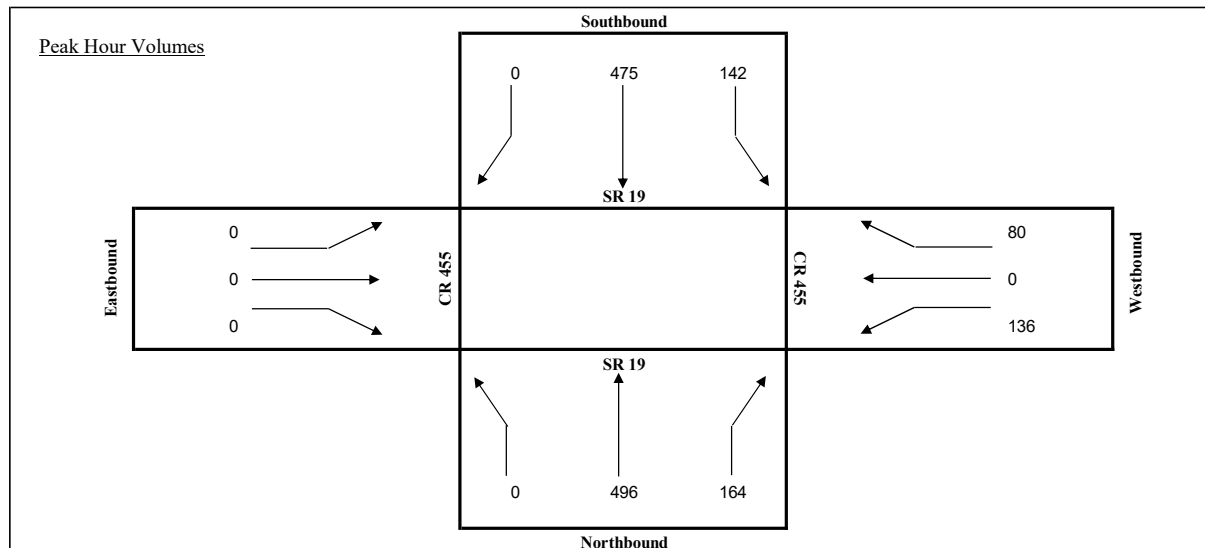
Intersection (N/S): SR 19

Intersection (E/W): CR 455

Date: 5/29/2025

		SR 19			SR 19			CR 455			CR 455			
Start	End	NB			SB			EB			WB			TOTAL
		L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	0	102	29	21	102	0	0	0	0	19	0	12	285
7:15 AM	7:30 AM	0	120	40	27	116	0	0	0	0	27	0	17	347
7:30 AM	7:45 AM	0	140	47	33	115	0	0	0	0	31	0	21	387
7:45 AM	8:00 AM	0	115	41	38	126	0	0	0	0	39	0	19	378
8:00 AM	8:15 AM	0	121	36	44	118	0	0	0	0	39	0	23	381
8:15 AM	8:30 AM	0	80	40	36	87	0	0	0	0	36	0	19	298
8:30 AM	8:45 AM	0	102	38	32	72	0	0	0	0	33	0	24	301
8:45 AM	9:00 AM	0	76	29	26	69	0	0	0	0	24	0	22	246

Total for:	7:00 AM	8:00 AM	0	477	157	119	459	0	0	0	0	116	0	69	1397
Total for:	8:00 AM	9:00 AM	0	379	143	138	346	0	0	0	0	132	0	88	1226
Tota Peak Hour:	7:15 AM	8:15 AM	0	496	164	142	475	0	0	0	0	136	0	80	1493
Overall PHF:	0.96														



TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

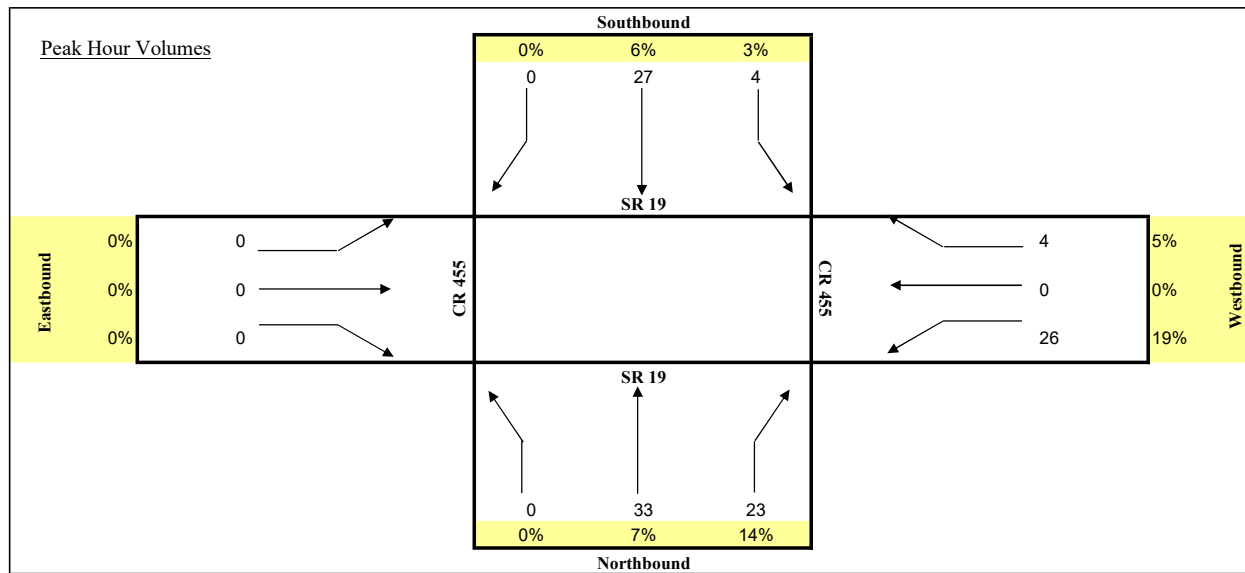
Intersection (N/S): SR 19

Intersection (E/W): CR 455

Date: 5/29/2025

SR 19				SR 19			CR 455			CR 455			TOTAL	
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T		R
7:00 AM	7:15 AM	0	8	7	1	5	0	0	0	0	2	0	0	23
7:15 AM	7:30 AM	0	5	9	1	8	0	0	0	0	7	0	1	31
7:30 AM	7:45 AM	0	11	10	0	4	0	0	0	0	5	0	1	31
7:45 AM	8:00 AM	0	7	1	1	6	0	0	0	0	6	0	2	23
8:00 AM	8:15 AM	0	10	3	2	9	0	0	0	0	8	0	0	32
8:15 AM	8:30 AM	0	5	6	1	3	0	0	0	0	5	0	1	21
8:30 AM	8:45 AM	0	12	8	1	6	0	0	0	0	4	0	2	33
8:45 AM	9:00 AM	0	8	3	0	6	0	0	0	0	4	0	2	23

Total for:	7:00 AM	8:00 AM	0	31	27	3	23	0	0	0	0	20	0	4	108
Total for:	8:00 AM	9:00 AM	0	35	20	4	24	0	0	0	0	21	0	5	109
Tota Peak Hour:	7:15 AM	8:15 AM	0	33	23	4	27	0	0	0	0	26	0	4	117
Overall PHF:	0.91														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

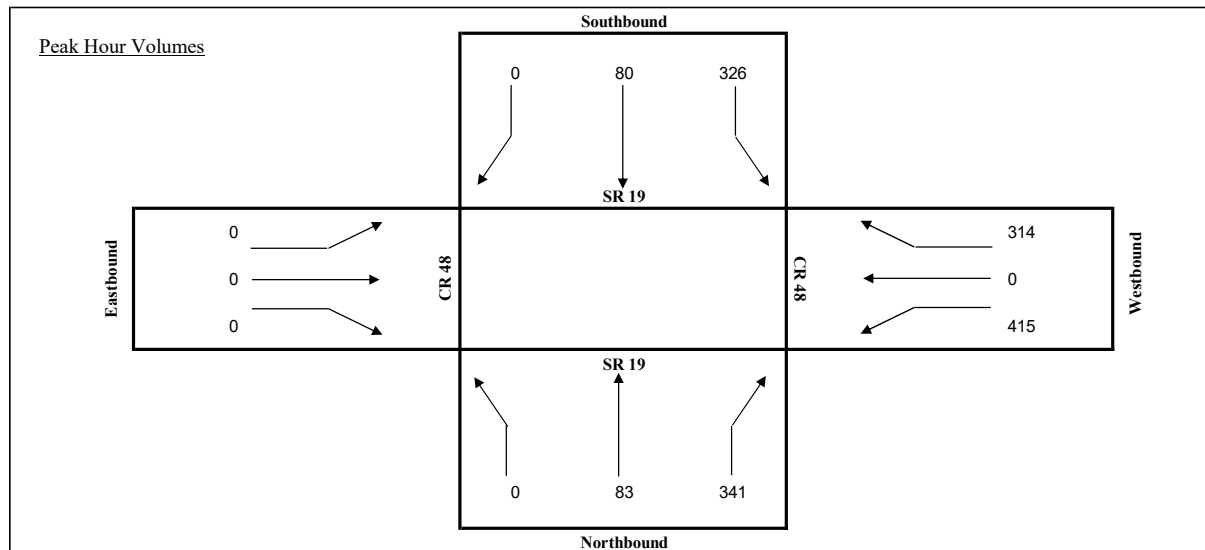
Intersection (N/S): SR 19

Intersection (E/W): CR 48

Date: 5/29/2025

		SR 19			SR 19			CR 48			CR 48			TOTAL
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	0	15	98	62	21	0	0	0	0	89	0	66	351
4:15 PM	4:30 PM	0	21	83	73	20	0	0	0	0	95	0	71	363
4:30 PM	4:45 PM	0	24	86	75	13	0	0	0	0	107	0	82	387
4:45 PM	5:00 PM	0	20	90	88	17	0	0	0	0	97	0	74	386
5:00 PM	5:15 PM	0	24	84	78	19	0	0	0	0	92	0	71	368
5:15 PM	5:30 PM	0	19	69	91	23	0	0	0	0	115	0	77	394
5:30 PM	5:45 PM	0	20	98	69	21	0	0	0	0	111	0	92	411
5:45 PM	6:00 PM	0	24	73	64	17	0	0	0	0	103	0	79	360

Total for:	4:00 PM	5:00 PM	0	80	357	298	71	0	0	0	0	388	0	293	1487
Total for:	5:00 PM	6:00 PM	0	87	324	302	80	0	0	0	0	421	0	319	1533
Tota Peak Hour:	4:45 PM	5:45 PM	0	83	341	326	80	0	0	0	0	415	0	314	1559
Overall PHF:	0.95														



TURNING MOVEMENT COUNT ANALYSIS
TRUCKS

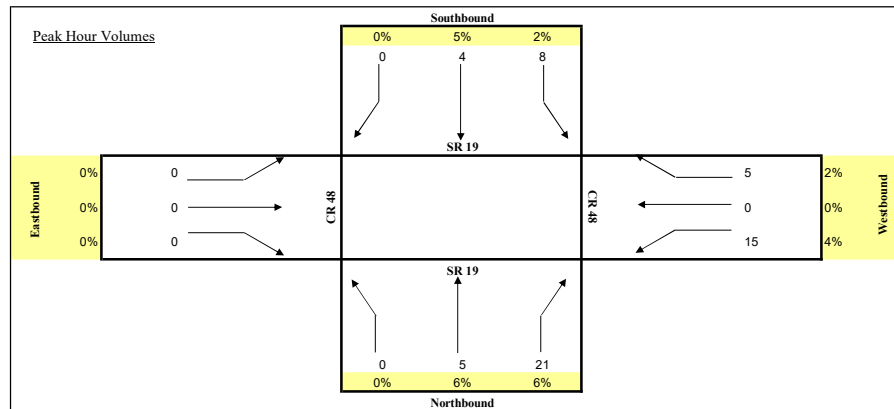
Intersection (N/S): SR 19

Intersection (E/W): CR 48

Date: 5/29/2025

		SR 19			SR 19			CR 48			CR 48			TOTAL
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	
4:00 PM	4:15 PM	0	1	8	3	1	0	0	0	0	2	0	3	18
4:15 PM	4:30 PM	0	2	5	4	2	0	0	0	0	5	0	1	19
4:30 PM	4:45 PM	0	2	6	1	1	0	0	0	0	5	0	1	16
4:45 PM	5:00 PM	0	0	2	0	0	0	0	0	0	3	0	0	5
5:00 PM	5:15 PM	0	0	5	3	1	0	0	0	0	4	0	2	15
5:15 PM	5:30 PM	0	0	1	1	0	0	0	0	0	4	0	0	6
5:30 PM	5:45 PM	0	1	4	2	1	0	0	0	0	4	0	0	12
5:45 PM	6:00 PM	0	1	1	1	0	0	0	0	0	3	0	1	7

Total for:	4:00 PM	5:00 PM	0	5	21	8	4	0	0	0	0	15	0	5	58
Total for:	5:00 PM	6:00 PM	0	2	11	7	2	0	0	0	0	15	0	3	40
Total Peak Hour:	4:00 PM	5:00 PM	0	5	21	8	4	0	0	0	0	15	0	5	58
Overall PHF:	0.76														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

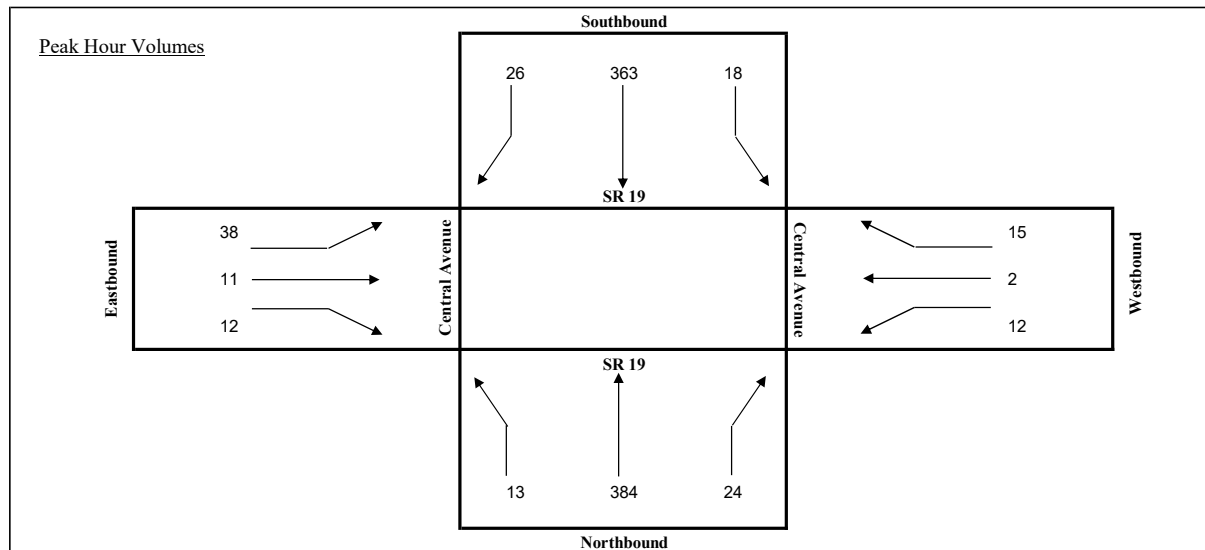
Intersection (N/S): SR 19

Intersection (E/W): Central Avenue

Date: 5/29/2025

		SR 19			SR 19			Central Avenue			Central Avenue			TOTAL
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	4	98	5	3	93	13	6	2	3	3	2	4	236
4:15 PM	4:30 PM	5	85	3	5	69	5	6	2	2	0	1	1	184
4:30 PM	4:45 PM	3	102	5	8	89	7	9	4	3	4	0	4	238
4:45 PM	5:00 PM	4	107	5	5	74	9	12	2	4	3	0	3	228
5:00 PM	5:15 PM	3	83	8	4	107	7	10	2	3	1	2	4	234
5:15 PM	5:30 PM	3	92	6	1	93	3	7	3	2	4	0	4	218
5:30 PM	5:45 PM	5	82	3	2	99	5	10	6	5	2	1	3	223
5:45 PM	6:00 PM	6	86	3	4	88	8	10	3	4	2	2	4	220

Total for:	4:00 PM	5:00 PM	16	392	18	21	325	34	33	10	12	10	3	12	886
Total for:	5:00 PM	6:00 PM	17	343	20	11	387	23	37	14	14	9	5	15	895
Tota Peak Hour:	4:30 PM	5:30 PM	13	384	24	18	363	26	38	11	12	12	2	15	918
Overall PHF:	0.96														

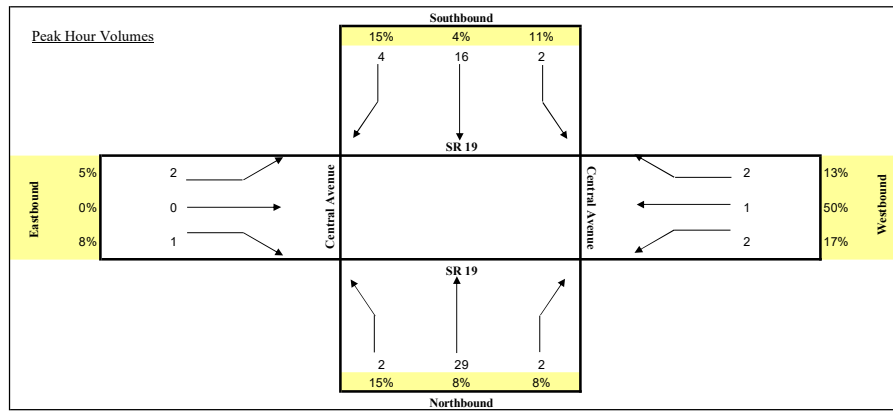


TURNING MOVEMENT COUNT ANALYSIS
TRUCKS

Intersection (N/S): SR 19
Intersection (E/W): Central Avenue
Date: 5/29/2025

		SR 19			SR 19			Central Avenue			Central Avenue			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	1	10	0	1	5	3	1	0	0	1	1	2	25
4:15 PM	4:30 PM	0	5	1	1	2	0	1	0	0	0	0	0	10
4:30 PM	4:45 PM	1	9	1	0	4	0	0	0	1	1	0	0	17
4:45 PM	5:00 PM	0	5	0	0	5	1	0	0	0	0	0	0	11
5:00 PM	5:15 PM	0	8	0	0	5	1	0	0	1	0	1	0	16
5:15 PM	5:30 PM	1	3	0	0	4	0	0	0	0	0	0	0	8
5:30 PM	5:45 PM	0	6	0	0	1	0	1	0	0	0	0	1	9
5:45 PM	6:00 PM	0	8	0	0	1	1	0	0	1	0	0	0	11

Total for:	4:00 PM	5:00 PM	2	29	2	2	16	4	2	0	1	2	1	2	63
Total for:	5:00 PM	6:00 PM	1	25	0	0	11	2	1	0	2	0	1	1	44
Total Peak Hour:	4:00 PM	5:00 PM	2	29	2	2	16	4	2	0	1	2	1	2	63
Overall PHF:	0.63														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

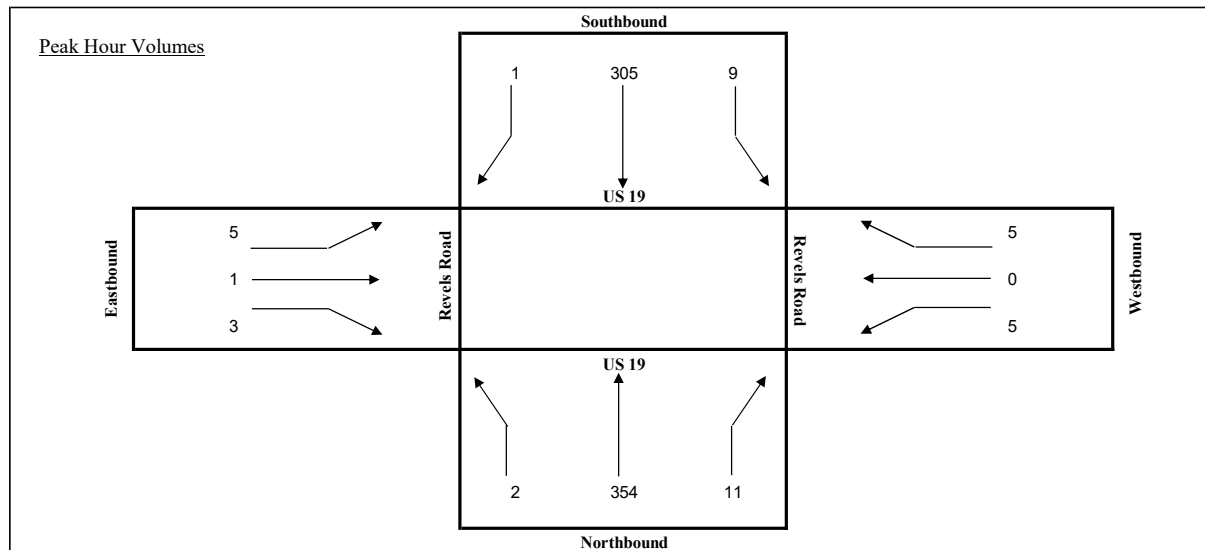
Intersection (N/S): US 19

Intersection (E/W): Revels Road

Date: 5/29/2025

		US 19			US 19			Revels Road			Revels Road			TOTAL
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	3	81	4	3	56	1	1	0	1	3	0	1	154
4:15 PM	4:30 PM	2	87	3	4	71	2	0	0	0	1	2	0	172
4:30 PM	4:45 PM	0	94	0	1	83	1	1	0	1	1	0	3	185
4:45 PM	5:00 PM	0	95	4	3	79	0	0	1	1	3	0	2	188
5:00 PM	5:15 PM	1	80	2	1	65	0	3	0	1	1	0	0	154
5:15 PM	5:30 PM	1	85	5	4	78	0	1	0	0	0	0	0	174
5:30 PM	5:45 PM	0	94	2	2	81	0	2	0	0	2	0	1	184
5:45 PM	6:00 PM	0	80	2	1	70	1	0	1	2	1	0	0	158

Total for:	4:00 PM	5:00 PM	5	357	11	11	289	4	2	1	3	8	2	6	699
Total for:	5:00 PM	6:00 PM	2	339	11	8	294	1	6	1	3	4	0	1	670
Tota Peak Hour:	4:30 PM	5:30 PM	2	354	11	9	305	1	5	1	3	5	0	5	701
Overall PHF:	0.93														

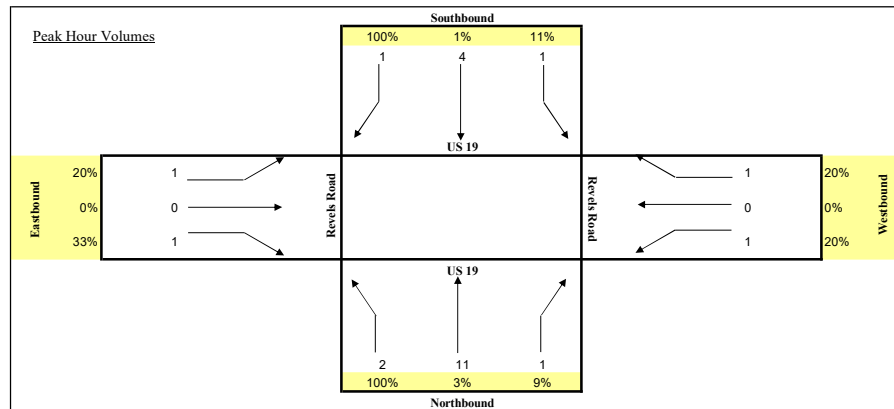


TURNING MOVEMENT COUNT ANALYSIS
TRUCKS

Intersection (N/S): US 19
Intersection (E/W): Revels Road
Date: 5/29/2025

US 19					US 19			Revels Road			Revels Road			TOTAL
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	
4:00 PM	4:15 PM	1	2	1	1	2	0	1	0	0	1	0	0	9
4:15 PM	4:30 PM	1	1	0	0	1	1	0	0	0	0	0	0	4
4:30 PM	4:45 PM	0	6	0	0	1	0	0	0	1	0	0	0	8
4:45 PM	5:00 PM	0	2	0	0	0	0	0	0	0	0	0	1	3
5:00 PM	5:15 PM	0	1	1	0	2	0	1	0	0	0	0	0	5
5:15 PM	5:30 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
5:30 PM	5:45 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
5:45 PM	6:00 PM	0	2	0	0	1	0	0	0	0	0	0	0	3

Total for:	4:00 PM	5:00 PM	2	11	1	1	4	1	1	0	1	1	0	1	24
Total for:	5:00 PM	6:00 PM	0	7	1	0	5	0	1	0	0	0	0	0	14
Total Peak Hour:	4:00 PM	5:00 PM	2	11	1	1	4	1	1	0	1	1	0	1	24
Overall PHF:	0.67														



TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

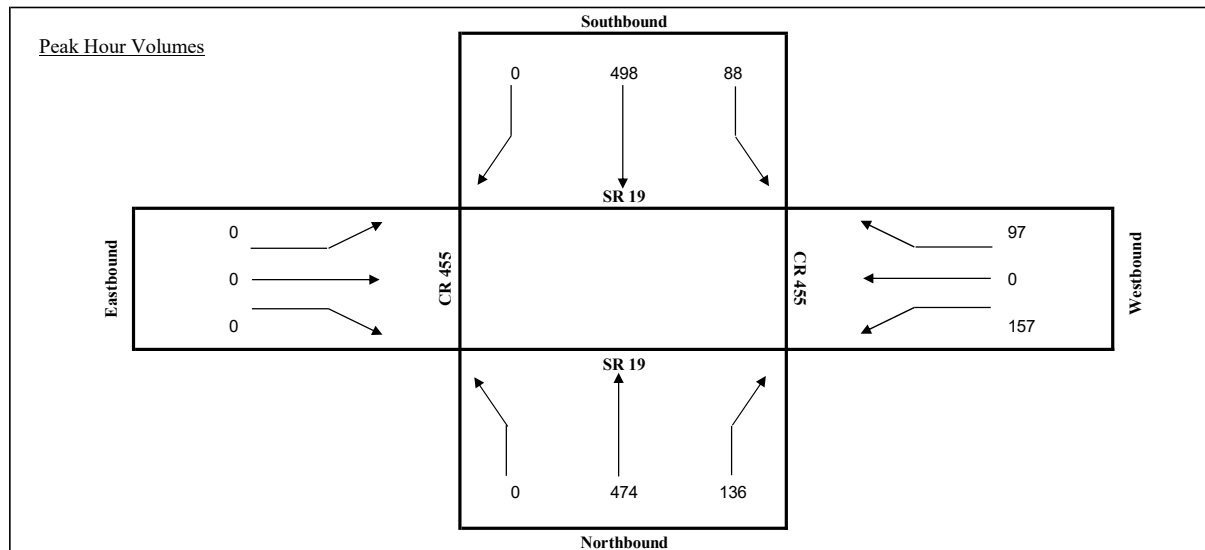
Intersection (N/S): SR 19

Intersection (E/W): CR 455

Date: 5/29/2025

		SR 19			SR 19			CR 455			CR 455			TOTAL
Start	End	NB			SB			EB			WB			
		L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	0	122	31	21	140	0	0	0	0	31	0	20	365
4:15 PM	4:30 PM	0	110	35	26	119	0	0	0	0	34	0	26	350
4:30 PM	4:45 PM	0	124	30	19	127	0	0	0	0	42	0	31	373
4:45 PM	5:00 PM	0	118	40	22	112	0	0	0	0	50	0	20	362
5:00 PM	5:15 PM	0	116	32	20	100	0	0	0	0	57	0	26	351
5:15 PM	5:30 PM	0	111	49	20	113	0	0	0	0	48	0	23	364
5:30 PM	5:45 PM	0	103	37	17	126	0	0	0	0	45	0	21	349
5:45 PM	6:00 PM	0	113	34	14	127	0	0	0	0	52	0	27	367

Total for:	4:00 PM	5:00 PM	0	474	136	88	498	0	0	0	0	157	0	97	1450
Total for:	5:00 PM	6:00 PM	0	443	152	71	466	0	0	0	0	202	0	97	1431
Tota Peak Hour:	4:00 PM	5:00 PM	0	474	136	88	498	0	0	0	0	157	0	97	1450
Overall PHF:	0.97														



TURNING MOVEMENT COUNT ANALYSIS
TRUCKS

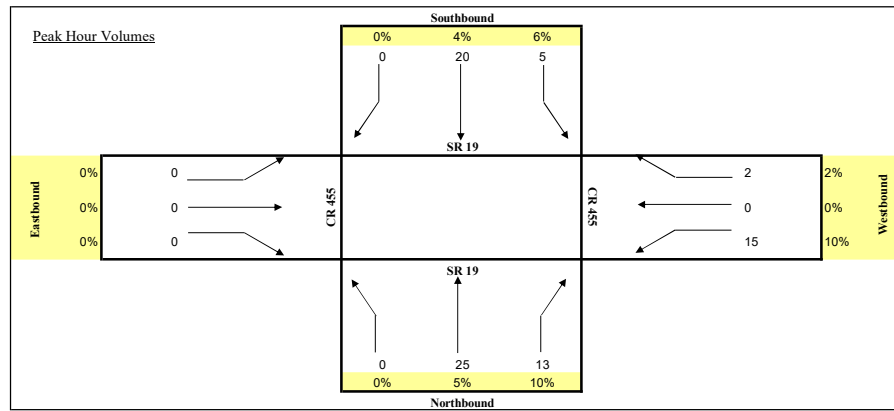
Intersection (N/S): SR 19

Intersection (E/W): CR 455

Date: 5/29/2025

		SR 19			SR 19			CR 455			CR 455			TOTAL
		NB			SB			EB			WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	0	11	3	1	7	0	0	0	0	1	0	1	24
4:15 PM	4:30 PM	0	2	4	3	4	0	0	0	0	6	0	1	20
4:30 PM	4:45 PM	0	3	1	1	3	0	0	0	0	3	0	0	11
4:45 PM	5:00 PM	0	9	5	0	6	0	0	0	0	5	0	0	25
5:00 PM	5:15 PM	0	1	2	0	2	0	0	0	0	5	0	1	11
5:15 PM	5:30 PM	0	4	5	2	6	0	0	0	0	4	0	0	21
5:30 PM	5:45 PM	0	5	1	0	8	0	0	0	0	4	0	0	18
5:45 PM	6:00 PM	0	2	1	1	4	0	0	0	0	2	0	1	11

Total for:	4:00 PM	5:00 PM	0	25	13	5	20	0	0	0	0	15	0	2	80
Total for:	5:00 PM	6:00 PM	0	12	9	3	20	0	0	0	0	15	0	2	61
Total Peak Hour:	4:00 PM	5:00 PM	0	25	13	5	20	0	0	0	0	15	0	2	80
Overall PHF:	0.80														



2024 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1100 LAKE COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2024 - 01/06/2024	1.02	1.07
2	01/07/2024 - 01/13/2024	1.04	1.09
3	01/14/2024 - 01/20/2024	1.05	1.11
4	01/21/2024 - 01/27/2024	1.03	1.08
5	01/28/2024 - 02/03/2024	1.01	1.06
6	02/04/2024 - 02/10/2024	0.99	1.04
* 7	02/11/2024 - 02/17/2024	0.97	1.02
* 8	02/18/2024 - 02/24/2024	0.96	1.01
* 9	02/25/2024 - 03/02/2024	0.96	1.01
*10	03/03/2024 - 03/09/2024	0.95	1.00
*11	03/10/2024 - 03/16/2024	0.94	0.99
*12	03/17/2024 - 03/23/2024	0.94	0.99
*13	03/24/2024 - 03/30/2024	0.94	0.99
*14	03/31/2024 - 04/06/2024	0.94	0.99
*15	04/07/2024 - 04/13/2024	0.94	0.99
*16	04/14/2024 - 04/20/2024	0.94	0.99
*17	04/21/2024 - 04/27/2024	0.95	1.00
*18	04/28/2024 - 05/04/2024	0.96	1.01
*19	05/05/2024 - 05/11/2024	0.98	1.03
20	05/12/2024 - 05/18/2024	0.99	1.04
21	05/19/2024 - 05/25/2024	1.00	1.05
22	05/26/2024 - 06/01/2024	1.01	1.06
23	06/02/2024 - 06/08/2024	1.02	1.07
24	06/09/2024 - 06/15/2024	1.03	1.08
25	06/16/2024 - 06/22/2024	1.04	1.09
26	06/23/2024 - 06/29/2024	1.05	1.11
27	06/30/2024 - 07/06/2024	1.06	1.12
28	07/07/2024 - 07/13/2024	1.06	1.12
29	07/14/2024 - 07/20/2024	1.07	1.13
30	07/21/2024 - 07/27/2024	1.06	1.12
31	07/28/2024 - 08/03/2024	1.05	1.11
32	08/04/2024 - 08/10/2024	1.04	1.09
33	08/11/2024 - 08/17/2024	1.03	1.08
34	08/18/2024 - 08/24/2024	1.03	1.08
35	08/25/2024 - 08/31/2024	1.03	1.08
36	09/01/2024 - 09/07/2024	1.03	1.08
37	09/08/2024 - 09/14/2024	1.04	1.09
38	09/15/2024 - 09/21/2024	1.04	1.09
39	09/22/2024 - 09/28/2024	1.02	1.07
40	09/29/2024 - 10/05/2024	1.01	1.06
41	10/06/2024 - 10/12/2024	0.99	1.04
42	10/13/2024 - 10/19/2024	0.97	1.02
43	10/20/2024 - 10/26/2024	0.98	1.03
44	10/27/2024 - 11/02/2024	0.99	1.04
45	11/03/2024 - 11/09/2024	0.99	1.04
46	11/10/2024 - 11/16/2024	1.00	1.05
47	11/17/2024 - 11/23/2024	1.00	1.05
48	11/24/2024 - 11/30/2024	1.01	1.06
49	12/01/2024 - 12/07/2024	1.01	1.06
50	12/08/2024 - 12/14/2024	1.02	1.07
51	12/15/2024 - 12/21/2024	1.02	1.07
52	12/22/2024 - 12/28/2024	1.04	1.09
53	12/29/2024 - 12/31/2024	1.05	1.11

* PEAK SEASON

04-MAR-2025 16:32:53

830UPD

5_1100_PKSEASON.TXT

Project No. 22105.1
Vested Intersection Volumes

Analysis Period
AM Peak

Intersection: SR 19 & CR 48 1

App	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
	L						0
NB	T	3	21	39	5	17	85
	R	24	82	26	65	7	204
	L			32		30	62
SB	T	1	8	13	2	4	28
	R						0
	L						0
EB	T						0
	R						0
	L	8	32	52	21	20	133
WB	T						0
	R					30	30

Intersection: SR 19 & Central Ave 2

Appr	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
	L	11					11
NB	T		82	65	42	24	213
	R						0
	L						0
SB	T		32	65	14	24	135
	R	10	24		9	2	45
	L	29	62		28		119
EB	T						0
	R	31					31
	L						0
WB	T						0
	R						0

Intersection: SR 19 & Revels Rd 3

Appr	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
	L		12		33		45
NB	T		67	65	9	77	218
	R						0
	L						0
SB	T		175	65	28	15	283
	R		2		14		16
	L		3		42		45
EB	T						0
	R		30		99		129
	L						0
WB	T						0
	R						0

Intersection: SR 19 & CR 455 4

Appr	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
	L						0
NB	T		55	52	33		140
	R						0
	L		41	13	28		82
SB	T		144	52	99		295
	R						0
	L						0
EB	T						0
	R						0
	L						0
WB	T						0
	R		16	13	9		38

Project No. 22105.1
Vested Intersection Volumes

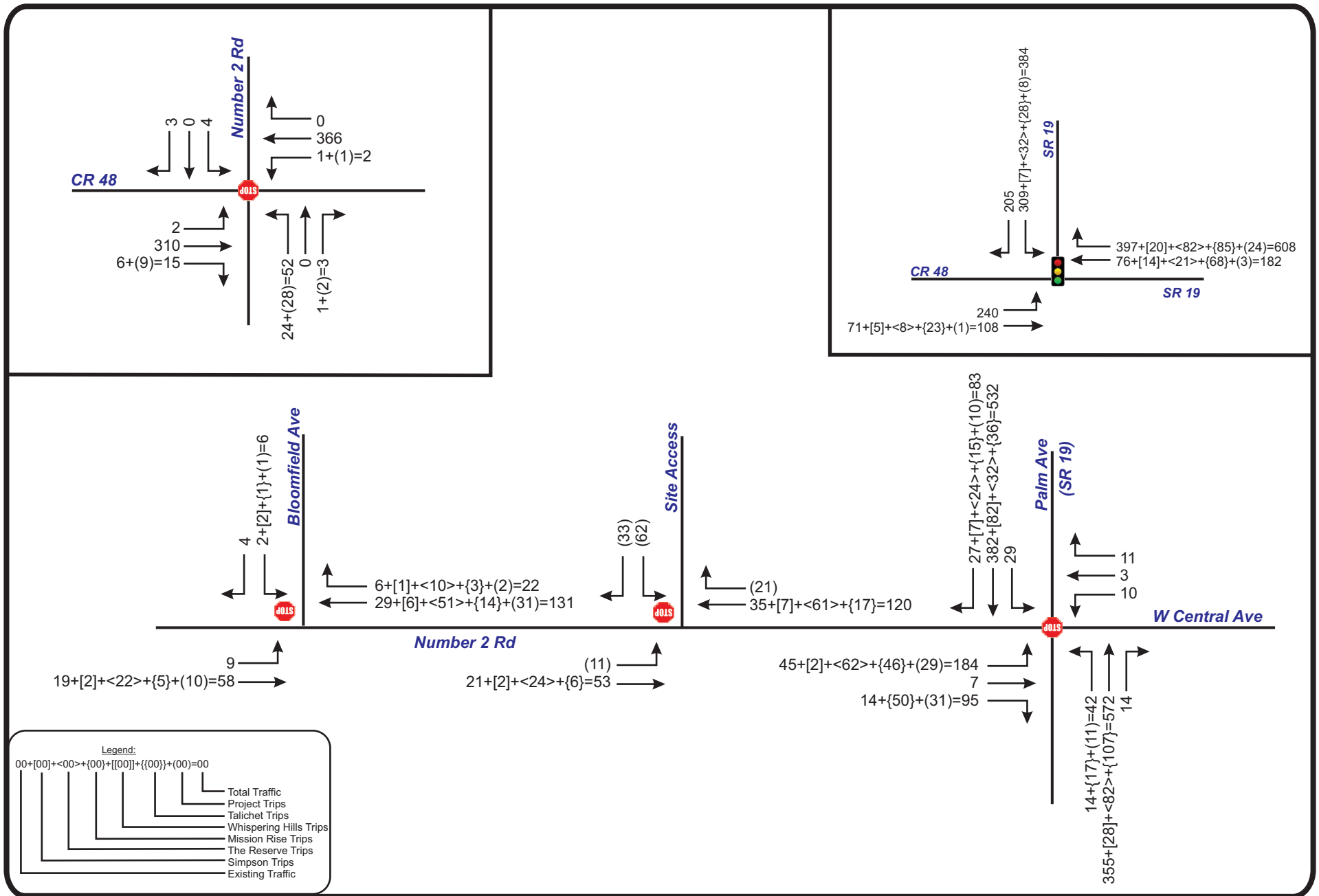
Analysis Period
PM Peak

Intersection: SR 19 & CR 48 1							
Appr	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
NB	L						0
	T	2	15	54	4	4	79
	R	16	58	35	45	20	174
SB	L			41		30	71
	T	3	23	9	7	17	59
	R						0
EB	L						0
	T						0
	R						0
WB	L	27	92	76	77	7	279
	T						0
	R					30	30

Intersection: SR 19 & Central Ave 2							
Appr	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
NB	L	36					36
	T		58	89	29	24	200
	R						0
SB	L						0
	T		92	85	50	24	251
	R	34	69		33		136
EB	L	30	44		20	2	96
	T						0
	R	21					21
WB	L						0
	T						0
	R						0

Intersection: SR 19 & Revels Rd 3							
Appr	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
NB	L		35		117		152
	T		194	89	33	15	331
	R						0
SB	L						0
	T		124	85	20	77	306
	R		2		50		52
EB	L		1		29		30
	T						0
	R		21		68		89
WB	L						0
	T						0
	R						0

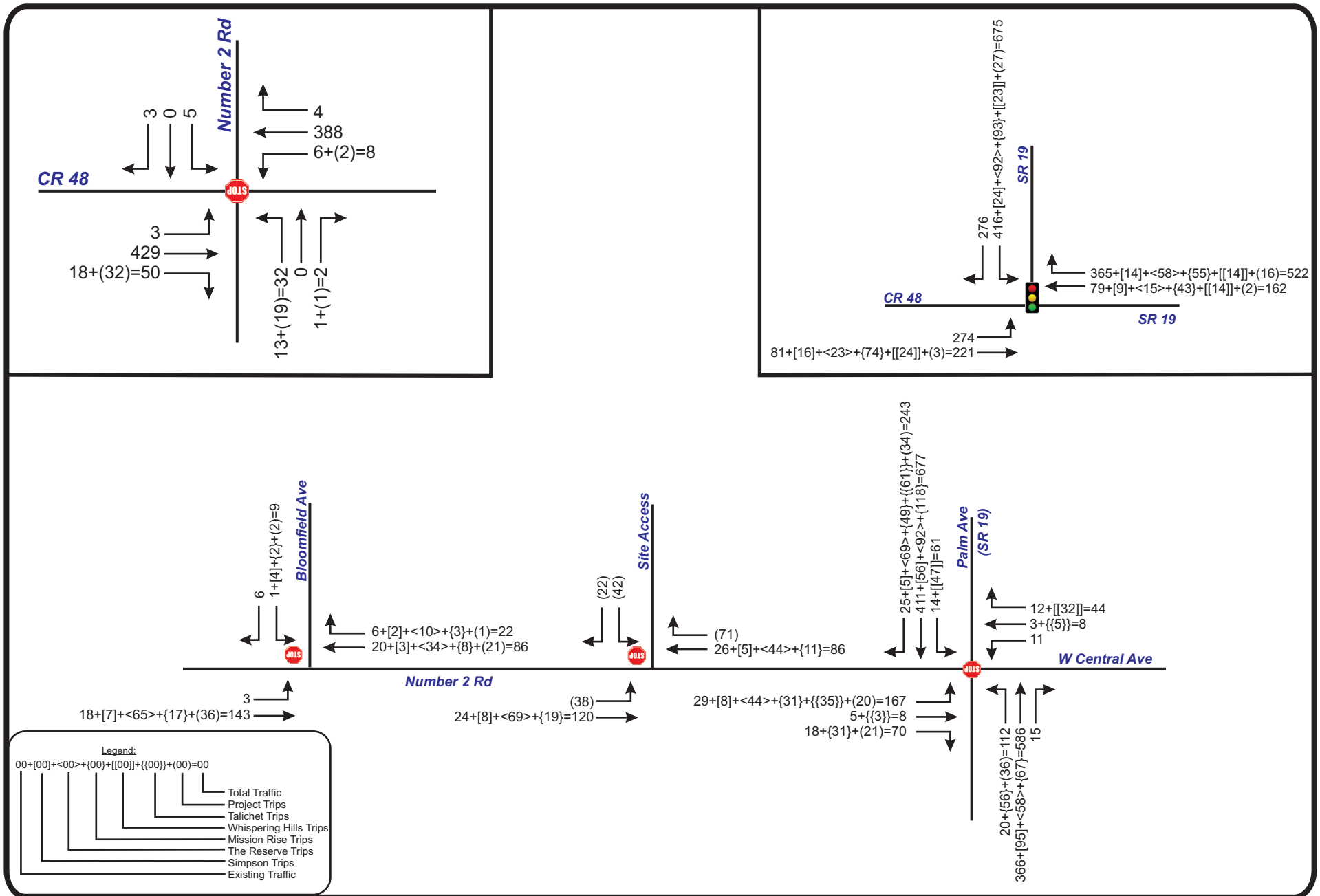
Intersection: SR 19 & CR 455 4							
Appr	Mvmt	Blue Sky	Hillside Groves	Lake Hills	Mission Rise	Whispering Hills	Total
NB	L						0
	T		161	71	117		349
	R						0
SB	L		102	17	20		139
	T		29	68	69		166
	R						0
EB	L						0
	T						0
	R						0
WB	L						0
	T						0
	R		46	18	33		97



Howey in the Hills
 Project № 5659
 Figure 5a

Projected AM Peak Hour Volumes

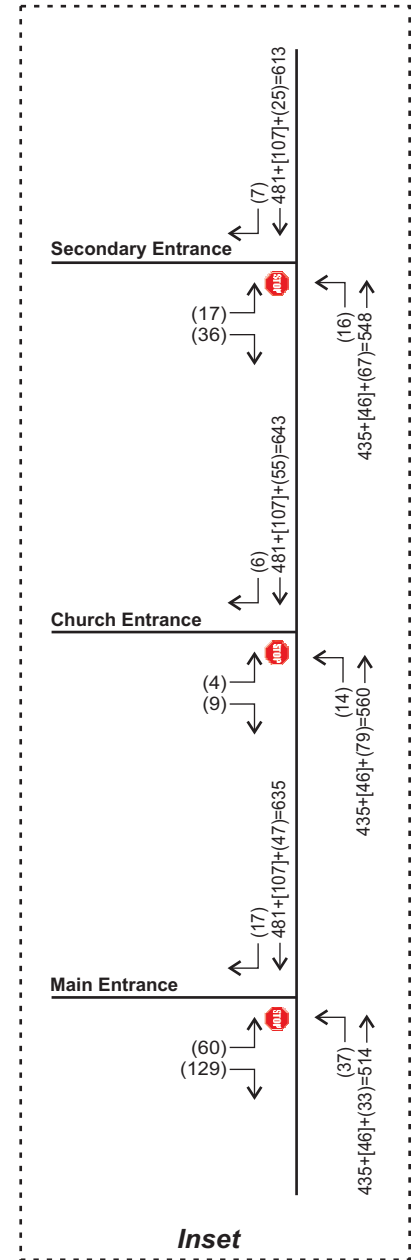
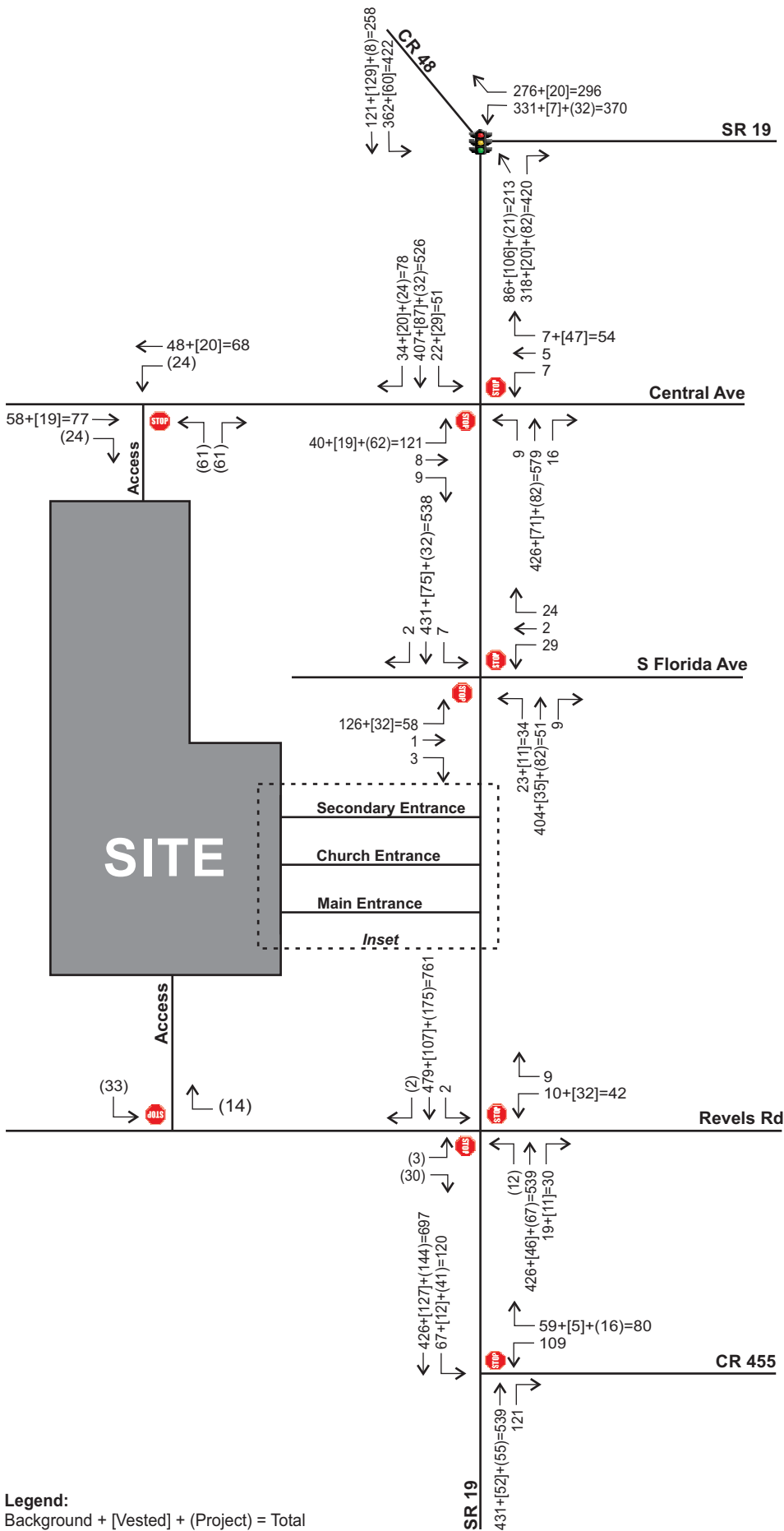


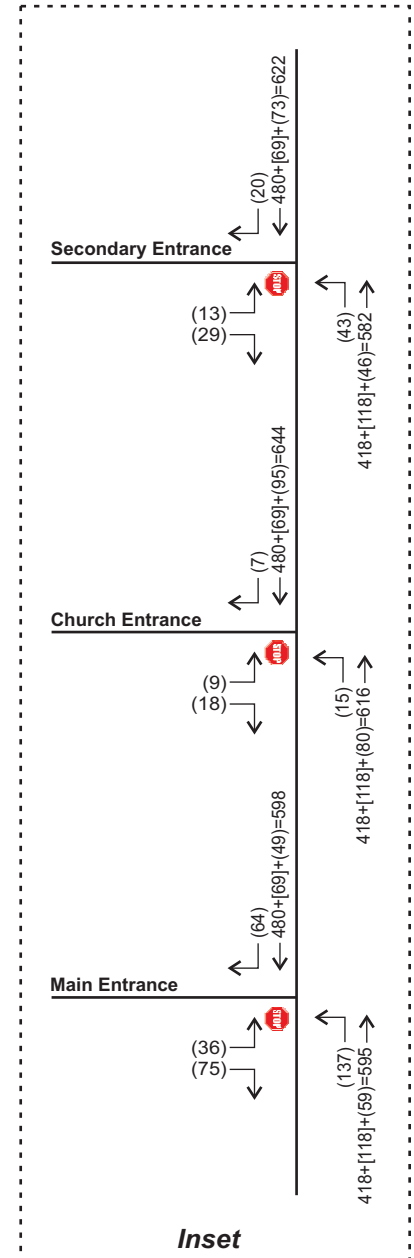
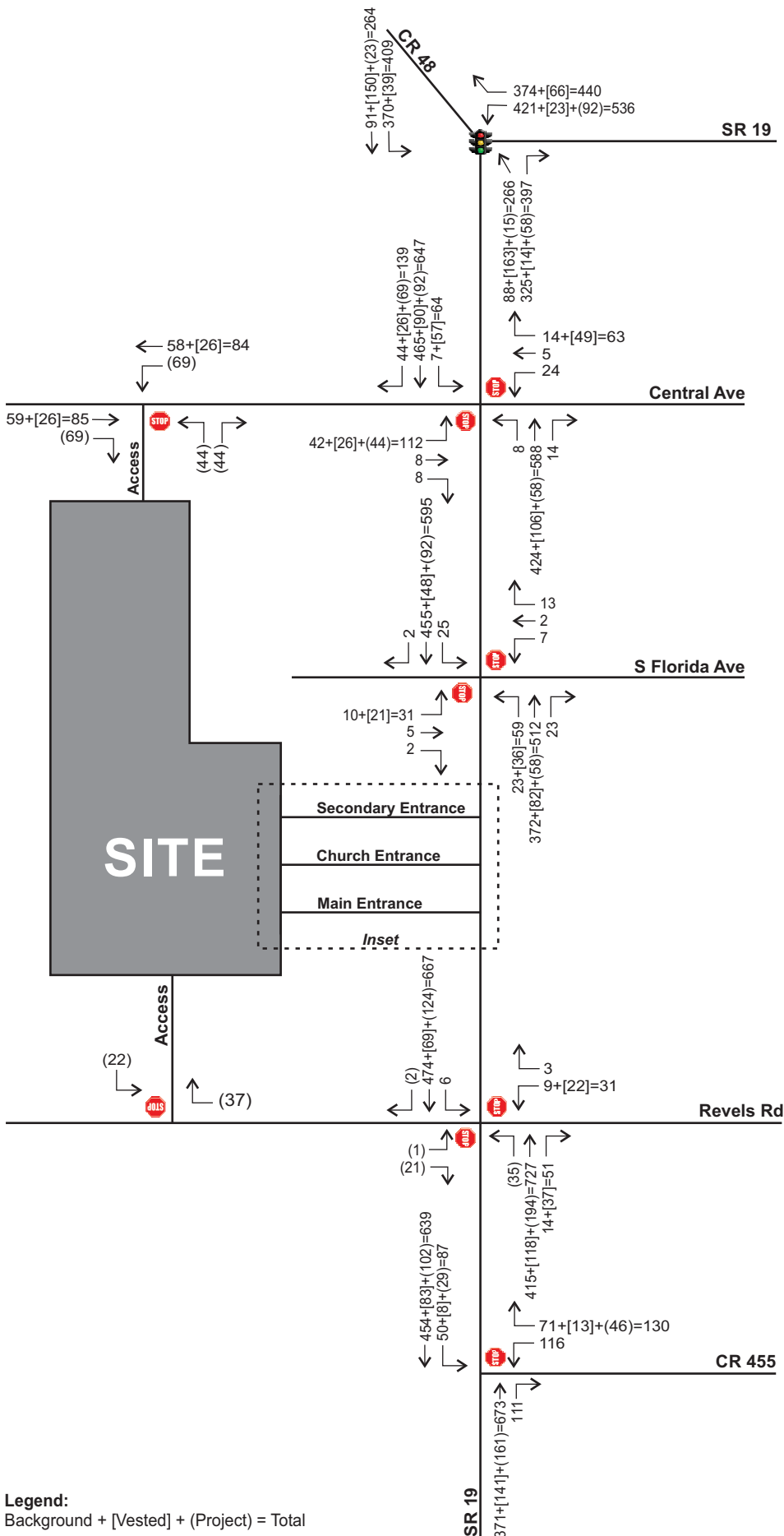


Howey in the Hills
 Project No 5659
 Figure 5b

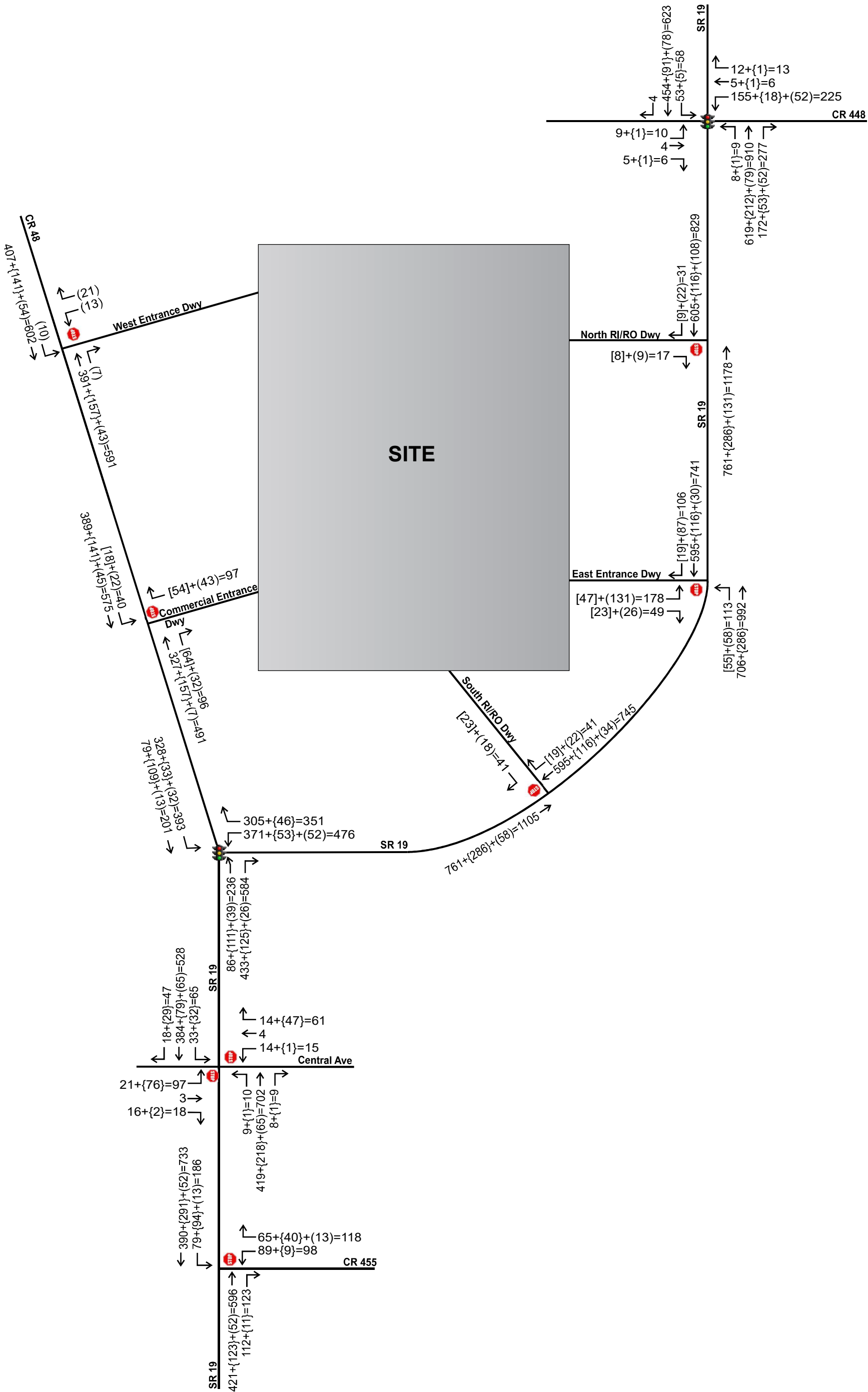
**Projected PM Peak Hour
 Volumes**



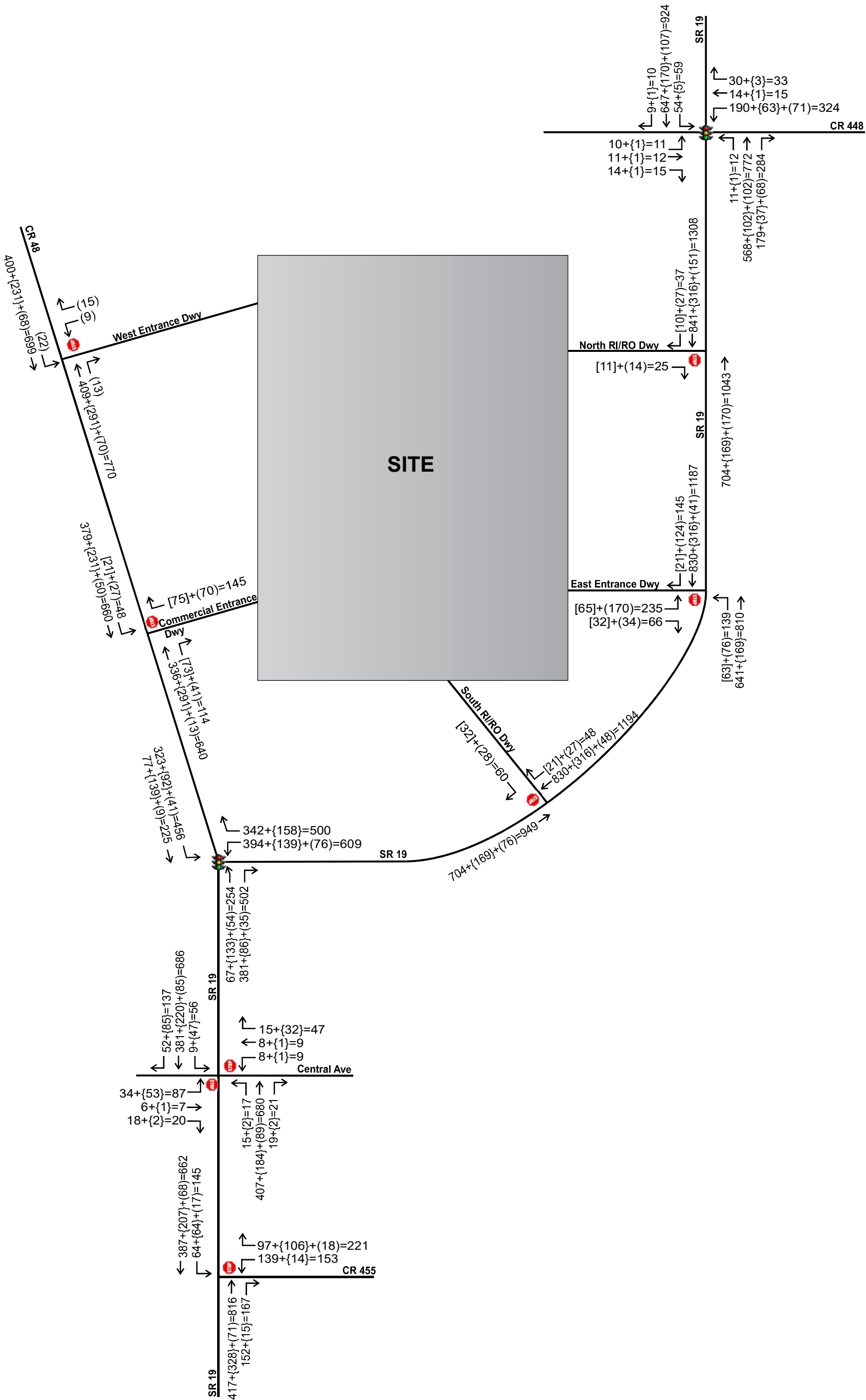




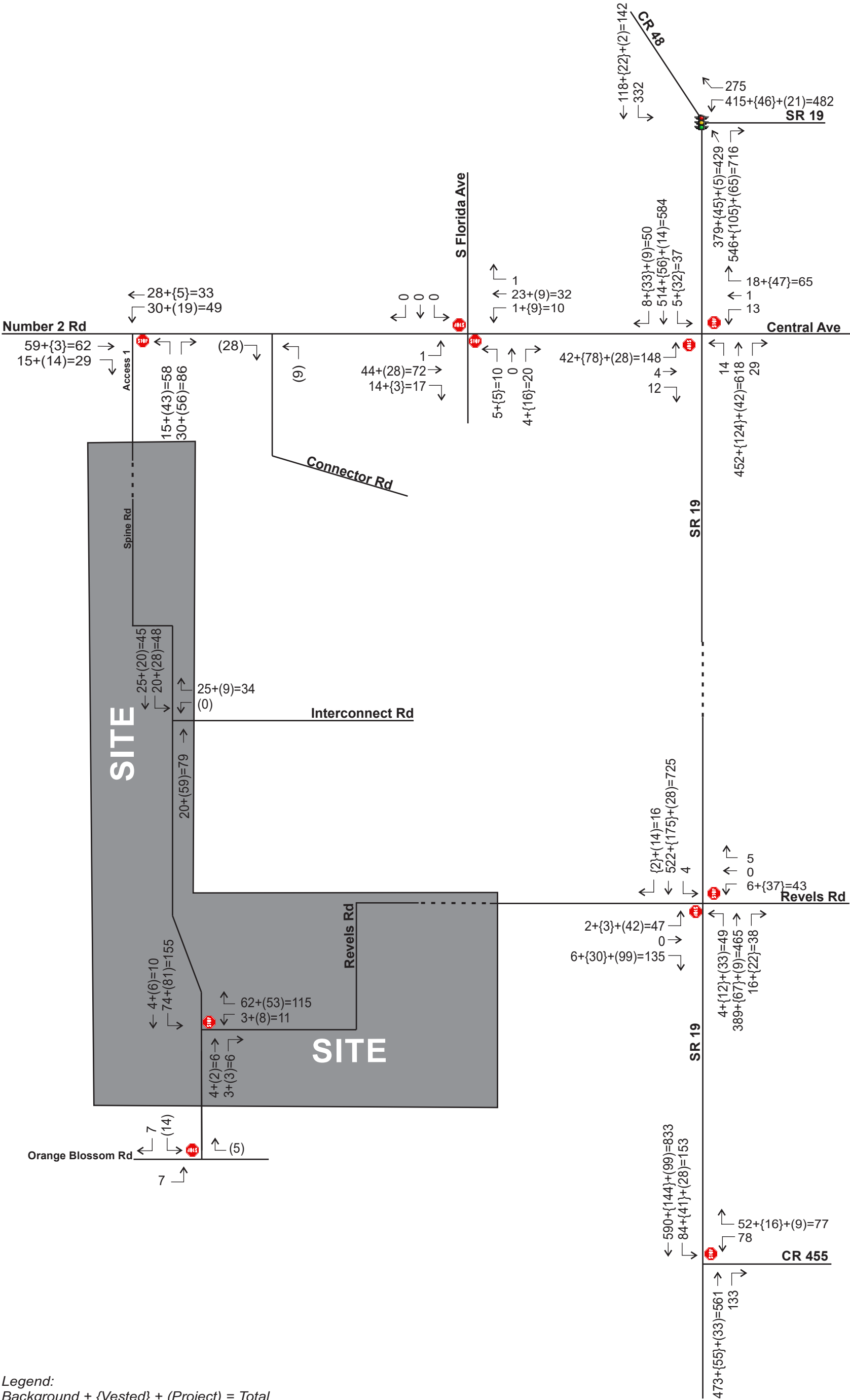
Legend:
Background + [Vested] + (Project) = Total

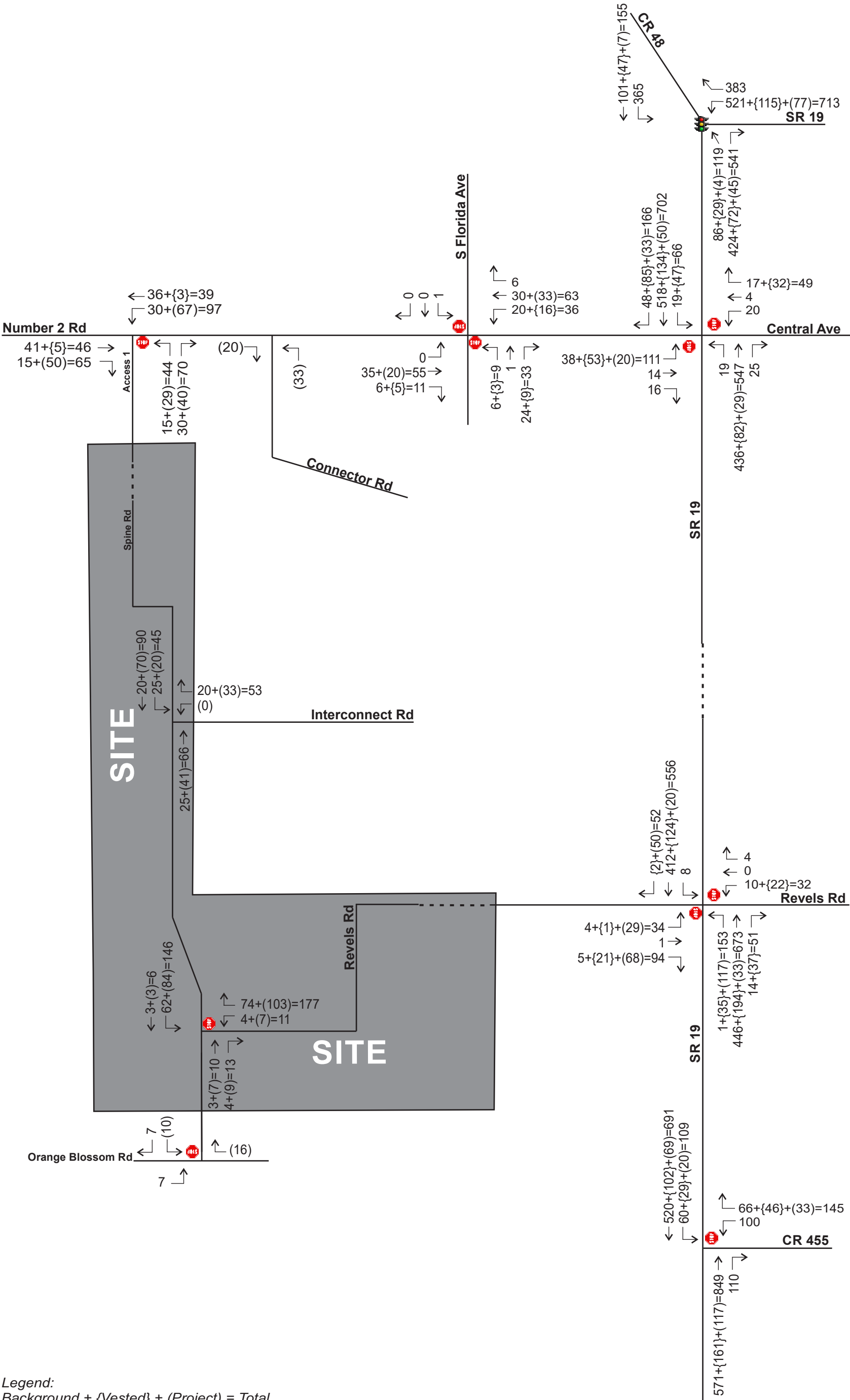


Legend:
Existing + {Vested} + [Pass-by]+ (Project) = Total



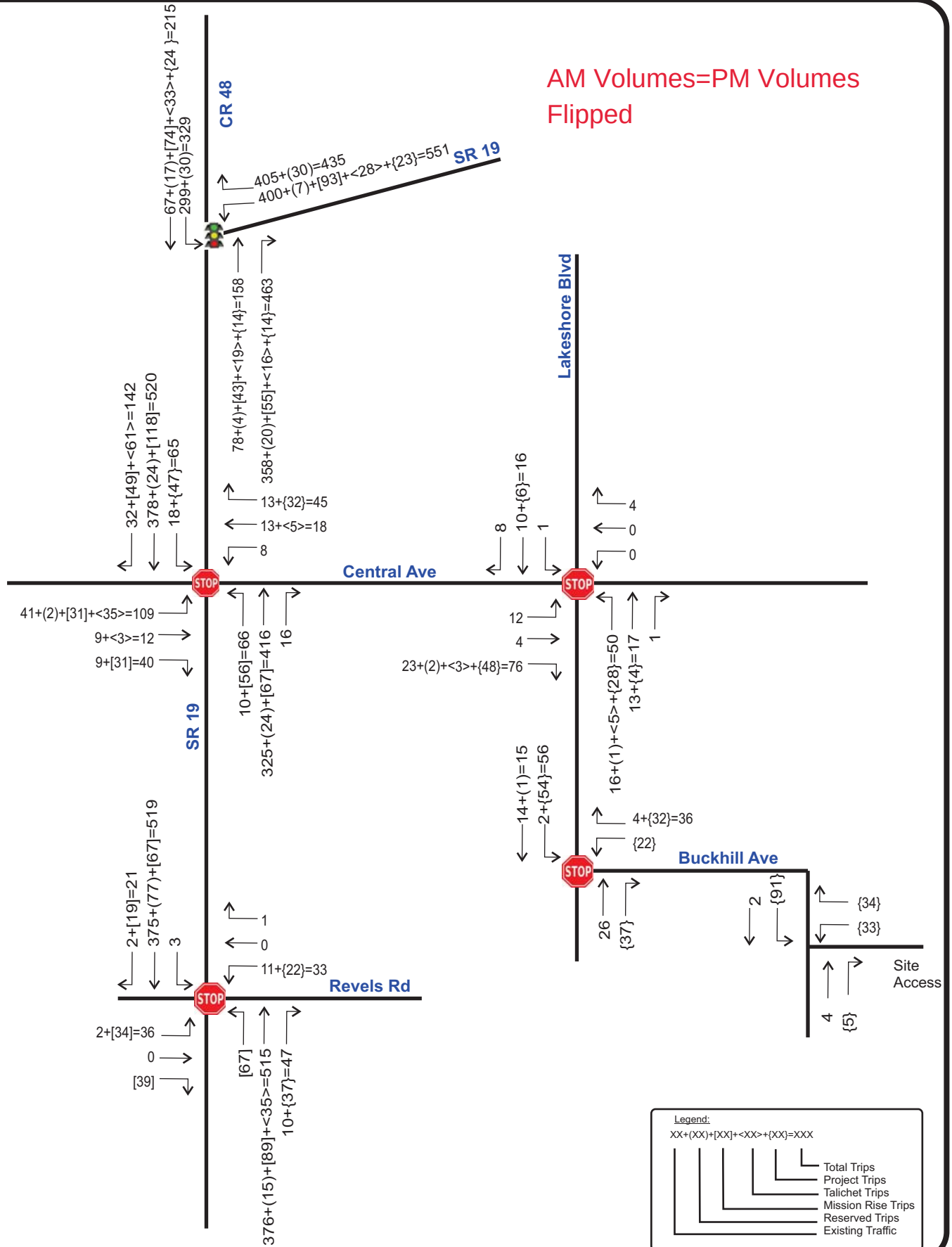
Legend:
Existing + {Vested} + [Pass-by]+ (Project) = Total





Legend:
Background + {Vested} + (Project) = Total

AM Volumes=PM Volumes
Flipped



Whispering Hills
Project No 5199
Figure 5

Projected P.M. Peak Hour Intersection Volumes



Appendix I
Projected Intersection Volumes

Project No.		22105.1									
Intersection Volumes											
		Factors			Tgen						
Analysis Period		SF	AGR	Years	Enter		Exit	Legend			
AM Peak		1.01	2.00%	2	49		147	Backg'd + {Vested} + (Project) = Total			

Intersection: SR 19 & CR 48														1
App	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Volumes
NB	L	0	0	1.01	0	1.11		0	0	0%	0%	0	0	
	T	1	110	1.01	111	1.11		85	208	0%	10%	15	223	123 + {85} + (15) = 223
	R	1	472	1.01	477	1.11		204	732	0%	25%	37	769	528 + {204} + (37) = 769
SB	L	1	419	1.01	423	1.04		62	502	0%	0%	0	502	440 + {62} = 502
	T	1	107	1.01	108	1.04		28	140	10%	0%	5	145	112 + {28} + (5) = 145
	R	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
EB	L	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
WB	L	1	421	1.01	425	1.04		133	575	25%	0%	12	587	442 + {133} + (12) = 587
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	1	349	1.01	352	1.04		30	396	0%	0%	0	396	366 + {30} = 396

Intersection: SR 19 & Central Ave														2
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0	14	1.01	14	1.10		11	26	0%	0%	0	26	15 + {11} = 26
	T	1	332	1.01	335	1.10		213	582	0%	35%	52	634	369 + {213} + (52) = 634
	R	0	15	1.01	15	1.10		0	17	0%	0%	0	17	17
SB	L	0	3	1.01	3	1.11		0	3	0%	0%	0	3	3
	T	1	384	1.01	388	1.11		135	565	35%	0%	17	582	430 + {135} + (17) = 582
	R	0	14	1.01	14	1.11		45	61	0%	0%	0	61	16 + {45} = 61
EB	L	0	24	1.01	24	1.04		119	144	0%	0%	0	144	25 + {119} = 144
	T	1	9	1.01	9	1.04		0	9	0%	0%	0	9	9
	R	0	14	1.01	14	1.04		31	46	0%	0%	0	46	15 + {31} = 46
WB	L	0	8	1.01	8	1.04		0	8	0%	0%	0	8	8
	T	1	1	1.01	1	1.04		0	1	0%	0%	0	1	1
	R	0	13	1.01	13	1.04		0	14	0%	0%	0	14	14

Intersection: SR 19 & Revels Rd														3
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0	2	1.01	2	1.10		45	47	0%	0%	0	47	2 + {45} = 47
	T	1	310	1.01	313	1.10		218	563	0%	0%	0	563	345 + {218} = 563
	R	0	3	1.01	3	1.10		0	3	60%	0%	29	32	3 + (29) = 32
SB	L	0	3	1.01	3	1.10		0	3	35%	0%	17	20	3 + (17) = 20
	T	1	406	1.01	410	1.10		283	735	0%	0%	0	735	452 + {283} = 735
	R	0	2	1.01	2	1.10		16	18	0%	0%	0	18	2 + {16} = 18
EB	L	0	2	1.01	2	1.04		45	47	0%	0%	0	47	2 + {45} = 47
	T	1	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	0	0	1.01	0	1.04		129	129	0%	0%	0	129	+ {129} = 129
WB	L	0	5	1.01	5	1.04		0	5	0%	60%	88	93	5 + (88) = 93
	T	1	1	1.01	1	1.04		0	1	0%	0%	0	1	1
	R	0	2	1.01	2	1.04		0	2	0%	35%	52	54	2 + (52) = 54

Intersection: SR 19 & CR 455														4
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0	0	1.01	0	1.10		0	0	0%	0%	0	0	
	T	1	496	1.01	501	1.10		140	692	40%	0%	20	712	552 + {140} + (20) = 712
	R	1	164	1.01	166	1.10		0	183	0%	0%	0	183	183
SB	L	1	142	1.01	143	1.10		82	240	0%	15%	22	262	158 + {82} + (22) = 262
	T	1	475	1.01	480	1.10		295	824	0%	40%	59	883	529 + {295} + (59) = 883
	R	0	0	1.01	0	1.10		0	0	0%	0%	0	0	
EB	L	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
WB	L	1	136	1.01	137	1.04		0	142	0%	0%	0	142	142
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	1	80	1.01	81	1.04		38	122	15%	0%	7	129	84 + {38} + (7) = 129

Intersection: Revels Rd & West Project Access														5
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0							0	0%	70%	103	103	(103)
	T	1							0	0%	0%	0	0	
	R	0							0	0%	2%	3	3	(3)
SB	L	0							0	0%	0%	0	0	
	T	0							0	0%	0%	0	0	
	R	0							0	0%	0%	0	0	
EB	L	0							0	0%	0%	0	0	
	T	1							6	25%	0%	12	18	6 + (12) = 18
	R	0							0	70%	0%	34	34	(34)
WB	L	0							0	2%	0%	1	1	(1)
	T	1							8	0%	25%	37	45	8 + (37) = 45
	R	0							0	0%	0%	0	0	

Project No.	22105.1		
Intersection Volumes			
Analysis Period	Factors		
	SF	AGR	Years
	1.01	2.00%	2
AM Peak	Tgen		Legend
	Enter	Exit	
	49	147	
Backg'd + (Vested) + (Project) = Total			

Intersection: Revels Rd & East Project Access														6
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0							0	0%	25%	37	37	(37)
	T	1							0	0%	0%	0	0	
	R	0							0	0%	3%	4	4	(4)
SB	L	0							0	0%	0%	0	0	
	T	0							0	0%	0%	0	0	
	R	0							0	0%	0%	0	0	
EB	L	0							0	0%	0%	0	0	
	T	1							6	0%	2%	3	9	6 + (3) = 9
	R	0							0	25%	0%	12	12	(12)
WB	L	0							0	3%	0%	2	2	(2)
	T	1							8	2%	0%	1	9	8 + (1) = 9
	R	0							0	0%	0%	0	0	

Project No. 22105.1
Intersection Volumes

Analysis Period	Factors			Tgen		Legend
	SF	AGR	Years	Enter	Exit	
	1.01	2.00%	2	170	100	

Backg'd + (Vested) + (Project) = Total

Intersection: SR 19 & CR 48															1
App	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula	
NB	L	0	0	1.01	0	1.11		0	0	0%	0%	0	0		
	T	1	83	1.01	84	1.11		79	172	0%	10%	10	182	93 + {79} + (10) = 182	
	R	1	341	1.01	344	1.11		174	555	0%	25%	25	580	381 + {174} + (25) = 580	
SB	L	1	326	1.01	329	1.04		71	413	0%	0%	0	413	342 + {71} = 413	
	T	1	80	1.01	81	1.04		59	143	10%	0%	17	160	84 + {59} + (17) = 160	
	R	0	0	1.01	0	1.04		0	0	0%	0%	0	0		
EB	L	0	0	1.01	0	1.04		0	0	0%	0%	0	0		
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0		
	R	0	0	1.01	0	1.04		0	0	0%	0%	0	0		
WB	L	1	415	1.01	419	1.04		279	715	25%	0%	43	758	436 + {279} + (43) = 758	
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0		
	R	1	314	1.01	317	1.04		30	360	0%	0%	0	360	330 + {30} = 360	

Intersection: SR 19 & Central Ave														2
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0	13	1.01	13	1.10		36	50	0%	0%	0	50	14 + {36} = 50
	T	1	384	1.01	388	1.10		200	627	0%	35%	35	662	427 + {200} + (35) = 662
	R	0	24	1.01	24	1.10		0	26	0%	0%	0	26	26
SB	L	0	18	1.01	18	1.11		0	20	0%	0%	0	20	20
	T	1	363	1.01	367	1.11		251	657	35%	0%	60	717	406 + {251} + (60) = 717
	R	0	26	1.01	26	1.11		136	165	0%	0%	0	165	29 + {136} = 165
EB	L	0	38	1.01	38	1.04		96	136	0%	0%	0	136	40 + {96} = 136
	T	1	11	1.01	11	1.04		0	11	0%	0%	0	11	11
	R	0	12	1.01	12	1.04		21	33	0%	0%	0	33	12 + {21} = 33
WB	L	0	12	1.01	12	1.04		0	12	0%	0%	0	12	12
	T	1	2	1.01	2	1.04		0	2	0%	0%	0	2	2
	R	0	15	1.01	15	1.04		0	16	0%	0%	0	16	16

Intersection: SR 19 & Revels Rd														3
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0	2	1.01	2	1.10		152	154	0%	0%	0	154	2 + {152} = 154
	T	1	354	1.01	358	1.10		331	725	0%	0%	0	725	394 + {331} = 725
	R	0	11	1.01	11	1.10		0	12	60%	0%	102	114	12 + (102) = 114
SB	L	0	9	1.01	9	1.10		0	10	35%	0%	60	70	10 + (60) = 70
	T	1	305	1.01	308	1.10		306	645	0%	0%	0	645	339 + {306} = 645
	R	0	1	1.01	1	1.10		52	53	0%	0%	0	53	1 + {52} = 53
EB	L	0	5	1.01	5	1.04		30	35	0%	0%	0	35	5 + {30} = 35
	T	1	1	1.01	1	1.04		0	1	0%	0%	0	1	1
	R	0	3	1.01	3	1.04		89	92	0%	0%	0	92	3 + {89} = 92
WB	L	0	5	1.01	5	1.04		0	5	0%	60%	60	65	5 + (60) = 65
	T	1	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	0	5	1.01	5	1.04		0	5	0%	35%	35	40	5 + (35) = 45

Intersection: SR 19 & CR 455														4
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0	0	1.01	0	1.10		0	0	0%	0%	0	0	
	T	1	474	1.01	479	1.10		349	877	40%	0%	68	945	528 + {349} + (68) = 945
	R	1	136	1.01	137	1.10		0	151	0%	0%	0	151	151
SB	L	1	88	1.01	89	1.10		139	237	0%	15%	15	252	98 + {139} + (15) = 252
	T	1	498	1.01	503	1.10		166	720	0%	40%	40	760	554 + {166} + (40) = 760
	R	0	0	1.01	0	1.10		0	0	0%	0%	0	0	
EB	L	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
WB	L	1	157	1.01	159	1.04		0	165	0%	0%	0	165	165
	T	0	0	1.01	0	1.04		0	0	0%	0%	0	0	
	R	1	97	1.01	98	1.04		97	199	15%	0%	26	225	102 + {97} + (26) = 225

Intersection: Revels Rd & West Project Access														5
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0							0	0%	70%	70	70	(70)
	T	1							0	0%	0%	0	0	
	R	0							0	0%	2%	2	2	(2)
SB	L	0							0	0%	0%	0	0	
	T	0							0	0%	0%	0	0	
	R	0							0	0%	0%	0	0	
EB	L	0							0	0%	0%	0	0	
	T	1							23	25%	0%	43	66	23 + (43) = 66
	R	0							0	70%	0%	119	119	(119)
WB	L	0							0	2%	0%	3	3	(3)
	T	1							10	0%	25%	25	35	10 + (25) = 35
	R	0							0	0%	0%	0	0	

Project No. 22105.1
Intersection Volumes

Analysis Period	Factors			Tgen		Legend
	SF	AGR	Years	Enter	Exit	
PM Peak	1.01	2.00%	2	170	100	Backg'd + {Vested} + (Project) = Total

Intersection: Revels Rd & East Project Access														6	
Appr	Mvmt	Lns	Raw	SF	Adjusted	GR	Redirect	Vested	Adj	Bg'd	ProjIn	ProjOut	Project	BldOut	Formula
NB	L	0							0	0%	0%	25%	25	25	(25)
	T	1							0	0%	0%	0	0		
	R	0							0	0%	3%	3	3	(3)	
SB	L	0							0	0%	0%	0%	0	0	
	T	0							0	0%	0%	0	0		
	R	0							0	0%	0%	0	0		
EB	L	0							0	0%	0%	0%	0	0	
	T	1							23	0%	2%	2	25	23 + (2) = 25	
	R	0							0	25%	0%	43	43	(43)	
WB	L	0							0	3%	0%	0%	5	5	(5)
	T	1							10	2%	0%	3	13	10 + (3) = 13	
	R	0							0	0%	0%	0	0		

Appendix J
HCM Worksheets

HCM 7th Signalized Intersection Summary

1: SR 19 & CR 48

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	425	352	111	477	423	108
Future Volume (veh/h)	425	352	111	477	423	108
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1767	1767	1841	1781	1752
Adj Flow Rate, veh/h	472	391	123	0	470	120
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	8	9	9	4	8	10
Cap, veh/h	506	447	351		662	911
Arrive On Green	0.30	0.30	0.20	0.00	0.24	0.52
Sat Flow, veh/h	1697	1497	1767	1560	1697	1752
Grp Volume(v), veh/h	472	391	123	0	470	120
Grp Sat Flow(s),veh/h/ln	1697	1497	1767	1560	1697	1752
Q Serve(g_s), s	20.4	18.7	4.5	0.0	15.6	2.7
Cycle Q Clear(g_c), s	20.4	18.7	4.5	0.0	15.6	2.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	506	447	351		662	911
V/C Ratio(X)	0.93	0.88	0.35		0.71	0.13
Avail Cap(c_a), veh/h	510	450	903		678	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	25.2	26.1	0.0	15.7	9.3
Incr Delay (d2), s/veh	24.1	17.2	0.6	0.0	3.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	8.4	1.9	0.0	6.1	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.9	42.3	26.7	0.0	19.0	9.4
LnGrp LOS	D	D	C		B	A
Approach Vol, veh/h	863		123			590
Approach Delay, s/veh	46.5		26.7			17.1
Approach LOS	D		C			B
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.3	21.4		29.8		45.7
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	17.6	6.5		22.4		4.7
Green Ext Time (p_c), s	0.2	0.7		0.1		0.7
Intersection Summary						
HCM 7th Control Delay, s/veh			33.9			
HCM 7th LOS			C			
Notes						
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.						

HCM 7th Signalized Intersection Summary

1: SR 19 & CR 48

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	575	396	208	732	502	140
Future Volume (veh/h)	575	396	208	732	502	140
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1767	1767	1841	1781	1752
Adj Flow Rate, veh/h	639	440	231	0	558	156
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	8	9	9	4	8	10
Cap, veh/h	504	445	347		588	917
Arrive On Green	0.30	0.30	0.20	0.00	0.24	0.52
Sat Flow, veh/h	1697	1497	1767	1560	1697	1752
Grp Volume(v), veh/h	639	440	231	0	558	156
Grp Sat Flow(s),veh/h/ln	1697	1497	1767	1560	1697	1752
Q Serve(g_s), s	22.7	22.4	9.2	0.0	18.5	3.6
Cycle Q Clear(g_c), s	22.7	22.4	9.2	0.0	18.5	3.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	504	445	347		588	917
V/C Ratio(X)	1.27	0.99	0.67		0.95	0.17
Avail Cap(c_a), veh/h	504	445	893		588	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	26.7	28.4	0.0	18.4	9.5
Incr Delay (d2), s/veh	135.5	39.7	2.2	0.0	25.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.6	12.4	4.0	0.0	11.1	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	162.3	66.4	30.6	0.0	43.6	9.6
LnGrp LOS	F	E	C		D	A
Approach Vol, veh/h	1079		231			714
Approach Delay, s/veh	123.2		30.6			36.2
Approach LOS	F		C			D
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	21.4		30.0		46.4
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	20.5	11.2		24.7		5.6
Green Ext Time (p_c), s	0.0	1.4		0.0		0.9
Intersection Summary						
HCM 7th Control Delay, s/veh			81.9			
HCM 7th LOS			F			
Notes						
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.						

HCM 7th Signalized Intersection Summary

1: SR 19 & CR 48

	    					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	587	396	223	769	502	145
Future Volume (veh/h)	587	396	223	769	502	145
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1767	1767	1841	1781	1752
Adj Flow Rate, veh/h	652	440	248	0	558	161
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	8	9	9	4	8	10
Cap, veh/h	504	445	347		575	917
Arrive On Green	0.30	0.30	0.20	0.00	0.24	0.52
Sat Flow, veh/h	1697	1497	1767	1560	1697	1752
Grp Volume(v), veh/h	652	440	248	0	558	161
Grp Sat Flow(s),veh/h/ln	1697	1497	1767	1560	1697	1752
Q Serve(g_s), s	22.7	22.4	10.0	0.0	18.5	3.7
Cycle Q Clear(g_c), s	22.7	22.4	10.0	0.0	18.5	3.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	504	445	347		575	917
V/C Ratio(X)	1.29	0.99	0.72		0.97	0.18
Avail Cap(c_a), veh/h	504	445	893		575	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	26.7	28.7	0.0	18.6	9.5
Incr Delay (d2), s/veh	146.2	39.7	2.8	0.0	30.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.1	12.4	4.4	0.0	11.8	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	173.1	66.4	31.5	0.0	48.5	9.6
LnGrp LOS	F	E	C		D	A
Approach Vol, veh/h	1092		248			719
Approach Delay, s/veh	130.1		31.5			39.8
Approach LOS	F		C			D
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	21.4		30.0		46.4
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	20.5	12.0		24.7		5.7
Green Ext Time (p_c), s	0.0	1.5		0.0		0.9
Intersection Summary						
HCM 7th Control Delay, s/veh			86.7			
HCM 7th LOS			F			
Notes						
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.						

HCM 7th Signalized Intersection Summary

1: SR 19 & CR 48

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	419	317	84	344	329	81
Future Volume (veh/h)	419	317	84	344	329	81
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1811	1811	1870	1826
Adj Flow Rate, veh/h	441	334	88	0	346	85
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	2	6	6	2	5
Cap, veh/h	508	459	412		670	917
Arrive On Green	0.29	0.29	0.23	0.00	0.18	0.50
Sat Flow, veh/h	1753	1585	1811	1535	1781	1826
Grp Volume(v), veh/h	441	334	88	0	346	85
Grp Sat Flow(s),veh/h/ln	1753	1585	1811	1535	1781	1826
Q Serve(g_s), s	15.7	12.5	2.6	0.0	9.0	1.6
Cycle Q Clear(g_c), s	15.7	12.5	2.6	0.0	9.0	1.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	508	459	412		670	917
V/C Ratio(X)	0.87	0.73	0.21		0.52	0.09
Avail Cap(c_a), veh/h	603	545	1060		855	1069
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	21.1	20.7	0.0	13.3	8.6
Incr Delay (d2), s/veh	11.3	4.0	0.3	0.0	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	4.8	1.1	0.0	3.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	33.5	25.0	20.9	0.0	13.9	8.6
LnGrp LOS	C	C	C		B	A
Approach Vol, veh/h	775		88			431
Approach Delay, s/veh	29.9		20.9			12.9
Approach LOS	C		C			B
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	18.1	21.4		26.4		39.5
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	11.0	4.6		17.7		3.6
Green Ext Time (p_c), s	0.7	0.5		1.4		0.4
Intersection Summary						
HCM 7th Control Delay, s/veh			23.6			
HCM 7th LOS			C			
Notes						
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.						

HCM 7th Signalized Intersection Summary

1: SR 19 & CR 48

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	715	360	172	555	413	143
Future Volume (veh/h)	715	360	172	555	413	143
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1811	1811	1870	1826
Adj Flow Rate, veh/h	753	379	181	0	435	151
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	2	6	6	2	5
Cap, veh/h	541	489	369		617	923
Arrive On Green	0.31	0.31	0.20	0.00	0.21	0.51
Sat Flow, veh/h	1753	1585	1811	1535	1781	1826
Grp Volume(v), veh/h	753	379	181	0	435	151
Grp Sat Flow(s),veh/h/ln	1753	1585	1811	1535	1781	1826
Q Serve(g_s), s	22.7	16.0	6.5	0.0	13.2	3.3
Cycle Q Clear(g_c), s	22.7	16.0	6.5	0.0	13.2	3.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	541	489	369		617	923
V/C Ratio(X)	1.39	0.78	0.49		0.71	0.16
Avail Cap(c_a), veh/h	541	489	950		684	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	23.1	25.9	0.0	15.8	9.8
Incr Delay (d2), s/veh	187.9	7.7	1.0	0.0	2.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	37.0	6.7	2.8	0.0	5.4	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	213.4	30.8	26.9	0.0	18.7	9.9
LnGrp LOS	F	C	C		B	A
Approach Vol, veh/h	1132		181			586
Approach Delay, s/veh	152.3		26.9			16.5
Approach LOS	F		C			B
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.2	21.4		30.0		43.6
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	15.2	8.5		24.7		5.3
Green Ext Time (p_c), s	0.5	1.0		0.0		0.9
Intersection Summary						
HCM 7th Control Delay, s/veh			98.4			
HCM 7th LOS			F			
Notes						
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.						

HCM 7th Signalized Intersection Summary

1: SR 19 & CR 48

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	758	360	182	580	413	160
Future Volume (veh/h)	758	360	182	580	413	160
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1811	1811	1870	1826
Adj Flow Rate, veh/h	798	379	192	0	435	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	2	6	6	2	5
Cap, veh/h	541	489	369		608	923
Arrive On Green	0.31	0.31	0.20	0.00	0.21	0.51
Sat Flow, veh/h	1753	1585	1811	1535	1781	1826
Grp Volume(v), veh/h	798	379	192	0	435	168
Grp Sat Flow(s),veh/h/ln	1753	1585	1811	1535	1781	1826
Q Serve(g_s), s	22.7	16.0	7.0	0.0	13.2	3.7
Cycle Q Clear(g_c), s	22.7	16.0	7.0	0.0	13.2	3.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	541	489	369		608	923
V/C Ratio(X)	1.48	0.78	0.52		0.72	0.18
Avail Cap(c_a), veh/h	541	489	950		676	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	23.1	26.1	0.0	15.9	9.9
Incr Delay (d2), s/veh	224.2	7.7	1.1	0.0	3.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	42.5	6.7	3.0	0.0	5.4	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	249.6	30.8	27.2	0.0	19.1	10.0
LnGrp LOS	F	C	C		B	B
Approach Vol, veh/h	1177		192			603
Approach Delay, s/veh	179.2		27.2			16.6
Approach LOS	F		C			B
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.2	21.4		30.0		43.6
Change Period (Y+Rc), s	6.5	6.4		7.3		6.4
Max Green Setting (Gmax), s	18.5	38.6		22.7		38.6
Max Q Clear Time (g_c+I1), s	15.2	9.0		24.7		5.7
Green Ext Time (p_c), s	0.5	1.1		0.0		1.0
Intersection Summary						
HCM 7th Control Delay, s/veh			114.6			
HCM 7th LOS			F			
Notes						
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.						

HCM 7th TWSC

2: SR 19 & Central Ave

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	9	14	8	1	13	14	335	15	3	388	14
Future Vol, veh/h	24	9	14	8	1	13	14	335	15	3	388	14
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	8	11	21	13	100	15	21	14	20	33	5	14
Mvmt Flow	26	10	15	9	1	14	15	356	16	3	413	15
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	813	829	420	818	828	364	428	0	0	372	0	0
Stage 1	427	427	-	394	394	-	-	-	-	-	-	-
Stage 2	387	402	-	424	434	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.61	6.41	7.23	7.5	6.35	4.31	-	-	4.43	-	-
Critical Hdwy Stg 1	6.18	5.61	-	6.23	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.61	-	6.23	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.099	3.489	3.617	4.9	3.435	2.389	-	-	2.497	-	-
Pot Cap-1 Maneuver	290	296	594	282	218	652	1037	-	-	1035	-	-
Stage 1	594	570	-	609	466	-	-	-	-	-	-	-
Stage 2	625	585	-	587	444	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	276	290	594	260	213	652	1037	-	-	1035	-	-
Mov Cap-2 Maneuver	276	290	-	260	213	-	-	-	-	-	-	-
Stage 1	592	568	-	598	457	-	-	-	-	-	-	-
Stage 2	599	574	-	560	443	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	17.75		14.62		0.33		0.06					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	69	-	-	332	398	13	-	-				
HCM Lane V/C Ratio	0.014	-	-	0.151	0.059	0.003	-	-				
HCM Ctrl Dly (s/v)	8.5	0	-	17.7	14.6	8.5	0	-				
HCM Lane LOS	A	A	-	C	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.5	0.2	0	-	-				

HCM 7th TWSC

2: SR 19 & Central Ave

Intersection												
Int Delay, s/veh	41.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	144	9	46	8	1	14	26	582	17	3	565	61
Future Vol, veh/h	144	9	46	8	1	14	26	582	17	3	565	61
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	8	11	21	13	100	15	21	14	20	33	5	14
Mvmt Flow	153	10	49	9	1	15	28	619	18	3	601	65

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1315	1332	634	1296	1356	628	666	0	0	637	0	0
Stage 1	640	640	-	684	684	-	-	-	-	-	-	-
Stage 2	675	693	-	612	672	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.61	6.41	7.23	7.5	6.35	4.31	-	-	4.43	-	-
Critical Hdwy Stg 1	6.18	5.61	-	6.23	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.61	-	6.23	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.099	3.489	3.617	4.9	3.435	2.389	-	-	2.497	-	-
Pot Cap-1 Maneuver	~ 131	148	447	132	96	460	840	-	-	814	-	-
Stage 1	454	456	-	422	329	-	-	-	-	-	-	-
Stage 2	434	431	-	462	333	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 118	139	447	104	90	460	840	-	-	814	-	-
Mov Cap-2 Maneuver	~ 118	139	-	104	90	-	-	-	-	-	-	-
Stage 1	451	453	-	400	312	-	-	-	-	-	-	-
Stage 2	397	409	-	400	331	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	\$ 304.05		26.26		0.39		0.05	
HCM LOS	F		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	74	-	-	144	194	8	-
HCM Lane V/C Ratio	0.033	-	-	1.474	0.126	0.004	-
HCM Ctrl Dly (s/v)	9.4	0	-	\$ 304	26.3	9.4	0
HCM Lane LOS	A	A	-	F	D	A	A
HCM 95th %tile Q(veh)	0.1	-	-	14.1	0.4	0	-

Notes	
~: Volume exceeds capacity	\$. Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC

2: SR 19 & Central Ave

Intersection												
Int Delay, s/veh	50.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	144	9	46	8	1	14	26	634	17	3	582	61
Future Vol, veh/h	144	9	46	8	1	14	26	634	17	3	582	61
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	8	11	21	13	100	15	21	14	20	33	5	14
Mvmt Flow	153	10	49	9	1	15	28	674	18	3	619	65

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1388	1406	652	1369	1429	684	684	0	0	693	0	0
Stage 1	658	658	-	739	739	-	-	-	-	-	-	-
Stage 2	730	748	-	630	690	-	-	-	-	-	-	-
Critical Hdwy	7.18	6.61	6.41	7.23	7.5	6.35	4.31	-	-	4.43	-	-
Critical Hdwy Stg 1	6.18	5.61	-	6.23	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.18	5.61	-	6.23	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.572	4.099	3.489	3.617	4.9	3.435	2.389	-	-	2.497	-	-
Pot Cap-1 Maneuver	~ 116	133	436	117	85	427	827	-	-	774	-	-
Stage 1	444	448	-	393	307	-	-	-	-	-	-	-
Stage 2	404	407	-	451	326	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 104	125	436	91	80	427	827	-	-	774	-	-
Mov Cap-2 Maneuver	~ 104	125	-	91	80	-	-	-	-	-	-	-
Stage 1	441	445	-	371	290	-	-	-	-	-	-	-
Stage 2	368	385	-	389	324	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	\$ 388.69		29.34		0.37		0.04	
HCM LOS	F		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	69	-	-	128	172	8	-
HCM Lane V/C Ratio	0.033	-	-	1.658	0.142	0.004	-
HCM Ctrl Dly (s/v)	9.5	0	-	\$ 388.7	29.3	9.7	0
HCM Lane LOS	A	A	-	F	D	A	A
HCM 95th %tile Q(veh)	0.1	-	-	15.6	0.5	0	-

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC

2: SR 19 & Central Ave

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	11	12	12	2	15	13	388	24	18	367	26
Future Vol, veh/h	38	11	12	12	2	15	13	388	24	18	367	26
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	2	8	17	50	13	15	8	8	11	4	15
Mvmt Flow	40	11	13	13	2	16	14	404	25	19	382	27
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	866	890	396	869	891	417	409	0	0	429	0	0
Stage 1	433	433	-	444	444	-	-	-	-	-	-	-
Stage 2	432	456	-	426	447	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.28	7.27	7	6.33	4.25	-	-	4.21	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.27	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.27	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.372	3.653	4.45	3.417	2.335	-	-	2.299	-	-
Pot Cap-1 Maneuver	270	282	641	256	236	613	1083	-	-	1084	-	-
Stage 1	595	581	-	565	502	-	-	-	-	-	-	-
Stage 2	596	568	-	578	500	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	251	271	641	232	227	613	1083	-	-	1084	-	-
Mov Cap-2 Maneuver	251	271	-	232	227	-	-	-	-	-	-	-
Stage 1	582	568	-	556	493	-	-	-	-	-	-	-
Stage 2	569	559	-	543	489	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	20.89		16.58		0.26		0.37					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	54	-	-	290	341	78	-	-				
HCM Lane V/C Ratio	0.013	-	-	0.219	0.089	0.017	-	-				
HCM Ctrl Dly (s/v)	8.4	0	-	20.9	16.6	8.4	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.8	0.3	0.1	-	-				

HCM 7th TWSC

2: SR 19 & Central Ave

Intersection												
Int Delay, s/veh	71.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	136	11	33	12	2	16	50	627	26	20	657	165
Future Vol, veh/h	136	11	33	12	2	16	50	627	26	20	657	165
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	2	8	17	50	13	15	8	8	11	4	15
Mvmt Flow	142	11	34	13	2	17	52	653	27	21	684	172

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1570	1596	770	1503	1669	667	856	0	0	680	0	0
Stage 1	812	812	-	771	771	-	-	-	-	-	-	-
Stage 2	758	784	-	732	898	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.28	7.27	7	6.33	4.25	-	-	4.21	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.27	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.27	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.372	3.653	4.45	3.417	2.335	-	-	2.299	-	-
Pot Cap-1 Maneuver	~ 88	107	391	92	75	440	731	-	-	871	-	-
Stage 1	368	392	-	371	347	-	-	-	-	-	-	-
Stage 2	395	404	-	390	300	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 70	90	391	63	63	440	731	-	-	871	-	-
Mov Cap-2 Maneuver	~ 70	90	-	63	63	-	-	-	-	-	-	-
Stage 1	351	374	-	328	307	-	-	-	-	-	-	-
Stage 2	334	357	-	329	286	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	\$ 681.15		46.95		0.73		0.22	
HCM LOS	F		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	127	-	-	83	116	41	-
HCM Lane V/C Ratio	0.071	-	-	2.253	0.269	0.024	-
HCM Ctrl Dly (s/v)	10.3	0	-	\$ 681.2	47	9.2	0
HCM Lane LOS	B	A	-	F	E	A	A
HCM 95th %tile Q(veh)	0.2	-	-	17.1	1	0.1	-

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC

2: SR 19 & Central Ave

Intersection												
Int Delay, s/veh	88.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	136	11	33	12	2	16	50	662	26	20	717	165
Future Vol, veh/h	136	11	33	12	2	16	50	662	26	20	717	165
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	2	8	17	50	13	15	8	8	11	4	15
Mvmt Flow	142	11	34	13	2	17	52	690	27	21	747	172

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1669	1695	833	1602	1768	703	919	0	0	717	0	0
Stage 1	874	874	-	807	807	-	-	-	-	-	-	-
Stage 2	795	821	-	794	960	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.28	7.27	7	6.33	4.25	-	-	4.21	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.27	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.27	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.372	3.653	4.45	3.417	2.335	-	-	2.299	-	-
Pot Cap-1 Maneuver	~ 75	93	360	79	64	419	692	-	-	844	-	-
Stage 1	340	367	-	354	333	-	-	-	-	-	-	-
Stage 2	377	389	-	360	279	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 58	77	360	51	53	419	692	-	-	844	-	-
Mov Cap-2 Maneuver	~ 58	77	-	51	53	-	-	-	-	-	-	-
Stage 1	322	348	-	309	291	-	-	-	-	-	-	-
Stage 2	314	340	-	298	264	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 894.31	58.87	0.72	0.21
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	121	-	-	70 97	38	-	-
HCM Lane V/C Ratio	0.075	-	-	2.695 0.322	0.025	-	-
HCM Ctrl Dly (s/v)	10.6	0	-	\$ 894.3 58.9	9.4	0	-
HCM Lane LOS	B	A	-	F F	A A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	18.5 1.2	0.1	-	-

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC 3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	0	5	1	2	2	313	3	3	410	2
Future Vol, veh/h	2	0	0	5	1	2	2	313	3	3	410	2
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	100	2	2	2	2	2	51	5	33	2	3	50
Mvmt Flow	2	0	0	5	1	2	2	319	3	3	418	2
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	749	752	419	749	752	321	420	0	0	322	0	0
Stage 1	426	426	-	325	325	-	-	-	-	-	-	-
Stage 2	324	327	-	424	427	-	-	-	-	-	-	-
Critical Hdwy	8.1	6.52	6.22	7.12	6.52	6.22	4.61	-	-	4.12	-	-
Critical Hdwy Stg 1	7.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.1	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	4.4	4.018	3.318	3.518	4.018	3.318	2.659	-	-	2.218	-	-
Pot Cap-1 Maneuver	231	339	634	328	339	720	919	-	-	1237	-	-
Stage 1	453	586	-	687	649	-	-	-	-	-	-	-
Stage 2	523	648	-	608	586	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	229	337	634	326	337	720	919	-	-	1237	-	-
Mov Cap-2 Maneuver	229	337	-	326	337	-	-	-	-	-	-	-
Stage 1	452	584	-	686	647	-	-	-	-	-	-	-
Stage 2	519	646	-	606	584	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	20.89		14.7		0.06		0.06					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	11	-	-	229	379	13	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.009	0.022	0.002	-	-				
HCM Ctrl Dly (s/v)	8.9	0	-	20.9	14.7	7.9	0	-				
HCM Lane LOS	A	A	-	C	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-				

HCM 7th TWSC

3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	0	129	5	1	2	47	563	3	3	735	18
Future Vol, veh/h	47	0	129	5	1	2	47	563	3	3	735	18
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	-	-	-	-	-	-	455	-	-	-	-	405
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	5	2	2	2	2	2	5	5	33	2	3	5
Mvmt Flow	48	0	132	5	1	2	48	574	3	3	750	18
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1427	1430	750	1428	1446	576	768	0	0	578	0	0
Stage 1	756	756	-	672	672	-	-	-	-	-	-	-
Stage 2	671	673	-	756	774	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.22	7.12	6.52	6.22	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.318	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	111	135	411	113	132	517	832	-	-	996	-	-
Stage 1	396	416	-	445	455	-	-	-	-	-	-	-
Stage 2	441	454	-	400	408	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	126	411	72	123	517	832	-	-	996	-	-
Mov Cap-2 Maneuver	230	249	-	162	234	-	-	-	-	-	-	-
Stage 1	394	414	-	420	428	-	-	-	-	-	-	-
Stage 2	413	428	-	271	406	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	26.84		23.32		0.74		0.03					
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	832	-	-	340	205	7	-	-				
HCM Lane V/C Ratio	0.058	-	-	0.528	0.04	0.003	-	-				
HCM Ctrl Dly (s/v)	9.6	-	-	26.8	23.3	8.6	0	-				
HCM Lane LOS	A	-	-	D	C	A	A	-				
HCM 95th %tile Q(veh)	0.2	-	-	2.9	0.1	0	-	-				

HCM 7th TWSC

3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	8.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘			↗	↘
Traffic Vol, veh/h	47	0	129	93	1	54	47	563	32	20	735	18
Future Vol, veh/h	47	0	129	93	1	54	47	563	32	20	735	18
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	-	-	-	-	-	-	455	-	-	-	-	405
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	5	2	2	2	2	2	5	5	5	2	3	5
Mvmt Flow	48	0	132	95	1	55	48	574	33	20	750	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1462	1494	750	1478	1496	591	768	0	0	607	0	0
Stage 1	791	791	-	687	687	-	-	-	-	-	-	-
Stage 2	671	703	-	791	809	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.22	7.12	6.52	6.22	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.318	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	105	123	411	104	123	507	832	-	-	971	-	-
Stage 1	379	401	-	437	448	-	-	-	-	-	-	-
Stage 2	441	440	-	383	393	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	85	112	411	~ 64	111	507	832	-	-	971	-	-
Mov Cap-2 Maneuver	201	229	-	149	219	-	-	-	-	-	-	-
Stage 1	365	386	-	412	422	-	-	-	-	-	-	-
Stage 2	370	415	-	251	379	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	29.44	62.49	0.7	0.23
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	832	-	-	322	201	48	-
HCM Lane V/C Ratio	0.058	-	-	0.558	0.75	0.021	-
HCM Ctrl Dly (s/v)	9.6	-	-	29.4	62.5	8.8	0
HCM Lane LOS	A	-	-	D	F	A	A
HCM 95th %tile Q(veh)	0.2	-	-	3.2	5	0.1	-

Notes	
~: Volume exceeds capacity	\$. Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC 3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	3	5	0	5	2	358	11	9	308	1
Future Vol, veh/h	5	1	3	5	0	5	2	358	11	9	308	1
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	20	2	33	20	2	20	100	3	9	11	2	100
Mvmt Flow	5	1	3	5	0	5	2	385	12	10	331	1
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	740	752	332	746	747	391	332	0	0	397	0	0
Stage 1	351	351	-	395	395	-	-	-	-	-	-	-
Stage 2	389	401	-	351	352	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.52	6.53	7.3	6.52	6.4	5.1	-	-	4.21	-	-
Critical Hdwy Stg 1	6.3	5.52	-	6.3	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.3	5.52	-	6.3	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.68	4.018	3.597	3.68	4.018	3.48	3.1	-	-	2.299	-	-
Pot Cap-1 Maneuver	311	339	644	308	342	620	834	-	-	1115	-	-
Stage 1	630	632	-	596	605	-	-	-	-	-	-	-
Stage 2	600	601	-	630	632	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	304	334	644	301	337	620	834	-	-	1115	-	-
Mov Cap-2 Maneuver	304	334	-	301	337	-	-	-	-	-	-	-
Stage 1	623	625	-	594	603	-	-	-	-	-	-	-
Stage 2	593	599	-	619	625	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	14.9		14.12		0.05		0.23					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	10	-	-	373	405	51	-	-				
HCM Lane V/C Ratio	0.003	-	-	0.026	0.027	0.009	-	-				
HCM Ctrl Dly (s/v)	9.3	0	-	14.9	14.1	8.3	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-				

HCM 7th TWSC

3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	1	92	5	0	5	154	725	12	10	645	53
Future Vol, veh/h	35	1	92	5	0	5	154	725	12	10	645	53
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	-	-	-	-	-	-	455	-	-	-	-	405
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	5	2	5	20	2	20	5	3	9	11	2	5
Mvmt Flow	38	1	99	5	0	5	166	780	13	11	694	57
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1826	1839	694	1833	1889	786	751	0	0	792	0	0
Stage 1	715	715	-	1117	1117	-	-	-	-	-	-	-
Stage 2	1111	1124	-	716	772	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.25	7.3	6.52	6.4	4.15	-	-	4.21	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.3	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.3	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.345	3.68	4.018	3.48	2.245	-	-	2.299	-	-
Pot Cap-1 Maneuver	58	76	438	53	70	365	845	-	-	790	-	-
Stage 1	417	434	-	232	283	-	-	-	-	-	-	-
Stage 2	250	281	-	394	409	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	45	59	438	32	55	365	845	-	-	790	-	-
Mov Cap-2 Maneuver	135	154	-	84	130	-	-	-	-	-	-	-
Stage 1	407	424	-	187	227	-	-	-	-	-	-	-
Stage 2	198	226	-	297	400	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	31.71		33.46		1.78		0.14					
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	845	-	-	268	137	27	-	-				
HCM Lane V/C Ratio	0.196	-	-	0.513	0.078	0.014	-	-				
HCM Ctrl Dly (s/v)	10.3	-	-	31.7	33.5	9.6	0	-				
HCM Lane LOS	B	-	-	D	D	A	A	-				
HCM 95th %tile Q(veh)	0.7	-	-	2.7	0.3	0	-	-				

HCM 7th TWSC

3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	27.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	↕
Traffic Vol, veh/h	35	1	92	65	0	40	154	725	114	70	645	53
Future Vol, veh/h	35	1	92	65	0	40	154	725	114	70	645	53
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	-	-	-	-	-	-	455	-	-	-	-	405
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	5	2	5	5	2	5	5	3	5	5	2	5
Mvmt Flow	38	1	99	70	0	43	166	780	123	75	694	57

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1955	2077	694	2017	2073	841	751	0	0	902	0	0
Stage 1	844	844	-	1172	1172	-	-	-	-	-	-	-
Stage 2	1111	1233	-	845	901	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.25	7.15	6.52	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.345	3.545	4.018	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	47	54	438	~ 43	54	360	845	-	-	741	-	-
Stage 1	354	379	-	231	266	-	-	-	-	-	-	-
Stage 2	250	249	-	353	357	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 28	35	438	~ 22	36	360	845	-	-	741	-	-
Mov Cap-2 Maneuver	78	94	-	~ 48	88	-	-	-	-	-	-	-
Stage 1	291	312	-	186	214	-	-	-	-	-	-	-
Stage 2	177	200	-	225	294	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	60.95	\$ 420.39	1.6	0.95
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	845	-	-	191 71	176	-	-
HCM Lane V/C Ratio	0.196	-	-	0.719 1.59	0.102	-	-
HCM Ctrl Dly (s/v)	10.3	-	-	61\$ 420.4	10.4	0	-
HCM Lane LOS	B	-	-	F F	B	A	-
HCM 95th %tile Q(veh)	0.7	-	-	4.6 9.6	0.3	-	-

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC
4: CR 455 & SR 19

Intersection						
Int Delay, s/veh	4.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	137	81	501	166	143	480
Future Vol, veh/h	137	81	501	166	143	480
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	210	0	-	434	460	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	19	5	7	14	3	6
Mvmt Flow	143	84	522	173	149	500
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1320	522	0	0	695	0
Stage 1	522	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Critical Hdwy	6.59	6.25	-	-	4.13	-
Critical Hdwy Stg 1	5.59	-	-	-	-	-
Critical Hdwy Stg 2	5.59	-	-	-	-	-
Follow-up Hdwy	3.671	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	159	549	-	-	896	-
Stage 1	562	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 133	549	-	-	896	-
Mov Cap-2 Maneuver	251	-	-	-	-	-
Stage 1	562	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Approach	WB	NB		SB		
HCM Ctrl Dly, s/v	27.74	0		2.25		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	251	549	896	-
HCM Lane V/C Ratio	-	-	0.568	0.154	0.166	-
HCM Ctrl Dly (s/v)	-	-	36.6	12.7	9.8	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	3.2	0.5	0.6	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s				
+: Computation Not Defined		*: All major volume in platoon				

HCM 7th TWSC
4: CR 455 & SR 19

Intersection						
Int Delay, s/veh	19.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	142	122	692	183	240	824
Future Vol, veh/h	142	122	692	183	240	824
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	210	0	-	434	460	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	19	5	7	14	3	6
Mvmt Flow	148	127	721	191	250	858

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2079	721	0	0	911	0
Stage 1	721	-	-	-	-	-
Stage 2	1358	-	-	-	-	-
Critical Hdwy	6.59	6.25	-	-	4.13	-
Critical Hdwy Stg 1	5.59	-	-	-	-	-
Critical Hdwy Stg 2	5.59	-	-	-	-	-
Follow-up Hdwy	3.671	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	~ 53	422	-	-	743	-
Stage 1	452	-	-	-	-	-
Stage 2	220	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 35	422	-	-	743	-
Mov Cap-2 Maneuver	~ 112	-	-	-	-	-
Stage 1	452	-	-	-	-	-
Stage 2	~ 146	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	150.93	0	2.77
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 112 422	743	-
HCM Lane V/C Ratio	-	- 1.322 0.301	0.336	-
HCM Ctrl Dly (s/v)	-	- 265.9 17.1	12.3	-
HCM Lane LOS	-	- F C	B	-
HCM 95th %tile Q(veh)	-	- 10 1.2	1.5	-

Notes	
~: Volume exceeds capacity	\$. Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC 4: CR 455 & SR 19

Intersection						
Int Delay, s/veh	25.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	142	129	712	183	262	883
Future Vol, veh/h	142	129	712	183	262	883
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	210	0	-	434	460	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	19	5	7	14	3	6
Mvmt Flow	148	134	742	191	273	920

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2207	742	0	0	932	0
Stage 1	742	-	-	-	-	-
Stage 2	1466	-	-	-	-	-
Critical Hdwy	6.59	6.25	-	-	4.13	-
Critical Hdwy Stg 1	5.59	-	-	-	-	-
Critical Hdwy Stg 2	5.59	-	-	-	-	-
Follow-up Hdwy	3.671	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	~ 43	411	-	-	730	-
Stage 1	442	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 27	411	-	-	730	-
Mov Cap-2 Maneuver	~ 95	-	-	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	~ 122	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	204.56	0	2.94
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 95 411	730	-
HCM Lane V/C Ratio	-	- 1.558 0.327	0.374	-
HCM Ctrl Dly (s/v)	-	- \$ 374.1 18	12.8	-
HCM Lane LOS	-	- F C	B	-
HCM 95th %tile Q(veh)	-	- 11.5 1.4	1.7	-

Notes	
~: Volume exceeds capacity	\$. Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC
4: CR 455 & SR 19

Intersection

Int Delay, s/veh 4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	159	98	479	137	89	503
Future Vol, veh/h	159	98	479	137	89	503
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	210	0	-	434	460	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	10	2	5	10	6	4
Mvmt Flow	164	101	494	141	92	519

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1196	494	0
Stage 1	494	-	-
Stage 2	702	-	-
Critical Hdwy	6.5	6.22	-
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.5	-	-
Follow-up Hdwy	3.59	3.318	-
Pot Cap-1 Maneuver	198	575	-
Stage 1	597	-	-
Stage 2	477	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	179	575	-
Mov Cap-2 Maneuver	306	-	-
Stage 1	597	-	-
Stage 2	430	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	23.05	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	306	575
HCM Lane V/C Ratio	-	-	0.535	0.176
HCM Ctrl Dly (s/v)	-	-	29.5	12.6
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	3	0.6

HCM 7th TWSC 4: CR 455 & SR 19

Intersection						
Int Delay, s/veh	26.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	165	199	877	151	237	720
Future Vol, veh/h	165	199	877	151	237	720
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	210	0	-	434	460	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	10	2	5	10	6	4
Mvmt Flow	170	205	904	156	244	742

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2135	904	0	0	1060
Stage 1	904	-	-	-	-
Stage 2	1231	-	-	-	-
Critical Hdwy	6.5	6.22	-	-	4.16
Critical Hdwy Stg 1	5.5	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-
Follow-up Hdwy	3.59	3.318	-	-	2.254
Pot Cap-1 Maneuver	~ 51	335	-	-	642
Stage 1	382	-	-	-	-
Stage 2	266	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 32	335	-	-	642
Mov Cap-2 Maneuver	~ 117	-	-	-	-
Stage 1	382	-	-	-	-
Stage 2	~ 164	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	159.14	0	3.47
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 117 335	642	-
HCM Lane V/C Ratio	-	- 1.455 0.612	0.38	-
HCM Ctrl Dly (s/v)	-	- \$ 313.3 31.3	14	-
HCM Lane LOS	-	- F D	B	-
HCM 95th %tile Q(veh)	-	- 12 3.8	1.8	-

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC 4: CR 455 & SR 19

Intersection						
Int Delay, s/veh	34					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	165	225	945	151	252	760
Future Vol, veh/h	165	225	945	151	252	760
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	210	0	-	434	460	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	10	2	5	10	6	4
Mvmt Flow	170	232	974	156	260	784

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2277	974	0	0	1130	0
Stage 1	974	-	-	-	-	-
Stage 2	1303	-	-	-	-	-
Critical Hdwy	6.5	6.22	-	-	4.16	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.318	-	-	2.254	-
Pot Cap-1 Maneuver	~ 42	305	-	-	604	-
Stage 1	354	-	-	-	-	-
Stage 2	245	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 24	305	-	-	604	-
Mov Cap-2 Maneuver	~ 100	-	-	-	-	-
Stage 1	354	-	-	-	-	-
Stage 2	~ 139	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	208.07	0	3.83
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 100 305	604	-
HCM Lane V/C Ratio	-	- 1.704 0.759	0.43	-
HCM Ctrl Dly (s/v)	-	- \$ 429 46.1	15.4	-
HCM Lane LOS	-	- F E	C	-
HCM 95th %tile Q(veh)	-	- 13.5 5.8	2.2	-

Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

HCM 7th TWSC

5: West Project Access & Revels Rd

Intersection

Int Delay, s/veh 5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
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Lane Configurations						
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Traffic Vol, veh/h	18	34	1	45	103	3
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Future Vol, veh/h	18	34	1	45	103	3
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Free	Free	Free	Free	Stop	Stop
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	-	-	-	0	-
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Veh in Median Storage, #	0	-	-	0	0	-
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Grade, %	0	-	-	0	0	-
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Peak Hour Factor	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	2	2
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Mvmt Flow	20	37	1	49	112	3
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Major/Minor	Major1	Major2	Minor1
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Conflicting Flow All	0	0	57	0	89	38
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Stage 1	-	-	-	-	38	-
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Stage 2	-	-	-	-	51	-
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Critical Hdwy	-	-	4.12	-	6.42	6.22
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Critical Hdwy Stg 1	-	-	-	-	5.42	-
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Critical Hdwy Stg 2	-	-	-	-	5.42	-
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Follow-up Hdwy	-	-	2.218	-	3.518	3.318
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Pot Cap-1 Maneuver	-	-	1548	-	911	1034
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Stage 1	-	-	-	-	984	-
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Stage 2	-	-	-	-	971	-
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Platoon blocked, %	-	-	-	-	-	-
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Mov Cap-1 Maneuver	-	-	1548	-	911	1034
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Mov Cap-2 Maneuver	-	-	-	-	911	-
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Stage 1	-	-	-	-	984	-
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Stage 2	-	-	-	-	971	-
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Approach	EB	WB	NB
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HCM Ctrl Dly, s/v	0	0.16	9.51
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HCM LOS			A
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Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
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Capacity (veh/h)	914	-	-	39	-
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HCM Lane V/C Ratio	0.126	-	-	0.001	-
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HCM Ctrl Dly (s/v)	9.5	-	-	7.3	0
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HCM Lane LOS	A	-	-	A	A
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HCM 95th %tile Q(veh)	0.4	-	-	0	-
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HCM 7th TWSC

5: West Project Access & Revels Rd

Intersection

Int Delay, s/veh 2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	66	119	3	35	70	2
Future Vol, veh/h	66	119	3	35	70	2
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	2	2
Mvmt Flow	72	129	3	38	76	2

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	201
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1371
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1371
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.6	9.93
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	809	-	-	142	-
HCM Lane V/C Ratio	0.097	-	-	0.002	-
HCM Ctrl Dly (s/v)	9.9	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

HCM 7th TWSC

6: East Project Access & Revels Rd

Intersection

Int Delay, s/veh 5.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	12	2	9	37	4
Future Vol, veh/h	9	12	2	9	37	4
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	2	2
Mvmt Flow	10	13	2	10	40	4

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	23
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1592
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1592
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.32	8.81
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	990	-	-	327	-
HCM Lane V/C Ratio	0.045	-	-	0.001	-
HCM Ctrl Dly (s/v)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 7th TWSC

6: East Project Access & Revels Rd

Intersection

Int Delay, s/veh 2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	43	5	13	25	3
Future Vol, veh/h	25	43	5	13	25	3
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	2	2
Mvmt Flow	27	47	5	14	27	3

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	74
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1526
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1526
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	2.05	8.99
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	934	-	-	500	-
HCM Lane V/C Ratio	0.033	-	-	0.004	-
HCM Ctrl Dly (s/v)	9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

LAKE COUNTY - TRAFFIC SIGNAL OPERATIONS

CARTEGRAPH ID: LC-S-043**DATE: 05/15/2015****INTERSECTION NAME AND ID#: SR 19 & CR 48 076**

PHASE	1	2	3	4	5	6	7	8
	EBL	WB		SB		EB		
INITIAL	8	15		8		15		
PASSAGE	3	3		3		3		
YELLOW	4.4	4.4		4.8		4.4		
RED CLEAR	2.1	2.0		2.5		2.0		
MAX 1	25	45		30		45		
MAX 2								
WALK								
DON'T WALK								
RECALL				SOFT				
DET. FUNC.	L	L		L		L		

SYSTEM TIMING

	CYCLE	OFFSET	COORDINATED		BASE DAY 1		BASE DAY 2	
PATTERN	Sec.	Sec.	Phase	Sequence	Mon.- Fri.		Sat.- Sun.	

SPLIT ALLOCATION - Sec.

PHASE	1	2	3	4	5	6	7	8

NOTES: Naztec 980

Appendix K
Mitigation HCM Printouts

HCM 7th Signalized Intersection Summary

3: SR 19 & Revels Rd

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	0	129	93	1	54	47	563	32	20	735	18
Future Volume (veh/h)	47	0	129	93	1	54	47	563	32	20	735	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1870	1870	1870	1870	1870	1826	1826	1826	1870	1856	1826
Adj Flow Rate, veh/h	48	0	132	95	1	55	48	574	33	20	750	18
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, %	5	2	2	2	2	2	5	5	5	2	3	5
Cap, veh/h	151	18	189	274	20	95	337	1101	63	90	899	766
Arrive On Green	0.16	0.00	0.16	0.16	0.16	0.16	0.05	0.64	0.64	0.50	0.50	0.50
Sat Flow, veh/h	321	113	1192	918	125	598	1739	1710	98	17	1816	1547
Grp Volume(v), veh/h	180	0	0	151	0	0	48	0	607	770	0	18
Grp Sat Flow(s),veh/h/ln	1626	0	0	1641	0	0	1739	0	1808	1833	0	1547
Q Serve(g_s), s	1.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	8.2	2.2	0.0	0.3
Cycle Q Clear(g_c), s	4.6	0.0	0.0	3.5	0.0	0.0	0.5	0.0	8.2	16.4	0.0	0.3
Prop In Lane	0.27		0.73	0.63		0.36	1.00		0.05	0.03		1.00
Lane Grp Cap(c), veh/h	358	0	0	389	0	0	337	0	1164	989	0	766
V/C Ratio(X)	0.50	0.00	0.00	0.39	0.00	0.00	0.14	0.00	0.52	0.78	0.00	0.02
Avail Cap(c_a), veh/h	733	0	0	727	0	0	460	0	1687	1381	0	1104
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	17.6	0.0	0.0	8.0	0.0	4.3	9.9	0.0	5.9
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.6	0.0	0.0	0.2	0.0	0.4	1.9	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(50%),veh/ln	1.7	0.0	0.0	1.3	0.0	0.0	0.1	0.0	0.6	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	0.0	0.0	18.2	0.0	0.0	8.2	0.0	4.7	11.8	0.0	5.9
LnGrp LOS	B			B			A		A	B		A
Approach Vol, veh/h	180			151			655			788		
Approach Delay, s/veh	19.1			18.2			5.0			11.7		
Approach LOS	B			B			A			B		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	33.8			11.7		6.8	27.1		11.7			
Change Period (Y+Rc), s	4.5			4.5		4.5	4.5		4.5			
Max Green Setting (Gmax), s	42.5			18.5		5.5	32.5		18.5			
Max Q Clear Time (g_c+I1), s	10.2			6.6		2.5	18.4		5.5			
Green Ext Time (p_c), s	3.7			0.8		0.0	4.1		0.6			
Intersection Summary												
HCM 7th Control Delay, s/veh	10.5											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Summary

3: SR 19 & Revels Rd

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1	92	65	0	40	154	725	114	70	645	53
Future Volume (veh/h)	35	1	92	65	0	40	154	725	114	70	645	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1870	1826	1826	1870	1826	1826	1856	1826	1826	1870	1826
Adj Flow Rate, veh/h	38	1	99	70	0	43	166	780	123	75	694	57
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	2	5	5	2	5	5	3	5	5	2	5
Cap, veh/h	128	15	143	221	14	77	392	1107	175	130	834	830
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.09	0.71	0.71	0.54	0.54	0.54
Sat Flow, veh/h	338	123	1169	906	118	629	1739	1564	247	104	1555	1547
Grp Volume(v), veh/h	138	0	0	113	0	0	166	0	903	769	0	57
Grp Sat Flow(s),veh/h/ln	1629	0	0	1653	0	0	1739	0	1811	1659	0	1547
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	15.4	11.3	0.0	0.9
Cycle Q Clear(g_c), s	4.1	0.0	0.0	3.1	0.0	0.0	1.9	0.0	15.4	20.3	0.0	0.9
Prop In Lane	0.28		0.72	0.62		0.38	1.00		0.14	0.10		1.00
Lane Grp Cap(c), veh/h	287	0	0	313	0	0	392	0	1281	965	0	830
V/C Ratio(X)	0.48	0.00	0.00	0.36	0.00	0.00	0.42	0.00	0.70	0.80	0.00	0.07
Avail Cap(c_a), veh/h	630	0	0	628	0	0	423	0	2135	1673	0	1532
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.2	0.0	0.0	21.8	0.0	0.0	9.6	0.0	4.5	10.0	0.0	5.9
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.7	0.0	0.0	0.7	0.0	0.7	1.6	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(50%),veh/ln	1.6	0.0	0.0	1.3	0.0	0.0	0.6	0.0	0.8	4.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.4	0.0	0.0	22.5	0.0	0.0	10.3	0.0	5.2	11.6	0.0	5.9
LnGrp LOS	C			C			B		A	B		A
Approach Vol, veh/h	138			113			1069			826		
Approach Delay, s/veh	23.4			22.5			6.0			11.2		
Approach LOS	C			C			A			B		
Timer - Assigned Phs	2			4	5	6	8					
Phs Duration (G+Y+Rc), s	42.0			11.0	9.1	32.9	11.0					
Change Period (Y+Rc), s	4.5			4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	62.5			18.5	5.5	52.5	18.5					
Max Q Clear Time (g_c+I1), s	17.4			6.1	3.9	22.3	5.1					
Green Ext Time (p_c), s	7.3			0.5	0.1	6.1	0.4					
Intersection Summary												
HCM 7th Control Delay, s/veh	10.0											
HCM 7th LOS	A											

HCM 7th Roundabout 3: SR 19 & Revels Rd

Intersection				
Intersection Delay, s/veh	11.0			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	180	151	655	788
Demand Flow Rate, veh/h	185	154	688	811
Vehicles Circulating, veh/h	889	703	70	148
Vehicles Exiting, veh/h	70	55	1004	709
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.6	8.2	9.0	13.0
Approach LOS	B	A	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	185	154	688	811
Cap Entry Lane, veh/h	557	674	1285	1187
Entry HV Adj Factor	0.973	0.980	0.952	0.971
Flow Entry, veh/h	180	151	655	788
Cap Entry, veh/h	542	660	1224	1152
V/C Ratio	0.332	0.229	0.536	0.684
Control Delay, s/veh	11.6	8.2	9.0	13.0
LOS	B	A	A	B
95th %tile Queue, veh	1	1	3	6

HCM 7th Roundabout 3: SR 19 & Revels Rd

Intersection				
Intersection Delay, s/veh	22.2			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	138	113	1069	826
Demand Flow Rate, veh/h	145	118	1106	847
Vehicles Circulating, veh/h	860	1017	120	247
Vehicles Exiting, veh/h	234	209	885	888
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.1	11.3	27.5	18.9
Approach LOS	B	B	D	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	145	118	1106	847
Cap Entry Lane, veh/h	574	489	1221	1073
Entry HV Adj Factor	0.952	0.958	0.966	0.975
Flow Entry, veh/h	138	113	1069	826
Cap Entry, veh/h	546	468	1180	1046
V/C Ratio	0.253	0.241	0.906	0.790
Control Delay, s/veh	10.1	11.3	27.5	18.9
LOS	B	B	D	C
95th %tile Queue, veh	1	1	14	9

HCM 7th Signalized Intersection Summary

4: CR 455 & SR 19

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	158	138	712	183	262	883
Future Volume (veh/h)	158	138	712	183	262	883
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1618	1826	1796	1693	1856	1811
Adj Flow Rate, veh/h	165	144	742	191	273	920
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	19	5	7	14	3	6
Cap, veh/h	232	233	894	714	403	1241
Arrive On Green	0.15	0.15	0.50	0.50	0.11	0.68
Sat Flow, veh/h	1541	1547	1796	1434	1767	1811
Grp Volume(v), veh/h	165	144	742	191	273	920
Grp Sat Flow(s),veh/h/ln	1541	1547	1796	1434	1767	1811
Q Serve(g_s), s	5.6	4.8	19.3	4.2	3.6	17.8
Cycle Q Clear(g_c), s	5.6	4.8	19.3	4.2	3.6	17.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	232	233	894	714	403	1241
V/C Ratio(X)	0.71	0.62	0.83	0.27	0.68	0.74
Avail Cap(c_a), veh/h	521	523	1297	1036	492	1738
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	22.1	21.8	11.8	8.0	10.8	5.5
Incr Delay (d2), s/veh	4.0	2.7	3.1	0.2	2.8	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.8	6.8	1.1	1.7	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.1	24.4	14.9	8.2	13.6	6.6
LnGrp LOS	C	C	B	A	B	A
Approach Vol, veh/h	309		933			1193
Approach Delay, s/veh	25.3		13.5			8.2
Approach LOS	C		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.3	31.7			42.0	12.7
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	8.5	39.5			52.5	18.5
Max Q Clear Time (g_c+I1), s	5.6	21.3			19.8	7.6
Green Ext Time (p_c), s	0.2	5.9			8.9	0.7
Intersection Summary						
HCM 7th Control Delay, s/veh			12.4			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

4: CR 455 & SR 19

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	183	236	945	151	252	760
Future Volume (veh/h)	183	236	945	151	252	760
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1826	1752	1811	1841
Adj Flow Rate, veh/h	189	243	974	156	260	784
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	10	2	5	10	6	4
Cap, veh/h	298	283	1014	824	294	1319
Arrive On Green	0.18	0.18	0.56	0.56	0.11	0.72
Sat Flow, veh/h	1668	1585	1826	1485	1725	1841
Grp Volume(v), veh/h	189	243	974	156	260	784
Grp Sat Flow(s),veh/h/ln	1668	1585	1826	1485	1725	1841
Q Serve(g_s), s	9.0	12.8	43.6	4.5	7.3	18.0
Cycle Q Clear(g_c), s	9.0	12.8	43.6	4.5	7.3	18.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	298	283	1014	824	294	1319
V/C Ratio(X)	0.63	0.86	0.96	0.19	0.88	0.59
Avail Cap(c_a), veh/h	360	342	1033	840	297	1342
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	34.2	18.2	9.5	24.7	6.0
Incr Delay (d2), s/veh	2.6	16.7	19.1	0.1	25.2	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	6.1	21.5	1.4	7.2	5.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	35.2	50.8	37.3	9.6	49.9	6.7
LnGrp LOS	D	D	D	A	D	A
Approach Vol, veh/h	432		1130			1044
Approach Delay, s/veh	44.0		33.5			17.5
Approach LOS	D		C			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.8	52.1			65.9	19.8
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	9.5	48.5			62.5	18.5
Max Q Clear Time (g_c+I1), s	9.3	45.6			20.0	14.8
Green Ext Time (p_c), s	0.0	2.0			7.1	0.6
Intersection Summary						
HCM 7th Control Delay, s/veh			28.8			
HCM 7th LOS			C			

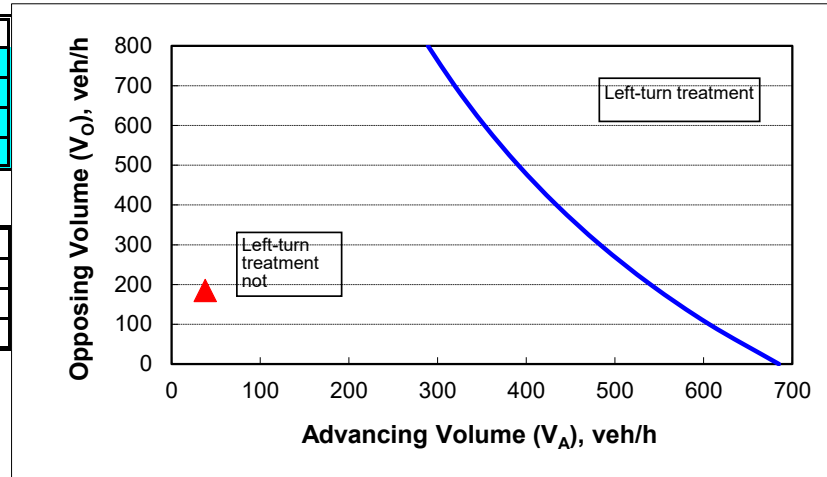
Appendix L
NCHRP 457 Reports

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.**2-lane roadway (English)****INPUT**

Variable	Value
85 th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	8%
Advancing volume (V_A), veh/h:	38
Opposing volume (V_O), veh/h:	185

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	549
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	

**CALIBRATION CONSTANTS**

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	185
Right-turn volume, veh/h:	119

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	7638
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

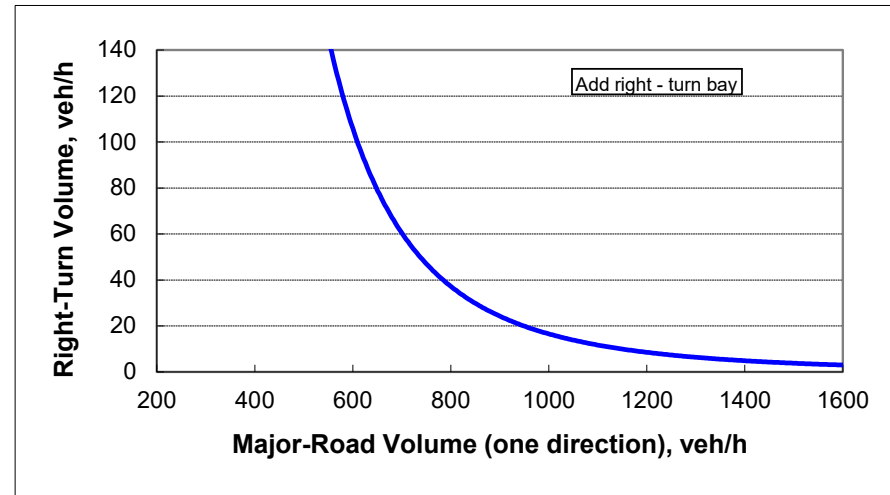
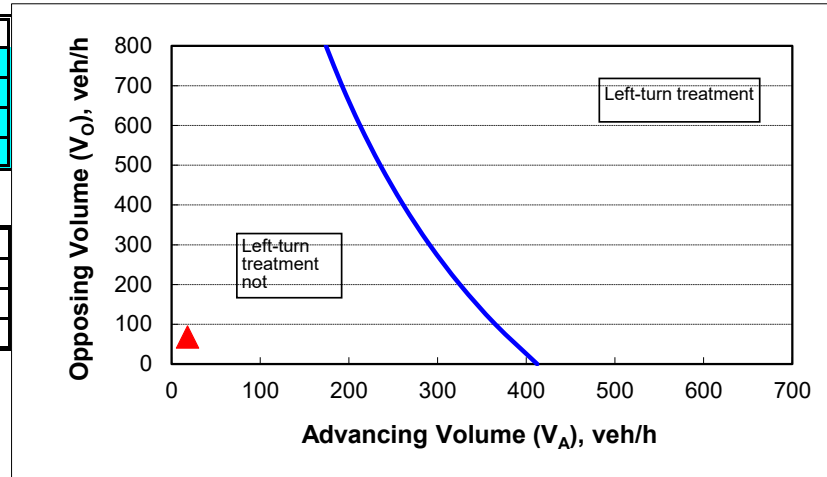


Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.**2-lane roadway (English)****INPUT**

Variable	Value
85 th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	28%
Advancing volume (V_A), veh/h:	18
Opposing volume (V_O), veh/h:	68

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	379
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	

**CALIBRATION CONSTANTS**

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

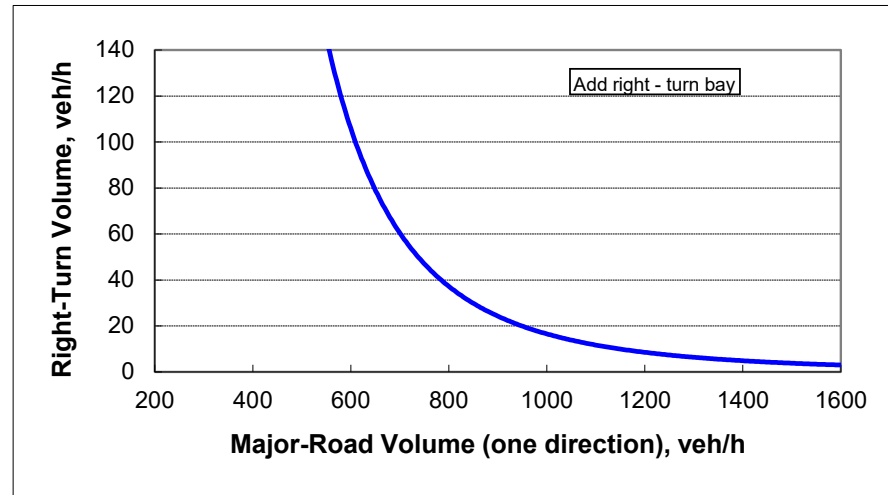
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	68
Right-turn volume, veh/h:	43

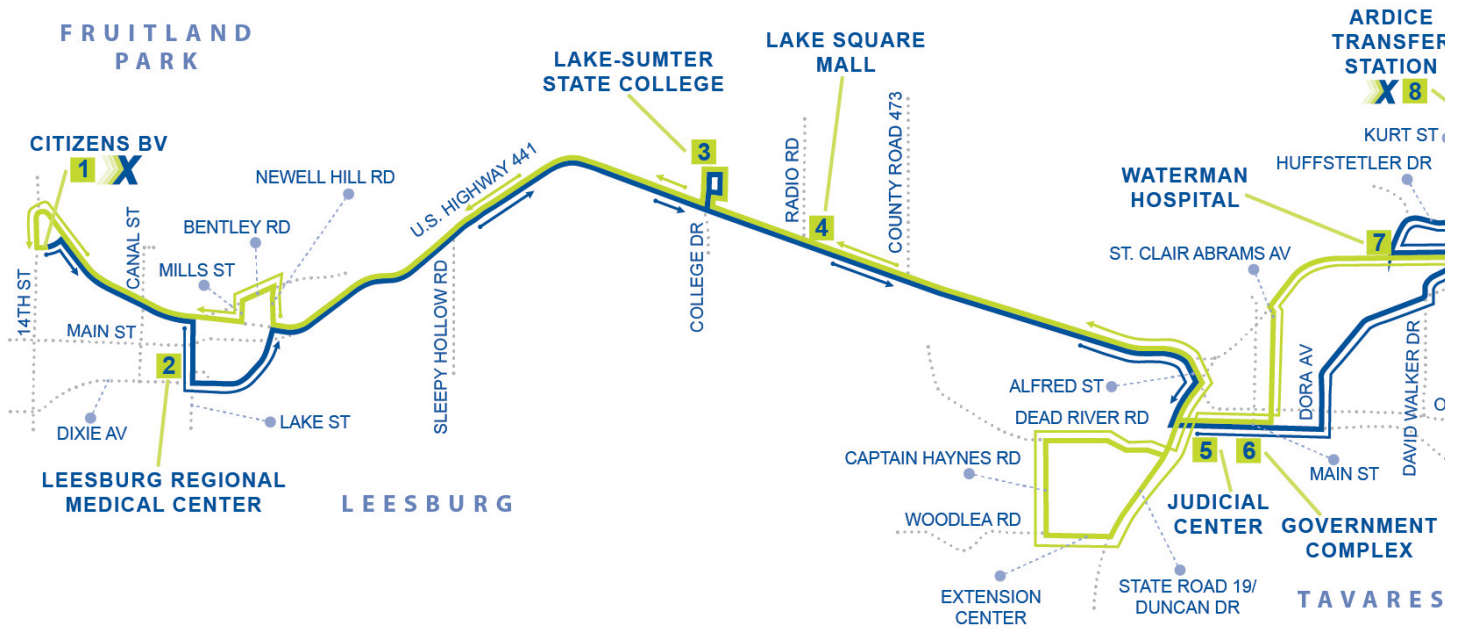
OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	290756
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



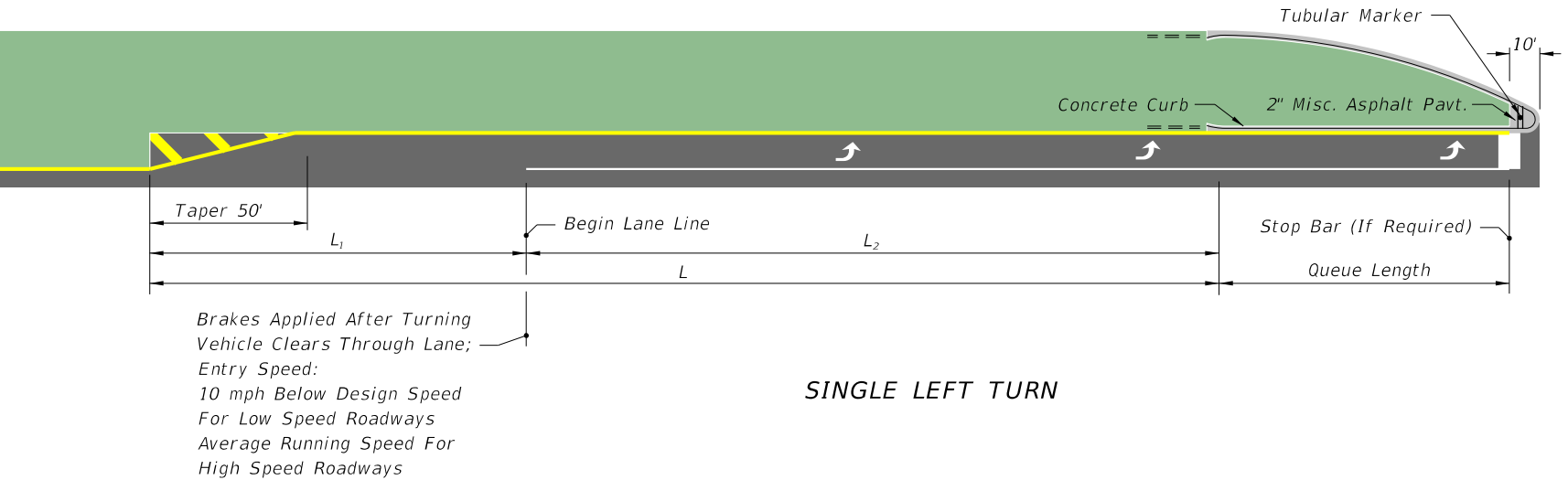
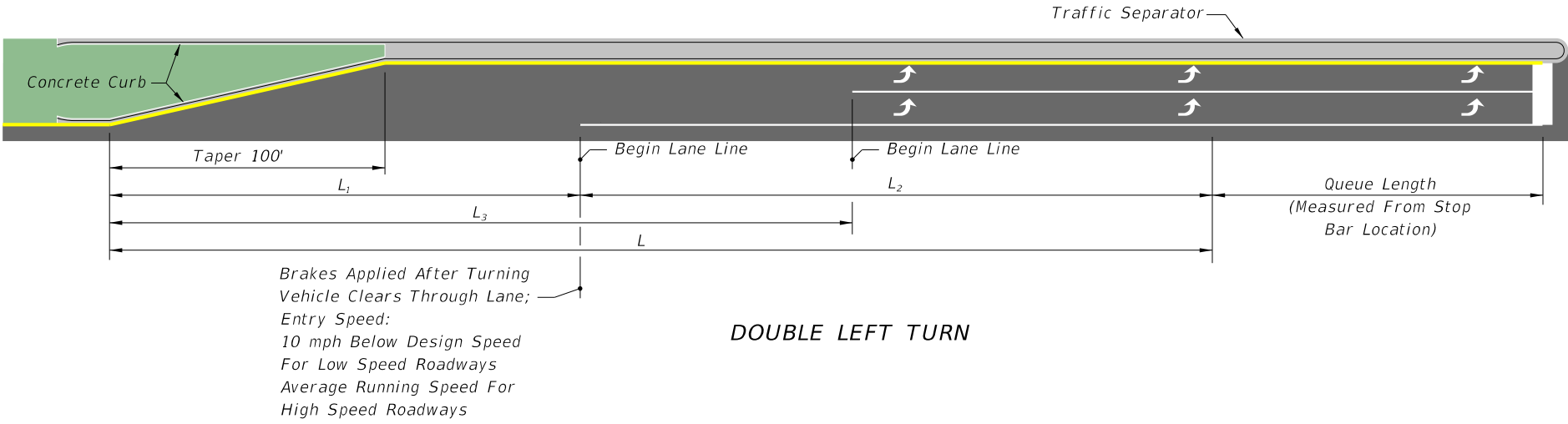
Appendix M
Bus Map

PRI
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Appendix N
FDM 212-1

MEDIAN TURN LANES
MINIMUM DECELERATION LENGTHS



MEDIAN TURN LANES					
Design Speed (mph)	Entry Speed (mph)	Clearance Distance L_1 (ft.)	Brake To Stop Distance L_2 (ft.)	Total Decel. Distance L (ft.)	Clearance Distance L_3 (ft.)
25	15	70	25	95	90
30	20	70	50	120	100
35	25	70	75	145	110
40	30	80	75	155	120
45	35	85	100	185	135
50	44	105	185	290	160
55	48	125	225	350	195
60	52	145	260	405	230
65	55	170	290	460	270
70	58	200	325	525	300

- NOTE:
- For C3 Context Classification roadways with Design Speeds of 50 mph, the following values may be used under constrained conditions:
 - Entry Speed of 40 mph
 - Brake to stop distance (L_2) of 135 ft.
 - Total deceleration distance (L) of 240 ft.
 - For RRR Projects with Design Speeds of 50 mph and Entry Speeds of 40 mph, existing brake to stop distances (L_2) of 135 ft. and total deceleration distances (L) of 240 ft. may be retained.

NOT TO SCALE

Appendix O
Interim Condition Supporting Information

HCM 7th TWSC 3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	30	93	1	54	14	554	32	20	707	4
Future Vol, veh/h	5	0	30	93	1	54	14	554	32	20	707	4
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	-	-	-	355	-	-	455	-	405	455	-	405
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	5	2	2	2	2	2	5	5	5	2	3	5
Mvmt Flow	5	0	31	95	1	55	14	565	33	20	721	4
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1357	1389	721	1356	1360	565	726	0	0	598	0	0
Stage 1	762	762	-	594	594	-	-	-	-	-	-	-
Stage 2	594	627	-	762	766	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.22	7.12	6.52	6.22	4.15	-	-	4.12	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.318	3.518	4.018	3.318	2.245	-	-	2.218	-	-
Pot Cap-1 Maneuver	124	143	427	126	148	524	864	-	-	979	-	-
Stage 1	393	413	-	491	493	-	-	-	-	-	-	-
Stage 2	486	477	-	397	412	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	137	427	113	143	524	864	-	-	979	-	-
Mov Cap-2 Maneuver	229	257	-	234	261	-	-	-	-	-	-	-
Stage 1	384	405	-	483	485	-	-	-	-	-	-	-
Stage 2	427	469	-	361	403	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	15.45		23.95		0.22		0.24					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	864	-	-	380 234 515	979	-	-					
HCM Lane V/C Ratio	0.017	-	-	0.094 0.406 0.109	0.021	-	-					
HCM Ctrl Dly (s/v)	9.2	-	-	15.5 30.5 12.8	8.8	-	-					
HCM Lane LOS	A	-	-	C D B	A	-	-					
HCM 95th %tile Q(veh)	0.1	-	-	0.3 1.9 0.4	0.1	-	-					

HCM 7th TWSC

3: SR 19 & Revels Rd

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	6	1	24	65	0	40	37	692	114	70	625	3
Future Vol, veh/h	6	1	24	65	0	40	37	692	114	70	625	3
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	-	-	-	355	-	-	455	-	405	455	-	405
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	5	2	5	5	2	5	5	3	5	5	2	5
Mvmt Flow	6	1	26	70	0	43	40	744	123	75	672	3

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1646	1769	672	1647	1649	744	675	0	0	867	0	0
Stage 1	823	823	-	824	824	-	-	-	-	-	-	-
Stage 2	824	946	-	823	826	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.25	7.15	6.52	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.15	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.15	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.345	3.545	4.018	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	78	83	451	78	99	410	902	-	-	764	-	-
Stage 1	363	388	-	363	387	-	-	-	-	-	-	-
Stage 2	363	340	-	363	387	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	60	72	451	~ 63	85	410	902	-	-	764	-	-
Mov Cap-2 Maneuver	152	165	-	166	192	-	-	-	-	-	-	-
Stage 1	328	350	-	347	370	-	-	-	-	-	-	-
Stage 2	311	325	-	308	349	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	17.85	31.37	0.4	1.03
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	902	-	-	313 166 410	764	-	-
HCM Lane V/C Ratio	0.044	-	-	0.106 0.421 0.105	0.098	-	-
HCM Ctrl Dly (s/v)	9.2	-	-	17.9 41.5 14.8	10.2	-	-
HCM Lane LOS	A	-	-	C E B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4 1.9 0.3	0.3	-	-

Notes	
~: Volume exceeds capacity	\$. Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

COUNTY: 11
STATION: 0376
DESCRIPTION: ON SR-19, 0.364 MI. S OF US-27 (RCLP)
START DATE: 05/15/2024
START TIME: 0000

TIME	DIRECTION: N					DIRECTION: S					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	15	6	4	7	32	11	7	7	6	31	63	
0100	3	7	3	1	14	11	8	3	11	33	47	
0200	11	3	9	5	28	5	11	7	10	33	61	
0300	7	10	14	8	39	8	10	27	10	55	94	
0400	18	21	25	26	90	16	16	32	31	95	185	
0500	42	54	57	77	230	42	55	81	102	280	510	
0600	94	99	113	148	454	57	57	80	87	281	735	
0700	161	183	168	142	654	66	71	75	123	335	989	
0800	107	140	127	88	462	72	58	85	65	280	742	
0900	103	117	98	89	407	88	69	68	79	304	711	
1000	71	89	104	78	342	99	74	69	71	313	655	
1100	80	103	83	79	345	61	61	73	82	277	622	
1200	86	78	92	79	335	93	82	84	76	335	670	
1300	86	85	100	77	348	76	104	103	93	376	724	
1400	95	81	107	87	370	98	91	97	95	381	751	
1500	89	86	85	74	334	99	104	102	107	412	746	
1600	95	104	140	97	436	112	138	136	135	521	957	
1700	125	100	128	108	461	139	124	138	114	515	976	
1800	72	73	42	39	226	122	118	101	79	420	646	
1900	51	54	38	32	175	60	55	54	35	204	379	
2000	25	34	19	19	97	39	37	36	47	159	256	
2100	35	14	13	9	71	47	30	34	25	136	207	
2200	19	15	20	19	73	14	36	31	32	113	186	
2300	20	10	18	6	54	20	14	23	17	74	128	
24-HOUR TOTALS:					6077						5963	12040

PEAK VOLUME INFORMATION						COMBINED DIRECTIONS					
DIRECTION: N			DIRECTION: S								
A.M.	HOUR	VOLUME		HOUR	VOLUME		HOUR	VOLUME			
P.M.	1615	466		1615	548		1615	1014			
DAILY	645	660		1615	548		1615	1014			

TRUCK PERCENTAGE	23.51	24.23	23.87
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CLASSIFICATION SUMMARY DATABASE																
DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK TOTVOL
N	8	3530	1110	55	1027	7	0	330	4	0	6	0	0	0	0	1429 6077
S	72	3456	990	57	756	17	8	574	27	0	5	0	1	0	0	1445 5963

Begin Time	SR 19	
	NB	SB
	Thru	Thru
12:00 AM	37	37
1:00 AM	16	39
2:00 AM	33	39
3:00 AM	46	66
4:00 AM	105	113
5:00 AM	269	334
6:00 AM	531	335
7:00 AM	765	399
8:00 AM	540	334
9:00 AM	476	362
10:00 AM	400	373
11:00 AM	403	330
12:00 PM	392	399
1:00 PM	407	448
2:00 PM	433	454
3:00 PM	391	491
4:00 PM	510	621
5:00 PM	539	614
6:00 PM	264	501
7:00 PM	205	243
8:00 PM	113	190
9:00 PM	83	162
10:00 PM	85	135
11:00 PM	63	88
Total	7,106	7,107

Begin Time	Site 110376			
	NB		SB	
	Vol	Percent	Vol	Percent
12:00 AM	32	0.5%	31	0.5%
1:00 AM	14	0.2%	33	0.6%
2:00 AM	28	0.5%	33	0.6%
3:00 AM	39	0.6%	55	0.9%
4:00 AM	90	1.5%	95	1.6%
5:00 AM	230	3.8%	280	4.7%
6:00 AM	454	7.5%	281	4.7%
7:00 AM	654	10.8%	335	5.6%
8:00 AM	462	7.6%	280	4.7%
9:00 AM	407	6.7%	304	5.1%
10:00 AM	342	5.6%	313	5.2%
11:00 AM	345	5.7%	277	4.6%
12:00 PM	335	5.5%	335	5.6%
1:00 PM	348	5.7%	376	6.3%
2:00 PM	370	6.1%	381	6.4%
3:00 PM	334	5.5%	412	6.9%
4:00 PM	436	7.2%	521	8.7%
5:00 PM	461	7.6%	515	8.6%
6:00 PM	226	3.7%	420	7.0%
7:00 PM	175	2.9%	204	3.4%
8:00 PM	97	1.6%	159	2.7%
9:00 PM	71	1.2%	136	2.3%
10:00 PM	73	1.2%	113	1.9%
11:00 PM	54	0.9%	74	1.2%
Total	6077	100.0%	5963	100.0%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use									
Source: ITE Trip Generation Manual , 11th Edition									
Land Use Code	210			210			210		
Land Use	Single-Family Detached Housing			Single-Family Detached Housing			Single-Family Detached Housing		
Setting	General Urban/Suburban			General Urban/Suburban			General Urban/Suburban		
Time Period	Weekday			Saturday			Sunday		
# Data Sites	7			3			2		
	% of 24-Hour Vehicle Trips			% of 24-Hour Vehicle Trips			% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting
12:00 - 1:00 AM	0.3%	0.5%	0.2%	0.8%	0.6%	1.0%	0.6%	0.6%	0.6%
1:00 - 2:00 AM	0.2%	0.2%	0.1%	0.4%	0.6%	0.2%	0.6%	1.2%	0.0%
2:00 - 3:00 AM	0.2%	0.3%	0.1%	0.3%	0.4%	0.2%	0.0%	0.0%	0.0%
3:00 - 4:00 AM	0.2%	0.2%	0.2%	0.5%	0.4%	0.6%	0.3%	0.0%	0.6%
4:00 - 5:00 AM	0.6%	0.3%	0.8%	0.5%	0.6%	0.4%	0.0%	0.0%	0.0%
5:00 - 6:00 AM	1.2%	0.5%	2.0%	1.0%	0.8%	1.2%	1.8%	1.8%	1.8%
6:00 - 7:00 AM	3.7%	1.6%	5.8%	1.0%	0.4%	1.5%	1.5%	1.8%	1.2%
7:00 - 8:00 AM	6.5%	3.1%	10.0%	2.0%	0.8%	3.3%	1.8%	0.6%	3.0%
8:00 - 9:00 AM	6.2%	3.8%	8.5%	3.8%	2.5%	5.2%	4.7%	0.6%	9.0%
9:00 - 10:00 AM	4.6%	3.3%	5.8%	5.5%	5.0%	6.0%	4.7%	3.5%	6.0%
10:00 - 11:00 AM	4.9%	4.2%	5.6%	8.2%	6.2%	10.2%	11.5%	8.8%	14.4%
11:00 - 12:00 PM	5.3%	5.4%	5.1%	7.2%	8.7%	5.8%	7.7%	8.2%	7.2%
12:00 - 1:00 PM	5.7%	5.7%	5.7%	7.7%	7.3%	8.1%	9.2%	10.5%	7.8%
1:00 - 2:00 PM	6.1%	6.1%	6.0%	8.1%	7.1%	9.0%	9.8%	10.5%	9.0%
2:00 - 3:00 PM	6.6%	7.1%	6.1%	8.0%	8.7%	7.3%	5.9%	5.8%	6.0%
3:00 - 4:00 PM	7.5%	8.7%	6.2%	9.2%	9.8%	8.7%	4.4%	5.8%	3.0%
4:00 - 5:00 PM	8.9%	10.5%	7.4%	6.2%	6.9%	5.4%	8.3%	8.2%	8.4%
5:00 - 6:00 PM	8.7%	10.0%	7.3%	8.4%	9.6%	7.1%	9.8%	11.1%	8.4%
6:00 - 7:00 PM	7.2%	8.5%	5.9%	6.0%	7.3%	4.6%	6.2%	5.8%	6.6%
7:00 - 8:00 PM	5.1%	6.1%	4.2%	5.1%	4.8%	5.4%	5.3%	7.0%	3.6%
8:00 - 9:00 PM	4.6%	6.1%	3.1%	4.8%	6.0%	3.7%	4.1%	5.8%	2.4%
9:00 - 10:00 PM	3.3%	4.4%	2.3%	2.4%	2.7%	2.1%	0.3%	0.6%	0.0%
10:00 - 11:00 PM	1.6%	2.1%	1.0%	1.7%	1.5%	1.9%	1.5%	1.8%	1.2%
11:00 - 12:00 AM	1.0%	1.3%	0.6%	1.4%	1.5%	1.3%	0.0%	0.0%	0.0%

Begin Time	Revels Rd		SR 19	
	WB		NB	SB
	Left	Right	Right	Left
0:00	0.09%	0.05%	0.29%	0.17%
1:00	0.09%	0.05%	0.13%	0.08%
2:00	0.04%	0.02%	0.15%	0.09%
3:00	0.10%	0.06%	0.11%	0.06%
4:00	0.48%	0.28%	0.18%	0.11%
5:00	1.20%	0.70%	0.27%	0.16%
6:00	3.51%	2.05%	0.93%	0.54%
7:00	5.98%	3.49%	1.84%	1.07%
8:00	5.11%	2.98%	2.26%	1.32%
9:00	3.46%	2.02%	2.01%	1.17%
10:00	3.34%	1.95%	2.52%	1.47%
11:00	3.06%	1.79%	3.25%	1.90%
12:00	3.41%	1.99%	3.45%	2.01%
13:00	3.61%	2.10%	3.67%	2.14%
14:00	3.67%	2.14%	4.27%	2.49%
15:00	3.75%	2.19%	5.22%	3.05%
16:00	4.43%	2.59%	6.31%	3.68%
17:00	4.39%	2.56%	6.01%	3.51%
18:00	3.51%	2.05%	5.12%	2.98%
19:00	2.54%	1.48%	3.63%	2.12%
20:00	1.85%	1.08%	3.68%	2.14%
21:00	1.38%	0.80%	2.65%	1.55%
22:00	0.60%	0.35%	1.27%	0.74%
23:00	0.39%	0.23%	0.76%	0.44%
Total	60%	35%	60%	35%

Source: ITE Trip Generation Manual, 11th Edition

Begin Time	LUC 210	
	Enter	Exit
0:00	0.5%	0.2%
1:00	0.2%	0.1%
2:00	0.3%	0.1%
3:00	0.2%	0.2%
4:00	0.3%	0.8%
5:00	0.5%	2.0%
6:00	1.6%	5.8%
7:00	3.1%	10.0%
8:00	3.8%	8.5%
9:00	3.3%	5.8%
10:00	4.2%	5.6%
11:00	5.4%	5.1%
12:00	5.7%	5.7%
13:00	6.1%	6.0%
14:00	7.1%	6.1%
15:00	8.7%	6.2%
16:00	10.5%	7.4%
17:00	10.0%	7.3%
18:00	8.5%	5.9%
19:00	6.1%	4.2%
20:00	6.1%	3.1%
21:00	4.4%	2.3%
22:00	2.1%	1.0%
23:00	1.3%	0.6%
% of Daily	100%	100%

Source: ITE Trip Generation Manual, 11th Edition

Project Trips							
Begin Time	Revels Rd			SR 19			
	WB			NB		SB	
	Left	Right	Total	Right	Total	Left	Total
12:00 AM	1	1	2	4	4	2	2
1:00 AM	1	1	2	2	2	1	1
2:00 AM	1	0	1	2	2	1	1
3:00 AM	1	1	2	1	1	1	1
4:00 AM	6	4	10	2	2	1	1
5:00 AM	16	9	25	4	4	2	2
6:00 AM	47	27	74	13	13	7	7
7:00 AM	80	47	127	25	25	14	14
8:00 AM	69	40	109	30	30	18	18
9:00 AM	46	27	73	27	27	16	16
10:00 AM	45	26	71	34	34	20	20
11:00 AM	41	24	65	44	44	25	25
12:00 PM	46	27	73	46	46	27	27
1:00 PM	48	28	76	49	49	29	29
2:00 PM	49	29	78	57	57	33	33
3:00 PM	50	29	79	70	70	41	41
4:00 PM	60	35	95	85	85	49	49
5:00 PM	59	34	93	81	81	47	47
6:00 PM	47	28	75	69	69	40	40
7:00 PM	34	20	54	49	49	28	28
8:00 PM	25	15	40	49	49	29	29
9:00 PM	19	11	30	36	36	21	21
10:00 PM	8	5	13	17	17	10	10
11:00 PM	5	3	8	10	10	6	6
Total	804	471	1,275	806	806	468	468

Begin Time	Revels Rd				SR 19							
	WB				NB				SB			
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total
12:00 AM	1	0	1	2	0	37	4	41	2	37	0	39
1:00 AM	1	0	1	2	0	16	2	18	1	39	0	40
2:00 AM	1	0	0	1	0	33	2	35	1	39	0	40
3:00 AM	1	0	1	2	0	46	1	47	1	66	0	67
4:00 AM	6	0	4	10	0	105	2	107	1	113	0	114
5:00 AM	16	0	9	25	0	269	4	273	2	334	0	336
6:00 AM	47	0	27	74	0	531	13	544	7	335	0	342
7:00 AM	80	0	47	127	0	765	25	790	14	399	0	413
8:00 AM	69	0	40	109	0	540	30	570	18	334	0	352
9:00 AM	46	0	27	73	0	476	27	503	16	362	0	378
10:00 AM	45	0	26	71	0	400	34	434	20	373	0	393
11:00 AM	41	0	24	65	0	403	44	447	25	330	0	355
12:00 PM	46	0	27	73	0	392	46	438	27	399	0	426
1:00 PM	48	0	28	76	0	407	49	456	29	448	0	477
2:00 PM	49	0	29	78	0	433	57	490	33	454	0	487
3:00 PM	50	0	29	79	0	391	70	461	41	491	0	532
4:00 PM	60	0	35	95	0	510	85	595	49	621	0	670
5:00 PM	59	0	34	93	0	539	81	620	47	614	0	661
6:00 PM	47	0	28	75	0	264	69	333	40	501	0	541
7:00 PM	34	0	20	54	0	205	49	254	28	243	0	271
8:00 PM	25	0	15	40	0	113	49	162	29	190	0	219
9:00 PM	19	0	11	30	0	83	36	119	21	162	0	183
10:00 PM	8	0	5	13	0	85	17	102	10	135	0	145
11:00 PM	5	0	3	8	0	63	10	73	6	88	0	94
Total	804	0	471	1,275	0	7,106	806	7,912	468	7,107	0	7,575

Number of lanes for moving traffic on each approach				Vehicles/hour on major street (total of both approaches)				Vehicles/hour on higher-volume minor-street approach (one direction only)			
Condition A – Minimum Vehicular Volume											
Major Street		Minor Street		100%	80%	70%	56%	100%	80%	70%	56%
1	Lane	1	Lane	500	400	350	280	150	120	105	84
2+	Lanes	1	Lane	600	480	420	336	150	120	105	84
2+	Lanes	2+	Lanes	600	480	420	336	200	160	140	112
1	Lane	2+	Lanes	500	400	350	280	200	160	140	112
Condition B – Interruption of Continuous Traffic											
Major Street		Minor Street		100%	80%	70%	56%	100%	80%	70%	56%
1	Lane	1	Lane	750	600	525	420	75	60	53	42
2+	Lanes	1	Lane	900	720	630	504	75	60	53	42
2+	Lanes	2+	Lanes	900	720	630	504	100	80	70	56
1	Lane	2+	Lanes	750	600	525	420	100	80	70	56

Source: Manual on Uniform Traffic Control Devices, 2009 Edition, U.S. Department of Transportation, Federal Highway Administration.