TRAFFIC IMPACT ANALYSIS

RESIDENTIAL DEVELOPMENT
HOWEY-IN-THE-HILLS, FLORIDA

Prepared for:
Blue Sky Capital Group, LLC
103 Commerce Street, Suite 160
Lake Mary, Florida 32746

Prepared by:

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407-628-9955

May 2022
Revised December 2022

TPD № 5659

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic Planning & Design, Inc., a corporation authorized to operate as an engineering business, EB-3702, 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: Residential Development

LOCATION: Howey-in-the-Hills, Lake County

CLIENT: Blue Sky Capital Group, LLC

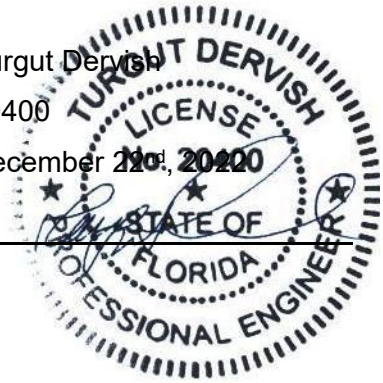
I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Turgut Dervish

P.E. No.: 20400

DATE: December 22nd, 2020

SIGNATURE: _____



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INTRODUCTION

This traffic analysis was performed to assess the impact of a proposed residential development in Howey-in-the-Hills, Lake County. The proposed development will consist of 180 single family units. The site, as depicted in **Figure 1,** is located to the north side of Number 2 Road approximately two-miles west of SR 19. Access to the site will be via a full access driveway on Number 2 Road. It is anticipated that the development will be completed in 2028. **Figure 2** depicts the site plan and the proposed access connection.

A Tier 2 Traffic Impact Analysis (TIA) is required as per the Lake Sumter MPO Traffic Impact Study Methodology and Guidelines which require a minimum of one mile impact area from the main access point plus all roadways which the project consumes 5% or more of the roadway capacity. This area includes segments of CR 48, SR 19 and Number 2 Road which provide external access to the site.

The analysis was conducted as per the study methodology submitted to the City and County. The study methodology and related correspondence are included in **Appendix A.** Reference data used in the analysis were obtained from the Florida Department of Transportation (FDOT) Annual Average Daily Traffic Report, Lake County CMP Database spreadsheets and trip generation data from the Institute of Transportation Engineers (ITE). Additionally, A.M./P.M. peak hour traffic data were collected at the intersections by TPD personnel for use in the analysis.

Howey in the Hills
Project № 5659
Figure 1

Site Location

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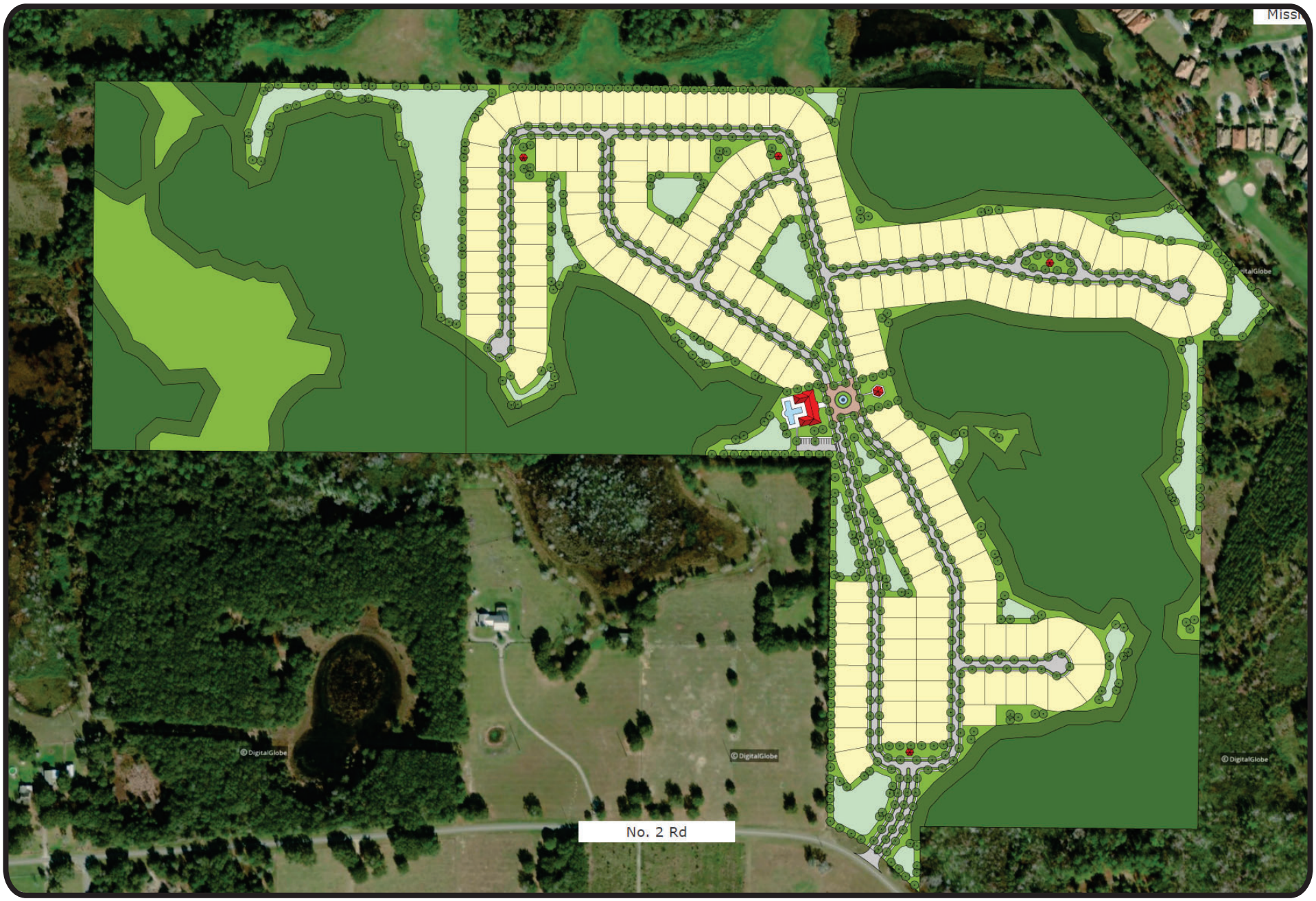

Howey in the Hills
Project № 5659
Figure 2

Conceptual Site Plan

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NTS

EXISTING CONDITIONS ANALYSIS

Existing traffic conditions were analyzed using peak direction P.M. peak hour volumes for the study roadways and A.M./P.M. peak hour traffic volumes for the study intersections. The roadway analysis consisted of a generalized capacity analysis with the existing traffic volumes and the available capacity. The intersection analysis was conducted as per the procedures of the Highway Capacity Manual.

Roadway Segment Analysis

The roadway segments were analyzed by comparing their existing P.M. peak hour directional volumes with the corresponding peak hour directional capacities at the adopted Level of Service (LOS) standard. The existing P.M. peak hour volumes, LOS standard, and peak hour direction capacities were obtained from the Lake County's 2022 CMP Database. A summary of the existing roadway capacity analysis is presented in **Table 1.** This table shows that the segments in the vicinity of the site are operating at satisfactory Levels of Service. The Lake County's 2022 CMP Database is included in **Appendix B**.

Intersection Analysis

A capacity analysis was conducted for the study intersections using the *Highway Capacity Software (HCS)* in accordance with the procedures of the *Highway Capacity Manual (HCM 6E)*. The capacity analysis was performed using the existing intersection geometry, traffic volumes during the A.M./P.M. peak hours and traffic controls. Existing turning movement counts obtained by TPD in 2022 were adjusted as per FDOT seasonal factors for Lake County. The adjusted intersection volumes are displayed in **Figures 3a** and **3b**. The intersection counts, FDOT seasonal factors and signal timings are included in **Appendix C**.

The intersection capacity analysis is summarized in **Table 2**. This analysis indicates that the study intersections are currently operating at acceptable Levels of Service. Detailed *HCS* analysis worksheets are included in **Appendix D**.

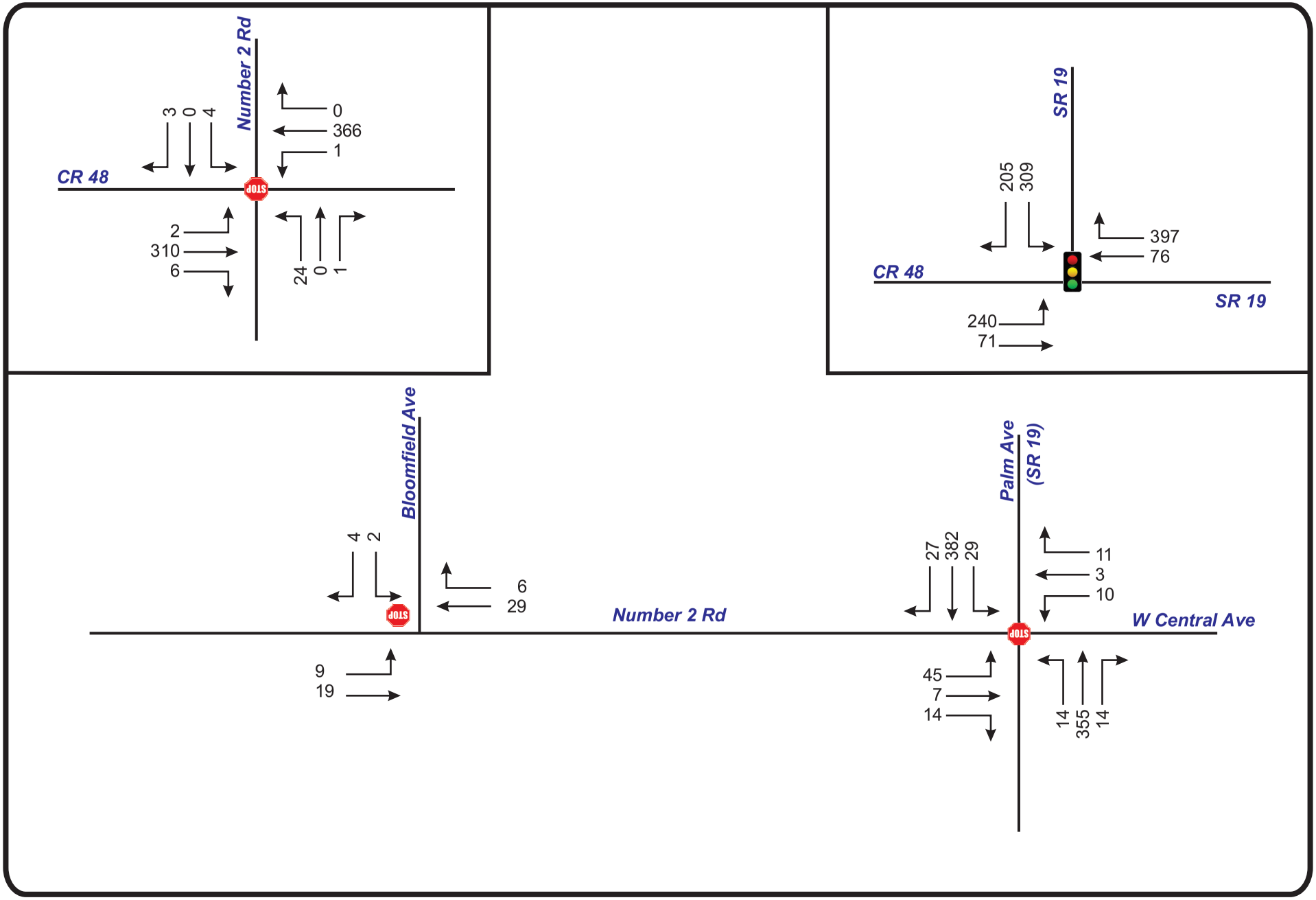
Table 1
Existing Roadway Capacity Analysis

Roadway Segment	Segment ID	No. of Lanes	Adopted		P.M. Peak Hour*		v/c Ratio	LOS
			LOS	Capacity	Peak Direction	Volume		
CR 48								
US 27 to Lime Ave	1240	2	D	1,080	EB	469	0.43	B
Lime Ave to SR 19	1250	2	D	1,080	EB	409	0.38	B
SR 19								
Lane Park Rd to CR 48	3040	2	D	920	SB	652	0.71	C
CR 48 to Central Ave	3050	2	D	700	SB	415	0.59	C
Central Ave to CR 455	3060	2	D	1,200	SB	415	0.35	B
Number 2 Road*								
CR 48 to Bloomfield Ave	---	2	D	675***	WB	26	0.04	C
Bloomfield Ave to SR 19	---	2	D	675***	EB	52	0.08	C

* Based on FDOT and Lake County 2020 traffic counts
** Not included in the County's Database
***Obtained from FDOT Quality/LOS Handbook

Table 2
Existing P.M. Peak Hour Intersection Capacity Analysis

Intersection	Control	Period	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Number 2 Rd & CR 48	Stop	A.M.	0.1	A	0.0	A	17.5	C	14.2	B	--	--
		P.M.	0.1	A	0.1	A	19.7	C	16.2	C	--	--
Number 2 Rd & Bloomfield Ave	Stop	A.M.	2.4	A	--	--	--	--	8.6	A	--	--
		P.M.	1.1	A	--	--	--	--	8.5	A	--	--
Palm Ave & Central Ave	Stop	A.M.	25.9	D	18.0	C	0.5	A	0.9	A	--	--
		P.M.	23.2	C	18.9	C	0.7	A	0.4	A	--	--
CR 48 & SR 19	Signal	A.M.	10.4	B	2.7	A	0.0	A	27.7	C	14.4	B
		P.M.	12.2	B	3.4	A	0.0	A	27.1	C	16.5	B



Howey in the Hills
Project № 5659
Figure 3a

Existing AM Peak Hour Volumes

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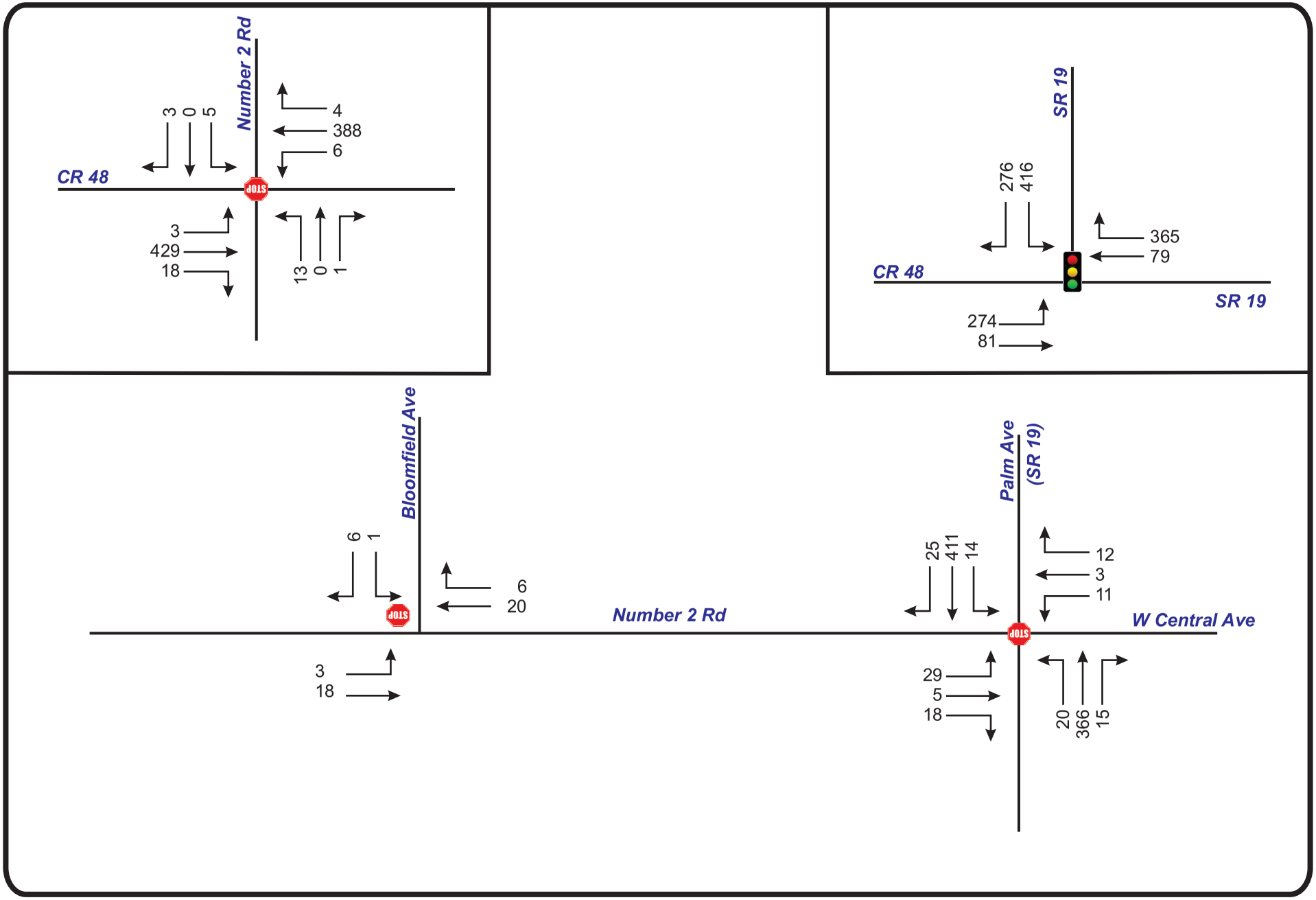

Howey in the Hills
Project № 5659
Figure 3b

Existing PM Peak Hour Volumes

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PROPOSED DEVELOPMENT AND TRIP GENERATION

The proposed development consists of 180 single family homes anticipated to be completed in 2028. Access to the site will be via a full access driveway on Number 2 Road. To determine the impact of this development in the area, an analysis of its trip generation characteristics was conducted.

Trip Generation

The trip generation of the proposed development was calculated with the use of rates obtained from the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual.* A summary of the trip generation calculation is shown in **Table 3**. The ITE trip generation sheets are included in the study methodology in Appendix A.

Table 3
Trip Generation Calculation Summary

ITE Code	Land Use	Size	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate*	Trips	Rate*	Enter	Exit	Total	Rate*	Enter	Exit	Total
210	Single Family Residential	180 DU**	9.63	1,733	0.71	32	95	127	0.96	109	64	173
Total Trips				**1,733**	**---**	**32**	**95**	**127**	**---**	**109**	**64**	**173**

* Equation used, $R^2 > 0.75$
** DU = Dwelling Unit

The development is estimated to generate a total of 1,733 daily trips, of which 127 will occur during the A.M. peak hour and 173 will occur during the P.M. peak hour upon full development.

Trip Distribution and Assignment

A distribution pattern was estimated using the currently adopted CFRPM model with a Select Zone Analysis (SZA). The model trip distribution plot is included in the study methodology. The trip distribution thus determined is shown in **Figure 4**. This distribution pattern was used to distribute and assign the project trips to the study roadways and intersections.

Howey in the Hills
Project № 5659
Figure 4

Trip Distribution

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PROJECTED TRAFFIC CONDITIONS

Projected traffic conditions were analyzed for the study roadway segments for the P.M. peak hour directional volumes and intersections for the A.M. and P.M. peak hours. Projected traffic volumes used in the analysis consisted of background traffic combined with site generated traffic. Background traffic volumes were determined by combining the existing traffic volumes with the approved trips provided by the City from the following developments:

- Whispering Hills
- The Reserve
- Simpson Howey-in-the-Hills
- Talichet PUD
- Mission Rise

The trip information provided by the City for the approved developments is included in **Appendix E.**

Roadway Segment Analysis

The projected roadway segment analysis was performed by comparing the projected traffic volume of each segment with the capacity of the segment at the adopted LOS standard. The analysis as summarized in **Table 4** shows the study segments along with their number of lanes, adopted LOS/capacity, projected traffic volumes and resultant Levels of Service. The roadway segments in the vicinity of the project will continue operate at satisfactory Levels of Service similar to the existing conditions, except for the segment of SR 19 from CR 48 to Central Avenue. This segment will become over-capacity and fail with the addition of the approved 439 peak hour trips alone, which are more than double the existing traffic on the segment. This segment will fail regardless of the addition of the project trips. The project is adding only 34 peak hour trips to this segment.

Table 4
Projected Roadway Capacity Analysis

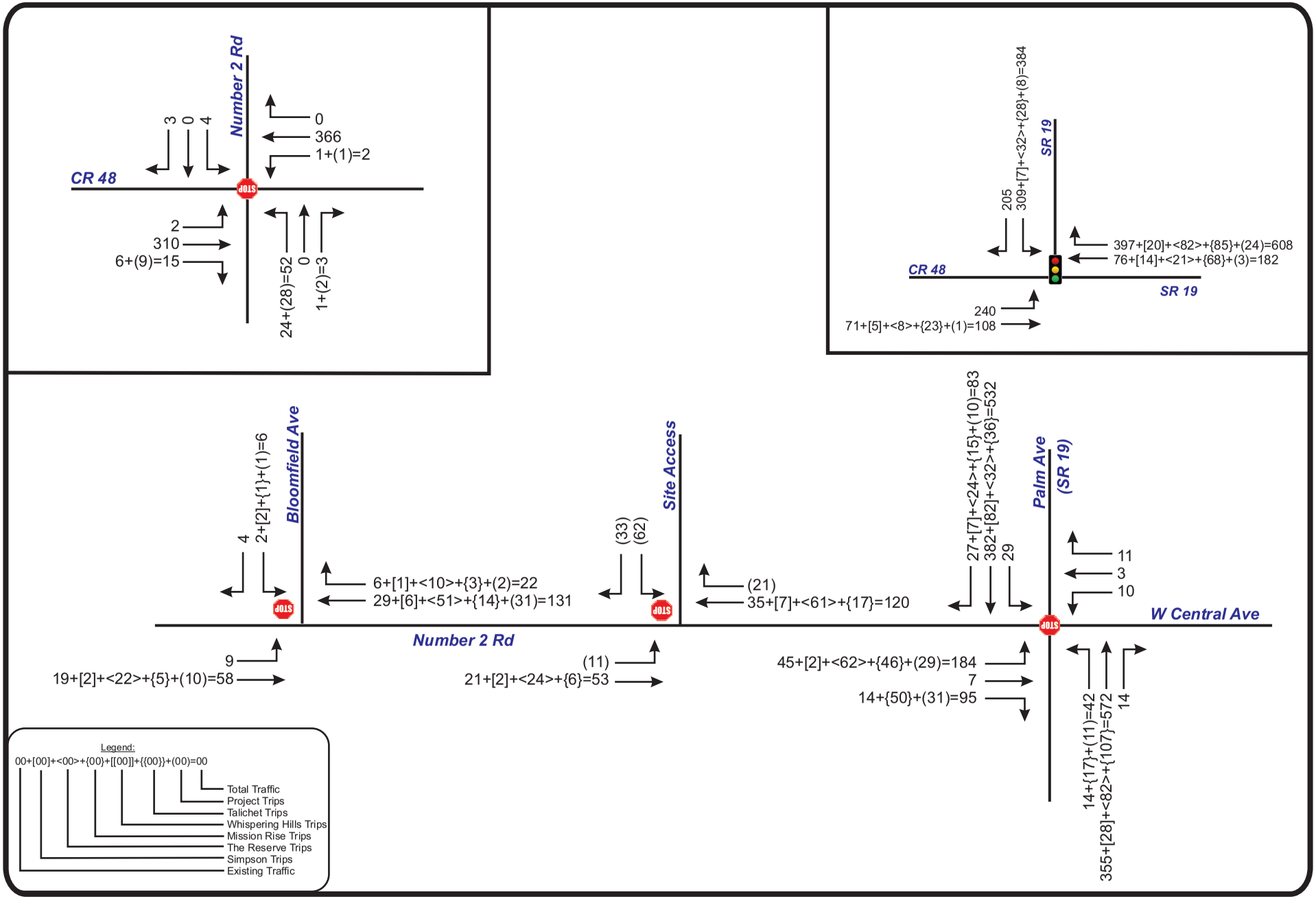
Roadway Segment	No. of Lanes	Adopted		P.M. Peak Hour Peak Direction					
		LOS	Capacity	Direction	Volume	Approved Trips*	Project Trips*	Total	LOS
CR 48									
US 27 to Lime Ave	2	D	1,080	EB	469	123	32	624	C
Lime Ave to SR 19	2	D	1,080	EB	409	159	3	571	C
SR 19									
Lane Park Rd to CR 48	2	D	920	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.



Howey in the Hills
Project № 5659
Figure 5a

Projected AM Peak Hour Volumes

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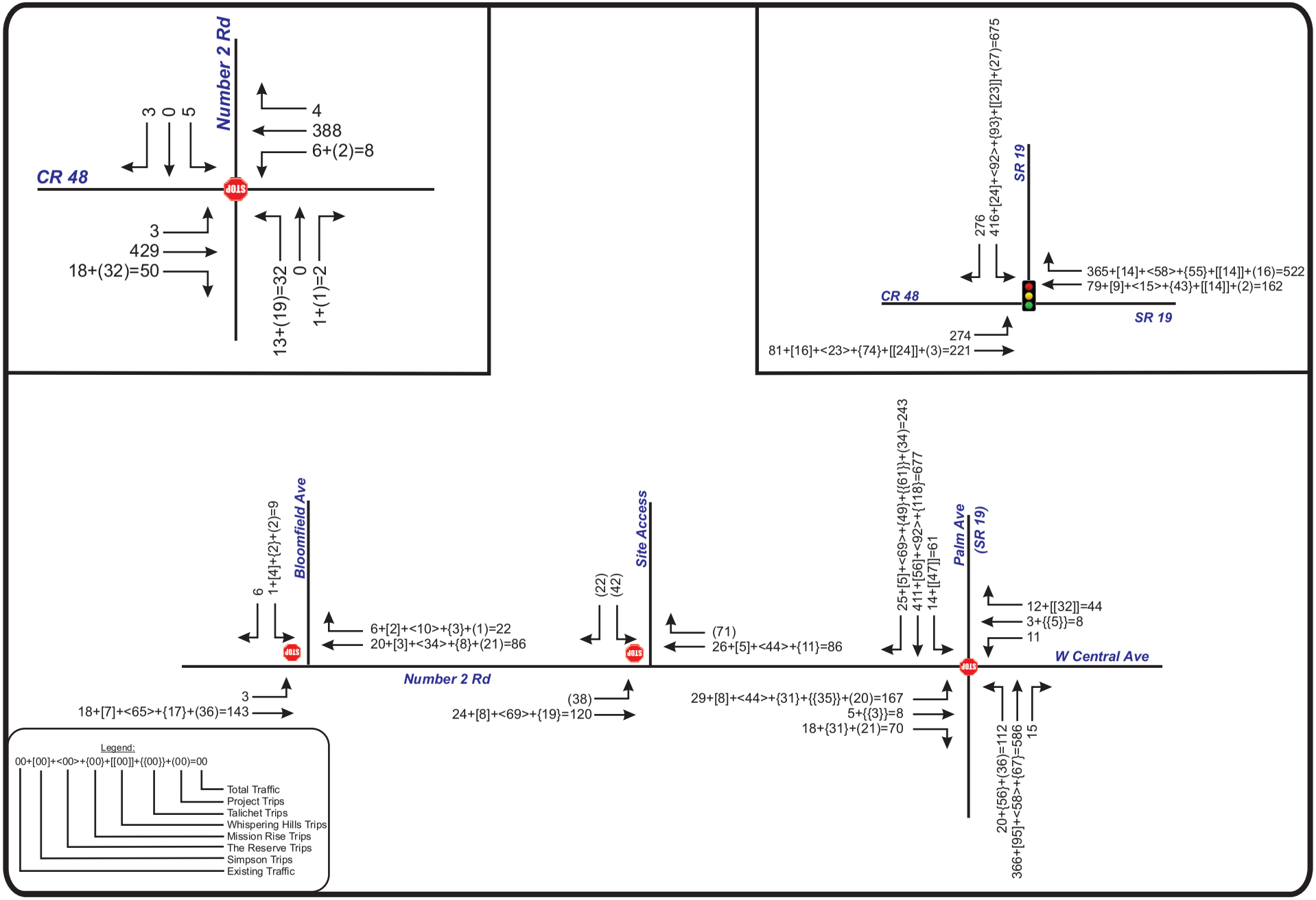

Howey in the Hills
Project № 5659
Figure 5b

Projected PM Peak Hour Volumes

NTS

Table 5
Projected P.M. Peak Hour
Intersection Capacity Analysis

Intersection	Control	Period	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Number 2 Rd & CR 48	Stop	A.M.	0.0	A	0.0	A	19.2	C	14.3	B	--	--
		P.M.	0.1	A	0.2	A	21.8	C	16.2	C	--	--
Number 2 Rd & Bloomfield Ave	Stop	A.M.	1.1	A	--	--	--	--	9.6	A	--	--
		P.M.	0.2	A	--	--	--	--	9.6	A	--	--
Palm Ave & Central Ave	Stop	A.M.	935.5	F	45.8	E	1.5	A	1.0	A	--	--
		P.M.	6309.4	F	352.9	F	6.0	A	2.5	A	--	--
CR 48 & SR 19	Signal	A.M.	12.0	B	4.5	A	--	--	51.9	D	22.2	C
		P.M.	13.2	B	5.1	A	--	--	138.8	F	66.7	E
CR 48 & SR 19 – Opt. Signal Timing	Signal	A.M.	13.2	B	5.0	A	--	--	22.2	C	12.5	B
		P.M.	20.3	C	6.7	A	--	--	32.7	C	21.5	C
Number 2 Rd & Site Access	Stop	A.M.	1.4	A	--	--	--	--	10.2	B	--	--
		P.M.	2.0	A	--	--	--	--	10.7	B	--	--

The intersection of Palm Avenue and Central Avenue was reanalyzed with the background traffic only by removing the project trips from the intersection. The results summarized below for both the A.M. and P.M. peak hours show that the intersection will fail without the addition of the project trips.

Table 6
Palm Ave & Central Ave
Analysis with Background Traffic Only

Intersection	Control	Period	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Palm Ave & Central Ave	Stop	A.M.	643.4	F	39.2	E	1.1	A	1.0	A	--	--
		P.M.	3438.3	F	155.9	F	3.9	A	2.4	A	--	--

Turn Lane Analysis

An analysis was conducted for the proposed driveway on Number 2 Road to determine if turn lanes would be warranted. Based upon the procedures of the NCHRP Report 457, Evaluating Intersection Improvements, right and left turns lanes are not warranted. The warrant charts are included in **Appendix G**. The site access driveway is located on a curve with sight distance concerns. Therefore, the Developer will consider the construction of turn lanes as follows:

Left turn lane length (TL) = Deceleration Distance (DD) + Queue Length (QL)

DD = 290 feet for 50 mph design speed (As per FDM 212)

QL = 0.1 vehicles (from HCS P.M. analysis, 25 feet per vehicle, minimum 1 vehicle)

TL = 290 + 25 = 315 feet

Right turn lane length (TL) = Deceleration Distance (DD) + Queue Length (QL)

DD = 290 feet for 50 mph design speed (As per FDM 212)

QL = 0 vehicles (from HCS P.M. analysis, 25 feet per vehicle)

TL = 290 + 0 = 290 feet

STUDY CONCLUSIONS

This traffic analysis was performed to assess the impact of a proposed residential development in Howey-in-the-Hills, Lake County. The proposed development consists of 180 single family homes to be completed by 2028. The results of the study as documented herein are summarized below:

- The development is expected to generate 1,733 new net daily trips, of which 127 will occur in the A.M. peak hour and 173 will occur during the P.M. peak hour.

- The study roadway segments currently operate at satisfactory Levels of Service in the existing conditions and will continue to do so upon completion of the project in 2028, except for the segment of SR 19 from CR 48 to Central Avenue. This segment will fail with the addition of approved project trips which are more than double the existing traffic on the segment.

- The study intersections currently operate at overall satisfactory Level of Service. In the projected conditions, the intersections will continue to operate at a satisfactory Level of Service with project trips added, except for the intersection of Palm Avenue and Central Avenue. This intersection will have a failing eastbound approach due to the existing stop control. This condition will continue to prevail until a signal becomes warranted and installed.

- The proposed development will be served by a full access driveway on Number 2 Road which is projected to operate satisfactorily. Based upon the procedures of the NCHRP Report 457, turn lanes are not warranted at the driveway. While not required, the Developer will consider the construction of turn lanes to address sight distance concerns.

APPENDICES

APPENDIX A

Study Methodology and Related Correspondence

Turgut Dervish

From: Tom Harowski <tom@tmhconsultinginc.com>
Sent: Friday, June 17, 2022 2:07 PM
To: Turgut Dervish
Cc: Don Griffey; Sean O'Keefe; John Brock
Subject: RE: TPD#5659

Okay. Let's go to work.

Thomas A. Harowski, AICP
President
Please make note of my NEW email address: Tom@TMHConsultingInc.com
(386) 316-8426

From: Turgut Dervish <turgut@tpdtraffic.com>
Sent: Tuesday, June 14, 2022 1:49 PM
To: Tom Harowski <tom@tmhconsultinginc.com>
Cc: Don Griffey <dag@griffeyengineering.com>; Sean O'Keefe <sokeefe@howey.org>; John Brock <jbrock@howey.org>
Subject: RE: TPD#5659

Tom,
Table 2 is the significance test showing the project's highest impacts on the roadway segments. You are correct that 100% of the trips end up on Number 2 Road but with 65% going east and 35% going west. Therefore, the project's highest percent impact on Number2 Road is 65%. In the analysis, the segment was broken into two subsegments at the request I of the county. As for the distribution map leaking percentages, the trips go to different destinations (represented by traffic zones in the traffic model) along the way. Of the 35% of the trips going west on Number 2 Road, only 31% reach CR 48 with 4% having destinations along Number 2 Road, of which 2% was assigned to Bloomfield Avenue. Of the 65% of the trips going east on Number 2 Road, 64% reach SR 19 with 33% going south and 31% going north. The same happens on SR 19 between Number 2 Road an CR 48 where 4% is lost due to trip destinations along the segment. In the graphical presentation of the trips, we showed the highest trip percentage on each segment. Detailed percentages are shown on the model distribution plot.

Turgut Dervish, P.E., President
TRAFFIC PLANNING AND DESIGN, INC.
535 Versailles Drive
Maitland, Florida 32751
407-628-9955
turgut@tpdtraffic.com

From: Tom Harowski <tom@tmhconsultinginc.com>
Sent: Monday, June 13, 2022 3:30 PM
To: Turgut Dervish <turgut@tpdtraffic.com>
Cc: Don Griffey <dag@griffeyengineering.com>; Sean O'Keefe <sokeefe@howey.org>; John Brock <jbrock@howey.org>
Subject: RE: TPD#5659

Your proposal and response still has me confused. On Table 2 which you cite as correct has 65% of the trips impacting Number 2 Road between CR 48 and SR 19. Since Number 2 Road is the only access to the project, why is the impact not 100%? The distribution map shows the split on Number 2 road as 35% west and 65% east, but the Table 2 seems to contradict this assignment. It seems to me the full project volume could affect the significance of impact to some roads.

The distribution map also seems to leak traffic percentages, and I don't understand where these trips go. For example, the 35% westbound on Number 2 Road drops to 33% at Bloomfield Ave. where 2% of the trips are shown as taking Bloomfield Ave, but at CR 48 the total volume drops to 31% with 29% west on CR 48 and 2% east on CR 48. Where did the other two percent go? The same thing happens on Number 2 Road at SR 19 where 31% goes north and 33% of the 65% goes south. We lose 1% here. At SR 19 and CR 48 25% of the 31% goes east and 3% continues on CR 48, so another 3% of the volume is unaccounted. Are this trips stopping in Howey proper?

Thomas A. Harowski, AICP
President
Please make note of my NEW email address: Tom@TMHConsultingInc.com
(386) 316-8426

From: Turgut Dervish <turgut@tpdtraffic.com>
Sent: Tuesday, June 7, 2022 4:08 PM
To: Tom Harowski <tom@tmhconsultinginc.com>; Lewis, Sharon E <SELewis@lakecountyfl.gov>; tmhconsulting@cfl.rr.com
Cc: Rita Merhi <rita@tpdtraffic.com>; John Brock <jbrock@howey.org>; Sean O'Keefe <sokeefe@howey.org>; Don Griffey <dag@griffeyengineering.com>
Subject: RE: TPD#5659

Tom,
The trip distribution map shows the highest percent distribution on any segment. When a roadway segment has more than one distribution, the higher is depicted on the map for illustration purposes. For example, the segment of SR 19 between CR 48 and Central Avenue has a trip distribution ranging from 27% to 31%. In this instance the higher 31% used in impact assessment was shown on the map. The detailed distributions are shown in the model distribution plot included in the appendix of the TIA. For reference, attached are the trip distribution map and the model distribution plot. We also checked the tables and they are correct. If you have any further comments/questions, please t do not hesitate to bring to our attention. We will be glad to provide clarification and/or response with additional information.
Turgut

Turgut Dervish, P.E., President
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407-628-9955
turgut@tpdtraffic.com

From: Tom Harowski <tom@tmhconsultinginc.com>
Sent: Monday, June 6, 2022 1:36 PM
To: Turgut Dervish <turgut@tpdtraffic.com>; Lewis, Sharon E <SELewis@lakecountyfl.gov>; tmhconsulting@cfl.rr.com
Cc: Rita Merhi <rita@tpdtraffic.com>; John Brock <jbrock@howey.org>; Sean O'Keefe <sokeefe@howey.org>; Don Griffey <dag@griffeyengineering.com>
Subject: RE: TPD#5659

The distributions still don't add up properly and the tables in the text still need to be corrected. PLEASE HAVE SOMEONE PROOFREAD THE SUBMITTAL AND MAKE THE NECESSARY EDITS.

Thomas A. Harowski, AICP
President
Please make note of my NEW email address: Tom@TMHConsultingInc.com
(386) 316-8426

Rita Merhi

From: Lewis, Sharon E <SELewis@lakecountyfl.gov>
Sent: Wednesday, May 25, 2022 2:50 PM
To: Turgut Dervish; tmhconsulting@cfl.rr.com
Cc: Rita Merhi
Subject: RE: TPD#5659
Attachments: Markup 5659 Residential Development-Howey-in-the-Hills Methodology 052422.pdf

Dervish,

Please see comments in the attached . Thanks

SHARON E LEWIS, MSCTM
Traffic Project Engineer

PUBLIC WORKS
Engineering

A P.O Box 7800, Tavares, FL 32778
P 352-253-9050 | F 352-253-6016
E selewis@lakecountyfl.gov | W www.lakecountyfl.gov

From: Turgut Dervish <turgut@tpdtraffic.com>
Sent: Tuesday, May 24, 2022 12:27 PM
To: Lewis, Sharon E <SELewis@lakecountyfl.gov>; tmhconsulting@cfl.rr.com
Cc: Rita Merhi <rita@tpdtraffic.com>
Subject: FW: TPD#5659

Sharon/Tom,
Attached is our proposed traffic study methodology for a residential project located on Number 2 Road in Howey-in-the-Hills, Lake County for your review. Please call if you have questions.
Thanks,
Turgut

Turgut Dervish, P.E., President
TRAFFIC PLANNING AND DESIGN, INC.
535 Versailles Drive
Maitland, Florida 32751
407-628-9955
turgut@tpdtraffic.com

Table 2
Significance Analysis

Roadway Segment	# of Lns	Adopted		Existing		PHPD Trips		Project Trips as % of Capacity	Significance*
		LOS	Capacity	Direction	Volume	%	Volume		
CR 48									
US 27 to Lime Ave	2L	D	1,080	EB	469	29%	43	3.9%	No
Lime Ave to SR 19	2L	D	1,080	EB	409	3%	4	0.4%	No
SR 19									
Lane Park Rd to CR 48	2L	D	920	SB	652	25%	37	4.0%	No
CR 48 to Central Ave	2L	D	700	SB	415	31%	46	6.6%	Yes
Central Ave to CR 455	2L	D	1,200	SB	4150	33%	49	4.1%	No
Number 2 Road									
CR 48 to SR 19	2L	D	675	WB	28	65%	96	14.2%	Yes

* Project as % of Capacity
** Not Included in the County's Database

5. Traffic Impact Assessment

a) Roadway

- Obtain existing traffic volumes on study roadway segment from Lake County for use in the traffic analysis.
- Determine background traffic with the use of an annual growth rate obtained from historical AADT in the vicinity of the project plus vested trips obtained from the City/County.
- Combine project traffic with background traffic to obtain total traffic volumes.
- Perform P.M. peak hour/peak direction roadway analyses utilizing City/County LOS standards.

b) Intersections

- Conduct intersection counts or use factors to adjust intersection data during the A.M./P.M. peak periods at the study intersections.
- Determine background traffic by expanding existing traffic counts to the project's buildout year plus committed trips provided by the County.
- Combine project traffic with background traffic to obtain total traffic.

3 comments

PAGE 5 1

selewis May 25

Split percentage does not add up

PAGE 6 2

selewis May 25

A High Plan will need to be conducted

selewis May 25

Please split the segment at Bloomfield Ave (East of/West of)

TO: Sharon Lewis, MS
Lake County Public Works
Thomas A. Harowski
Howey-in-the-Hills Town Planner

FROM: Turgut Dervish, P.E.

DATE: May 24, 2022

RE: Traffic Impact Analysis Methodology
Residential Development, Howey-in-the-Hills, Florida
TPD No. 5659

The following is an outline of the proposed methodology for the Traffic Impact Study for a residential development in Howey-in-the Hills, Lake County. The project site is located on the north side of Number 2 Road approximately 2 miles west of the SR 19 (Palm Avenue). **Figure 1** depicts the site location and the area roadways.

1. Proposed Development

The proposed development will consist of 250 single family lots. The development is anticipated to be built by 2025. **Figure 2** depicts the conceptual site plan.

2. Trip Generation

Trip generation data from the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual* will be used for the trip generation estimation of the development. **Table 1** provides a summary of the trip generation for the proposed development calculated with the ITE data. The project is expected to generate a total of 2,344 daily trips of which 172 will occur during the A.M. peak hour and 235 will occur during P.M. peak hour. The ITE trip generation worksheets are included in **Attachment A**.

Table 1
Trip Generation Calculation Summary

ITE Code	Land Use	Quantity	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate*	Trips	Rate*	Enter	Exit	Total	Rate*	Enter	Exit	Total
210	Single-Family Detached	250 DU**	9.38	2,344	0.69	45	127	172	0.94	148	57	235
Totals				**2,344**	---	**45**	**127**	**172**	---	**148**	**57**	**235**

*ITE Equations Used, R^2 >0.75.
**DU=Dwelling Units

Howey in the Hills
Project № 5659
Figure 1

Site Location

N
NTS

Howey in the Hills
Project № 5659
Figure 2

Conceptual Site Plan

N
NTS

3. Trip Distribution

The trip distribution pattern for the proposed project was estimated using the currently adopted Central Florida Regional Planning Model (CFRPM). A Select Zone Analysis (SZA) was conducted by modifying the 2030 interim year model network to include a Traffic Analysis Zone (TAZ) representing the proposed project and the model's socio-economic data updated to reflect the proposed project buildout. The trip distribution in the project vicinity is shown in **Figure 3.** The model distribution plot is included in **Attachment B**.

4. Impact Area

As per the Lake Sumter MPO TIS guidelines, a Tier 2 Traffic Impact Study (TIS) is required for this project. A minimum of one-mile impact area plus all roadway which the project trips consume 5% or more of the roadway capacity. Based upon the project's significance as per **Table 2**, the following roadway segments and intersections will be included in the analysis as a minimum:

The roadway segments to be included in the analysis:

- Number 2 Road
  - CR 48 to SR 19 (Palm Avenue)
- CR 48
  - US 27 to Lime Avenue
  - Lime Avenue to SR 19
- SR 19
  - Lane Park Road to CR 48
  - CR 48 to Central Avenue
  - Central Avenue to CR 455

The intersections to be included in the area analysis are:

- Number 2 Road and CR 48
- CR 48 and SR 19
- Number 2 Road (Central Avenue) and SR 19
- Site Entrance

Howey in the Hills
Project № 5659
Figure 3

Trip Distribution

N
NTS

Table 2
Significance Analysis

Roadway Segment	# of Lns	Adopted		Existing		PHPD Trips		Project Trips as % of Capacity	Significance*
		LOS	Capacity	Direction	Volume	%	Volume		
CR 48									
US 27 to Lime Ave	2L	D	1,080	EB	469	29%	43	3.9%	No
Lime Ave to SR 19	2L	D	1,080	EB	409	3%	4	0.4%	No
SR 19									
Lane Park Rd to CR 48	2L	D	920	SB	652	25%	37	4.0%	No
CR 48 to Central Ave	2L	D	700	SB	415	31%	46	6.6%	Yes
Central Ave to CR 455	2L	D	1,200	SB	4150	33%	49	4.1%	No
Number 2 Road **									
CR 48 to SR 19	2L	D	675	WB	28	65%	96	14.2%	Yes

* Project as % of Capacity
** Not Included in the County's Database

5. Traffic Impact Assessment

a) Roadway

- Obtain existing traffic volumes on study roadway segment from Lake County for use in the traffic analysis.
- Determine background traffic with the use of an annual growth rate obtained from historical AADT in the vicinity of the project plus vested trips obtained from the City/County.
- Combine project traffic with background traffic to obtain total traffic volumes.
- Perform P.M. peak hour/peak direction roadway analyses utilizing City/County LOS standards.

b) Intersections

- Conduct intersection counts or use factors to adjust intersection data during the A.M./P.M. peak periods at the study intersections.
- Determine background traffic by expanding existing traffic counts to the project's buildout year plus committed trips provided by the County.
- Combine project traffic with background traffic to obtain total traffic.

- Perform intersection capacity analysis utilizing the HCS operational analysis procedures for the A.M./P.M. peak hour.

6. Traffic Report

Prepare traffic report summarizing study procedures, analyses and recommendations.
If you have any questions or concerns, please contact us at (407) 628-9955.

Attachment A
ITE Trip Generation Sheets

Single-Family Detached Housing
(210)

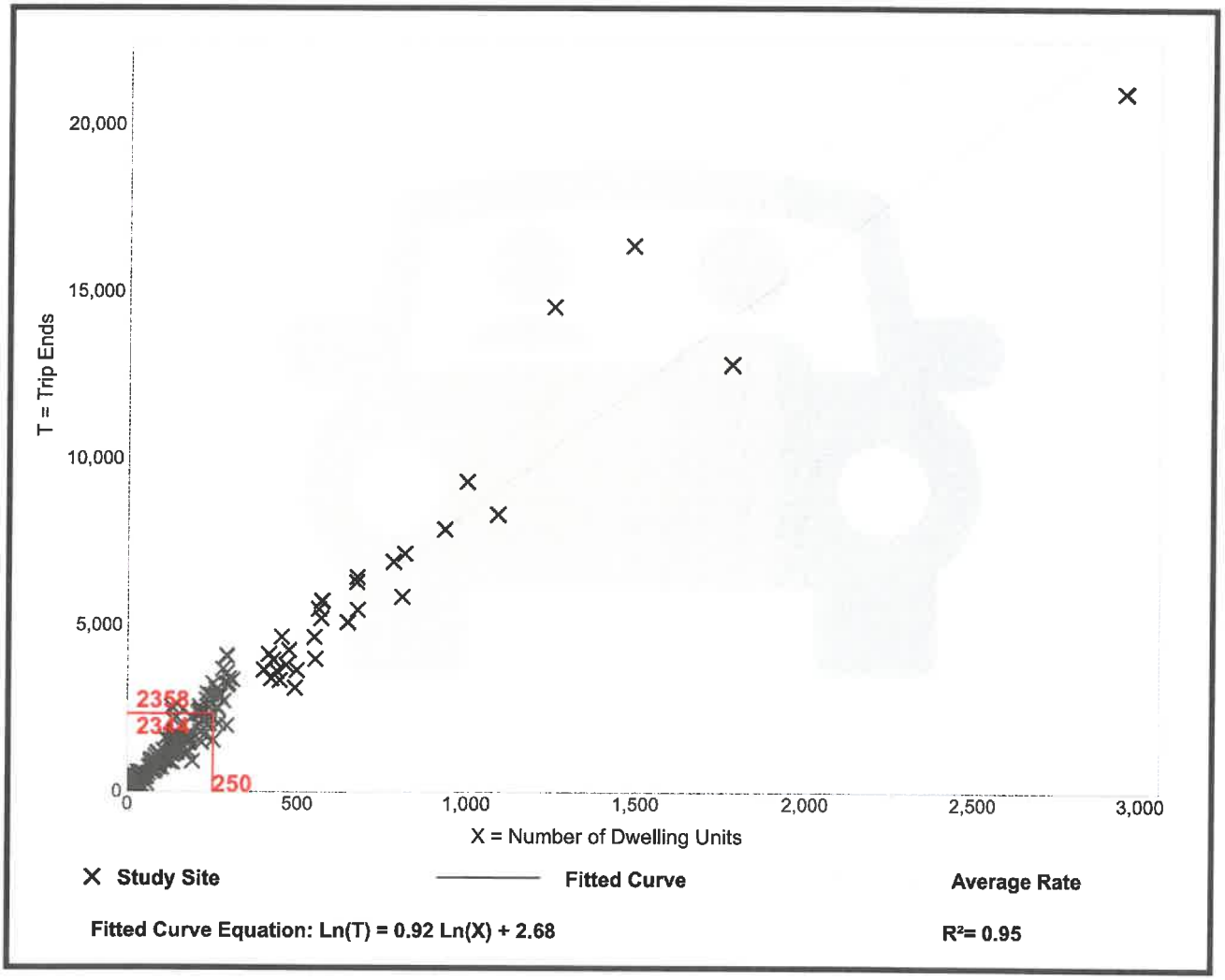
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

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



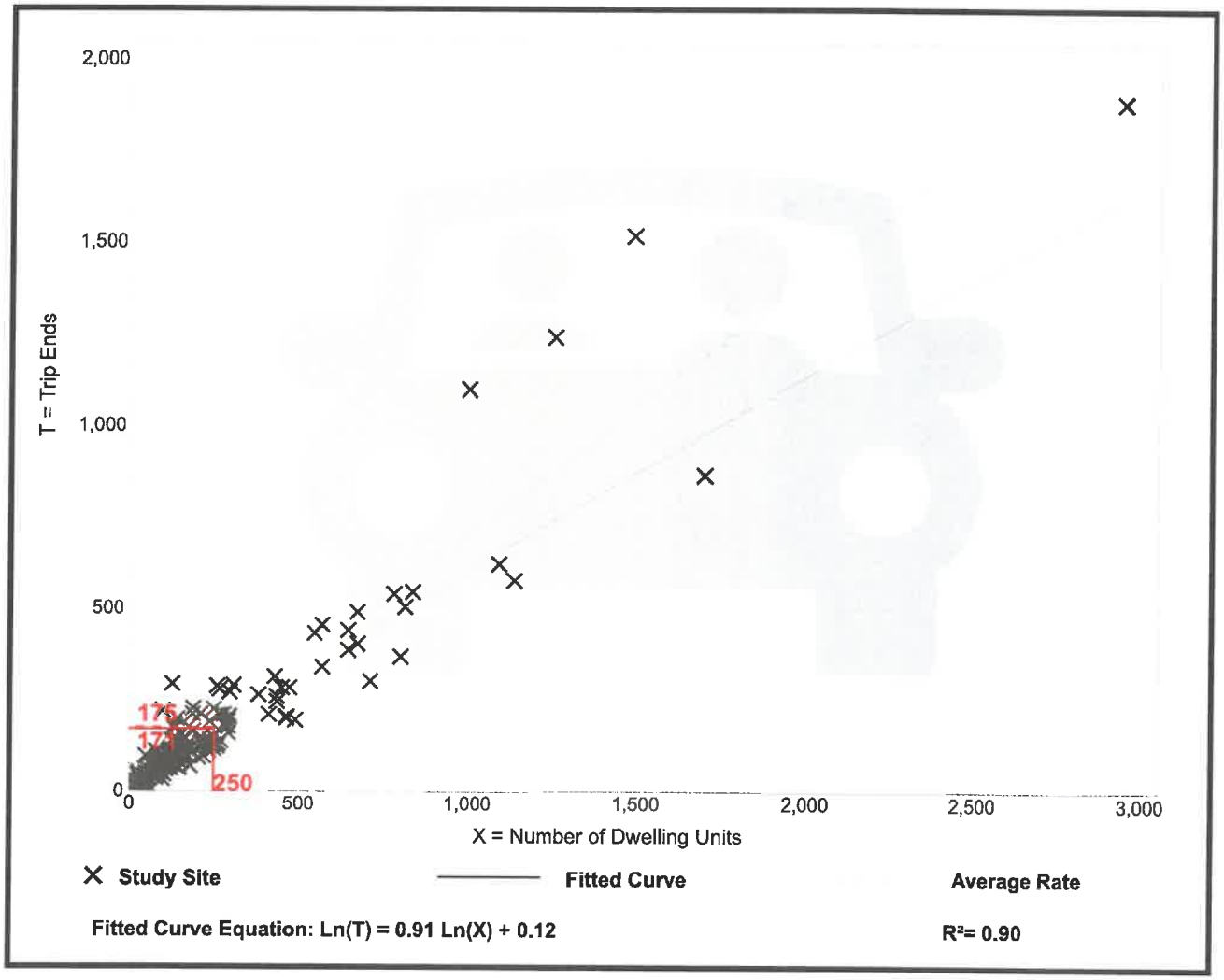
Single-Family Detached Housing
(210)

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:	26% entering, 74% 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



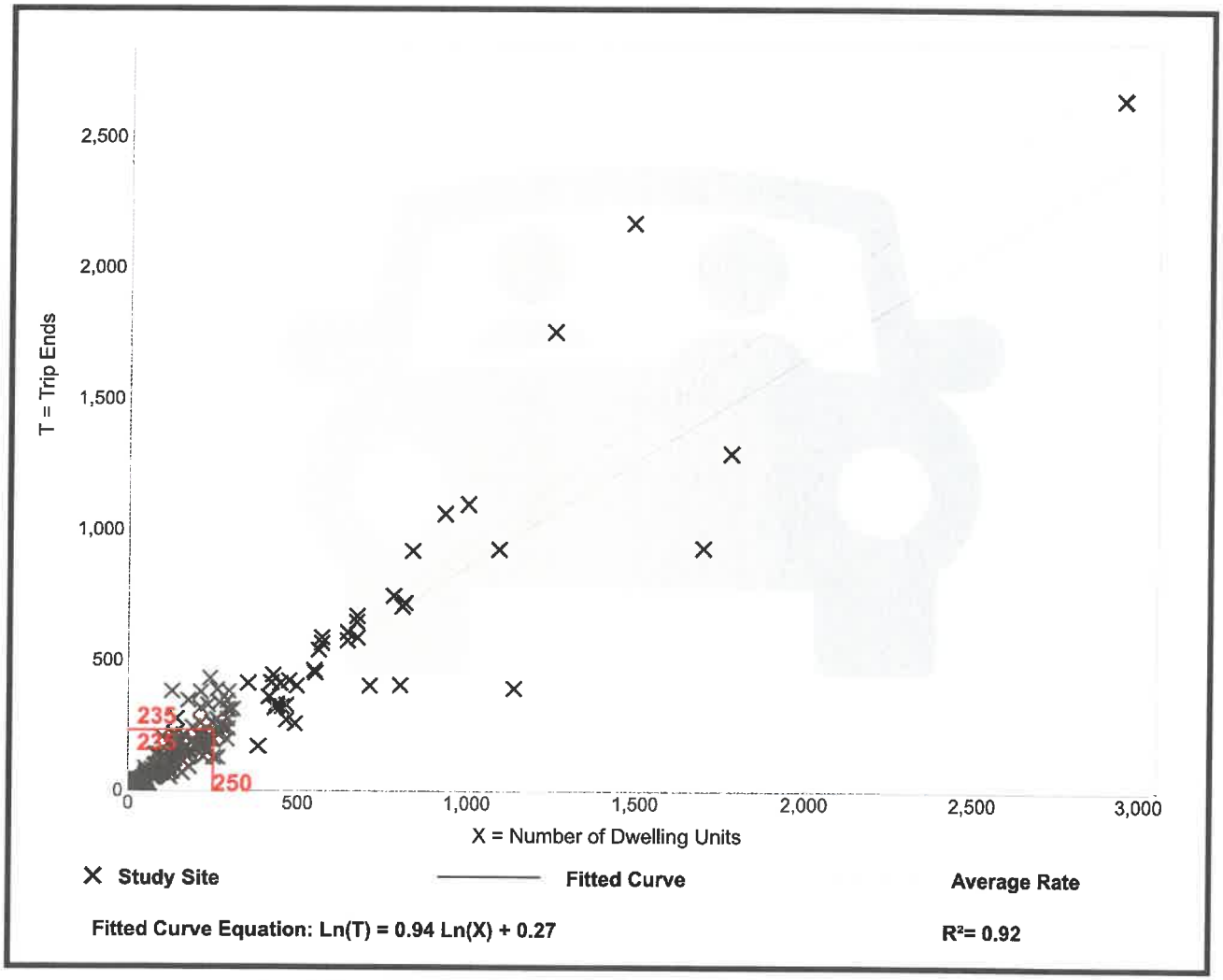
Single-Family Detached Housing
(210)

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

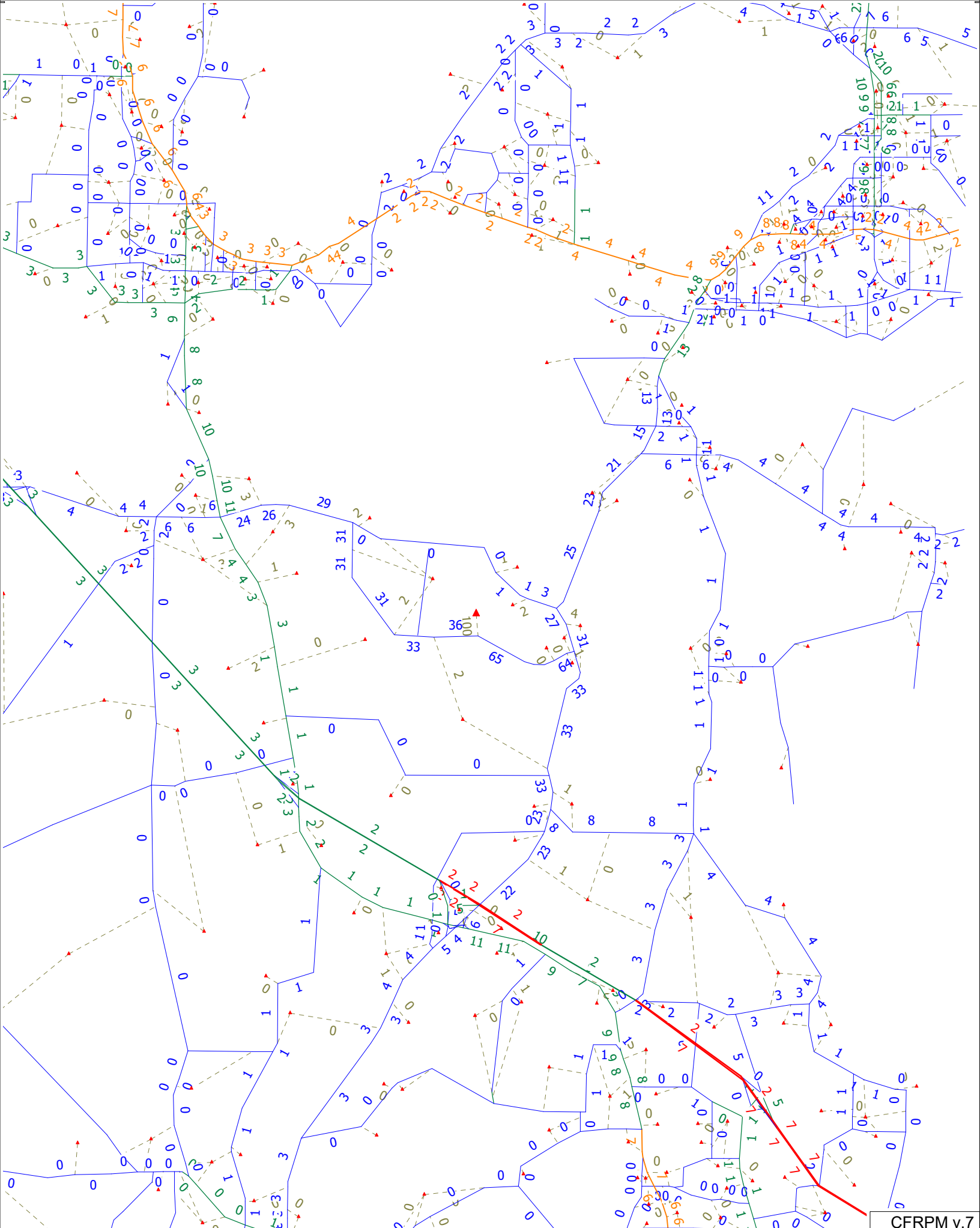
Vehicle Trip Generation per Dwelling Unit

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

Data Plot and Equation



Attachment B
Model Distribution Plot



CFRPM v.7

cube

TPD#5659

(Licensed to)

APPENDIX B

Lake County 2022 CMP Database

SEGMENT ID	COUNTY STATION	FDOT STATION	DATA SOURCE	SPEED LIMIT	SEGMENT LENGTH (MI)	ROAD NAME	FROM	TO	LANES (2022)	LANES (2027)	URBAN / RURAL	DIVIDED / UNDIVIDED	MAINTAINING AGENCY	JURISDICTION	ADOPTED LOS STANDARD	DAILY SERVICE VOLUME	2022 AADT	2022 DAILY V/C	2022 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME	2022 PEAK HOUR NB/EB VOLUME	2022 PEAK HOUR SB/WB VOLUME	2022 PEAK HOUR V/C	2022 PEAK HOUR LOS	GROWTH RATE	DAILY SERVICE VOLUME (2027)	2027 AADT	2027 DAILY V/C	2027 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME (2027)	2027 PEAK HOUR NB/EB VOLUME	2027 PEAK HOUR SB/WB VOLUME	2027 PEAK HOUR V/C	2027 PEAK HOUR LOS
1120	480		County	35	1.80	C.R. 468	PINE RIDGE DAIRY ROAD	GRIFFIN ROAD	2	2	URBAN	UNDIVIDED	COUNTY	FRUITLAND PARK	D	13,320	7,736	0.58	D	680	343	384	0.56	D	3.00%	13,320	8,968	0.67	D	680	398	445	0.65	D
1130	436		County	45	1.13	C.R. 468	GRIFFIN ROAD	SR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	9,173	0.74	C	620	440	404	0.71	C	1.75%	12,390	10,005	0.81	C	620	480	440	0.77	C
1145	612		County	55	3.65	C.R. 46A REALIGNMENT	SR 44	SR 46	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	16,576	2.14	E	410	663	857	2.09	E	3.50%	7,740	19,687	2.54	E	410	788	1,018	2.48	E
1150	267		County	55	0.94	C.R. 470	SUMTER COUNTY LINE	FLORIDA TURNPIKE	2	4	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	13,300	11,303	0.85	D	690	530	376	0.77	D	8.50%	28,880	16,996	0.59	C	1,500	797	566	0.53	C
1155	266		County	55	2.39	C.R. 470	FLORIDA TURNPIKE	BAY AVENUE	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,600	8,826	0.70	D	660	436	278	0.66	D	1.00%	12,600	9,276	0.74	D	660	458	292	0.69	D
1160	266		ADJACENT	55	0.54	C.R. 470	BAY AVENUE	CR 33	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	8,826	0.71	C	620	436	278	0.70	C	1.00%	12,390	9,276	0.75	C	620	458	292	0.74	C
1170	499		County	35	2.99	C.R. 473	CR 44	FOUNTAIN LAKE BOULEVARD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	14,060	6,957	0.49	D	710	322	242	0.45	C	1.00%	14,060	7,312	0.52	D	710	338	255	0.48	C
1180	443		County	40	1.03	C.R. 473	FOUNTAIN LAKE BOULEVARD	US 441	4	4	URBAN	DIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	35,820	14,713	0.41	C	1,800	811	461	0.45	C	1.00%	35,820	15,464	0.43	C	1,800	852	485	0.47	C
1190	4		County	55	5.21	C.R. 474	SR 33	GREEN SWAMP ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	5,962	0.77	C	410	151	240	0.59	C	2.50%	7,740	6,745	0.87	C	410	171	272	0.66	C
1200	3		County	55	3.35	C.R. 474	GREEN SWAMP ROAD	US 27	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	5,436	0.70	C	410	173	202	0.49	B	1.00%	7,740	5,713	0.74	C	410	182	212	0.52	B
1210	222		County	45	5.99	C.R. 478	SR 19	JAMARLY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF GROVELAND	D	21,780	2,244	0.10	B	1,080	112	93	0.10	B	7.75%	21,780	3,259	0.15	B	1,080	162	135	0.15	B
1220	259		County	55	3.17	C.R. 48	SUMTER COUNTY LINE	CLEARWATER LAKE RD	2	2	RURAL	UNDIVIDED	COUNTY	CITY OF LEESBURG	C	7,740	3,504	0.45	B	410	112	180	0.44	B	4.25%	7,740	4,315	0.56	C	410	138	222	0.54	C
1225	248		County	55	2.41	C.R. 48	CLEARWATER LAKE RD	CR 33	2	2	RURAL	UNDIVIDED	COUNTY	CITY OF LEESBURG	C	7,740	3,327	0.43	B	410	123	206	0.50	B	1.75%	7,740	3,629	0.47	B	410	134	224	0.55	C
1230	263		County	45	0.46	C.R. 48	CR 33	HAYWOOD WORM FARM RD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	15,930	8,836	0.55	C	790	370	297	0.47	C	2.75%	15,930	10,120	0.64	C	790	424	340	0.54	C
1235	262		County	45	0.68	C.R. 48	HAYWOOD WORM FARM RD	US 27	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	9,073	0.54	C	840	401	375	0.48	C	1.00%	16,820	9,536	0.57	C	840	421	394	0.50	C
1240	264		County	40	4.89	C.R. 48	US 27	LIME AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	9,821	0.45	C	1,080	420	380	0.39	B	4.00%	21,780	11,949	0.55	C	1,080	511	462	0.47	B
1250	255		County	40	2.04	C.R. 48	LIME AVENUE	SR 19	2	2	URBAN	UNDIVIDED	COUNTY	HOWEY-IN-THE-HILLS	D	21,780	9,982	0.46	B	1,080	429	404	0.40	B	1.50%	21,780	10,754	0.49	C	1,080	462	435	0.43	B
1260	253		County	40	1.14	C.R. 48	CR 561	RANCH ROAD	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF ASTATULA	D	16,820	6,515	0.39	C	840	310	292	0.37	C	1.00%	16,820	6,847	0.41	C	840	326	307	0.39	C
1270	253		ADJACENT	40	3.17	C.R. 48	RANCH ROAD	CR 448A	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	6,515	0.84	C	410	310	292	0.76	C	1.00%	7,740	6,847	0.88	C	410	326	307	0.80	C
1280	217		County	30	0.71	C.R. 50 (SUNSET AVENUE)	CR 33	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MASCOTTE	D	10,360	1,592	0.15	C	530	66	95	0.18	C	1.75%	10,360	1,736	0.17	C	530	72	104	0.20	C
1290	210		County	45	1.74	C.R. 50	US 27	N HANCOCK ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MINNEOLA	D	16,820	6,981	0.42	C	840	285	346	0.41	C	1.00%	16,820	7,337	0.44	C	840	299	363	0.43	C
1300	202		County	45	2.47	C.R. 50	N HANCOCK ROAD	CR 455	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	6,877	0.32	B	1,080	228	491	0.45	B	2.00%	21,780	7,593	0.35	B	1,080	251	542	0.50	C
1310	42		County	45	1.92	C.R. 50	CR 455	ORANGE COUNTY LINE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	6,828	0.41	C	840	195	557	0.66	C	1.00%	16,820	7,176	0.43	C	840	205	585	0.70	C
1320	417		County	35	1.08	C.R. 500A/ OLD 441	SR 19	DORA AVENUE	2	2	URBAN	DIVIDED	COUNTY	CITY OF TAVARES	D	8,390	9,907	1.18	F	870	367	450	0.52	D	1.00%	8,390	10,412	1.24	F	870	386	473	0.54	D
1325	417		County	35	1.08	C.R. 500A/ OLD 441	DORA AVENUE	SR 19	2	2	URBAN	DIVIDED	COUNTY	CITY OF TAVARES	D	8,390	9,907	1.18	F	870	367	450	0.52	D	1.00%	8,390	10,412	1.24	F	870	386	473	0.54	D
1330	413	115084	County	45	1.94	C.R. 500A/OLD 441/ALFRED ST	DORA AVENUE	BAY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	16,820	9,558	0.57	C	840	489	424	0.58	C	1.00%	16,820	10,045	0.60	C	840	514	446	0.61	C
1340	420		County	35	0.79	C.R. 500A/OLD 441	BAY ROAD	CR 44C / EUDORA AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	9,917	0.96	D	530	465	458	0.88	D	2.50%	10,360	11,220	1.08	F	530	526	518	0.99	D
1350	421		County	35	1.06	C.R. 500A/OLD 441	CR 44C / EUDORA DRIVE	LAKESHORE DRIVE	2	2	URBAN	DIVIDED	COUNTY	CITY OF MOUNT DORA	D	14,760	16,591	1.12	F	750	725	761	1.01	E	4.25%	14,760	20,430	1.38	F	750	893	937	1.25	F
1360	415		County	35	0.79	C.R. 500A/OLD 441	LAKESHORE DRIVE	5TH AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	11,207	1.08	F	530	469	505	0.95	D	4.25%	10,360	13,800	1.33	F	530	577	621	1.17	F
1370	415		ADJACENT	25	0.63	C.R. 500A/ 5TH AVENUE	OLD 441	N HIGHLAND STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	11,207	1.08	F	530	469	505	0.95	D	4.25%	10,360	13,800	1.33	F	530	577	621	1.17	F
1380	605		ADJACENT	30	0.26	C.R. 500A (HIGHLAND STREET)	5TH AVENUE	SR 46	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	13,320	2,792	0.21	C	680	179	127	0.26	C	3.50%	13,320	3,316	0.25	C	680	213	150	0.31	C
1390	602	115004	County	35	0.75	C.R. 500A/ OLD 441	SR 46	ORANGE COUNTY LINE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	5,849	0.56	D	530	325	244	0.61	D	5.25%	10,360	7,555	0.73	D	530	419	316	0.79	D
1400	401		County	45	1.62	C.R. 561	SR 19	CR 448	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	16,820	16,583	0.99	D	840	622	825	0.98	D	4.75%	16,820	20,914	1.24	F	840	784	1,041	1.24	F
1410	257		County	50	3.93	C.R. 561	CR 448	CR 48	2	2	URBAN	UNDIVIDED	COUNTY	ASTATULA/TAVARES	D	21,780	10,160	0.47	B	1,080	507	590	0.55	C	1.00%	21,780	10,678	0.49	C	1,080	533	620	0.57	C
1420	252		County	40	0.63	C.R. 561	CR 48	SOUTH ASTATULA CITY LIMIT	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF ASTATULA	D	12,390	11,947	0.96	D	620	570	558	0.92	C	1.00%	12,390	12,556	1.01	F	620	599	586	0.97	D
1430	252		ADJACENT	40	2.49	C.R. 561	SOUTH ASTATULA CITY LIMIT	CR 455	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	11,947	0.55	C	1,080	570	558	0.53	C	1.00%	21,780	12,556	0.58	C	1,080	599	586	0.55	C
1440	242		County	35	1.74	C.R. 561	CR 455	HOWEY CROSS ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	7,697	0.85	C	470	369	364	0.78	C	1.00%	9,030	8,090	0.90	C	470	387	382	0.82	C
1450	238		County	40	1.77	C.R. 561	HOWEY CROSS ROAD	TURNPIKE ROAD / CR 561A	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	12,260	8,115	0.66	C	640	328	385	0.60	C	1.00%	12,260	8,529	0.70	C	640	345	405	0.63	C
1460	235		County	45	0.46	C.R. 561 / C.R. 561A	TURNPIKE ROAD / CR 561A	US 27	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	9,075	0.73	C	620	403	385	0.65	C	1.00%	12,390	9,538	0.77	C	620	423	405	0.68	C
1470	214		County	30	1.78	EAST AVE/LAKE MINNEOLA DR/MAIN AVE	US 27	EAST AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CLERMONT/MINNEOLA	D	14,060	2,151	0.15	C	710	108	124	0.17	C	3.50%	14,060	2,555	0.18	C	710	128	147	0.21	C
1480	214		ADJACENT	30	1.05	8TH ST/OSCEOLA ST/4TH ST/CARROL ST/3RD S	EAST AVENUE	W MINNEOLA AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	10,360	2,151	0.21	C	530	108	124	0.23	C	3.50%	10,360	2,555	0.25	C	530	128	147	0.28	C
1490	115065	115065	State	-	0.42	C.R. 561 (W MINNEOLA AVENUE)	8TH STREET	C.R. 561A	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	12,390	1,085	0.09	C	620	179	186	0.30	C	1.00%	12,390	1,140	0.09	C	620	188	195	0.31	C
1500	203		ADJACENT	35	0.23	C.R. 561	C.R. 561A	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	5,175	0.37	C	710	278	212	0.39	C	6.50%	14,060	7,090	0.50	D	710	381	290	0.54	D
1510	45		County	25	4.31	C.R. 561	SR 50	LOG HOUSE ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	6,597	0.47	C	710	326	276	0.46	C	1.00%	14,060	6,934	0.49	C	710	342	290	0.48	C
1520	10		County	55	1.56	C.R. 561	LOG HOUSE ROAD	FLORIDA BOYS RANCH ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	3,767	0.22	C	840	159	156	0.19	C	2.00%	16,820	4,159	0.25	C	840	175	172	0.21	C
1530	6		County	55	5.87	C.R. 561	FLORIDA BOYS RANCH ROAD	SR 33	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	2,228	0.29	B	410	106	100	0.26	B	2.25%	7,740	2,491	0.32	B	410	118	112	0.29	B
1540	237		County	55	1.16	C.R. 561A	TURNPIKE ROAD / CR 561	SCRUB JAY LN	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	5,274	0.43	C	620	199	308	0.50	C	1.25%	12,390	5,612	0.45	C	620	212	327	0.53	C
1545	234		County	55	0.69	C.R. 561A	SCRUB JAY LN	N HANCOCK ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	5,529	0.25	B	1,080	201	307	0.28	B	1.00%	21,780	5,811	0.27	B	1,080	211	322	0.30	B
1546	234		ADJACENT	55	1.37	C.R. 561A	N HANCOCK ROAD	CR 455	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	5,529	0.25	B	1,080	201	307	0.28	B	1.00%	21,780	5,811	0.27	B	1,080	211	322	0.30	B
1550	203		County	35	1.69	C.R. 561	W MINNEOLA AVE	C.R. 565A	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	13,320	5,175	0.39	C	680	278	212	0.41	C	6.50%	13,320	7,090	0.53	D	680	381	290	0.56	D
1560	213		County	40	1.67	C.R. 561A	CR 565A	JALARMY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	6,485	0.39	C	840	316	258	0.38	C	4.50%	16,820	8,081	0.48	C	840	393	322	0.47	C
1570	223		County	40	1.11	C.R. 561 (LAKE MINNEOLA SHORES)	JALARMY ROAD	US 27	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MINNEOLA	D	16,820	11,066	0.66	C	840	397	491	0.58	C	3.00%	16,820	12,829	0.76	C	840	460	569	0.68	C
1580	241		County	55	7.01	C.R. 565	US 27	KJELLSTROM LANE	2	2	RURAL	UNDIVIDED	COUNTY	GROVELAND/MASCOTTE	C	14,130	2,347	0.17	B	740	167	70	0.23	B	5.25%	14,130	3,032	0.21	B	740	215	90	0.29	B
1590	208		County	40	0.63	C.R. 565 (VILLA CITY ROAD)	KJELLSTROM LANE	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF GROVELAND	D	16,820	5,367	0.32	C	840	247	249	0.30	C	4.25%	16,820	6,608	0.39	C	840	305	307	0.37	C
1600	118063	118063	ADJACENT	45	1.96	C.R. 565	SR 50	SLOANS RIDGE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MASCOTTE	D	16,820	865	0.05	C	840	44	42	0.05	C	2.00%	16,820	955	0.06	C	840	49	46	0.06	C
1610	118063	118063	State	45	5.44	C.R. 565	SLOANS RIDGE	LAKE ERIE ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	865	0.11	B	410	44	42	0.11	B	2.00%	7,740	955	0.12	B	410	49	46	0.12	B
1620	201		County	40	2.78	C.R. 565A	SR 50	CR 561A	2	2	URBAN	UNDIVIDED	COUNTY	CLERMONT/GROVELAND	D	16,820	9,917	0.59	C	840	407	348	0.48	C	2.25%	16,820	11,084	0.66	C	840	454	389	0.54	C
1630	47		County	55	4.60	C.R. 565A	SR 50	CR 565B	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF GROVELAND	D	21,780	2,549	0.12	B	1,080	82	133	0.12	B	3.25%	21,780	2,991	0.14	B	1,080	96	156	0.14	B
1640	18		County	45	3.66	C.R. 565B	SR 33	CR 561	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	2,796	0.36	B	410	135	152	0.37	B	4.00%	7,740	3,401	0.44	B	410	164	185	0.45	B
1650	434		County	25	0.30	CANAL STREET	US 441	MAIN STREET	2	2	URBAN	DIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	13,990	3,765	0.27	C	710	201	137	0.28	C	1.00%	13,990	3,957	0.28	C	710	211	144	0.30	C
1660	426		County	25	0.31	CANAL STREET	MAIN STREET	SR 44	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	13,320	3,169	0.24	C	680	144	127	0.21	C	1.00%	13,320	3,331	0.25	C	680	151	134	0.22	C
1670	205		County	35	1.80	CITRUS TOWER BOULEVARD	US 27	OAKLEY SEAVER DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	12,296	0.87	D	710	651	446	0.92	D	1.00%	14,060	12,923	0.92	D	710	684	469	0.96	D
1680	44		County	30	0.47	CITRUS TOWER BOULEVARD	OAKLEY SEAVER DRIVE	SR 50	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	29,160	16,240	0.56	D	1,470	561	715	0.49	D	1.00%	29,160	17,068	0.59	D	1,470	590	752	0.51	D
1690	28		County	40	0.28	CITRUS TOWER BOULEVARD	SR 50	HOOKS STREET	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	35,820	21,470	0.60	C	1,800	798	1,065	0.59	C	1.25%	35,820	22,846	0.64	C	1,800	849	1,134	0.63	C
1692	36		County	30	1.16	CITRUS TOWER BOULEVARD	HOOKS STREET	JOHNS LAKE ROAD	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	30,780	20,251	0.66	D	1,550	740	901	0.58	D	1.00%	30,780	21,284	0.69	D	1,550	778	947	0.61	D
1695	24		County	40	0.60	CITRUS TOWER BOULEVARD	JOHNS LAKE ROAD	US 27	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	37,810	17,725	0.47	C	1,900	738	629	0.39	C	1.50%	37,810	19,095	0.51	C	1,900	795	678	0.42	C
1700	442		ADJACENT	35	0.95	DAVID WALKER DRIVE	OLD US 441 / CR 500A	CR 19A	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	14,060	8,553	0.61	D	710	388	367	0.55	D	1.00%	14,060	8,989	0.64	D	710	408	386	0.57	D
1710	442		County	35	0.44	DAVID WALKER DRIVE	CR 19A	US 441	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	14,060	8,553	0.61	D	710	388	367	0.55	D	1.00%	14,060	8,989	0.64	D	710	408	386	0.57	D
1720	449		County	35	0.53	DAVID WALKER DRIVE	US 441	MOUNT HOMER ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	14,060	5,694	0.40	C	710	214	265	0.37	C	1.00%	14,060	5,984	0.43	C	710	225	279	0.39	C
1730	471		County	20	0.74	DAVID WALKER DRIVE	MOUNT HOMER ROAD	FLINKS AVE/KURT AVE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	6,537	0.63	D	530	334	277	0.63	D	3.50%	10,360	7,763	0.75	D	530	397	329	0.75	D
1740	406	117014	County	35	2.29	DEAD RIVER ROAD	WEST TERMINI	SR 19	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	21,780	6,785	0.31	B	1,080	276	355	0.33	B	1.00%	21,780	7,131	0.33	B	1,080	291	373	0.35	B
1750	617		County	35	1.25	DONNELLY STREET	US 441	11TH AVENUE	2	2	URBAN	DIVIDED	CITY OF MT. DORA	CITY OF MOUNT DORA	D	14,760	11,220	0.76	D	750	535	474	0.71	D	1.00%	14,760	11,792	0.80	D	750	563	498	0.75	D
1760	617		ADJACENT	35	0.38	DONNELLY STREET	11TH AVENUE	5TH AVENUE	2	2	URBAN	UNDIVIDED	CITY OF MT. DORA	CITY OF MOUNT DORA	D	10,360	11,220	1.08	F	530	535	474	1.01	E	1.00%	10,360	11,792	1.14	F	530	563	498	1.06	F
1770	258		County	55	0.64	DUDA ROAD	CR 448A	ORANGE COUNTY LINE	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	7,250	0.80	C	470	293	323	0.69	C	1.50%	9,030	7,810	0.86	C	470	316	348	0.74	C
1780	510		County	40	1.43	EAGLES NEST ROAD	US 27	CR 466B	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	4,271	0.34	C	620	198	133	0.32	C	3.75%	12,390	5,134	0.41	C	620	238	160	0.38	C
1790	46		County	30	0.73	EAST AVENUE	CR 561	SR 50	2	2	URBAN	UNDIVIDED	CITY OF CLERMONT	CITY OF CLERMONT	D	10,360	5,841	0.56	D	530	-	-	-	-	1.00%	10,360	6,139	0.59	D	530	-	-	-	-
1800	454		ADJACENT	25	0.85	EAST CROOKED LAKE ROAD	LAKEVIEW DRIVE	BROADVIEW AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	5,153	0.50	D	530	273	167	0.52	D	1.00%	10,360	5,416	0.52	D	530	287	176	0.54	D
1810	454		County	25	0.78	EAST CROOKED LAKE ROAD	BROADVIEW AVENUE	US 441	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	5,153	0.50	D	530	273	167	0.52	D	1.00%	10,360	5,416	0.52	D	530	287	176	0.54	D
1820	501		County	35	0.77	EMERALDA AVENUE	EMERALDA ISLAND ROAD	CR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	13,320	4,265	0.32	C	680	266	149	0.39	C	2.50%	13,320	4,826	0.36	C	680	301	168	0.44	C
1830	41		County	40	4.26	EMPIRE CHURCH ROAD	CR 565	ANDERSON ROAD	2	2	RURAL	UNDIVIDED	COUNTY	CITY OF GROVELAND	C	7,740	1,442	0.19	B	410	-	-	-	-	1.00%	7,740	1,516	0.20	B	410	-	-	-	-
1840	622		ADJACENT	40	0.76	ESTES ROAD	CR 44A	LAKE LINCOLN LANE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	15,930	4,384	0.28	C	790	146	262	0.33	C	2.75%	15,930	5,021	0.32	C	790	168	300	0.38	C
1850	622		County	40	0.49	ESTES ROAD	LAKE LINCOLN LANE	SR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	4,384	0.26	C	840	146	262	0.31	C	2.75%	16,820	5,021	0.30	C	840	168	300	0.36	C
1860	452		County	35	0.52	EUDORA ROAD	OLD MT DORA ROAD	US 441	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	2,998	0.29	C	530	-	-	-	-	1.00%	10,360	3,151	0.30	C	530	-	-	-	-
1865	30		County	35	0.73	EXCALLIBUR ROAD	HOOKS STREET	CITRUS TOWER BOULEVARD	2	2	URBAN	DIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	14,760	5,301	0.36	C	750	346	219	0.46	C	1.00%	14,760	5,572	0.38	C	750	364	230	0.49	C
1870	508		County	35	0.63	FISH CAMP ROAD	CR 452	CR 44	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	1,521	0.15	C	530	83	72	0.16	C	2.50%	10,360	1,721	0.17	C	530	94	82	0.18	C
1875	221		County	40	1.69	GRASSY LAKE ROAD/FOSGATE ROAD	CR 50 (WASHINGTON STREET)	HANCOCK ROAD	2	2	URBAN	UNDIVIDED	CITY OF CLERMONT	UNINCORPORATED LAKE COUNTY	D	16,820	5,995	0.36	C	840	288	350	0.42	C	7.50%	16,820	8,606	0.51	C	840	414	503	0.60	C
1880	470		County	30	0.39	GOLFLINKS AVENUE	KURT STREET	SR 19 / BAY STREET	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	940	0.09	C	530	45	49	0.09	C	1.00%	10,360	988	0.10	C	530	47	52	0.10	C
1890	0		NO COUNT	-	0.38	GOLFLINKS AVENUE	SR 19 / BAY STREET	MARY STREET	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	12,390	-	-	-	620	-	-	-	-	N/A	12,390	-	-	-	620	-	-	-	-
1900	514		County	45	1.86	GOOSE PRAIRIE ROAD	EMERALDA AVENUE	CR 452	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	3,168	0.26	C	620	196	111	0.32	C	3.25%	12,390	3,718	0.30	C	620	230	130	0.37	C
1910	40		County	35	1.23	GRAND HIGHWAY	CITRUS TOWER BOULEVARD	SR 50	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	6,479	0.46	C	710	268	273	0.39	C	1.00%	14,060	6,809	0.48	C	710	282	287	0.40	C
1915	37		County	25	0.26	S. GRAND HIGHWAY	SR 50	HOOKS STREET	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	29,160	5,203	0.18	C	1,470	261	203	0.18	C	1.00%	29,160	5,469	0.19	C	1,470	275	213	0.19	C
1920	226		County	40	1.66	CITRUS GROVE ROAD	US 27	GRASSY LAKE ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MINNEOLA	D	12,390	5,319	0.43	C	620	270	173	0.44	C	12.00%	12,390	9,373	0.76	C	620	476	305	0.77	C
1930	517	117007	ADJACENT	45	1.76	GRAYS AIRPORT ROAD	MARION COUNTY ROAD	CR 466	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	2,911	0.23	C	620	173	118	0.28	C	3.25%	12,390	3,416	0.28	C	620	203	138	0.33	C
1940	517	117007	County	45	1.25	GRAYS AIRPORT ROAD	CR 466	GRIFFIN VIEW DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	2,911	0.23	C	620	173	118	0.28	C	3.25%	12,390	3,416	0.28	C	620	203	138	0.33	C
1950	512	117007	County	45	1.75	S GRAYS AIRPORT ROAD	GRIFFIN VIEW DRIVE	EAGLES NEST ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	12,390	2,966	0.24	C	620	115	174	0.28	C	5.50%	12,390	3,877	0.31	C	620	150	228	0.37	C
1960	505	117008	County	45	1.43	S GRAYS AIRPORT ROAD	EAGLES NEST ROAD	US 27 / US 412	2	2	URBAN	UNDIVIDED	COUNTY	FRUITLAND PARK	D	12,390	786	0.06	C	620	55	28	0.09	C	1.00%	12,390	826	0.07	C	620	58	30	0.09	C
1970	536		County	35	0.85	GRIFFIN AVENUE	US 27 / US 411	CR 25	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	13,320	11,009	0.83	D	680	599	378	0.88	D	1.75%	13,320	12,007	0.90	D	680	653	412	0.96	D
1980	535		County	35	1.19	GRIFFIN AVENUE	CR 25	UNCLE DONALDS LANE	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	10,360	3,469	0.33	C	530	214	108	0.40	C	1.50%	10,360	3,737	0.36	C	530	230	116	0.43	C
1990	535		ADJACENT	35	1.66	GRIFFIN AVENUE	UNCLE DONALDS LANE	GRAYS AIRPORT ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	3,469	0.33	C	530	214	108	0.40	C	1.50%	10,360	3,737	0.36	C	530	230	116	0.43	C
2000	462		County	25	0.51	GRIFFIN ROAD	US 27	LEE STREET	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	13,320	2,061	0.15	C	680	-	-	-	-	1.00%	13,320	2,166	0.16	C	680	-	-	-	-
2010	515		County	45	1.85	GRIFFIN VIEW DRIVE	US 27	GRAYS AIRPORT ROAD	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	12,390	3,498	0.28	C	620	202	124	0.33	C	1.00%	12,390	3,676	0.30	C	620	212	130	0.34	C
2020	516		County	45	1.64	GRIFFIN VIEW DRIVE	GRAYS AIRPORT ROAD	SULEN ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	1,715	0.19	C	470	113	75	0.24	C	1.00%	9,030	1,802	0.20	C	470	118	78	0.25	C
2030	479		County	30	0.36	GROVE STREET	SR 19 (BADGER AVENUE)	LAKEVIEW AVENUE	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	1,475	0.14	C	530	24	106	0.20	C	1.00%	10,360	1,550	0.15	C	530	25	111	0.21	C
2040	472		County	30	0.37	GROVE STREET	LAKEVIEW AVENUE	GOLFLINKS AVENUE	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	2,561	0.25	C	530	160	71	0.30	C	1.00%	10,360	2,692	0.26	C	530	168	75	0.32	C
2045	465	117017	County	25	0.50	GROVE STREET	GOLFLINKS AVENUE	OLD MT DORA ROAD	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	3,733	0.36	C	530	140	250	0.47	C	1.00%	10,360	3,923	0.38	C	530	148	263	0.50	D
2050	21		County	35	2.14	HAMMOCK RIDGE	LAKE SHORE DRIVE	US 27	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	59,580	18,440	0.31	B	2,950	479	1,149	0.39	B	2.25%	59,580	20,610	0.35	B	2,950	536	1,284	0.44	B
2054	312		County	45	1.70	N. HANCOCK ROAD	C.R. 561A	SR 91 (FLORIDA TURNPIKE)	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	15,930	6,090	0.38	C	790	350	195	0.44	C	1.00%	15,930	6,400	0.40	C	790	368	205	0.47	C
2055	313		County	45	1.97	N. HANCOCK ROAD	SR 91 (FLORIDA TURNPIKE)	OLD HWY 50 (W)	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	37,810	10,757	0.28	C	1,900	395	557	0.29	C	1.00%	37,810	11,306	0.30	C	1,900	415	586	0.31	C
2056	313		ADJACENT	45	0.28	N. HANCOCK ROAD	OLD HWY 50 (E)	OLD HWY 50 (E)	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	35,820	10,757	0.30	C	1,800	395	557	0.31	C	1.00%	35,820	11,306	0.32	C	1,800	415	586	0.33	C
2060	207		County	35	0.29	N. HANCOCK ROAD	OLD HWY 50 (E)	N RIDGE BOULEVARD	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	30,780	17,674	0.57	D	1,550	758	735	0.49	D	1.00%	30,780	18,575	0.60	D	1,550	797	773	0.51	D

Lake County CMP Database

SEGMENT ID	COUNTY STATION	FDOT STATION	DATA SOURCE	SPEED LIMIT	SEGMENT LENGTH (MI)	ROAD NAME	FROM	TO	LANES (2022)	LANES (2027)	URBAN / RURAL	DIVIDED / UNDIVIDED	MAINTAINING AGENCY	JURISDICTION	ADOPTED LOS STANDARD	DAILY SERVICE VOLUME	2022 AADT	2022 DAILY V/C	2022 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME	2022 PEAK HOUR NB/EB VOLUME	2022 PEAK HOUR SB/WB VOLUME	2022 PEAK HOUR V/C	2022 PEAK HOUR LOS	GROWTH RATE	DAILY SERVICE VOLUME (2027)	2027 AADT	2027 DAILY V/C	2027 DAILY LOS	PEAK HOUR DIRECTIONAL SERVICE VOLUME (2027)	2027 PEAK HOUR NB/EB VOLUME	2027 PEAK HOUR SB/WB VOLUME	2027 PEAK HOUR V/C	2027 PEAK HOUR LOS
2070	39		County	45	1.50	N. HANCOCK ROAD	N RIDGE BOULEVARD	SR 50	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	37,810	17,618	0.47	C	1,900	680	820	0.43	C	1.00%	37,810	18,516	0.49	C	1,900	715	862	0.45	C
2080	35		County	45	0.25	S. HANCOCK ROAD	SR 50	HOOKS STREET	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	35,820	22,918	0.64	C	1,800	734	999	0.55	C	2.25%	35,820	25,615	0.72	C	1,800	821	1,116	0.62	C
2085	35		ADJACENT	45	1.23	S. HANCOCK ROAD	HOOKS STREET	JOHNS LAKE ROAD	2	2	URBAN	DIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	17,660	22,918	1.30	F	880	734	999	1.13	F	2.25%	17,660	25,615	1.45	F	880	821	1,116	1.27	F
2090	17		County	45	1.75	S. HANCOCK ROAD	JOHNS LAKE ROAD	HARTWOOD MARSH ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	16,820	12,491	0.74	C	840	410	487	0.58	C	1.50%	16,820	13,456	0.80	C	840	441	525	0.63	C
2100	15		County	40	0.70	HARTWOOD MARSH ROAD	US 27	HANCOCK ROAD	2	4	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	15,930	17,664	1.11	F	790	560	873	1.10	F	2.75%	35,820	20,230	0.56	C	1,800	641	999	0.56	C
2104	AVG (146,150)		AVERAGE	40	1.41	HARTWOOD MARSH ROAD	HANCOCK ROAD	N. 90 DEGREE BEND	2	4	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	14,536	0.86	C	840	410	487	0.58	C	N/A	37,810	16,110	0.43	C	1,900	494	854	0.45	C
2110	20		County	40	2.47	HARTWOOD MARSH ROAD	N. 90 DEGREE BEND	ORANGE COUNTY LINE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	11,408	0.52	C	1,080	330	674	0.62	C	1.00%	21,780	11,989	0.55	C	1,080	347	708	0.66	C
2120	485		County	30	0.75	HASELTON STREET	SR 44	LAKEVIEW AVENUE	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	1,646	0.16	C	530	80	94	0.18	C	1.00%	10,360	1,730	0.17	C	530	84	99	0.19	C
2130	605		County	25	1.01	HIGHLAND STREET	LIMIT AVENUE	5TH AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	2,792	0.27	C	530	179	127	0.34	C	3.50%	10,360	3,316	0.32	C	530	213	150	0.40	C
2140	32		County	30	0.35	HOOKS STREET	LAKESHORE DRIVE	US 27	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	10,360	6,972	0.67	D	530	291	349	0.66	D	1.00%	10,360	7,327	0.71	D	530	305	367	0.69	D
2150	31		County	40	0.84	HOOKS STREET	US 27	OAKLEY SEAVER DRIVE	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	35,820	11,413	0.32	C	1,800	479	508	0.28	C	1.75%	35,820	12,447	0.35	C	1,800	523	555	0.31	C
2153	33		County	35	0.27	HOOKS STREET	OAKLEY SEAVER DRIVE	CITRUS TOWER BOULEVARD	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	29,160	13,218	0.45	D	1,470	648	427	0.44	C	1.00%	29,160	13,892	0.48	D	1,470	681	448	0.46	D
2155	34		County	35	1.05	HOOKS STREET	CITRUS TOWER BOULEVARD	HANCOCK ROAD	4	4	URBAN	DIVIDED	COUNTY	CITY OF CLERMONT	D	29,160	11,419	0.39	C	1,470	395	622	0.42	C	1.00%	29,160	12,001	0.41	C	1,470	416	654	0.44	C
2160	456	117021	County	35	0.59	HUFFSTETLER DRIVE	DAVID WALKER DRIVE	KURT STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	1,169	0.11	C	530	79	53	0.15	C	1.00%	10,360	1,229	0.12	C	530	83	56	0.16	C
2170	224		County	35	0.35	JALARMY ROAD	CR 478	CR 561A	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	6,226	0.60	D	530	273	222	0.52	D	8.50%	10,360	9,362	0.90	D	530	411	333	0.78	D
2180	26		County	35	1.57	JOHNS LAKE ROAD	US 27	HANCOCK ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF CLERMONT	D	14,060	8,972	0.64	D	710	596	403	0.84	D	2.75%	14,060	10,276	0.73	D	710	683	461	0.96	D
2190	473		County	35	0.25	KURT STREET	W LAKEVIEW AVENUE	DAVID WALKER DRIVE	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	8,710	0.84	D	530	546	292	1.03	E	1.00%	10,360	9,154	0.88	D	530	574	307	1.08	F
2200	469		County	35	0.50	KURT STREET	DAVID WALKER DRIVE	MT HOMER ROAD / W ARDICE AVENUE	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	14,060	4,334	0.31	C	710	179	246	0.35	C	1.00%	14,060	4,555	0.32	C	710	188	259	0.36	C
2205	455		County	35	0.42	KURT STREET	MT HOMER ROAD / W ARDICE AVENUE	US 441	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	14,060	5,512	0.39	C	710	261	281	0.40	C	1.00%	14,060	5,793	0.41	C	710	275	295	0.42	C
2210	520		County	25	0.45	W LADY LAKE BOULEVARD	WEST TERMINI	US 27/US441	2	2	URBAN	UNDIVIDED	TOWN OF LADY LAKE	TOWN OF LADY LAKE	D	10,360	1,298	0.13	C	530	66	39	0.12	C	1.00%	10,360	1,364	0.13	C	530	69	41	0.13	C
2220	521		County	25	0.96	E LADY LAKE BOULEVARD	US 27/US441	BERCHFIELD ROAD	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	10,360	618	0.06	C	530	38	21	0.07	C	1.00%	10,360	650	0.06	C	530	40	22	0.08	C
2230	408		County	35	0.56	FAIRVIEW AVENUE	OLD 441/ CR 500A	LAKESHORE DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	680	0.07	C	530	43	24	0.08	C	1.00%	10,360	715	0.07	C	530	45	25	0.08	C
2240	0		NO COUNT	40	0.64	LAKE DRIVE	SR 44	COUNTRY ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	-	-	-	470	-	-	-	-	N/A	9,030	-	-	-	470	-	-	-	-
2250	509		County	35	0.50	LAKE ELLA ROAD	SUMTER COUNTY LINE	MICRO RACETRACK ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	2,817	0.27	C	530	175	101	0.33	C	6.50%	10,360	3,859	0.37	C	530	239	138	0.45	C
2254	511		ADJACENT	35	0.51	LAKE ELLA ROAD	MICRO RACETRACK ROAD	ROLLING ACRES ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	1,652	0.16	C	530	66	71	0.13	C	1.00%	10,360	1,737	0.17	C	530	70	75	0.14	C
2255	511		County	45	1.91	LAKE ELLA ROAD	ROLLING ACRES ROAD	US 27	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	1,652	0.10	C	840	66	71	0.08	C	1.00%	16,820	1,737	0.10	C	840	70	75	0.09	C
2260	7		County	35	5.01	LAKE ERIE ROAD	CR 565	SR 33	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	884	0.11	B	410	23	47	0.12	B	5.00%	7,740	1,128	0.15	B	410	29	61	0.15	B
2270	448		County	35	1.59	LAKE EUSTIS DRIVE	US 441	CLAY BOULEVARD	2	2	URBAN	UNDIVIDED	COUNTY	EUSTIS/TAVARES	D	14,060	7,262	0.52	D	710	330	285	0.46	C	1.75%	14,060	7,920	0.56	D	710	360	311	0.51	D
2280	19		County	40	2.57	LAKE LOUISA ROAD	LAKESHORE DRIVE	VISTA DEL LAGO BOULEVARD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	5,071	0.23	B	1,080	266	545	0.50	C	3.75%	21,780	6,096	0.28	B	1,080	320	655	0.61	C
2290	9		County	35	1.13	LAKE LOUISA ROAD	VISTA DEL LAGO BOULEVARD	US 27	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	14,060	5,377	0.38	C	710	512	271	0.72	D	4.50%	14,060	6,701	0.48	C	710	639	338	0.90	D
2300	802		County	25	1.10	LAKE MACK DRIVE	CR 42	ANOTHER ANNA ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	9,030	1,515	0.17	C	470	45	104	0.22	C	1.00%	9,030	1,592	0.18	C	470	47	109	0.23	C
2310	435		County	25	0.20	LAKE STREET	US 441	MAIN STREET	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	10,360	3,074	0.30	C	530	115	140	0.26	C	1.00%	10,360	3,231	0.31	C	530	121	147	0.28	C
2320	425		County	25	0.31	LAKE STREET	MAIN STREET	SR 44	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	10,360	3,235	0.31	C	530	121	134	0.25	C	1.00%	10,360	3,400	0.33	C	530	127	141	0.27	C
2330	8		County	45	1.55	LAKESHORE DRIVE (CLER)	CR 561	OSWALT ROAD	2	2	TRANS.	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	15,390	3,094	0.20	C	760	142	142	0.19	C	1.00%	15,390	3,252	0.21	C	760	149	149	0.20	C
2340	14		County	45	1.62	LAKESHORE DRIVE (CLER)	OSWALT ROAD	HARDER ROAD	2	2	TRANS.	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	15,390	11,219	0.73	C	760	390	622	0.82	C	1.00%	15,390	11,791	0.77	C	760	410	654	0.86	C
2350	22		County	40	0.67	LAKESHORE DRIVE (CLER)	HARDER ROAD	LAKE LOUISA ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	16,407	0.98	D	840	514	932	1.11	F	1.00%	16,820	17,244	1.03	F	840	541	980	1.17	F
2354	23		County	30	0.75	LAKESHORE DRIVE (CLER)	LAKE LOUISA ROAD	ANDERSON HILL ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	13,320	6,987	0.52	D	680	433	206	0.64	D	1.00%	13,320	7,343	0.55	D	680	455	216	0.67	D
2360	484		County	35	1.65	LAKESHORE DRIVE (EUSTIS)	CLAY BOULEVARD	SOUTH BAY STREET / SR 19 SB	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	7,157	0.69	D	530	356	294	0.67	D	2.75%	10,360	8,196	0.79	D	530	407	337	0.77	D
2370	476		County	35	0.43	W LAKEVIEW AVENUE	KURT STREET	SR 19	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	7,701	0.74	D	530	480	276	0.91	D	1.00%	10,360	8,094	0.78	D	530	504	290	0.95	D
2380	477		County	30	0.65	E LAKEVIEW AVENUE	SR 19	JASMINE STREET / CROOKED LAKE COURT	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	2,689	0.26	C	530	182	129	0.34	C	1.00%	10,360	2,826	0.27	C	530	191	135	0.36	C
2384	477		ADJACENT	30	0.34	E LAKEVIEW AVENUE	JASMINE STREET / CROOKED LAKE COURT	HASELTON STREET	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	2,689	0.26	C	530	182	129	0.34	C	1.00%	10,360	2,826	0.27	C	530	191	135	0.36	C
2390	271		County	35	0.62	LANE PARK CUTOFF	SR 19	CR 561	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF TAVARES	D	13,320	2,071	0.16	C	680	212	126	0.31	C	1.00%	13,320	2,177	0.16	C	680	223	133	0.33	C
2400	441		County	25	0.74	LEE STREET	GRIFFIN ROAD	US 441	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	10,360	2,244	0.22	C	530	-	-	-	-	1.00%	10,360	2,358	0.23	C	530	-	-	-	-
2410	438		County	25	0.50	LEE STREET	US 441	MAIN STREET	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	10,360	2,533	0.24	C	530	-	-	-	-	1.00%	10,360	2,662	0.26	C	530	-	-	-	-
2420	239		County	40	0.35	WILSON LAKE PARKWAY	US 27	LIBBY ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF GROVELAND	D	15,930	2,711	0.17	C	790	66	140	0.18	C	4.00%	15,930	3,298	0.21	C	790	80	170	0.22	C
2430	616	117005	County	35	0.99	LIMIT AVENUE	DONNELLY STREET	US 441	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	3,001	0.29	C	530	160	143	0.30	C	1.00%	10,360	3,154	0.30	C	530	168	151	0.32	C
2440	427		County	25	0.71	LONE OAK DRIVE	MAIN STREET	SR 44	2	2	URBAN	UNDIVIDED	CITY OF LEESBURG	CITY OF LEESBURG	D	10,360	3,227	0.31	C	530	180	206	0.39	C	1.00%	10,360	3,392	0.33	C	530	190	216	0.41	C
2450	13		County	35	0.87	LOG HOUSE ROAD	CR 561	LAKESHORE DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	3,673	0.35	C	530	225	170	0.42	C	2.25%	10,360	4,105	0.40	C	530	251	191	0.47	C
2460	410		County	25	0.74	E MAIN STREET	SR 19	CR 452/ ST CLAIR ABRAMS STREET	2	2	URBAN	DIVIDED	CITY OF TAVARES	CITY OF TAVARES	D	13,990	7,249	0.52	D	710	400	282	0.56	D	1.00%	13,990	7,619	0.54	D	710	420	297	0.59	D
2470	430		ADJACENT	45	0.76	MAIN STREET (LEESBURG)	CR 468	THOMAS AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	16,820	12,086	0.72	C	840	546	491	0.65	C	2.00%	16,820	13,344	0.79	C	840	603	542	0.72	C
2480	430		County	35	1.03	MAIN STREET (LEESBURG)	THOMAS AVENUE	US 27	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	10,360	12,086	1.17	F	530	546	491	1.03	E	2.00%	10,360	13,344	1.29	F	530	603	542	1.14	F
2490	431		County	25	0.45	MAIN STREET (LEESBURG)	US 27	LEE STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	10,360	10,859	1.05	E	530	473	522	0.98	D	1.00%	10,360	11,413	1.10	F	530	498	548	1.03	E
2500	431		ADJACENT	25	0.39	MAIN STREET (LEESBURG)	LEE STREET	CANAL STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	10,360	10,859	1.05	E	530	473	522	0.98	D	1.00%	10,360	11,413	1.10	F	530	498	548	1.03	E
2510	428		County	25	0.41	MAIN STREET (LEESBURG)	CANAL STREET	LAKE STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	10,360	4,943	0.48	C	530	228	252	0.48	C	1.00%	10,360	5,195	0.50	D	530	240	265	0.50	D
2520	433		County	35	0.62	MAIN STREET (LEESBURG)	LAKE STREET	DIXIE AVENUE / SR 44	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	13,320	4,021	0.30	C	680	-	-	-	-	1.00%	13,320	4,226	0.32	C	680	-	-	-	-
2530	432		County	35	0.32	MAIN STREET (LEESBURG)	DIXIE AVENUE / SR 44	NICHOLS DRIVE / SUNNYSIDE DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	10,360	4,977	0.48	C	530	294	173	0.55	D	1.00%	10,360	5,230	0.50	D	530	309	182	0.58	D
2540	539		County	45	2.52	MARION COUNTY ROAD	CR 25	GRAYS AIRPORT ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	2,362	0.11	B	1,080	128	78	0.12	B	3.75%	21,780	2,839	0.13	B	1,080	153	94	0.14	B
2550	539		ADJACENT	45	3.01	MARION COUNTY ROAD	GRAYS AIRPORT ROAD	LAKE GRIFFIN ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	7,740	2,362	0.31	B	410	128	78	0.31	B	3.75%	7,740	2,839	0.37	B	410	153	94	0.37	B
2560	215		County	30	3.23	MASCOTTE EMPIRE ROAD	SR 50	EMPIRE CHURCH ROAD	2	2	URBAN	UNDIVIDED	CITY OF MASCOTTE	CITY OF MASCOTTE	D	21,780	800	0.04	B	1,080	-	-	-	-	1.00%	21,780	841	0.04	B	1,080	-	-	-	-
2570	525		County	25	0.42	McLENDON STREET	CLAY AVENUE	US 27/US441	2	2	URBAN	UNDIVIDED	TOWN OF LADY LAKE	TOWN OF LADY LAKE	D	10,360	1,324	0.13	C	530	61	46	0.11	C	1.00%	10,360	1,392	0.13	C	530	64	48	0.12	C
2580	493		County	35	1.74	MICRO RACETRACK ROAD	LAKE ELLA ROAD	CR 466A	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	10,798	1.04	E	530	452	536	1.01	E	2.25%	10,360	12,069	1.16	F	530	505	600	1.13	F
2590	422		County	25	1.10	MORNINGSIDE DRIVE (MOUNT DORA)	US 441	CR 500A	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	1,990	0.19	C	530	95	91	0.18	C	3.50%	10,360	2,363	0.23	C	530	113	108	0.21	C
2600	444		County	40	0.74	MT HOMER ROAD	CR 19A	US 441	2	2	URBAN	UNDIVIDED	CITY OF TAVARES	CITY OF TAVARES	D	15,930	262	0.02	C	790	25	9	0.03	C	1.00%	15,930	275	0.02	C	790	26	10	0.03	C
2610	450		County	40	0.68	MT HOMER ROAD	US 441	DAVID WALKER DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	12,390	2,185	0.18	C	620	116	83	0.19	C	1.00%	12,390	2,296	0.19	C	620	122	87	0.20	C
2620	463		County	35	0.51	MT HOMER ROAD	DAVID WALKER DRIVE	KURT STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	4,364	0.42	C	530	224	209	0.42	C	1.25%	10,360	4,644	0.45	C	530	238	222	0.45	C
2630	110505	110505	State	40	0.23	OLD 441 (CR 500A)	US 441	SR 19	4	4	URBAN	UNDIVIDED	CITY OF TAVARES	CITY OF TAVARES	D	35,820	15,880	0.44	C	1,800	764	814	0.45	C	3.50%	35,820	18,860	0.53	C	1,800	907	967	0.54	C
2640	447		County	25	0.34	OLD EUSTIS ROAD	MORNINGSIDE DRIVE	E CROOKED LAKE DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	10,360	782	0.08	C	530	59	16	0.11	C	1.00%	10,360	822	0.08	C	530	62	16	0.12	C
2650	446		County	25	0.99	OLD EUSTIS ROAD	E CROOKED LAKE DRIVE	DONNELLY STREET	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	10,360	1,334	0.13	C	530	49	65	0.12	C	1.00%	10,360	1,402	0.14	C	530	52	68	0.13	C
2660	459		County	25	0.65	OLD MOUNT DORA ROAD	SR 19	EUDORA ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	5,189	0.50	D	530	239	278	0.52	D	1.00%	10,360	5,454	0.53	D	530	251	292	0.55	D
2670	459		ADJACENT	25	0.89	OLD MOUNT DORA ROAD	EUDORA ROAD	US 441	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	10,360	5,189	0.50	D	530	239	278	0.52	D	1.00%	10,360	5,454	0.53	D	530	251	292	0.55	D
2680	487	115150	County	40	1.01	ORANGE AVENUE	SR 19	HASSELTON STREET	4	4	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	25,870	12,722	0.49	C	1,300	612	494	0.47	C	1.00%	25,870	13,371	0.52	C	1,300	643	520	0.49	C
2690	623	115150	County	55	0.98	ORANGE AVENUE	HASSELTON STREET	ABRAMS ROAD	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF EUSTIS	D	16,820	13,386	0.80	C	840	498	649	0.77	C	1.00%	16,820	14,068	0.84	C	840	523	682	0.81	C
2700	11		County	45	1.97	OSWALT ROAD	LAKESHORE DRIVE	EDGEWATER DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	3,877	0.23	C	840	196	138	0.23	C	1.00%	16,820	4,075	0.24	C	840	206	145	0.25	C
2710	220		County	40	0.20	PALMETTO DRIVE	SUNSET AVENUE	CR 33	2	2	URBAN	UNDIVIDED	CITY OF MASCOTTE	CITY OF MASCOTTE	D	12,390	840	0.07	C	620	-	-	-	-	1.00%	12,390	883	0.07	C	620	-	-	-	-
2720	488		County	25	0.38	PRESCOTT STREET	BATES AVENUE	SR 44	2	2	URBAN	UNDIVIDED	CITY OF EUSTIS	CITY OF EUSTIS	D	10,360	562	0.05	C	530	21	36	0.07	C	1.00%	10,360	591	0.06	C	530	22	37	0.07	C
2730	494		County	45	2.29	RADIO ROAD	CR 44	MORNINGSIDE DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	3,179	0.19	C	840	144	127	0.17	C	1.00%	16,820	3,341	0.20	C	840	151	133	0.18	C
2740	453		County	45	0.95	RADIO ROAD	MORNINGSIDE DRIVE	US 441	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	7,349	0.44	C	840	281	367	0.44	C	1.25%	16,820	7,820	0.46	C	840	299	390	0.46	C
2750	530		County	35	0.78	ROLLING ACRES ROAD	US 27 / US 441	OAK STREET	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	14,060	16,129	1.15	F	710	699	573	0.99	D	1.00%	14,060	16,952	1.21	F	710	735	602	1.04	E
2760	526	117011	County	35	0.50	ROLLING ACRES ROAD	OAK STREET	CR 466	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	13,320	16,723	1.26	F	680	690	621	1.02	E	1.00%	13,320	17,576	1.32	F	680	725	653	1.07	F
2770	513		County	45	2.00	ROLLING ACRES ROAD	CR 466	LAKE ELLA ROAD	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	21,780	8,710	0.40	B	1,080	358	403	0.37	B	1.00%	21,780	9,154	0.42	B	1,080	376	423	0.39	B
2780	613		County	45	1.00	ROUND LAKE ROAD	WOLF BRANCH ROAD	SR 46	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF MOUNT DORA	D	16,820	6,256	0.37	C	840	209	343	0.41	C	1.00%	16,820	6,575	0.39	C	840	219	361	0.43	C
2790	604		County	45	1.02	ROUND LAKE ROAD	SR 46	ORANGE COUNTY LINE	2	2	URBAN	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	D	16,820	5,655	0.34	C	840	254	272	0.32	C	1.00%	16,820	5,943	0.35	C	840	267	286	0.34	C
2800	635		County	40	4.15	ROYAL TRAILS ROAD	SEAGRAPE AVENUE	SR 44	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	14,130	1,942	0.14	B	740	46	122	0.16	B	2.25%	14,130	2,171	0.15	B	740	51	136	0.18	B
2810	537		County	25	0.50	SHAY BOULEVARD	TARRSON BOULEVARD	GRIFFIN AVENUE	2	2	URBAN	UNDIVIDED	COUNTY	TOWN OF LADY LAKE	D	10,360	2,173	0.21	C	530	102	83	0.19	C	1.00%	10,360	2,284	0.22	C	530	108	87	0.20	C
2820	265		County	55	3.14	SHIRLEY SHORES ROAD	CR 448	DEER ISLAND ROAD	2	2	RURAL	UNDIVIDED	COUNTY	UNINCORPORATED LAKE COUNTY	C	14,130	3,044	0.22	B	740	156	123	0.21	B	2.75%	14,130	3,486	0.25	B	740	179	141	0.24	B
2830	451	117022	County	35	1.11	SLEEPY HOLLOW ROAD	US 441	SUNNYSIDE DRIVE	2	2	URBAN	UNDIVIDED	COUNTY	CITY OF LEESBURG	D	14,060	4,473	0.32	C	710	179	247	0.35	C	2.75%	14,060	5,123	0.36	C	710	205	283	0.40	C
2840	807		County	55	3.61	SR 19	MARION COUNTY LINE	CR 445A	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	2,017	0.23	B	450	78	88	0.20	B	1.00%	8,600	2,120	0.25	B	450	82	93	0.21	B
2850	110365	110365	State	55	5.50	SR 19	CR 445A	CR 445	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	4,090	0.48	B	450	209	180	0.46	B	1.00%	8,600	4,299	0.50	B	450	220	189	0.49	B
2860	110297	110297	State	55	5.21	SR 19	CR 445	CR 42	2	2	RURAL	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	C	8,600	6,120	0.71	C	450	313	332	0.74	C	1.00%	8,600	6,432	0.75	C	450	329	349	0.78	C
2870	115036	115036	ADJACENT	40	0.90	SR 19	CR 42	BAKER ROAD	2	2	URBAN	UNDIVIDED	STATE	UNINCORPORATED LAKE COUNTY	D	18,590	12,600	0.68	C	920	610	524	0.66	C	1.00%	18,590	13,243	0.71	C	920	641	551	0.70	C
2880	115036	115036	ADJACENT	55	1.19	SR 19	BAKER ROAD	CR 450 (UMATILLA BOULEVARD)	2	2	URBAN	UNDIVIDED	STATE	CITY OF UMATILLA	D	18,590	12,600	0.68	C	920	610	524	0.66	C	1.00%	18,590	13,243	0.71	C	920	641	551	0.70	C
2890	115036	115036	State	35	0.51	SR 19	CR 450 (UMATILLA BOULEVARD)	CR 450 (OCALA STREET)	2	2	URBAN	DIVIDED	STATE	CITY OF UMATILLA	D	16,320	12,600	0.77	D	830	610	524	0.73	D	1.00%	16,320	13,243	0.81	D	830	641	551	0.77	D
2900	115035	115035	State	40	1.38	SR 19	CR 450 (OCALA STREET)	CR 450A	4	4	URBAN	DIVIDED	STATE	CITY OF UMATILLA	D	39,800	16,880	0.42	C	2,000	826	678	0.41	C	1.00%	39,800	17,741	0.45	C	2,000	868	713	0.43	C
2910	110008	110008	State	55	2.22	SR 19	CR 450A	CR 19A	4	4	URBAN	DIVIDED	STATE	EUSTIS/UMATILLA	D	66,200	17,910	0.27	B	3,280	867	745	0.26	B	1.00%	66,200	18,824	0.28	B	3,280	911	783	0.28	B
2920	110008	110008	ADJACENT	55	0.58	SR 19	CR 19A	CR 44	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	41,790	17,910	0.43	C	2,100	867	745	0.41	C	1.00%	41,790	18,824	0.45	C	2,100	911	783	0.43	C
2930	111017	111017	State	45	0.75	SR 19	CR 44	CR 452	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	41,790	20,311	0.49	C	2,100	983	845	0.47	C	1.00%	41,790	21,348	0.51	C	2,100	1,033	888	0.49	C
2941	115176	115176	State	35	0.87	SR 19 (N)	ORANGE AVENUE	CR 452	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	19,440	11,450	0.59	D	1,960	1,029	0	0.53	D	1.00%	19,440	12,034	0.62	D	1,960	1,081	0	0.55	D
2951	110208	110208	ADJACENT	40	0.82	SR 19 (S)	CR 452	ORANGE AVENUE	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	23,880	7,430	0.31	C	2,400	0	668	0.28	C	1.00%	23,880	7,809	0.33	C	2,400	0	702	0.29	C
2960	115176	115176	ADJACENT	35	0.68	SR 19 (N)	STEVENS AVE	ORANGE AVENUE	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	19,440	11,450	0.59	D	1,960	1,029	0	0.53	D	1.00%	19,440	12,034	0.62	D	1,960	1,081	0	0.55	D
2970	110208	110208	State	35	0.62	SR 19 (S)	ORANGE AVENUE	STEVENS AVE	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	19,440	7,430	0.38	C	1,960	0	668	0.34	C	1.00%	19,440	7,809	0.40	C	1,960	0	702	0.36	C
2980	115013	115013	State	35	0.50	SR 19	STEVENS AVE	GOLF LINKS AVENUE	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	34,020	30,500	0.90	D	1,710	1,338	1,113	0.78	D	1.00%	34,020	32,056	0.94	D	1,710	1,406	1,170	0.82	D
2990	110421	110421	State	40	0.92	SR 19	GOLF LINKS AVENUE	US 441	4	4	URBAN	DIVIDED	STATE	CITY OF EUSTIS	D	41,790	17,760	0.42	C	2,100	860	738	0.41	C	1.00%	41,790	18,666	0.45	C	2,100	904	776	0.43	C
3000	115125	115125	State	35	0.24	SR 19 (DUNCAN DRIVE)	US 441	CR 500A/ LAKE SHORE BOULEVARD	4	4	URBAN	DIVIDED	STATE	CITY OF TAVARES	D	32,400	19,810	0.61	D	1,630	959	824	0.59	D	1.50%	32,400	21,341	0.66	D	1,630	1,033	888	0.63	D
3010	115125	115125	ADJACENT	35	0.37	SR 19	CR 500A/ LAKE SHORE BOULEVARD	CR 452 (MAIN STREET)	4	4	URBAN	DIVIDED	STATE	CITY OF TAVARES	D	32,400	19,810	0.61	D	1,630	959	824	0.59	D	1.50%	32,400	21,341	0.66	D	1,630	1,033	888	0.63	D
3020	110049	110049	State	45	1.38	SR 19	CR 452 (MAIN STREET)	CR 561	4	4	URBAN	DIVIDED	STATE	CITY OF TAVARES	D	41,790	45,500	1.09	F	2,100	2,203	1,892	1.05	F	4.50%	41,790	56,701	1.36	F	2,100	2,745	2,358	1.31	F
3030	110049	110049	ADJACENT	45	0.90	SR 19	CR 561	LANE PARK ROAD	2	2	URBAN	UNDIVIDED	STATE	CITY OF TAVARES	D	18,590	45,500	2.45	F	920	2,203	1,892	2.39	F	4.50%	18,590	56,701	3.05	F	920	2,745	2,358	2.98	F
3040	110494	110494	State	55	3.87	SR 19	LANE PARK ROAD	CR 48	2	2	URBAN	UNDIVIDED	STATE	HOWEY-IN-THE-HILLS/TAVARES	D	18,590	15,980	0.86	C	920	610	656	0.71	C	1.00%	18,590	16,795	0.90	C	920	641	689	0.75	C
3050	110495	110495	State	40	0.84	SR 19	CR 48	CENTRAL AVENUE	2	2	URBAN	UNDIVIDED	STATE	HOWEY-IN-THE-HILLS	D	14,160	8,950	0.63	C	700	433	372	0.62	C	1.00%	14,160	9,407	0.66	C	700	455	391	0.65	C
3060	110495	110495	ADJACENT	35	3.09	SR 19	CENTRAL AVENUE	CR 455	2	2	URBAN	UNDIVIDED	STATE	HOWEY-IN-THE-HILLS	D	24,200	8,950	0.37	B	1,200	433	372	0.36	B	1.00%	24,200	9,407	0.39	B	1,200	455	391	0.38	B
3070	110255	110255	State	55	2.72	SR 19	CR 455	US 27 / SR 25	2	2	RURAL	UNDIVIDED	STATE	CITY OF GROVELAND	C	8,600	9,910	1.15	D	450	507	435	1.13	D	1.00%	8,600	10,416	1.21	D	450	533	457	1.18	D

APPENDIX C

Intersection Counts/FDOT Seasonal Factors/Signal Timings

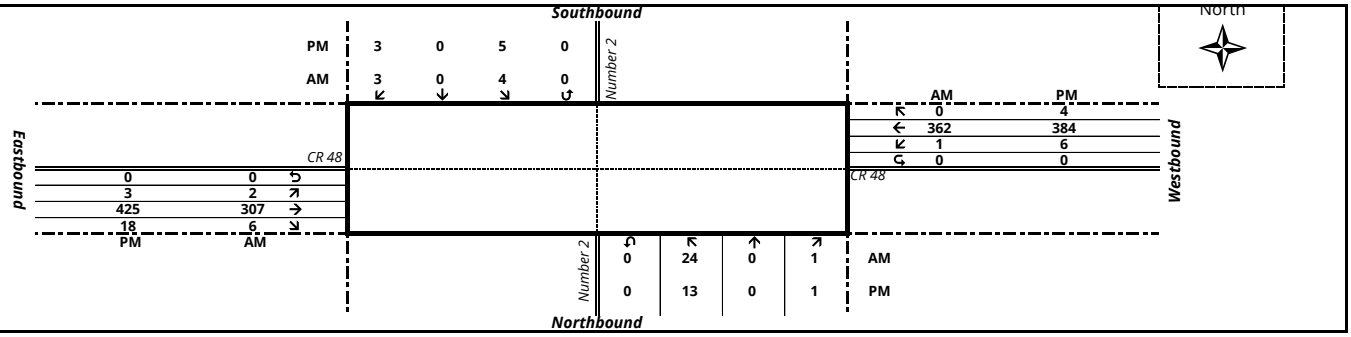
15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: May 24, 2022 (Tuesday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: Number 2 & CR 48 **COUNTY:** Lake County **LONGITUDE:** 0

	Number 2					Number 2						CR 48					CR 48						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	3	0	0	0	**3**	2	0	2	0	**4**	**7**	1	58	2	0	**61**	0	92	0	0	**92**	**153**	**160**
07:15 AM	4	0	1	0	**5**	1	0	1	0	**2**	**7**	0	82	2	0	**84**	0	90	0	0	**90**	**174**	**181**
07:30 AM	7	0	0	0	**7**	0	0	0	0	**0**	**7**	0	70	0	0	**70**	0	92	0	0	**92**	**162**	**169**
07:45 AM	10	0	0	0	**10**	1	0	0	0	**1**	**11**	1	97	2	0	**100**	1	88	0	0	**89**	**189**	**200**
TOTAL	24	0	1	0	**25**	4	0	3	0	**7**	**32**	2	307	6	0	**315**	1	362	0	0	**363**	**678**	**710**
08:00 AM	3	0	3	0	**6**	0	0	0	0	**0**	**6**	2	62	5	0	**69**	2	80	0	0	**82**	**151**	**157**
08:15 AM	4	0	0	0	**4**	0	0	0	0	**0**	**4**	0	74	7	0	**81**	0	91	0	0	**91**	**172**	**176**
08:30 AM	5	0	1	0	**6**	1	1	0	0	**2**	**8**	2	68	1	0	**71**	1	70	0	0	**71**	**142**	**150**
08:45 AM	1	0	1	0	**2**	0	0	1	0	**1**	**3**	0	85	1	0	**86**	0	75	1	0	**76**	**162**	**165**
TOTAL	13	0	5	0	**18**	1	1	1	0	**3**	**21**	4	289	14	0	**307**	3	316	1	0	**320**	**627**	**648**
09:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	5	0	0	**5**	**5**	**5**
09:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
09:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
09:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	5	0	0	**5**	**5**	**5**
04:00 PM	0	0	0	0	**0**	1	0	0	0	**1**	**1**	0	75	1	0	**76**	1	91	0	0	**92**	**168**	**169**
04:15 PM	3	0	0	0	**3**	1	0	1	0	**2**	**5**	0	91	3	0	**94**	0	85	0	0	**85**	**179**	**184**
04:30 PM	4	0	1	0	**5**	1	0	2	0	**3**	**8**	1	108	1	0	**110**	2	106	2	0	**110**	**220**	**228**
04:45 PM	3	0	0	0	**3**	1	0	1	0	**2**	**5**	0	106	4	0	**110**	2	92	0	0	**94**	**204**	**209**
TOTAL	10	0	1	0	**11**	4	0	4	0	**8**	**19**	1	380	9	0	**390**	5	374	2	0	**381**	**771**	**790**
05:00 PM	3	0	0	0	**3**	1	0	0	0	**1**	**4**	1	95	8	0	**104**	2	85	1	0	**88**	**192**	**196**
05:15 PM	3	0	0	0	**3**	2	0	0	0	**2**	**5**	1	116	5	0	**122**	0	101	1	0	**102**	**224**	**229**
05:30 PM	6	0	3	0	**9**	0	0	0	0	**0**	**9**	1	73	6	0	**80**	3	89	1	0	**93**	**173**	**182**
05:45 PM	5	0	0	0	**5**	0	0	2	0	**2**	**7**	2	114	6	0	**122**	0	78	0	0	**78**	**200**	**207**
TOTAL	17	0	3	0	**20**	3	0	2	0	**5**	**25**	5	398	25	0	**428**	5	353	3	0	**361**	**789**	**814**
AM Peak																						**Peak Hour Factor:**	**0.888**
07:00 AM to 08:00 AM	**24**	**0**	**1**	**0**	**25**	**4**	**0**	**3**	**0**	**7**	**32**	**2**	**307**	**6**	**0**	**315**	**1**	**362**	**0**	**0**	**363**	**678**	**710**
PM Peak																						**Peak Hour Factor:**	**0.941**
04:30 PM to 05:30 PM	**13**	**0**	**1**	**0**	**14**	**5**	**0**	**3**	**0**	**8**	**22**	**3**	**425**	**18**	**0**	**446**	**6**	**384**	**4**	**0**	**394**	**840**	**862**



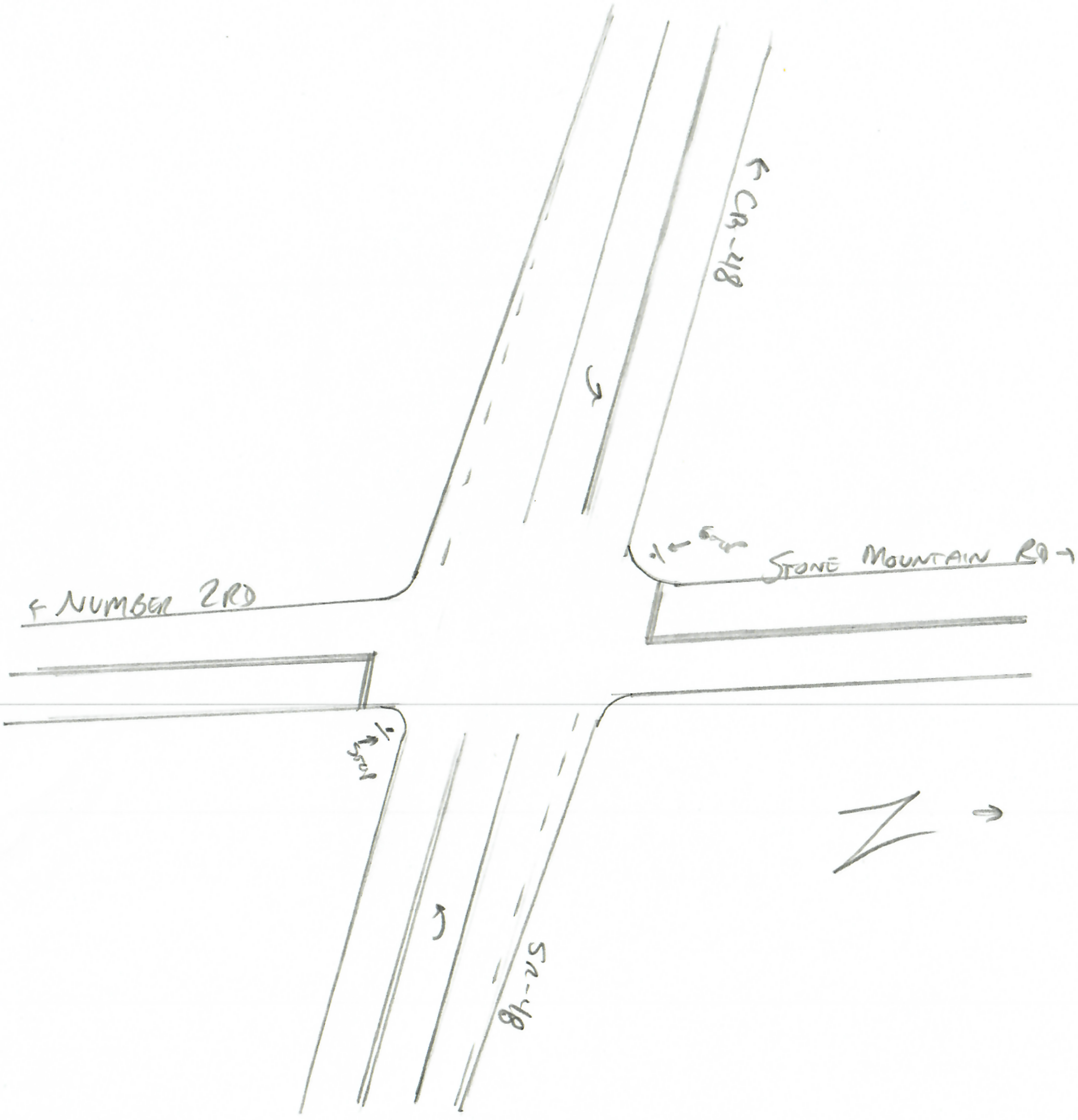
15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: May 24, 2022 (Tuesday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: Number 2 & CR 48 **COUNTY:** Lake County **LONGITUDE:** 0

	Number 2					Number 2						CR 48					CR 48						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	5	0	0	**5**	0	8	0	0	**8**	**13**	**13**
07:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	6	0	0	**6**	0	8	0	0	**8**	**14**	**14**
07:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	11	0	0	**11**	0	4	0	0	**4**	**15**	**15**
07:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	12	0	0	**12**	0	6	0	0	**6**	**18**	**18**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	34	0	0	**34**	0	26	0	0	**26**	**60**	**60**
08:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	4	1	0	**5**	0	9	0	0	**9**	**14**	**14**
08:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	7	0	0	**7**	0	12	0	0	**12**	**19**	**19**
08:30 AM	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	5	1	0	**6**	0	5	0	0	**5**	**11**	**12**
08:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	3	0	0	**3**	0	7	0	0	**7**	**10**	**10**
TOTAL	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	19	2	0	**21**	0	33	0	0	**33**	**54**	**55**
09:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
09:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
09:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
09:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	2	0	0	**2**	0	3	0	0	**3**	**5**	**5**
04:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	2	0	0	**2**	0	2	0	0	**2**	**4**	**4**
04:30 PM	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	5	0	0	**5**	0	4	0	0	**4**	**9**	**10**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	5	0	0	**5**	0	5	0	0	**5**	**10**	**10**
TOTAL	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	14	0	0	**14**	0	14	0	0	**14**	**28**	**29**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	1	0	**2**	0	4	0	0	**4**	**6**	**6**
05:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	2	0	0	**2**	0	4	0	0	**4**	**6**	**6**
05:30 PM	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**2**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**1**
TOTAL	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	5	1	0	**6**	0	8	0	0	**8**	**14**	**15**
AM Peak																							
07:00 AM to 08:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**0**	**34**	**0**	**26**	**0**	**0**	**26**	**60**	**60**
PM Peak																							
04:30 PM to 05:30 PM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**13**	**1**	**0**	**14**	**0**	**17**	**0**	**0**	**17**	**31**	**32**


NUMBER 2RD
STONE MOUNTAIN RD
CR-48
CR-48
N

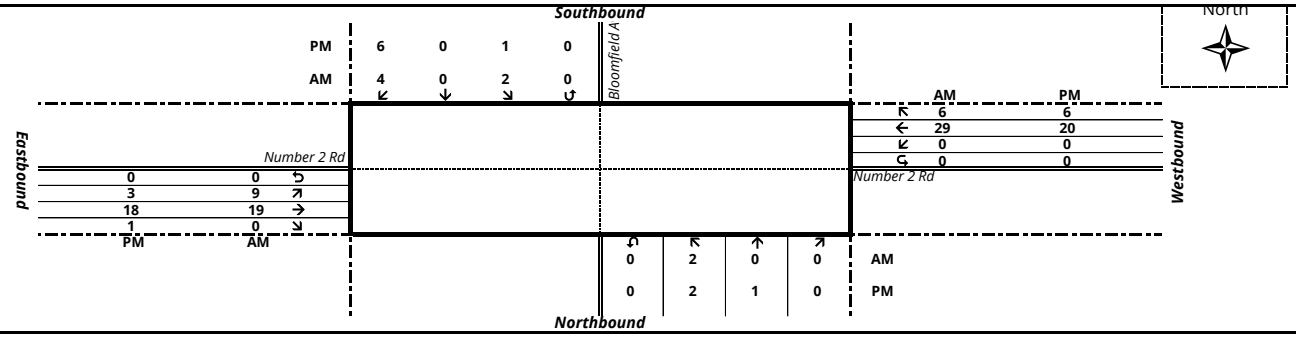
15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: May 19, 2022 (Thursday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: Bloomfield Av & Number 2 Rd **COUNTY:** Lake County **LONGITUDE:** 0

						Bloomfield Av						Number 2 Rd					Number 2 Rd						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	2	0	0	0	**2**	0	6	2	0	**8**	**10**	**10**
07:15 AM	1	0	0	0	**1**	0	0	1	0	**1**	**2**	2	3	0	0	**5**	0	2	0	0	**2**	**7**	**9**
07:30 AM	0	0	0	0	**0**	1	0	0	0	**1**	**1**	0	7	0	0	**7**	0	4	1	0	**5**	**12**	**13**
07:45 AM	0	0	0	0	**0**	0	0	1	0	**1**	**1**	1	2	0	0	**3**	0	3	0	0	**3**	**6**	**7**
TOTAL	1	0	0	0	**1**	1	0	2	0	**3**	**4**	5	12	0	0	**17**	0	15	3	0	**18**	**35**	**39**
08:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	1	1	0	0	**2**	0	3	1	0	**4**	**6**	**6**
08:15 AM	0	0	0	0	**0**	0	0	1	0	**1**	**1**	2	1	0	0	**3**	0	6	2	0	**8**	**11**	**12**
08:30 AM	1	0	0	0	**1**	1	0	1	0	**2**	**3**	1	5	0	0	**6**	0	5	0	0	**5**	**11**	**14**
08:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	2	2	0	0	**4**	0	2	0	0	**2**	**6**	**6**
TOTAL	1	0	0	0	**1**	1	0	2	0	**3**	**4**	6	9	0	0	**15**	0	16	3	0	**19**	**34**	**38**
04:00 PM	0	0	0	0	**0**	1	0	0	0	**1**	**1**	0	4	0	0	**4**	0	4	0	0	**4**	**8**	**9**
04:15 PM	0	0	0	0	**0**	0	0	1	0	**1**	**1**	1	1	1	0	**3**	0	4	0	0	**4**	**7**	**8**
04:30 PM	1	0	0	0	**1**	0	0	1	0	**1**	**2**	1	5	0	0	**6**	0	5	2	0	**7**	**13**	**15**
04:45 PM	1	0	0	0	**1**	0	0	2	0	**2**	**3**	1	2	0	0	**3**	0	0	3	0	**3**	**6**	**9**
TOTAL	2	0	0	0	**2**	1	0	4	0	**5**	**7**	3	12	1	0	**16**	0	13	5	0	**18**	**34**	**41**
05:00 PM	0	0	0	0	**0**	0	0	1	0	**1**	**1**	0	4	0	0	**4**	0	2	1	0	**3**	**7**	**8**
05:15 PM	0	1	0	0	**1**	0	0	1	0	**1**	**2**	0	2	0	0	**2**	0	5	0	0	**5**	**7**	**9**
05:30 PM	0	0	0	0	**0**	2	0	1	1	**4**	**4**	1	4	1	0	**6**	0	1	0	0	**1**	**7**	**11**
05:45 PM	0	0	0	0	**0**	0	0	1	0	**1**	**1**	2	4	0	0	**6**	0	2	0	0	**2**	**8**	**9**
TOTAL	0	1	0	0	**1**	2	0	4	1	**7**	**8**	3	14	1	0	**18**	0	10	1	0	**11**	**29**	**37**
AM Peak																						**Peak Hour Factor:**	**1.268**
07:00 AM to 08:00 AM	**2**	**0**	**0**	**0**	**2**	**2**	**0**	**4**	**0**	**6**	**8**	**9**	**19**	**0**	**0**	**28**	**0**	**29**	**6**	**0**	**35**	**63**	**71**
PM Peak																						**Peak Hour Factor:**	**0.967**
04:00 PM to 05:00 PM	**2**	**1**	**0**	**0**	**3**	**1**	**0**	**6**	**0**	**7**	**10**	**3**	**18**	**1**	**0**	**22**	**0**	**20**	**6**	**0**	**26**	**48**	**58**



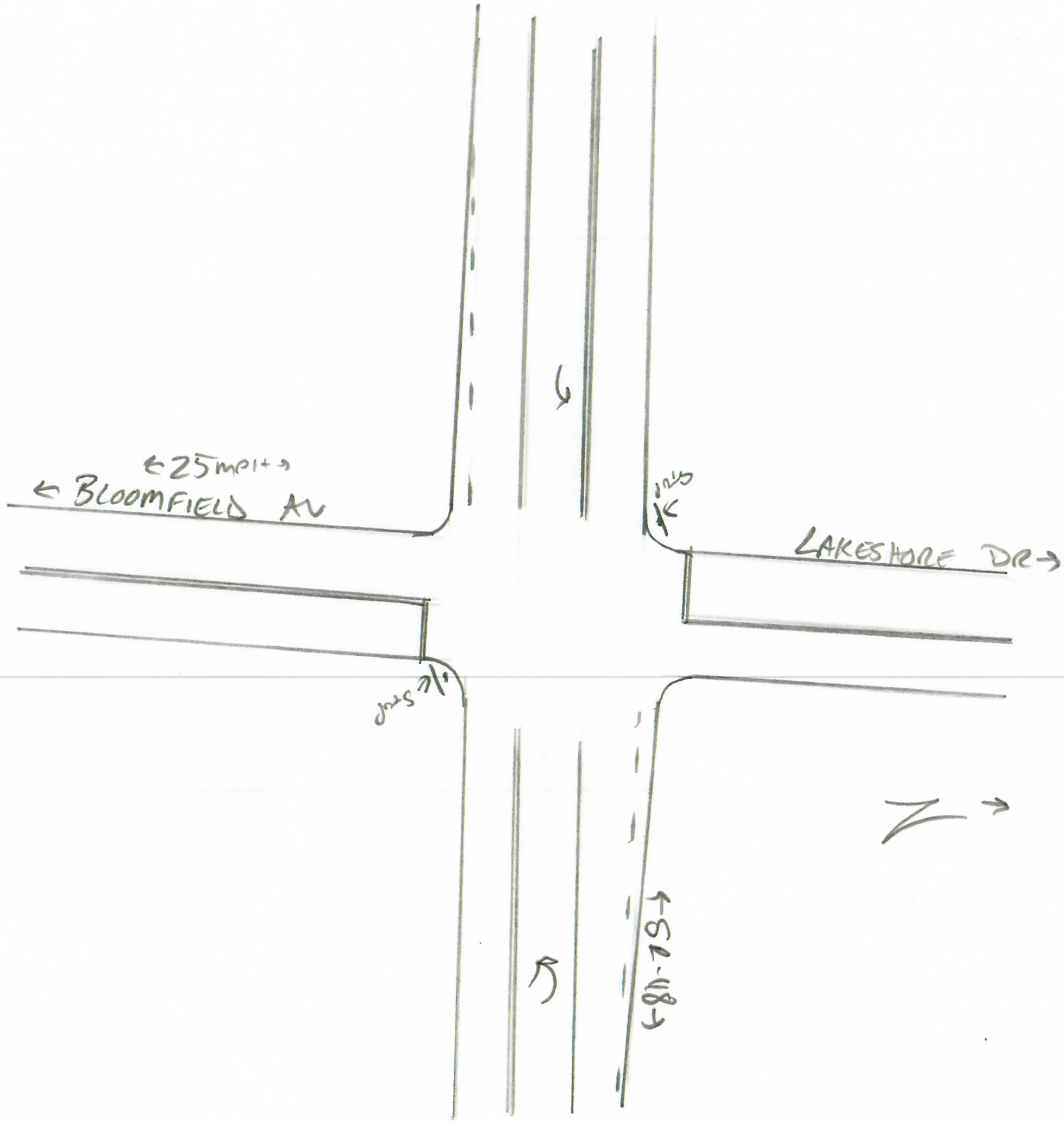
15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: May 19, 2022 (Thursday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: Bloomfield Av & Number 2 Rd **COUNTY:** Lake County **LONGITUDE:** 0

						Bloomfield Av						**Number 2 Rd**						**Number 2 Rd**						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**1**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**1**
08:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
08:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
08:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	1	0	0	0	**1**	0	0	0	0	**0**	**1**	**1**
08:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	1	0	0	**1**	**1**	**1**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	1	0	0	0	**1**	0	1	0	0	**1**	**2**	**2**
04:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	1	0	0	0	**1**	0	0	0	0	**0**	**1**	**1**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	1	0	0	0	**1**	0	0	0	0	**0**	**1**	**1**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
AM Peak																							
07:00 AM to 08:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**2**
PM Peak																							
04:00 PM to 05:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**


←25 mph→
← BLOOMFIELD AV
LAKESHORE DR→
N
←25 mph→
N

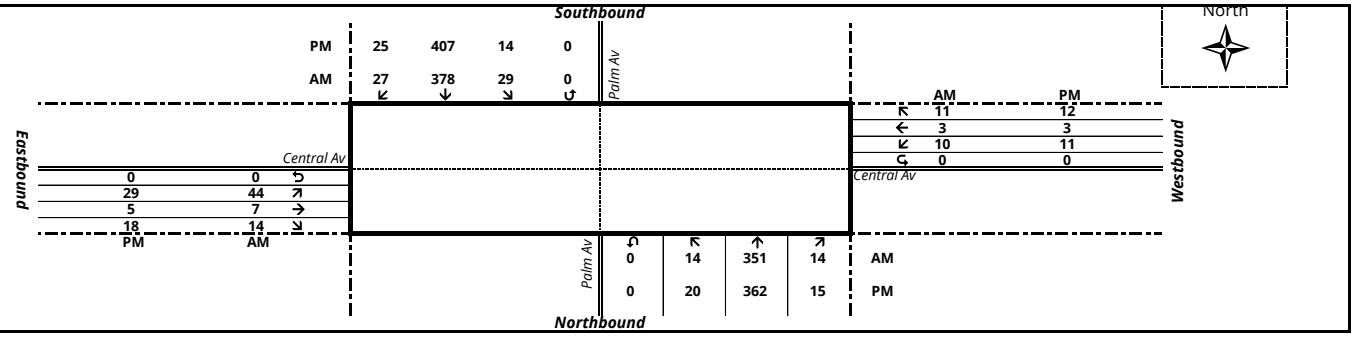
15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: May 19, 2022 (Thursday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: Palm Av & Central Av **COUNTY:** Lake County **LONGITUDE:** 0

	Palm Av					Palm Av						Central Av					Central Av						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	2	92	1	0	**95**	7	103	3	0	**113**	**208**	17	3	8	0	**28**	2	1	2	0	**5**	**33**	**241**
07:15 AM	3	84	2	0	**89**	4	74	6	0	**84**	**173**	8	2	1	0	**11**	4	1	3	0	**8**	**19**	**192**
07:30 AM	2	105	5	0	**112**	3	122	8	0	**133**	**245**	8	1	1	0	**10**	1	0	3	0	**4**	**14**	**259**
07:45 AM	7	70	6	0	**83**	15	79	10	0	**104**	**187**	11	1	4	0	**16**	3	1	3	0	**7**	**23**	**210**
TOTAL	14	351	14	0	**379**	29	378	27	0	**434**	**813**	44	7	14	0	**65**	10	3	11	0	**24**	**89**	**902**
08:00 AM	3	79	4	0	**86**	6	93	9	0	**108**	**194**	5	1	2	0	**8**	1	1	4	0	**6**	**14**	**208**
08:15 AM	2	75	6	0	**83**	9	66	6	0	**81**	**164**	2	0	1	0	**3**	5	1	6	0	**12**	**15**	**179**
08:30 AM	2	84	4	0	**90**	3	62	5	0	**70**	**160**	5	0	5	0	**10**	1	0	8	0	**9**	**19**	**179**
08:45 AM	2	77	5	0	**84**	4	58	6	0	**68**	**152**	4	1	4	0	**9**	3	1	7	0	**11**	**20**	**172**
TOTAL	9	315	19	0	**343**	22	279	26	0	**327**	**670**	16	2	12	0	**30**	10	3	25	0	**38**	**68**	**738**
04:00 PM	4	97	4	0	**105**	6	98	6	0	**110**	**215**	4	2	3	0	**9**	3	1	6	0	**10**	**19**	**234**
04:15 PM	3	81	5	0	**89**	2	88	9	0	**99**	**188**	13	0	1	0	**14**	5	0	3	0	**8**	**22**	**210**
04:30 PM	7	90	0	0	**97**	3	96	8	0	**107**	**204**	4	2	2	0	**8**	2	0	1	0	**3**	**11**	**215**
04:45 PM	2	99	4	0	**105**	6	86	7	0	**99**	**204**	10	0	2	0	**12**	3	2	3	0	**8**	**20**	**224**
TOTAL	16	367	13	0	**396**	17	368	30	0	**415**	**811**	31	4	8	0	**43**	13	3	13	0	**29**	**72**	**883**
05:00 PM	5	79	0	0	**84**	3	92	6	0	**101**	**185**	6	2	10	0	**18**	3	0	7	0	**10**	**28**	**213**
05:15 PM	6	94	11	0	**111**	2	133	4	0	**139**	**250**	9	1	4	0	**14**	3	1	1	0	**5**	**19**	**269**
05:30 PM	1	69	5	0	**75**	5	74	13	0	**92**	**167**	3	2	1	0	**6**	2	1	1	0	**4**	**10**	**177**
05:45 PM	2	88	2	0	**92**	1	85	8	0	**94**	**186**	6	0	1	0	**7**	2	1	1	0	**4**	**11**	**197**
TOTAL	14	330	18	0	**362**	11	384	31	0	**426**	**788**	24	5	16	0	**45**	10	3	10	0	**23**	**68**	**856**
AM Peak																						**Peak Hour Factor:**	**0.871**
07:00 AM to 08:00 AM	**14**	**351**	**14**	**0**	**379**	**29**	**378**	**27**	**0**	**434**	**813**	**44**	**7**	**14**	**0**	**65**	**10**	**3**	**11**	**0**	**24**	**89**	**902**
PM Peak																						**Peak Hour Factor:**	**0.856**
04:30 PM to 05:30 PM	**20**	**362**	**15**	**0**	**397**	**14**	**407**	**25**	**0**	**446**	**843**	**29**	**5**	**18**	**0**	**52**	**11**	**3**	**12**	**0**	**26**	**78**	**921**



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: May 19, 2022 (Thursday) **CITY:** Howie in the Hills **LATITUDE:** 0

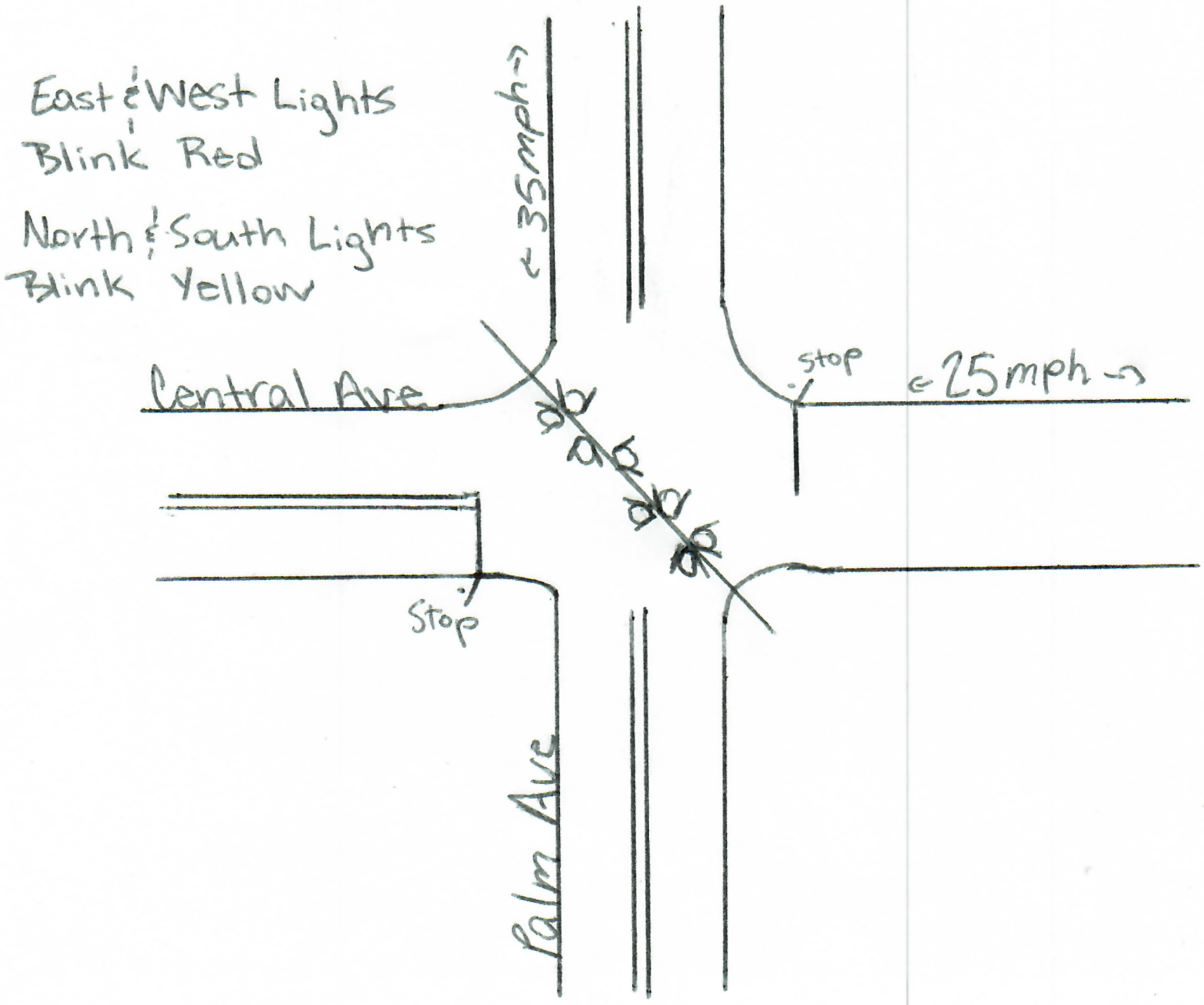
LOCATION: Palm Av & Central Av **COUNTY:** Lake County **LONGITUDE:** 0

	Palm Av					Palm Av						Central Av					Central Av						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	0	6	0	0	**6**	0	10	0	0	**10**	**16**	0	0	2	0	**2**	0	0	0	0	**0**	**2**	**18**
07:15 AM	1	4	1	0	**6**	0	5	0	0	**5**	**11**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**11**
07:30 AM	0	10	0	0	**10**	1	5	1	0	**7**	**17**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**17**
07:45 AM	2	7	0	0	**9**	1	2	1	0	**4**	**13**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**13**
TOTAL	3	27	1	0	**31**	2	22	2	0	**26**	**57**	0	0	2	0	**2**	0	0	0	0	**0**	**2**	**59**
08:00 AM	0	8	0	0	**8**	3	6	1	0	**10**	**18**	0	0	1	0	**1**	0	0	0	0	**0**	**1**	**19**
08:15 AM	0	8	0	0	**8**	1	5	0	0	**6**	**14**	0	0	0	0	**0**	0	0	2	0	**2**	**2**	**16**
08:30 AM	0	7	0	0	**7**	0	5	0	0	**5**	**12**	0	0	1	0	**1**	0	0	3	0	**3**	**4**	**16**
08:45 AM	0	5	0	0	**5**	0	6	0	0	**6**	**11**	0	0	1	0	**1**	0	0	1	0	**1**	**2**	**13**
TOTAL	0	28	0	0	**28**	4	22	1	0	**27**	**55**	0	0	3	0	**3**	0	0	6	0	**6**	**9**	**64**
04:00 PM	1	6	0	0	**7**	0	2	0	0	**2**	**9**	1	1	0	0	**2**	0	0	0	0	**0**	**2**	**11**
04:15 PM	0	3	0	0	**3**	0	3	0	0	**3**	**6**	0	0	1	0	**1**	0	0	0	0	**0**	**1**	**7**
04:30 PM	4	4	0	0	**8**	0	7	0	0	**7**	**15**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**15**
04:45 PM	0	2	0	0	**2**	0	2	1	0	**3**	**5**	0	0	1	0	**1**	0	0	0	0	**0**	**1**	**6**
TOTAL	5	15	0	0	**20**	0	14	1	0	**15**	**35**	1	1	2	0	**4**	0	0	0	0	**0**	**4**	**39**
05:00 PM	2	1	0	0	**3**	0	2	0	0	**2**	**5**	1	0	4	0	**5**	0	0	0	0	**0**	**5**	**10**
05:15 PM	1	3	0	0	**4**	0	1	0	0	**1**	**5**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**5**
05:30 PM	0	1	0	0	**1**	0	2	0	0	**2**	**3**	0	0	1	0	**1**	0	0	0	0	**0**	**1**	**4**
05:45 PM	1	3	0	0	**4**	0	8	0	0	**8**	**12**	1	0	0	0	**1**	0	0	0	0	**0**	**1**	**13**
TOTAL	4	8	0	0	**12**	0	13	0	0	**13**	**25**	2	0	5	0	**7**	0	0	0	0	**0**	**7**	**32**
AM Peak 07:00 AM to 08:00 AM	**3**	**27**	**1**	**0**	**31**	**2**	**22**	**2**	**0**	**26**	**57**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**59**
PM Peak 04:30 PM to 05:30 PM	**7**	**10**	**0**	**0**	**17**	**0**	**12**	**1**	**0**	**13**	**30**	**1**	**0**	**5**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**6**	**36**

N

East & West Lights
Blink Red

North & South Lights
Blink Yellow



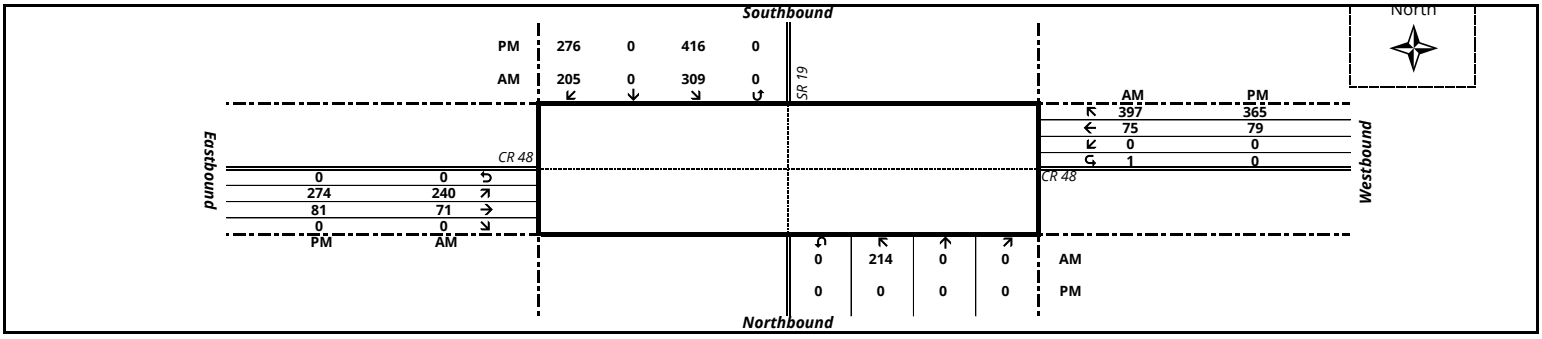
15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: January 13, 2022 (Thursday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: SR 19 & CR 48 **COUNTY:** Lake County **LONGITUDE:** 0

						SR 19						CR 48						CR 48						
TIME	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
BEGIN	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
07:00 AM	47	0	0	0	**47**	62	0	34	0	**96**	**143**	67	16	0	0	**83**	0	8	62	1	**71**	**154**	**297**
07:15 AM	70	0	0	0	**70**	83	0	49	0	**132**	**202**	78	17	0	0	**95**	0	15	110	1	**126**	**221**	**423**
07:30 AM	53	0	0	0	**53**	94	0	44	0	**138**	**191**	59	16	0	0	**75**	0	25	108	0	**133**	**208**	**399**
07:45 AM	48	0	0	0	**48**	62	0	55	0	**117**	**165**	53	18	0	0	**71**	0	19	87	0	**106**	**177**	**342**
TOTAL	218	0	0	0	**218**	301	0	182	0	**483**	**701**	257	67	0	0	**324**	0	67	367	2	**436**	**760**	**1,461**
08:00 AM	43	0	0	0	**43**	70	0	57	0	**127**	**170**	50	20	0	0	**70**	0	16	92	0	**108**	**178**	**348**
08:15 AM	55	0	0	0	**55**	69	0	67	0	**136**	**191**	58	16	0	0	**74**	0	31	82	0	**113**	**187**	**378**
08:30 AM	66	0	0	0	**66**	54	0	54	0	**108**	**174**	71	15	0	0	**86**	0	24	84	1	**109**	**195**	**369**
08:45 AM	50	0	0	0	**50**	56	0	66	0	**122**	**172**	56	17	0	0	**73**	0	16	63	0	**79**	**152**	**324**
TOTAL	214	0	0	0	**214**	249	0	244	0	**493**	**707**	235	68	0	0	**303**	0	87	321	1	**409**	**712**	**1,419**
04:00 PM	0	0	0	0	**0**	106	0	68	0	**174**	**174**	81	13	0	0	**94**	0	19	86	0	**105**	**199**	**373**
04:15 PM	0	0	0	0	**0**	83	0	76	0	**159**	**159**	72	22	0	0	**94**	0	16	88	0	**104**	**198**	**357**
04:30 PM	0	0	0	0	**0**	91	0	61	0	**152**	**152**	76	22	0	0	**98**	0	19	84	0	**103**	**201**	**353**
04:45 PM	0	0	0	0	**0**	101	0	64	0	**165**	**165**	70	19	0	0	**89**	0	24	99	0	**123**	**212**	**377**
TOTAL	0	0	0	0	**0**	381	0	269	0	**650**	**650**	299	76	0	0	**375**	0	78	357	0	**435**	**810**	**1,460**
05:00 PM	0	0	0	0	**0**	108	0	77	0	**185**	**185**	74	20	0	0	**94**	0	12	84	0	**96**	**190**	**375**
05:15 PM	0	0	0	0	**0**	96	0	74	0	**170**	**170**	75	16	0	0	**91**	0	26	98	0	**124**	**215**	**385**
05:30 PM	0	0	0	0	**0**	111	0	61	0	**172**	**172**	55	26	0	0	**81**	0	17	84	0	**101**	**182**	**354**
05:45 PM	0	0	0	0	**0**	85	0	65	0	**150**	**150**	79	20	0	0	**99**	0	15	66	0	**81**	**180**	**330**
TOTAL	0	0	0	0	**0**	400	0	277	0	**677**	**677**	283	82	0	0	**365**	0	70	332	0	**402**	**767**	**1,444**
AM Peak																						**Peak Hour Factor:**	**0.894**
07:15 AM to 08:15 AM	**214**	**0**	**0**	**0**	**214**	**309**	**0**	**205**	**0**	**514**	**728**	**240**	**71**	**0**	**0**	**311**	**0**	**75**	**397**	**1**	**473**	**784**	**1,512**
PM Peak																						**Peak Hour Factor:**	**0.968**
04:45 PM to 05:45 PM	**0**	**0**	**0**	**0**	**0**	**416**	**0**	**276**	**0**	**692**	**692**	**274**	**81**	**0**	**0**	**355**	**0**	**79**	**365**	**0**	**444**	**799**	**1,491**



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: January 13, 2022 (Thursday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: SR 19 & CR 48 **COUNTY:** Lake County **LONGITUDE:** 0

						SR 19						CR 48					CR 48						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	0	0	0	0	**0**	4	0	2	0	**6**	**6**	6	2	0	0	**8**	0	0	3	0	**3**	**11**	**17**
07:15 AM	0	0	0	0	**0**	4	0	2	0	**6**	**6**	8	0	0	0	**8**	0	0	2	0	**2**	**10**	**16**
07:30 AM	0	0	0	0	**0**	5	0	4	0	**9**	**9**	6	2	0	0	**8**	0	0	5	0	**5**	**13**	**22**
07:45 AM	0	0	0	0	**0**	6	0	3	0	**9**	**9**	5	0	0	0	**5**	0	0	4	0	**4**	**9**	**18**
TOTAL	0	0	0	0	**0**	19	0	11	0	**30**	**30**	25	4	0	0	**29**	0	0	14	0	**14**	**43**	**73**
08:00 AM	0	0	0	0	**0**	4	0	7	0	**11**	**11**	7	6	0	0	**13**	0	2	4	0	**6**	**19**	**30**
08:15 AM	0	0	0	0	**0**	11	0	11	0	**22**	**22**	3	1	0	0	**4**	0	4	6	0	**10**	**14**	**36**
08:30 AM	0	0	0	0	**0**	6	0	8	0	**14**	**14**	5	0	0	0	**5**	0	2	7	0	**9**	**14**	**28**
08:45 AM	0	0	0	0	**0**	7	0	7	0	**14**	**14**	6	0	0	0	**6**	0	1	5	0	**6**	**12**	**26**
TOTAL	0	0	0	0	**0**	28	0	33	0	**61**	**61**	21	7	0	0	**28**	0	9	22	0	**31**	**59**	**120**
04:00 PM	0	0	0	0	**0**	2	0	1	0	**3**	**3**	5	0	0	0	**5**	0	0	7	0	**7**	**12**	**15**
04:15 PM	0	0	0	0	**0**	5	0	3	0	**8**	**8**	4	1	0	0	**5**	0	0	3	0	**3**	**8**	**16**
04:30 PM	0	0	0	0	**0**	2	0	3	0	**5**	**5**	6	0	0	0	**6**	0	0	0	0	**0**	**6**	**11**
04:45 PM	0	0	0	0	**0**	1	0	2	0	**3**	**3**	2	0	0	0	**2**	0	1	1	0	**2**	**4**	**7**
TOTAL	0	0	0	0	**0**	10	0	9	0	**19**	**19**	17	1	0	0	**18**	0	1	11	0	**12**	**30**	**49**
05:00 PM	0	0	0	0	**0**	3	0	0	0	**3**	**3**	0	0	0	0	**0**	0	0	2	0	**2**	**2**	**5**
05:15 PM	0	0	0	0	**0**	9	0	2	0	**11**	**11**	1	0	0	0	**1**	0	1	3	0	**4**	**5**	**16**
05:30 PM	0	0	0	0	**0**	2	0	2	0	**4**	**4**	2	0	0	0	**2**	0	0	1	0	**1**	**3**	**7**
05:45 PM	0	0	0	0	**0**	4	0	1	0	**5**	**5**	2	0	0	0	**2**	0	0	3	0	**3**	**5**	**10**
TOTAL	0	0	0	0	**0**	18	0	5	0	**23**	**23**	5	0	0	0	**5**	0	1	9	0	**10**	**15**	**38**
AM Peak																							
07:15 AM to 08:15 AM	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**16**	**0**	**35**	**35**	**26**	**8**	**0**	**0**	**34**	**0**	**2**	**15**	**0**	**17**	**51**	**86**
PM Peak																							
04:45 PM to 05:45 PM	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**6**	**0**	**21**	**21**	**5**	**0**	**0**	**0**	**5**	**0**	**2**	**7**	**0**	**9**	**14**	**35**

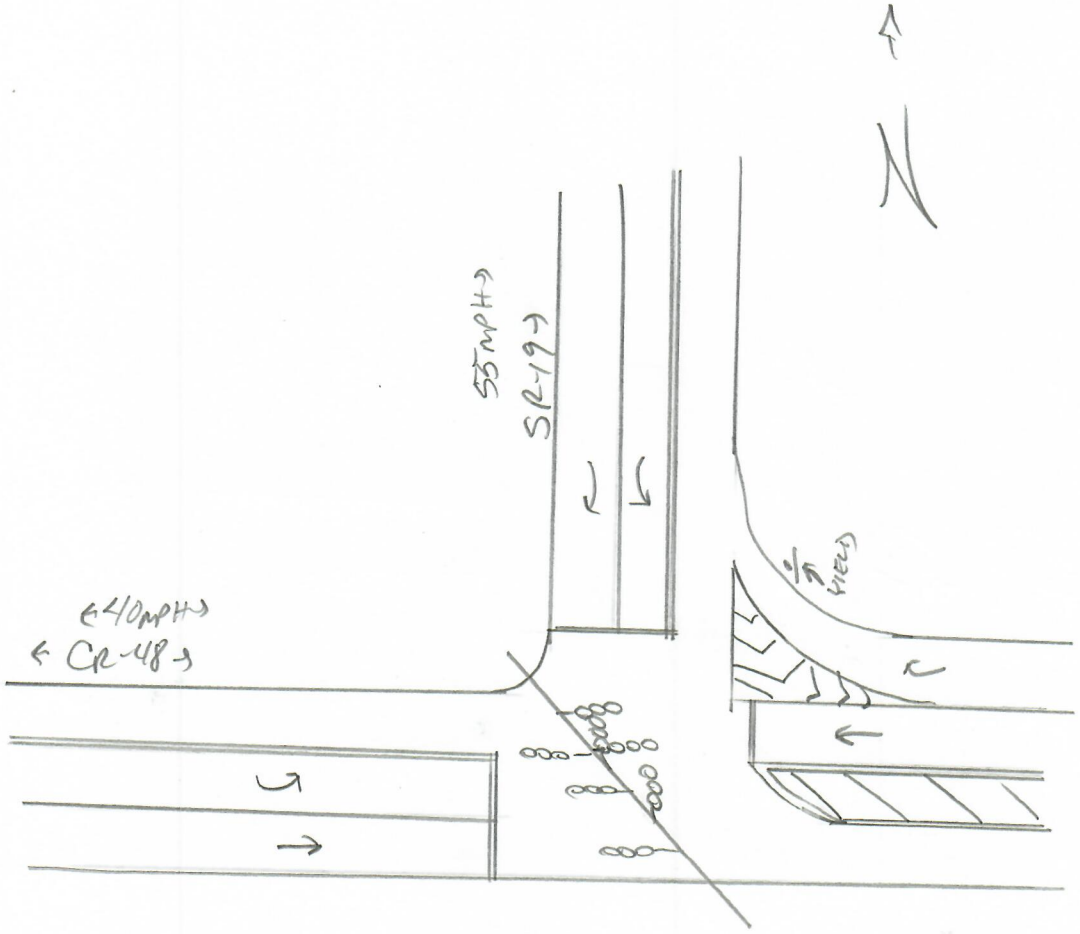
15 MINUTE TURNING MOVEMENT COUNTS

(B A N K 2 Only)

DATE: January 13, 2022 (Thursday) **CITY:** Howie in the Hills **LATITUDE:** 0

LOCATION: SR 19 & CR 48 **COUNTY:** Lake County **LONGITUDE:** 0

						SR 19						CR 48					CR 48						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
07:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
08:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
08:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
08:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
08:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**


N
55MPH
SR-19
40MPH
CR-48
YIELD

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1100 LAKE COUNTYWIDE

MOCF: 0.94

WEEK	DATES	SF	PSCF
1	01/01/2019 - 01/05/2019	1.01	1.07
2	01/06/2019 - 01/12/2019	1.01	1.07
3	01/13/2019 - 01/19/2019	1.01	1.07
4	01/20/2019 - 01/26/2019	0.99	1.05
* 5	01/27/2019 - 02/02/2019	0.97	1.03
* 6	02/03/2019 - 02/09/2019	0.96	1.02
* 7	02/10/2019 - 02/16/2019	0.94	1.00
* 8	02/17/2019 - 02/23/2019	0.94	1.00
* 9	02/24/2019 - 03/02/2019	0.93	0.99
*10	03/03/2019 - 03/09/2019	0.93	0.99
*11	03/10/2019 - 03/16/2019	0.92	0.98
*12	03/17/2019 - 03/23/2019	0.93	0.99
*13	03/24/2019 - 03/30/2019	0.93	0.99
*14	03/31/2019 - 04/06/2019	0.94	1.00
*15	04/07/2019 - 04/13/2019	0.94	1.00
*16	04/14/2019 - 04/20/2019	0.95	1.01
*17	04/21/2019 - 04/27/2019	0.96	1.02
18	04/28/2019 - 05/04/2019	0.98	1.04
19	05/05/2019 - 05/11/2019	0.99	1.05
20	05/12/2019 - 05/18/2019	1.00	1.06
21	05/19/2019 - 05/25/2019	1.01	1.07
22	05/26/2019 - 06/01/2019	1.03	1.10
23	06/02/2019 - 06/08/2019	1.04	1.11
24	06/09/2019 - 06/15/2019	1.05	1.12
25	06/16/2019 - 06/22/2019	1.05	1.12
26	06/23/2019 - 06/29/2019	1.06	1.13
27	06/30/2019 - 07/06/2019	1.06	1.13
28	07/07/2019 - 07/13/2019	1.07	1.14
29	07/14/2019 - 07/20/2019	1.07	1.14
30	07/21/2019 - 07/27/2019	1.06	1.13
31	07/28/2019 - 08/03/2019	1.05	1.12
32	08/04/2019 - 08/10/2019	1.04	1.11
33	08/11/2019 - 08/17/2019	1.03	1.10
34	08/18/2019 - 08/24/2019	1.03	1.10
35	08/25/2019 - 08/31/2019	1.04	1.11
36	09/01/2019 - 09/07/2019	1.05	1.12
37	09/08/2019 - 09/14/2019	1.06	1.13
38	09/15/2019 - 09/21/2019	1.07	1.14
39	09/22/2019 - 09/28/2019	1.05	1.12
40	09/29/2019 - 10/05/2019	1.04	1.11
41	10/06/2019 - 10/12/2019	1.02	1.09
42	10/13/2019 - 10/19/2019	1.00	1.06
43	10/20/2019 - 10/26/2019	1.00	1.06
44	10/27/2019 - 11/02/2019	1.00	1.06
45	11/03/2019 - 11/09/2019	1.00	1.06
46	11/10/2019 - 11/16/2019	1.00	1.06
47	11/17/2019 - 11/23/2019	1.00	1.06
48	11/24/2019 - 11/30/2019	1.00	1.06
49	12/01/2019 - 12/07/2019	1.00	1.06
50	12/08/2019 - 12/14/2019	1.01	1.07
51	12/15/2019 - 12/21/2019	1.01	1.07
52	12/22/2019 - 12/28/2019	1.01	1.07
53	12/29/2019 - 12/31/2019	1.01	1.07

* PEAK SEASON

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

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

SPLIT ALLOCATION - Sec.

PHASE	1	2	3	4	5	6	7	8

NOTES: Naztec 980

APPENDIX D

Existing Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

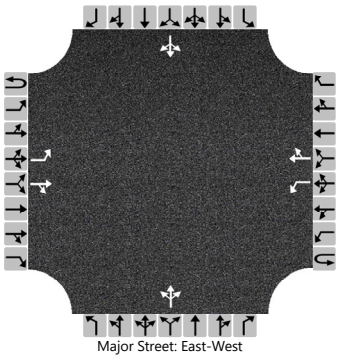
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	5/26/2022
Analysis Year	2022
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	CR 48 and Number 2 Rd
Jurisdiction	Lake County
East/West Street	CR 48
North/South Street	Number 2 Rd
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	0		0	1	0
Configuration		L		TR		L		TR			LTR				LTR	
Volume (veh/h)		2	310	6		1	366	0		24	0	1		4	0	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				1					28				8	
Capacity, c (veh/h)		1138				1194					316				398	
v/c Ratio		0.00				0.00					0.09				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.3				0.1	
Control Delay (s/veh)		8.2				8.0					17.5				14.2	
Level of Service (LOS)		A				A					C				B	
Approach Delay (s/veh)	0.1				0.0				17.5				14.2			
Approach LOS									C				B			

HCS7 Two-Way Stop-Control Report

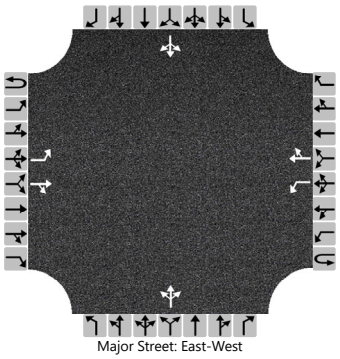
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	5/26/2022
Analysis Year	2022
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	CR 48 and Number 2 Rd
Jurisdiction	Lake County
East/West Street	CR 48
North/South Street	Number 2 Rd
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	0		0	1	0
Configuration		L		TR		L		TR			LTR				LTR	
Volume (veh/h)		3	429	18		6	388	4		13	0	1		5	0	3
Percent Heavy Vehicles (%)		3				3				8	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.18	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.57	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3				6					15				9	
Capacity, c (veh/h)		1137				1081					260				330	
v/c Ratio		0.00				0.01					0.06				0.03	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.1	
Control Delay (s/veh)		8.2				8.3					19.7				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.1				0.1				19.7				16.2			
Approach LOS									C				C			

HCS7 Two-Way Stop-Control Report

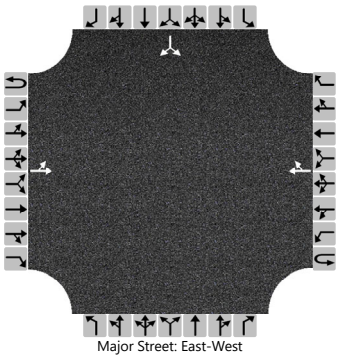
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	5/26/2022
Analysis Year	2022
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	Number 2 Rd & Bloomfield
Jurisdiction	Lake County
East/West Street	Number 2 Rd
North/South Street	Bloomfield Ave
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		9	19				29	6						2		4
Percent Heavy Vehicles (%)		11												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage																

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.21												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.30												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10													7	
Capacity, c (veh/h)		1516													994	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.4													8.6	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		2.4												8.6		
Approach LOS														A		

HCS7 Two-Way Stop-Control Report

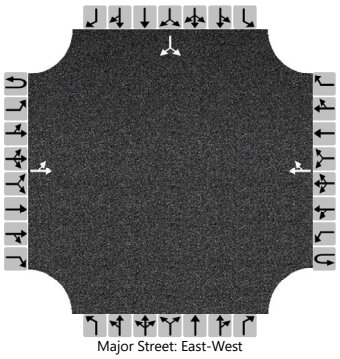
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	5/26/2022
Analysis Year	2022
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	Number 2 Rd & Bloomfield
Jurisdiction	Lake County
East/West Street	Number 2 Rd
North/South Street	Bloomfield Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	18				20	6						1		6
Percent Heavy Vehicles (%)		33												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.43												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.50												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													7	
Capacity, c (veh/h)		1408													1035	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6													8.5	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		1.1												8.5		
Approach LOS														A		

HCS7 Two-Way Stop-Control Report

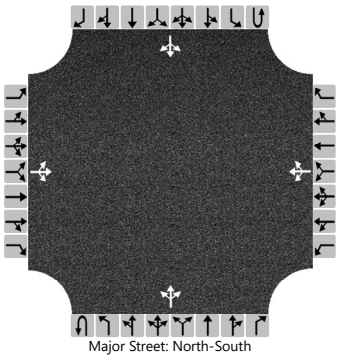
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	5/26/2022
Analysis Year	2022
Time Analyzed	Existing AM
Intersection Orientation	North-South
Project Description	5659

Site Information

Intersection	Palm Ave and Central Ave
Jurisdiction	Lake County
East/West Street	Number 2 Rd/W Central Ave
North/South Street	Palm Ave/SR 19
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		45	7	14		10	3	11		14	355	14		29	382	27
Percent Heavy Vehicles (%)		3	3	14		3	3	3		21				7		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.34		7.13	6.53	6.23		4.31				4.17		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.43		3.53	4.03	3.33		2.39				2.26		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			76				28			16				33		
Capacity, c (veh/h)			247				304			999				1109		
v/c Ratio			0.31				0.09			0.02				0.03		
95% Queue Length, Q_{95} (veh)			1.3				0.3			0.0				0.1		
Control Delay (s/veh)			25.9				18.0			8.7				8.3		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)	25.9				18.0				0.5				0.9			
Approach LOS	D				C											

HCS7 Two-Way Stop-Control Report

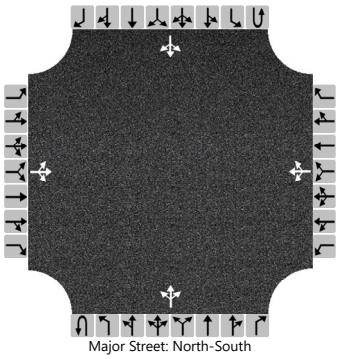
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	5/26/2022
Analysis Year	2022
Time Analyzed	Existing PM
Intersection Orientation	North-South
Project Description	5659

Site Information

Intersection	Palm Ave and Central Ave
Jurisdiction	Lake County
East/West Street	Number 2 Rd/W Central Ave
North/South Street	Palm Ave/SR 19
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		29	5	18		11	3	12		20	366	15		14	411	25
Percent Heavy Vehicles (%)		3	3	28		3	3	3		35				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

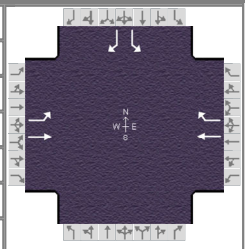
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.48		7.13	6.53	6.23		4.45				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.55		3.53	4.03	3.33		2.52				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			60				30			23				16		
Capacity, c (veh/h)			258				290			908				1112		
v/c Ratio			0.23				0.10			0.03				0.01		
95% Queue Length, Q_{95} (veh)			0.9				0.3			0.1				0.0		
Control Delay (s/veh)			23.2				18.9			9.1				8.3		
Level of Service (LOS)			C				C			A				A		
Approach Delay (s/veh)	23.2				18.9				0.7				0.4			
Approach LOS	C				C											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	SS	Analysis Date	5/26/2022	Area Type	Other
Jurisdiction	Lake County	Time Period	Existing AM	PHF	0.89
Urban Street	CR 48	Analysis Year	2022	Analysis Period	1> 7:15
Intersection	SR 19	File Name	5659 - CR 48 and SR 19 - Existing AM.xus		
Project Description	5659				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	240	71			76	397				309		205

Signal Information			
Cycle, s	71.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

							1	2	3	4
Green	9.8	23.6	17.6	0.0	0.0	0.0	5	6	7	8
Yellow	4.4	4.4	4.8	0.0	0.0	0.0				
Red	2.1	2.0	2.5	0.0	0.0	0.0				

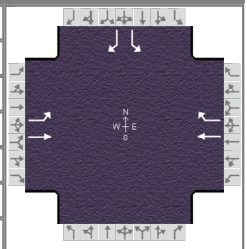
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	16.3	46.3		30.0				24.9
Change Period, (*Y+R c*), s	6.5	6.4		6.4				7.3
Max Allow Headway (*MAH*), s	4.1	4.2		4.2				4.2
Queue Clearance Time (*g s*), s	9.0	3.5		21.1				15.5
Green Extension Time (*g e*), s	0.8	2.6		2.5				2.0
Phase Call Probability	1.00	1.00		1.00				1.00
Max Out Probability	0.00	0.00		0.00				0.03

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	270	80			85	446				347		230
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1654	1737			1856					1725		1510
Queue Service Time (*g s*), s	7.0	1.5			2.3					13.5		9.7
Cycle Queue Clearance Time (*g c*), s	7.0	1.5			2.3					13.5		9.7
Green Ratio (*g/C*)	0.50	0.56			0.33					0.25		0.25
Capacity (*c*), veh/h	696	974			616					427		373
Volume-to-Capacity Ratio (*X*)	0.387	0.082			0.139					0.814		0.617
Back of Queue (*Q*), ft/ln (95 th percentile)	107.1	22.4			41.6					248.1		161.6
Back of Queue (*Q*), veh/ln (95 th percentile)	3.9	0.8			1.6					9.5		6.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00			0.00					0.00		0.00
Uniform Delay (*d 1*), s/veh	10.9	7.2			16.7					25.3		23.8
Incremental Delay (*d 2*), s/veh	0.4	0.0			0.1					3.8		1.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0					0.0		0.0
Control Delay (*d*), s/veh	11.3	7.3			16.8	0.0				29.1		25.5
Level of Service (LOS)	B	A			B	A				C		C
Approach Delay, s/veh / LOS	10.4	B		2.7	A		0.0			27.7	C	
Intersection Delay, s/veh / LOS	14.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.68	A	1.91	B	1.95	B	1.95	B
Bicycle LOS Score / LOS	1.06	A	1.36	A				F

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	SS	Analysis Date	5/26/2022	Area Type	Other
Jurisdiction	Lake County	Time Period	Existing PM	PHF	0.97
Urban Street	CR 48	Analysis Year	2022	Analysis Period	1> 16:45
Intersection	SR 19	File Name	5659 - CR 48 and SR 19 - Existing PM.xus		
Project Description	5659				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	274	81			79	365				416		276

Signal Information			
Cycle, s	71.4	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

							1	2	3	4
							5	6	7	8
Green	10.2	20.2	20.8	0.0	0.0	0.0				
Yellow	4.4	4.4	4.8	0.0	0.0	0.0				
Red	2.1	2.0	2.5	0.0	0.0	0.0				

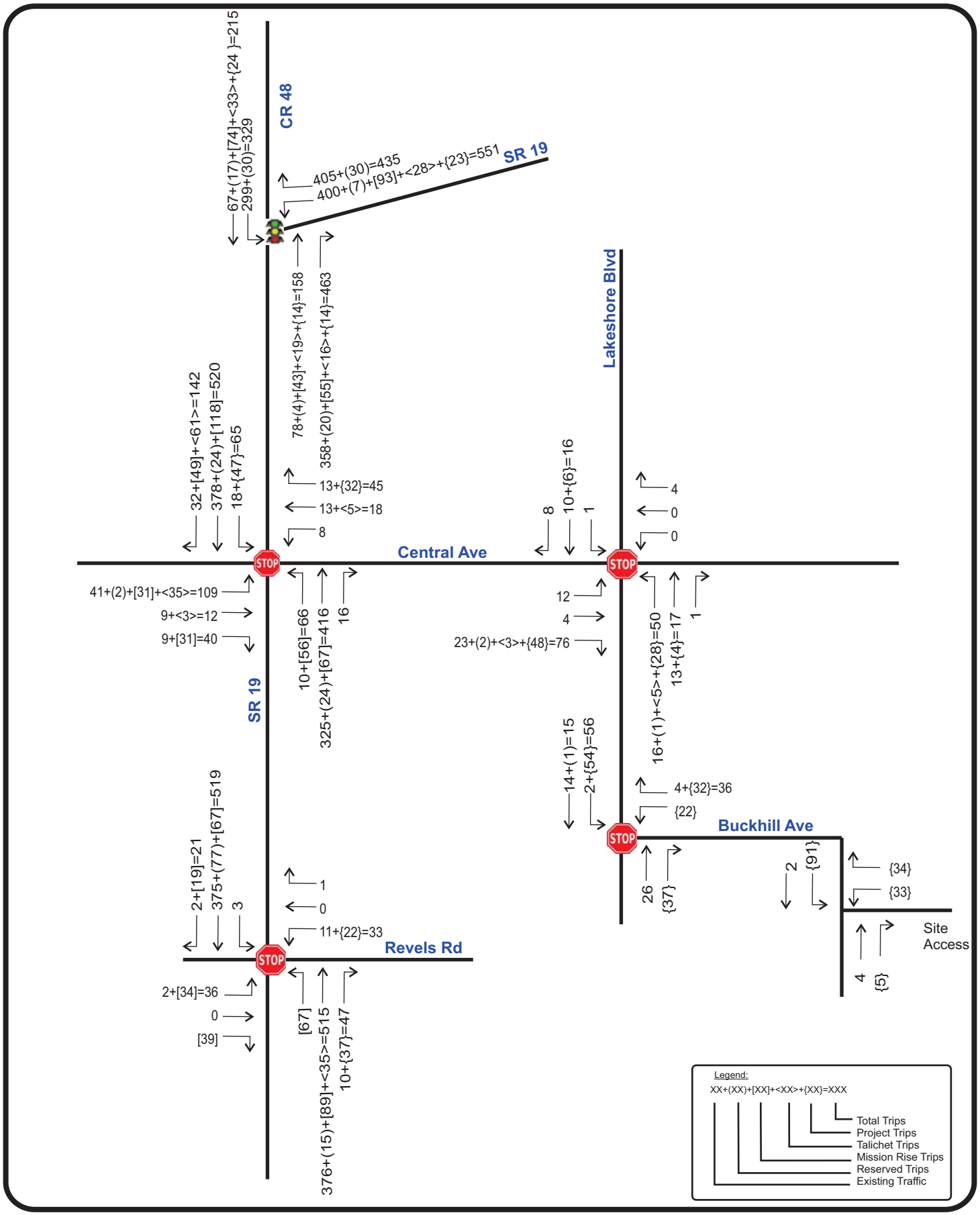
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	16.7	43.3		26.6				28.1
Change Period, (*Y+R c*), s	6.5	6.4		6.4				7.3
Max Allow Headway (*MAH*), s	4.1	4.2		4.2				4.2
Queue Clearance Time (*g s*), s	9.4	3.6		18.0				18.4
Green Extension Time (*g e*), s	0.8	2.2		2.1				2.3
Phase Call Probability	1.00	1.00		1.00				1.00
Max Out Probability	0.00	0.00		0.00				0.14

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	282	84			81	376				429		285
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1900			1856					1753		1585
Queue Service Time (*g s*), s	7.4	1.6			2.4					16.4		11.1
Cycle Queue Clearance Time (*g c*), s	7.4	1.6			2.4					16.4		11.1
Green Ratio (*g/C*)	0.45	0.52			0.28					0.29		0.29
Capacity (*c*), veh/h	687	982			525					512		463
Volume-to-Capacity Ratio (*X*)	0.411	0.085			0.155					0.838		0.615
Back of Queue (*Q*), ft/ln (95 th percentile)	118.2	25			43.8					294.3		181.4
Back of Queue (*Q*), veh/ln (95 th percentile)	4.7	1.0			1.7					11.4		7.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00			0.00					0.00		0.00
Uniform Delay (*d 1*), s/veh	12.8	8.7			19.2					23.8		21.9
Incremental Delay (*d 2*), s/veh	0.4	0.0			0.1					5.9		1.3
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0					0.0		0.0
Control Delay (*d*), s/veh	13.2	8.8			19.4	0.0				29.6		23.2
Level of Service (LOS)	B	A			B	A				C		C
Approach Delay, s/veh / LOS	12.2	B		3.4	A		0.0			27.1	C	
Intersection Delay, s/veh / LOS	16.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.68	A	1.91	B	1.95	B	1.95	B
Bicycle LOS Score / LOS	1.09	A	1.24	A				F

APPENDIX E

Approved Project Trips



Whispering Hills
Project № 5199
Figure 5

Projected P.M. Peak Hour Intersection Volumes

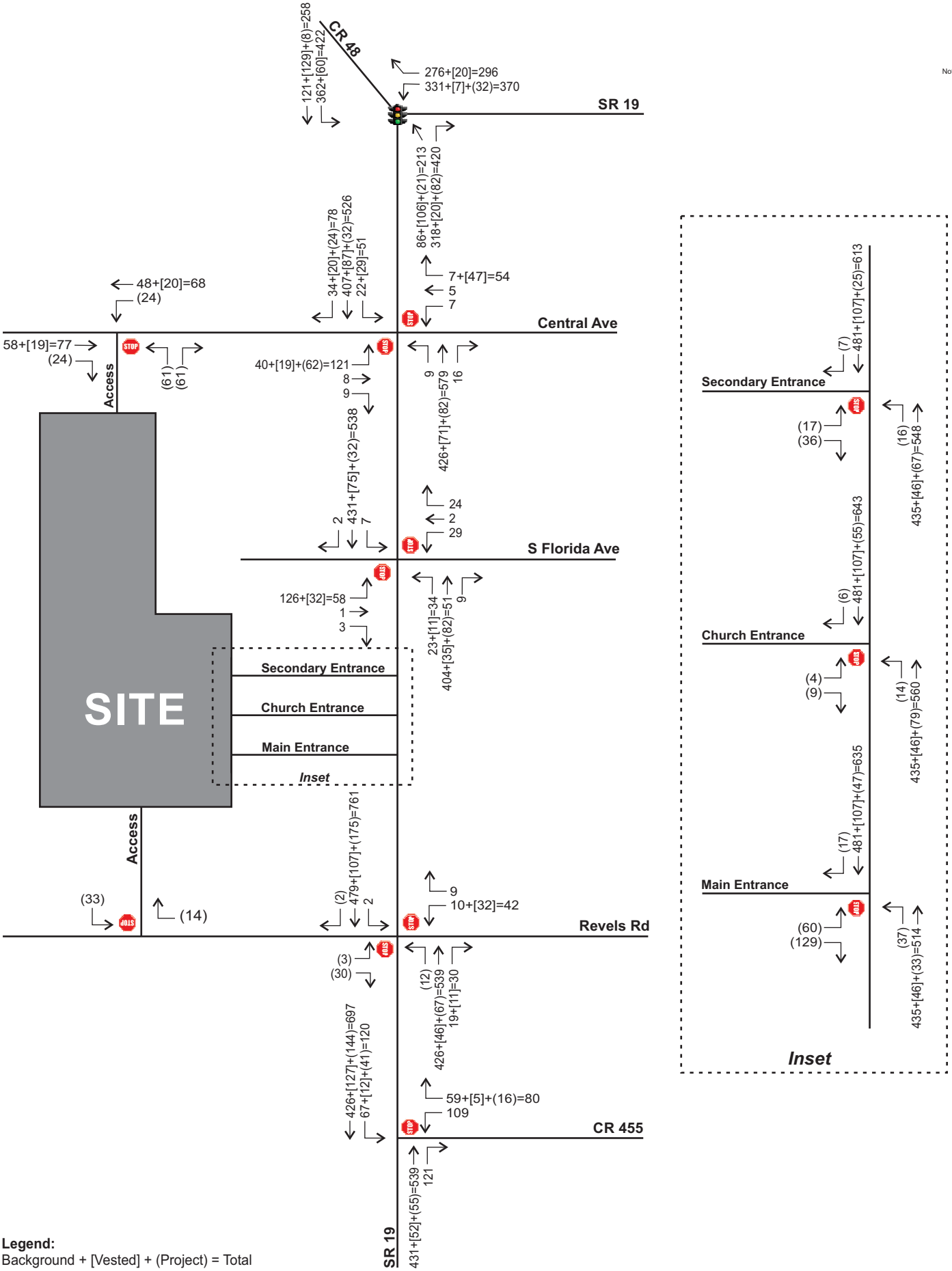
N
NTS

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* 1	Reserved* 2	Reserved* 3	Project**	Total		
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



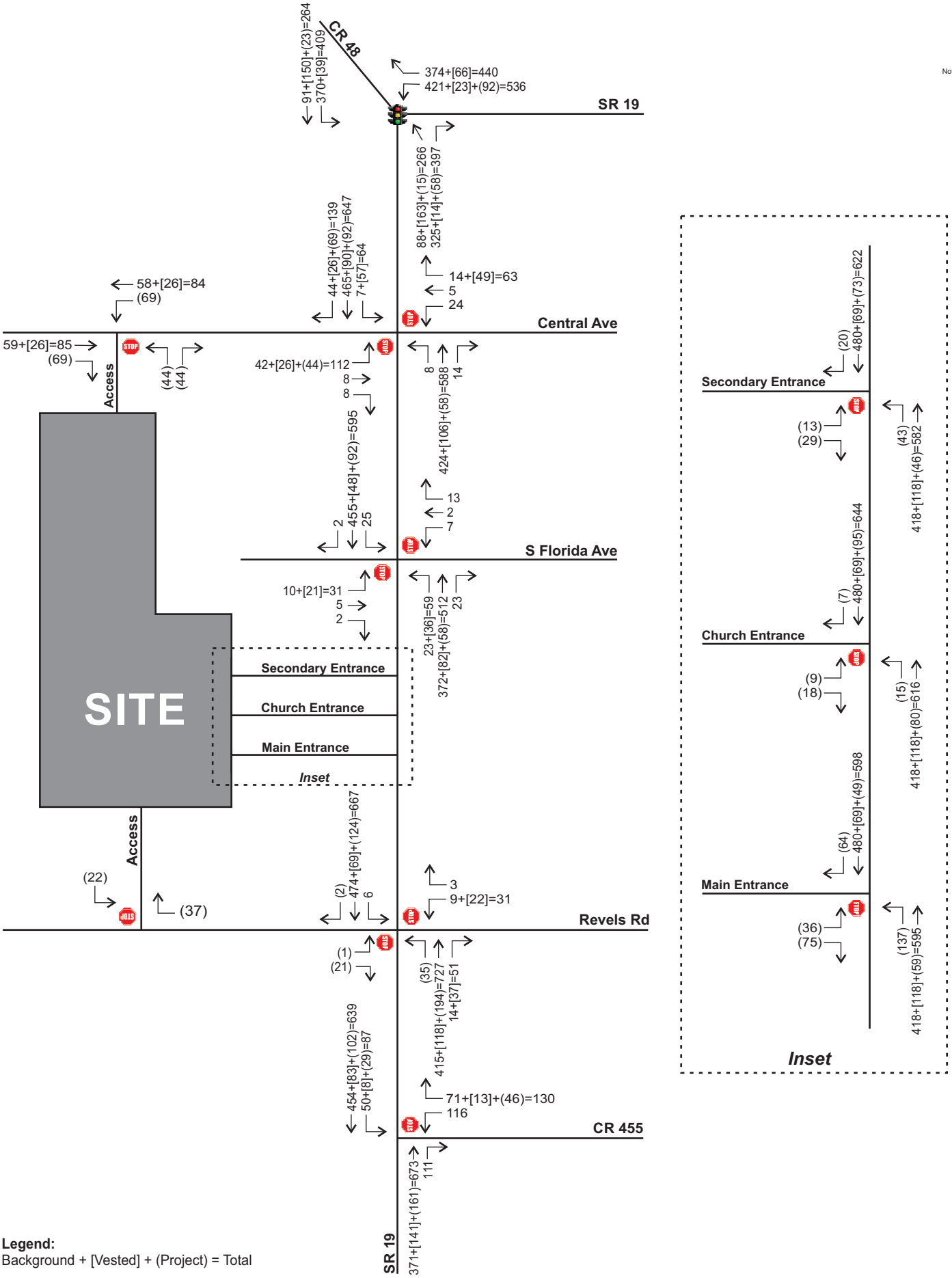
Legend:
Background + [Vested] + (Project) = Total

TMC Traffic & Mobility Consultants

Projected AM Peak Intersection Volumes

The Reserve at Howey in the Hills
21082

Figure 5



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

TMC Traffic & Mobility Consultants

Projected PM Peak Intersection Volumes

The Reserve at Howey in the Hills
21082

Figure 6

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

MEMORANDUM

May 16, 2022

Re: Simpson Howey-In-The-Hills
Tier 2 Traffic Impact Analysis (TIA) Methodology
Town of Howey-In-The-Hills, Florida
Project № 22105

This methodology outlines the Traffic Impact Analysis (TIA) for the above referenced project. This methodology is consistent with the requirements of the Town of Howey-In-The-Hills, Lake County, and the Lake~Sumter Metropolitan Planning Organization (LSMPO) for a Tier 2 TIA.

Project Description

The proposed project is a residential development consisting of 265 single-family units. The project buildout is anticipated to be in 2027. The ±87.17-acre site includes parcels 35-20-25-0150-000-01200, 02-21-25-0001-000-03700 and 35-20-25-0150-000-02600. 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

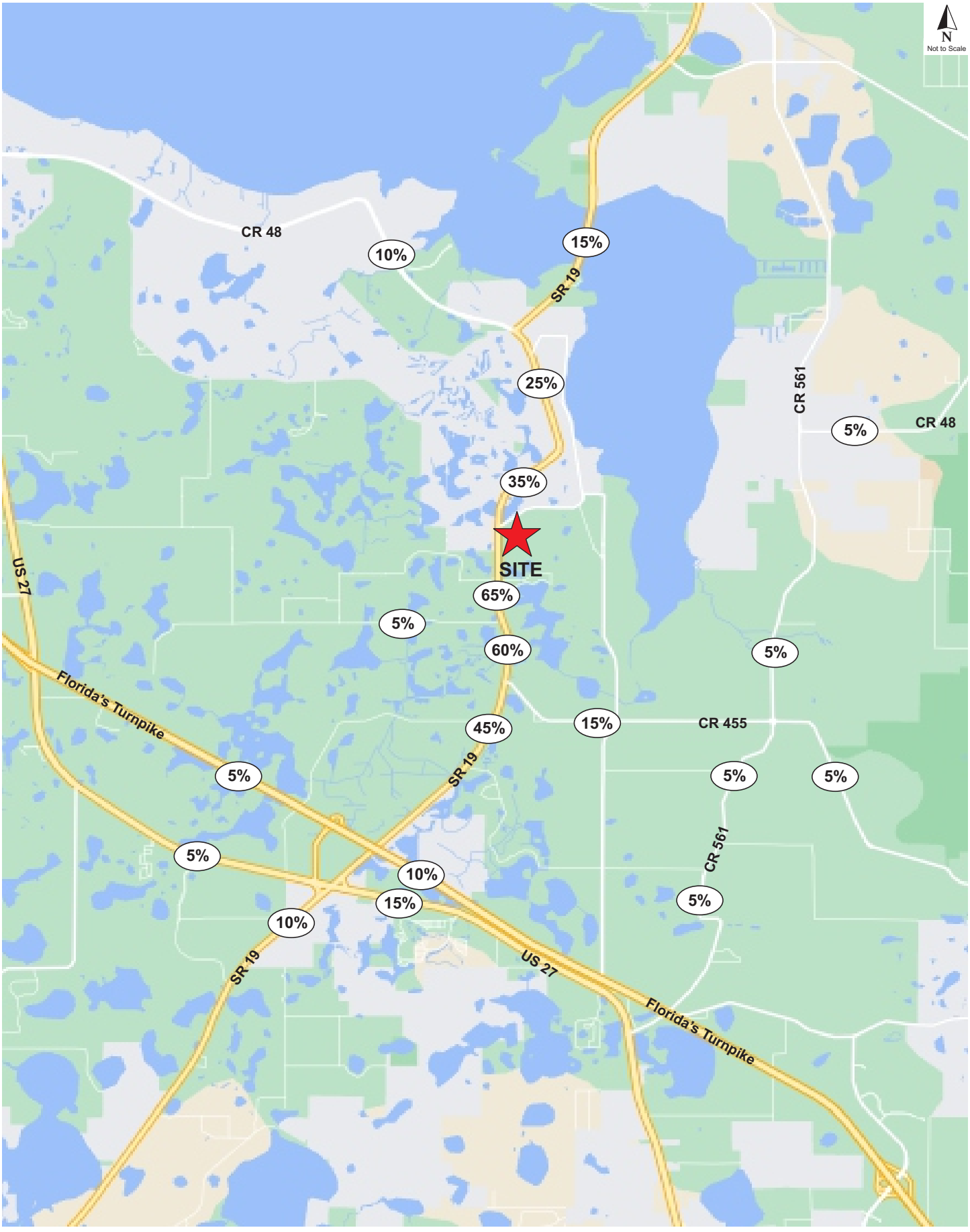
A trip generation analysis was performed for the development using the trip generation information from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition.* The ITE information sheets are included in the **Attachments**. The trip generation for the proposed development is summarized in **Table 1.**

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	269 DU	9.32	2,508	0.68	183	47	136	0.94	252	159	93

Source: ITE Trip Generation Manual, 11th Edition

The proposed development is projected to generate 2,508 new daily trips of which 183 trips occur during the AM peak hour, and 252 trips occur during the PM peak hour.



TMC Traffic & Mobility Consultants

Project Trip Distribution

Simpson Howey-In-The-Hills
22105

Figure
2

Table 2
Study Area Significance Analysis

Road Name	From	To	# LNS	A T	LOS Std	LOS Cap	Project Trips % Dist	Project Trips NB/EB	Project Trips SB/WB	Within 1.0 miles?	% Cap	Signif?	In Study?
CR 455	SR 19	CR 561	2	R	C	740	15%	14	24	NO	3.2%	NO	**NO**
CR 455	CR 561	CR 561A	2	R	C	410	5%	5	8	NO	2.0%	NO	**NO**
CR 48	US 27	Lime Ave	2	U	D	1,080	10%	16	9	NO	1.5%	NO	**NO**
CR 48	Lime Ave	SR 19	2	U	D	1,080	10%	16	9	NO	1.5%	NO	**NO**
CR 48	CR 561	Ranch Rd	2	U	D	840	5%	5	8	NO	1.0%	NO	**NO**
CR 48	Ranch Rd	CR 488A	2	R	C	410	5%	5	8	NO	2.0%	NO	**NO**
CR 561	CR 448	CR 48	2	U	D	1,080	0%	0	0	NO	0.0%	NO	**NO**
CR 561	CR 48	S Astatula City Limits	2	U	D	620	5%	5	8	NO	1.3%	NO	**NO**
CR 561	S Astatula City Limits	CR 455	2	U	D	1,080	5%	5	8	NO	0.7%	NO	**NO**
CR 561	CR 455	Howey Cross Rd	2	R	C	470	5%	8	5	NO	1.7%	NO	**NO**
CR 561	Howey Cross Rd	Turnpike Rd/CR 561A	2	R	C	640	5%	8	5	NO	1.3%	NO	**NO**
Revels Rd*	SR 19	6th Ave	2	R	C	600	100%	93	159	YES	26.5%	YES	**YES**
SR 19	Lane Park Rd	CR 48	2	U	D	920	15%	14	24	NO	2.6%	NO	**NO**
SR 19	CR 48	Central Ave	2	U	D	700	25%	23	40	NO	5.7%	YES	**YES**
SR 19	Central Ave	CR 455	2	R	C	1,200	65%	103	61	YES	8.6%	YES	**YES**
SR 19	CR 455	US 27/SR 25	2	R	C	450	45%	72	41	NO	16.0%	YES	**YES**
SR 19	US 27/SR 25	CR 478	2	R	C	450	10%	16	9	NO	3.6%	NO	**NO**
SR 91 (Florida Turnpike)	US 27/SR 25	US 27/SR 25/SR 19	4	U	B	2,230	5%	5	8	NO	0.4%	NO	**NO**
SR 91 (Florida Turnpike)	US 27/SR 25/SR 19	Orange County Line	4	U	C	3,100	10%	16	9	NO	0.5%	NO	**NO**
US 27/SR 25	Florida Turnpike	SR 19	4	U	D	2,100	5%	5	8	NO	0.4%	NO	**NO**
US 27/SR 25	SR 19	CR 561	4	U	D	3,280	15%	24	14	NO	0.7%	NO	**NO**

Source: 2021 Lake County CMP Database
** LOS Capacity Estimated Using FDOT 2020 QLOS Handbook Table 9*

Based on the study area analysis, the following roadway segments will be analyzed for the PM peak hour:

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

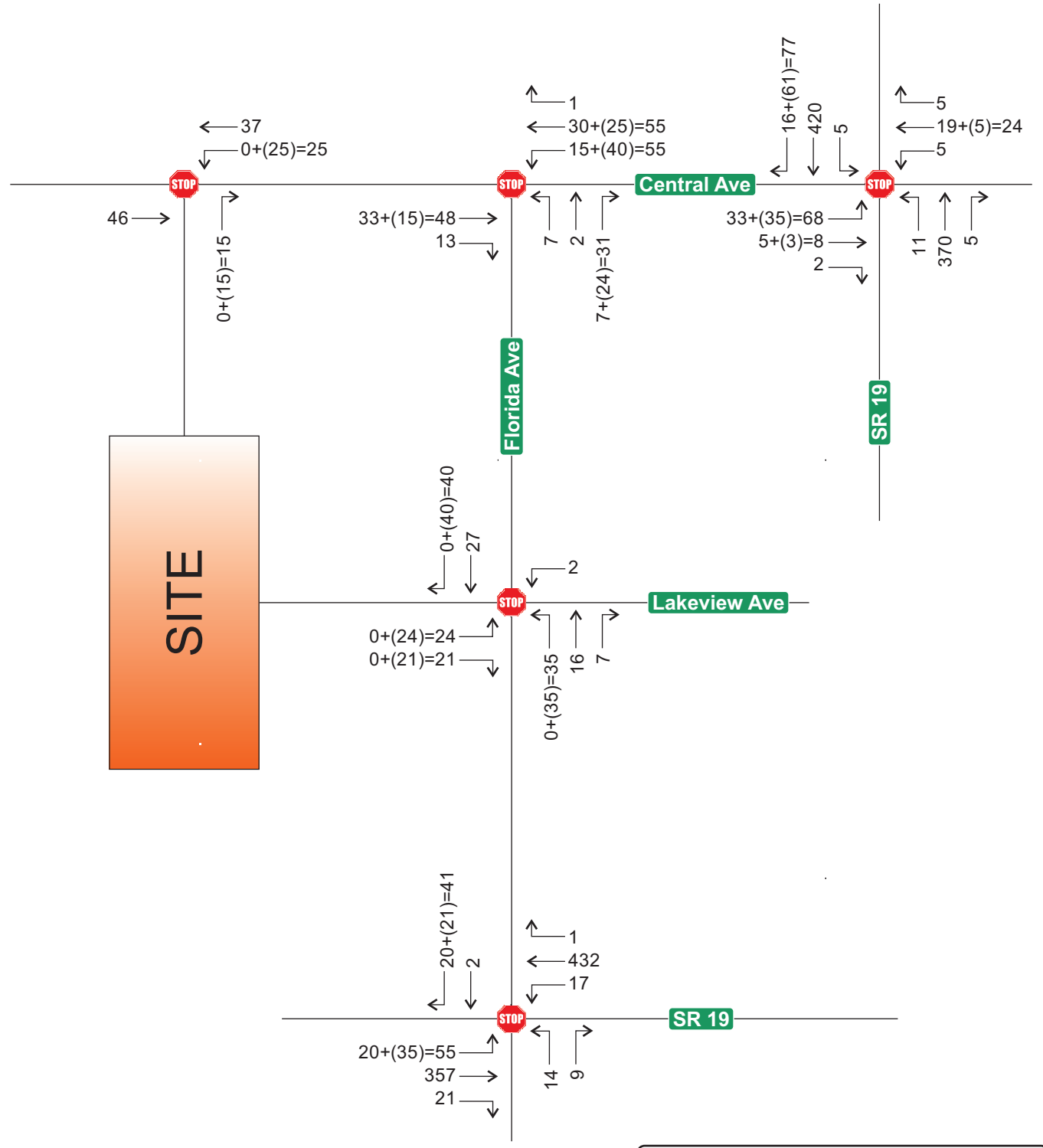
The following intersections will be analyzed for the AM and PM peak hours:

- SR 19 and CR 48 (signalized)
- SR 19 and CR 448 (signalized)
- SR 19 and Central Avenue (unsignalized)
- SR 19 and Revels Road (unsignalized)
- SR 19 and CR 455 (unsignalized)
- Revels Road and Site Access Driveway (proposed)

Table 4
Projected Roadway Capacity Analysis

Seg ID	Roadway	Segment	Lanes	LOS Stnd	PH Dir Capacity	Dir	Backg'd Vol	Trip Dist	Project Vol	% Sig.	Total Vol	Projected LOS
3030	SR 19	CR 561 to LAKE HARRIS NORTH END	2	D	1,190	NB/EB	1,189	28.0%	17	1.43%	1,206	E
						SB/WB	1,136		28	2.35%	1,164	D
3040	SR 19	LAKE HARRIS NORTH END to CR 48	2	C	850	NB/EB	479	28.0%	17	2.00%	496	C
						SB/WB	528		28	3.29%	556	C
3050	SR 19	CR 48 to CENTRAL AVENUE	2	C	710	NB/EB	349	65.0%	38	5.35%	387	C
						SB/WB	304		66	9.30%	370	C
3060	SR 19	CENTRAL AVENUE to CR 455	2	C	850	NB/EB	349	35.0%	35	4.12%	384	B
						SB/WB	304		21	2.47%	325	B
3070	SR 19	CR 455 to US 27 / SR 25	2	C	850	NB/EB	331	22.0%	22	2.59%	353	B
						SB/WB	376		13	1.53%	389	B
1250	C.R. 48	LIME AVENUE to SR 19	2	D	792	NB/EB	395	32.0%	32	4.04%	427	C
						SB/WB	337		19	2.40%	356	C

Note: Background volumes = Existing Volumes x 1 + (Annual Growth Rate x 5 Years of growth from 2016 to 2021)



*Schematic drawing. Not to scale.
** Any +/- 1 project trip discrepancies is due to rounding

Talichet PUD
Project № 5045
Figure 5

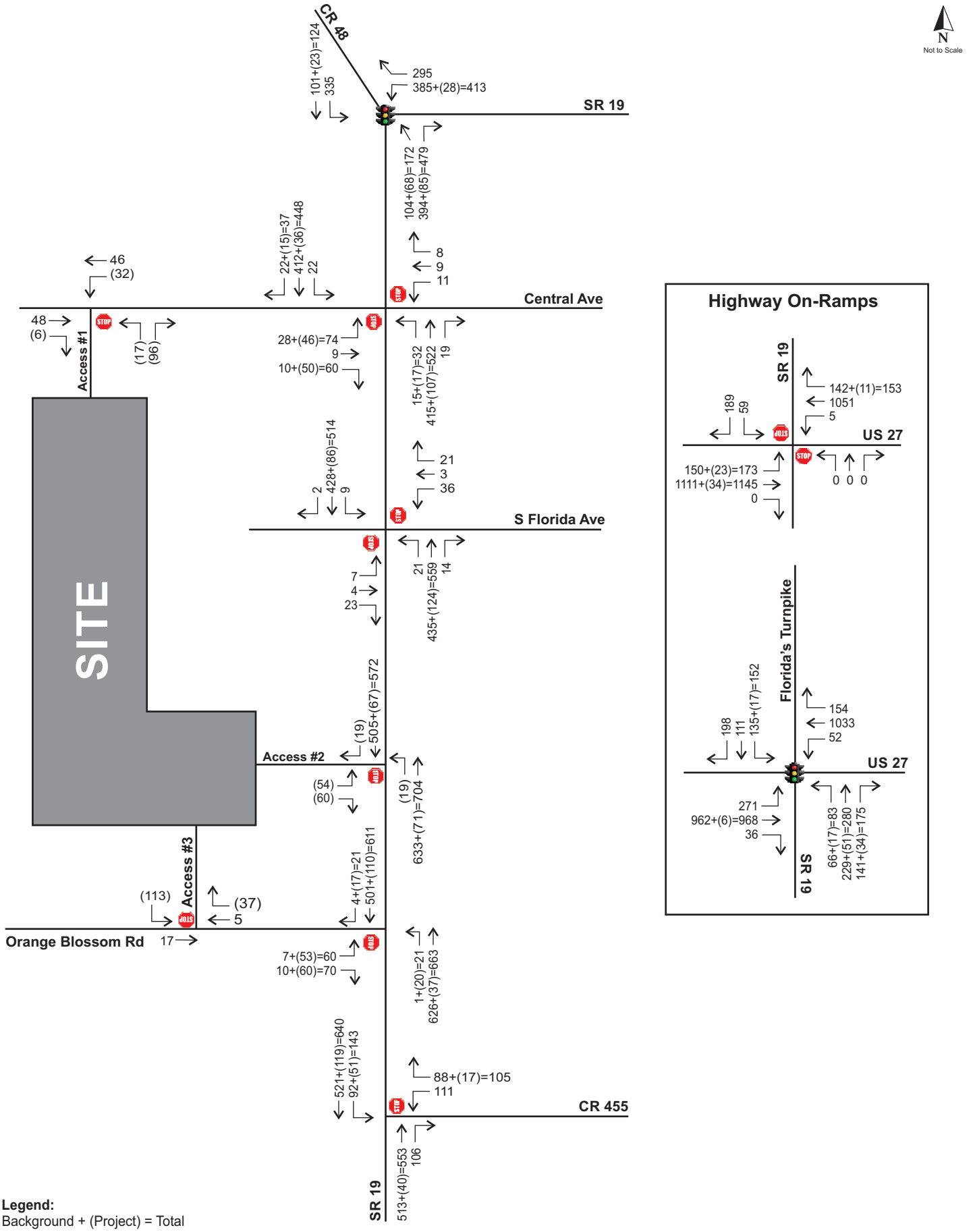
Projected P.M. Peak Hour Traffic Volumes

N
NTS

Table 5
Projected Roadway Segment Capacity Analysis

Roadway Segment	Seg ID	No Lns	LOS Std	PH Dir Capacity	Dir	Exist Vol	Growth Rate	2024 Backg'd	Trip Distr	Proj Dir	Project Volume	Total Volume	LOS
SR 19													
CR 561 to Lake Harris North End	NA	4	D	1,190	NB SB	657 805	4.24%	796 976	25%	OUT IN	55 93	851 1,069	D D
Lake Harris North End to CR 48	NA	2	D	1,200	NB SB	657 805	4.24%	796 976	25%	OUT IN	55 93	851 1,069	D D
CR 48 to Central Ave	NA	2	D	800	NB SB	432 436	3.29%	503 508	45%	OUT IN	99 167	602 675	C C
Central Ave to Taylor Memorial Cemetery	NA	2	D	800	NB SB	432 436	3.29%	503 508	45%	OUT IN	99 167	602 675	C C
Taylor Memorial Cemetery to CR 455 (1)	NA	2	C	900	NB SB	508 503	8.65%	728 721	46%	OUT IN	101 171	829 892	C C
CR 455 to US 27/SR 25 (1)	NA	2	C	900	NB SB	526 541	8.65%	753 775	35%	IN OUT	130 77	883 852	C C
CR 48 (2)													
US 27 to Lime Ave	16	2	D	792	EB WB	366 483	5.62%	469 619	25%	IN OUT	93 55	562 674	C C
Lime Ave to SR 19	16	2	D	792	EB WB	366 483	5.62%	469 619	20%	IN OUT	74 44	543 663	C C
Orange Blossom Rd (2)													
Revels Rd to SR 19	NA	2	D	612	EB WB	8 13	2.00%	9 14	33%	OUT IN	72 123	81 137	C C
Number 2 Rd (2)													
Blue Sink Rd to Mare Ave	NA	2	D	612	EB WB	59 50	2.00%	65 55	5%	OUT IN	11 19	76 74	C C
Central Ave (2)													
Mare Ave to SR 19	NA	2	D	612	EB WB	59 50	2.00%	65 55	28%	OUT IN	61 104	126 159	C C
CR 561													
South Astatula City Limit to CR 455	16	2	D	720	EB WB	520 534	5.33%	659 676	10%	IN OUT	37 22	696 698	D D

Source: 2018 Lake County Annual Traffic Counts
(1) FDOT QLOS HIGHPLAN Analysis for these segments of SR 19
(2) Volumes Obtained from PM Peak Turning Movement Counts



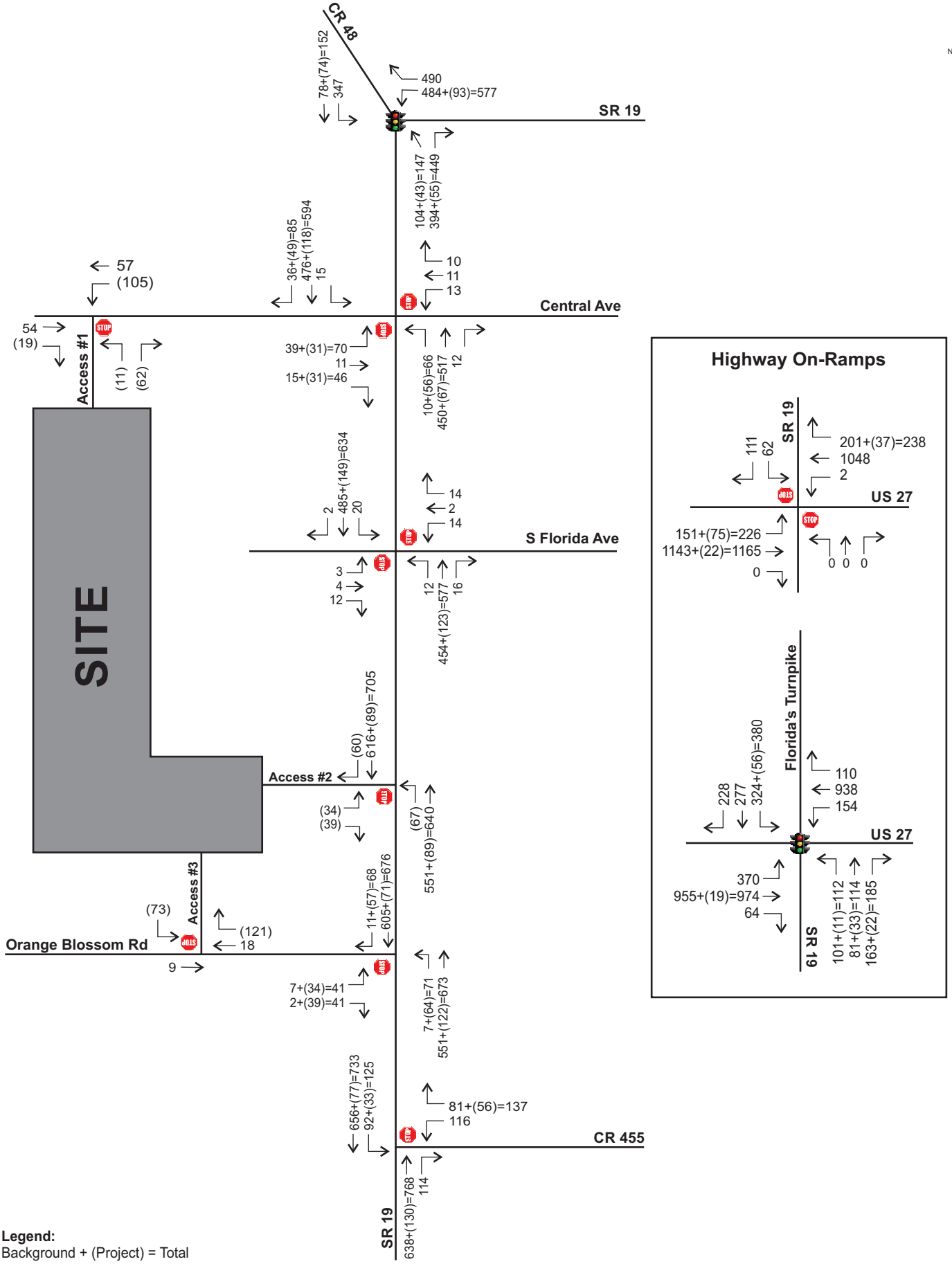
Legend:
Background + (Project) = Total

TMC Traffic & Mobility Consultants

Projected AM Peak Intersection Volumes

Mission Rise
19011

Figure
5



Legend:
Background + (Project) = Total

TMC Traffic & Mobility Consultants

Projected PM Peak Intersection Volumes

Mission Rise
19011

Figure
6

APPENDIX F

Projected Capacity Analysis Worksheets

HCS Two-Way Stop-Control Report

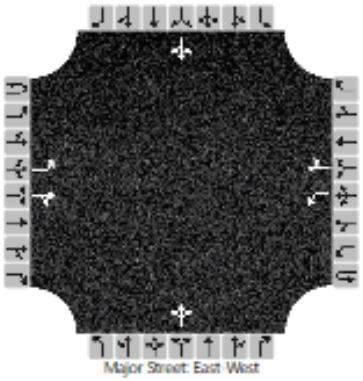
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected AM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	CR 48 and Number 2 Rd
Jurisdiction	Lake County
East/West Street	CR 48
North/South Street	Number 2 Rd
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	0		0	1	0
Configuration		L		TR		L		TR			LTR				LTR	
Volume (veh/h)		2	310	15		2	366	0		52	0	3		4	0	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				2					63				8	
Capacity, c (veh/h)		1138				1184					315				397	
v/c Ratio		0.00				0.00					0.20				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.7				0.1	
Control Delay (s/veh)		8.2				8.0					19.2				14.3	
Level of Service (LOS)		A				A					C				B	
Approach Delay (s/veh)		0.0				0.0				19.2				14.3		
Approach LOS		A				A				C				B		

HCS Two-Way Stop-Control Report

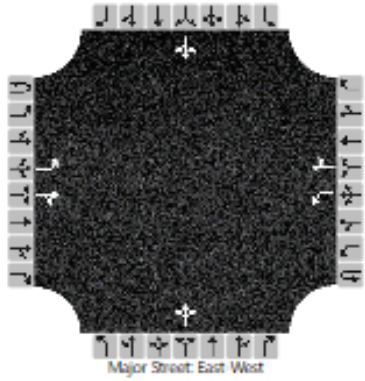
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected PM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	CR 48 and Number 2 Rd
Jurisdiction	Lake County
East/West Street	CR 48
North/South Street	Number 2 Rd
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	0		0	1	0
Configuration		L		TR		L		TR			LTR				LTR	
Volume (veh/h)		3	429	50		8	388	4		32	0	2		5	0	3
Percent Heavy Vehicles (%)		3				3				8	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.18	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.57	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3				9					36				9	
Capacity, c (veh/h)		1137				1050					250				331	
v/c Ratio		0.00				0.01					0.14				0.03	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.5				0.1	
Control Delay (s/veh)		8.2				8.5					21.8				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)		0.1				0.2				21.8				16.2		
Approach LOS		A				A				C				C		

HCS Two-Way Stop-Control Report

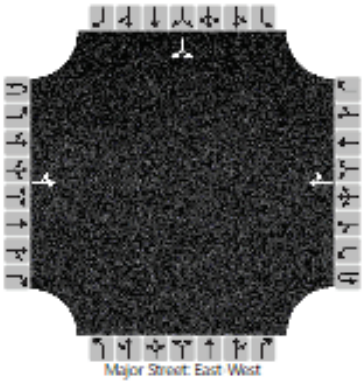
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected AM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	Number 2 Rd & Bloomfield
Jurisdiction	Lake County
East/West Street	Number 2 Rd
North/South Street	Bloomfield Ave
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		9	58				131	22						6		4
Percent Heavy Vehicles (%)		11												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.21												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.30												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10													11	
Capacity, c (veh/h)		1359													796	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.7	0.1												9.6	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)		1.1												9.6		
Approach LOS		A												A		

HCS Two-Way Stop-Control Report

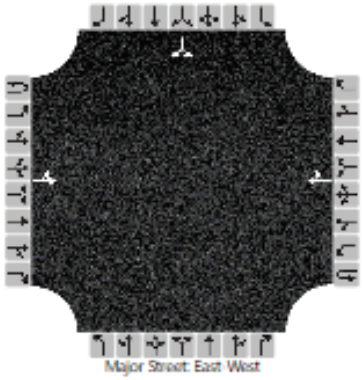
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected PM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	Number 2 Rd & Bloomfield
Jurisdiction	Lake County
East/West Street	Number 2 Rd
North/South Street	Bloomfield Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	143				86	22						9		6
Percent Heavy Vehicles (%)		33												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.43												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.50												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													15	
Capacity, c (veh/h)		1306													806	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.8	0.0												9.6	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)		0.2												9.6		
Approach LOS		A												A		

HCS Two-Way Stop-Control Report

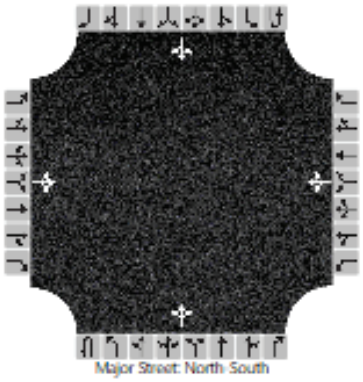
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Bkgd AM
Intersection Orientation	North-South
Project Description	5659

Site Information

Intersection	Palm Ave and Central Ave
Jurisdiction	Lake County
East/West Street	Number 2 Rd/W Central Ave
North/South Street	Palm Ave/SR 19
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		155	7	64		10	3	11		31	572	14		29	532	73
Percent Heavy Vehicles (%)		3	3	14		3	3	3		21				7		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.34		7.13	6.53	6.23		4.31				4.17		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.43		3.53	4.03	3.33		2.39				2.26		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			260				28			36				33		
Capacity, c (veh/h)			116				133			818				894		
v/c Ratio			2.24				0.21			0.04				0.04		
95% Queue Length, Q_{95} (veh)			22.3				0.7			0.1				0.1		
Control Delay (s/veh)			643.4				39.2			9.6	0.7	0.7		9.2	0.6	0.6
Level of Service (LOS)			F				E			A	A	A		A	A	A
Approach Delay (s/veh)		643.4				39.2				1.1				1.0		
Approach LOS		F				E				A				A		

HCS Two-Way Stop-Control Report

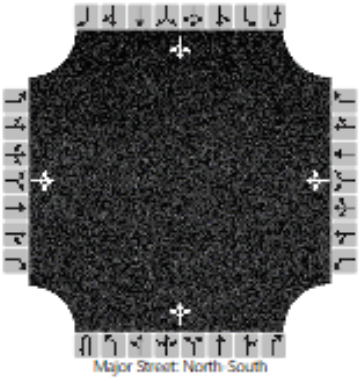
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Bkgd PM
Intersection Orientation	North-South
Project Description	5659

Site Information

Intersection	Palm Ave and Central Ave
Jurisdiction	Lake County
East/West Street	Number 2 Rd/W Central Ave
North/South Street	Palm Ave/SR 19
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		147	8	49		11	8	44		76	586	15		61	677	209
Percent Heavy Vehicles (%)		3	3	14		3	3	3		21				7		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.34		7.13	6.53	6.23		4.31				4.17		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.43		3.53	4.03	3.33		2.39				2.26		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			237				73			88				71		
Capacity, c (veh/h)			29				83			606				875		
v/c Ratio			8.06				0.88			0.15				0.08		
95% Queue Length, Q_{95} (veh)			29.0				4.7			0.5				0.3		
Control Delay (s/veh)			3438.3				155.9			12.0	2.9	2.9		9.5	1.9	1.9
Level of Service (LOS)			F				F			B	A	A		A	A	A
Approach Delay (s/veh)		3438.3				155.9				3.9				2.4		
Approach LOS		F				F				A				A		

HCS Two-Way Stop-Control Report

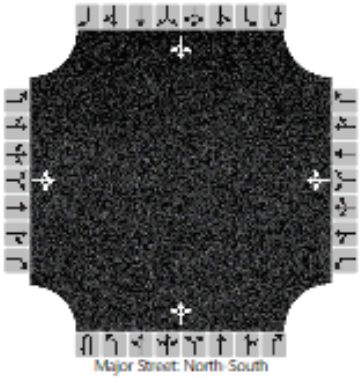
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected AM
Intersection Orientation	North-South
Project Description	5659

Site Information

Intersection	Palm Ave and Central Ave
Jurisdiction	Lake County
East/West Street	Number 2 Rd/W Central Ave
North/South Street	Palm Ave/SR 19
Peak Hour Factor	0.87
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		184	7	95		10	3	11		42	572	14		29	532	83
Percent Heavy Vehicles (%)		3	3	14		3	3	3		21				7		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.34		7.13	6.53	6.23		4.31				4.17		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.43		3.53	4.03	3.33		2.39				2.26		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			329				28			48				33		
Capacity, c (veh/h)			114				115			810				894		
v/c Ratio			2.90				0.24			0.06				0.04		
95% Queue Length, Q_{95} (veh)			30.9				0.9			0.2				0.1		
Control Delay (s/veh)			935.5				45.8			9.7	0.9	0.9		9.2	0.6	0.6
Level of Service (LOS)			F				E			A	A	A		A	A	A
Approach Delay (s/veh)		935.5				45.8				1.5				1.0		
Approach LOS		F				E				A				A		

HCS Two-Way Stop-Control Report

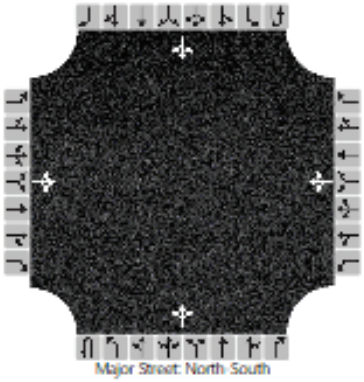
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected PM
Intersection Orientation	North-South
Project Description	5659

Site Information

Intersection	Palm Ave and Central Ave
Jurisdiction	Lake County
East/West Street	Number 2 Rd/W Central Ave
North/South Street	Palm Ave/SR 19
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		167	8	70		11	8	44		112	586	15		61	677	243
Percent Heavy Vehicles (%)		3	3	14		3	3	3		21				7		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

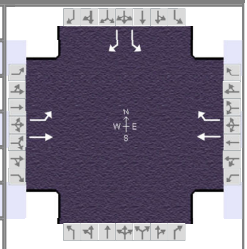
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.34		7.13	6.53	6.23		4.31				4.17		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.43		3.53	4.03	3.33		2.39				2.26		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			285				73			130				71		
Capacity, c (veh/h)			20				55			585				875		
v/c Ratio			14.20				1.32			0.22				0.08		
95% Queue Length, Q_{95} (veh)			36.1				6.5			0.8				0.3		
Control Delay (s/veh)			6309.4				352.9			12.9	4.7	4.7		9.5	2.1	2.1
Level of Service (LOS)			F				F			B	A	A		A	A	A
Approach Delay (s/veh)		6309.4				352.9				6.0				2.5		
Approach LOS		F				F				A				A		

HCS Signalized Intersection Results Summary

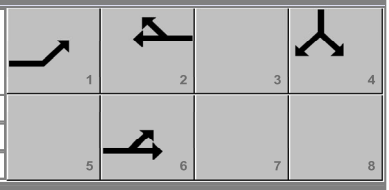
General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	SS	Analysis Date	Dec 22, 2022	Area Type	Other
Jurisdiction	Lake County	Time Period	Projected AM	PHF	0.89
Urban Street	CR 48	Analysis Year	2028	Analysis Period	1> 7:15
Intersection	SR 19	File Name	CR 48 and SR 19 - Projected AM.xus		
Project Description	5659				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	240	108			182	608				384		205

Signal Information			
Cycle, s	105.5	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.8	45.0	28.4	0.0	0.0	0.0
Yellow	4.4	4.4	4.8	0.0	0.0	0.0
Red	2.1	2.0	2.5	0.0	0.0	0.0



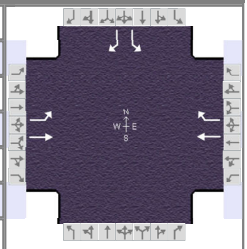
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	18.3	69.7		51.4				35.7
Change Period, (*Y+R c*), s	6.5	6.4		6.4				7.3
Max Allow Headway (*MAH*), s	4.1	4.2		4.2				4.2
Queue Clearance Time (*g s*), s	11.1	5.2		47.0				27.7
Green Extension Time (*g e*), s	0.8	4.8		0.0				0.7
Phase Call Probability	1.00	1.00		1.00				1.00
Max Out Probability	0.00	0.00		1.00				1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	270	121			204	683				431		230
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1654	1737			1856					1725		1510
Queue Service Time (*g s*), s	9.1	3.2			7.5					25.7		13.9
Cycle Queue Clearance Time (*g c*), s	9.1	3.2			7.5					25.7		13.9
Green Ratio (*g/C*)	0.56	0.60			0.43					0.27		0.27
Capacity (*c*), veh/h	643	1043			792					465		407
Volume-to-Capacity Ratio (*X*)	0.420	0.116			0.258					0.928		0.566
Back of Queue (*Q*), ft/ln (95 th percentile)												
Back of Queue (*Q*), veh/ln (95 th percentile)	5.7	2.0			5.6					19.6		8.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00			0.00					0.00		0.00
Uniform Delay (*d 1*), s/veh	12.9	9.0			19.5					37.5		33.2
Incremental Delay (*d 2*), s/veh	0.4	0.0			0.2					23.5		1.6
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0					0.0		0.0
Control Delay (*d*), s/veh	13.3	9.1			19.7	0.0				61.1		34.8
Level of Service (LOS)	B	A			B	A				E		C
Approach Delay, s/veh / LOS	12.0	B		4.5	A		0.0			51.9	D	
Intersection Delay, s/veh / LOS	22.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.69	A	1.91	B	1.96	B	1.96	B
Bicycle LOS Score / LOS	1.13	A	1.95	B				F

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	SS	Analysis Date	Dec 22, 2022	Area Type	Other
Jurisdiction	Lake County	Time Period	Projected PM	PHF	0.97
Urban Street	CR 48	Analysis Year	2028	Analysis Period	1> 16:45
Intersection	SR 19	File Name	CR 48 and SR 19 - Projected PM.xus		
Project Description	5659				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	274	221			162	522				675		276

Signal Information			
Cycle, s	98.3	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

							1	2	3	4
							5	6	7	8
Green	11.9	36.2	30.0	0.0	0.0	0.0				
Yellow	4.4	4.4	4.8	0.0	0.0	0.0				
Red	2.1	2.0	2.5	0.0	0.0	0.0				

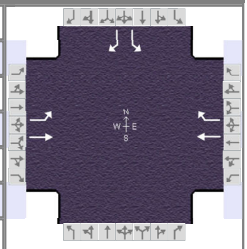
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	18.4	61.0		42.6				37.3
Change Period, ($Y+R_c$), s	6.5	6.4		6.4				7.3
Max Allow Headway (*MAH*), s	4.1	4.2		4.2				4.2
Queue Clearance Time (g_s), s	11.1	8.0		33.9				32.0
Green Extension Time (g_e), s	0.8	4.0		2.3				0.0
Phase Call Probability	1.00	1.00		1.00				1.00
Max Out Probability	0.00	0.00		0.24				1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	282	228			167	538				696		285
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1900			1856					1753		1585
Queue Service Time (g_s), s	9.1	6.0			6.1					30.0		15.0
Cycle Queue Clearance Time (g_c), s	9.1	6.0			6.1					30.0		15.0
Green Ratio (*g/C*)	0.51	0.56			0.37					0.31		0.31
Capacity (*c*), veh/h	662	1056			684					535		484
Volume-to-Capacity Ratio (*X*)	0.427	0.216			0.244					1.301		0.588
Back of Queue (*Q*), ft/ln (95 th percentile)												
Back of Queue (*Q*), veh/ln (95 th percentile)	6.2	4.2			4.6					51.0		9.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00			0.00					0.00		0.00
Uniform Delay (d_1), s/veh	14.5	11.0			21.5					34.2		28.9
Incremental Delay (d_2), s/veh	0.4	0.1			0.2					148.8		1.9
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0					0.0		0.0
Control Delay (*d*), s/veh	14.9	11.1			21.7	0.0				182.9		30.8
Level of Service (LOS)	B	B			C	A				F		C
Approach Delay, s/veh / LOS	13.2	B		5.1	A		0.0			138.8	F	
Intersection Delay, s/veh / LOS	66.7						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.69	A	1.92	B	1.95	B	1.95	B
Bicycle LOS Score / LOS	1.33	A	1.65	B				F

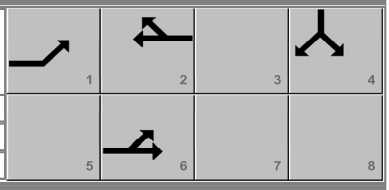
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	SS	Analysis Date	Dec 22, 2022	Area Type	Other
Jurisdiction	Lake County	Time Period	Projected AM	PHF	0.89
Urban Street	CR 48	Analysis Year	2028	Analysis Period	1> 7:15
Intersection	SR 19	File Name	CR 48 and SR 19 - Projected AM Optimized Sign…		
Project Description	5659 - Optimized Signal Timing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	240	108			182	608				384		205

Signal Information					EB			WB			NB			SB		
Cycle, s	63.4	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	9.0	15.0		19.2	0.0	0.0	0.0					
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.4	4.4		4.8	0.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.1	2.0		2.5	0.0	0.0	0.0					



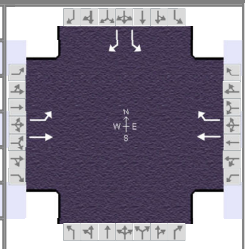
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	15.5	36.9		21.4				26.5
Change Period, (*Y+R c*), s	6.5	6.4		6.4				7.3
Max Allow Headway (*MAH*), s	4.1	4.2		4.2				4.2
Queue Clearance Time (*g s*), s	9.3	4.5		17.0				16.7
Green Extension Time (*g e*), s	0.0	3.4		0.0				2.5
Phase Call Probability	0.99	1.00		1.00				1.00
Max Out Probability	1.00	0.33		1.00				0.02

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	270	121			204	683				431		230
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1654	1737			1856					1725		1510
Queue Service Time (*g s*), s	7.3	2.5			6.0					14.7		8.0
Cycle Queue Clearance Time (*g c*), s	7.3	2.5			6.0					14.7		8.0
Green Ratio (*g/C*)	0.41	0.48			0.24					0.30		0.30
Capacity (*c*), veh/h	503	835			439					523		457
Volume-to-Capacity Ratio (*X*)	0.536	0.145			0.466					0.826		0.504
Back of Queue (*Q*), ft/ln (95 th percentile)												
Back of Queue (*Q*), veh/ln (95 th percentile)	4.4	1.4			4.4					9.7		4.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00			0.00					0.00		0.00
Uniform Delay (*d 1*), s/veh	13.9	9.2			20.8					20.5		18.2
Incremental Delay (*d 2*), s/veh	1.1	0.1			0.8					3.4		0.9
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0					0.0		0.0
Control Delay (*d*), s/veh	15.0	9.3			21.5	0.0				23.9		19.0
Level of Service (LOS)	B	A			C	A				C		B
Approach Delay, s/veh / LOS	13.2	B		5.0	A		0.0			22.2	C	
Intersection Delay, s/veh / LOS	12.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.69	A	1.91	B	1.94	B	1.94	B
Bicycle LOS Score / LOS	1.13	A	1.95	B				F

HCS Signalized Intersection Results Summary

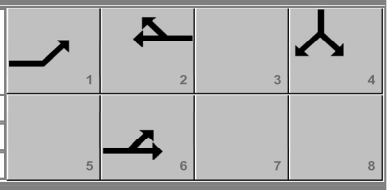
General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	SS	Analysis Date	Dec 22, 2022	Area Type	Other
Jurisdiction	Lake County	Time Period	Projected PM	PHF	0.97
Urban Street	CR 48	Analysis Year	2028	Analysis Period	1> 16:45
Intersection	SR 19	File Name	CR 48 and SR 19 - Projected PM Optimized Sign…		
Project Description	5659 - Optimized Signal Timing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	274	221			162	522				675		276

Signal Information			
Cycle, s	76.6	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	15.0	32.4	0.0	0.0	0.0
Yellow	4.4	4.4	4.8	0.0	0.0	0.0
Red	2.1	2.0	2.5	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	15.5	36.9		21.4				39.7
Change Period, (*Y+R c*), s	6.5	6.4		6.4				7.3
Max Allow Headway (*MAH*), s	4.1	4.2		4.2				4.2
Queue Clearance Time (*g s*), s	11.0	8.3		17.0				31.1
Green Extension Time (*g e*), s	0.0	2.3		0.0				1.3
Phase Call Probability	1.00	1.00		1.00				1.00
Max Out Probability	1.00	0.60		1.00				1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	282	228			167	538				696		285
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1900			1856					1753		1585
Queue Service Time (*g s*), s	9.0	6.3			6.1					29.1		9.7
Cycle Queue Clearance Time (*g c*), s	9.0	6.3			6.1					29.1		9.7
Green Ratio (*g/C*)	0.34	0.40			0.20					0.42		0.42
Capacity (*c*), veh/h	445	756			363					742		671
Volume-to-Capacity Ratio (*X*)	0.635	0.301			0.460					0.938		0.424
Back of Queue (*Q*), ft/ln (95 th percentile)												
Back of Queue (*Q*), veh/ln (95 th percentile)	7.1	4.5			4.7					20.6		5.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00			0.00					0.00		0.00
Uniform Delay (*d 1*), s/veh	20.8	15.8			27.2					21.1		15.5
Incremental Delay (*d 2*), s/veh	3.0	0.2			0.9					18.5		0.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0					0.0		0.0
Control Delay (*d*), s/veh	23.8	16.0			28.1	0.0				39.6		16.0
Level of Service (LOS)	C	B			C	A				D		B
Approach Delay, s/veh / LOS	20.3	C		6.7	A		0.0			32.7	C	
Intersection Delay, s/veh / LOS	21.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.71	A	1.93	B	1.94	B	1.94	B
Bicycle LOS Score / LOS	1.33	A	1.65	B				F

HCS Two-Way Stop-Control Report

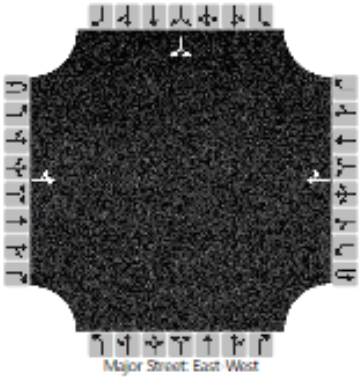
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected AM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	Number 2 Rd Site Access
Jurisdiction	Lake County
East/West Street	Number 2 Rd
North/South Street	Site Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		11	53				120	21						62		33
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12													103	
Capacity, c (veh/h)		1421													801	
v/c Ratio		0.01													0.13	
95% Queue Length, Q_{95} (veh)		0.0													0.4	
Control Delay (s/veh)		7.6	0.1												10.2	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)		1.4												10.2		
Approach LOS		A												B		

HCS Two-Way Stop-Control Report

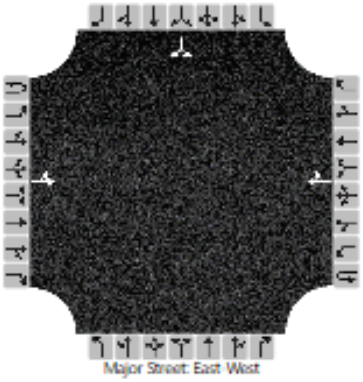
General Information

Analyst	SS
Agency/Co.	TPD, Inc.
Date Performed	12/22/2022
Analysis Year	2028
Time Analyzed	Projected PM
Intersection Orientation	East-West
Project Description	5659

Site Information

Intersection	Number 2 Rd Site Access
Jurisdiction	Lake County
East/West Street	Number 2 Rd
North/South Street	Site Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		38	120				86	71						42		22
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		41													70	
Capacity, c (veh/h)		1400													704	
v/c Ratio		0.03													0.10	
95% Queue Length, Q_{95} (veh)		0.1													0.3	
Control Delay (s/veh)		7.6	0.2												10.7	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	2.0												10.7			
Approach LOS	A												B			

APPENDIX G

Right and Left Turn Lanes Warrant Charts

Site Access @ Number 2 Rd - AM
Left Turn Lane Warrant

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

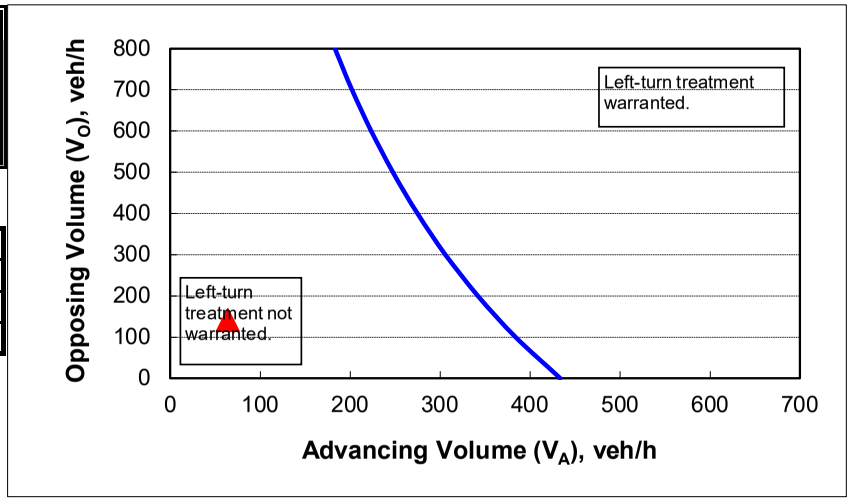
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	17%
Advancing volume (V_A), veh/h:	64
Opposing volume (V_O), veh/h:	141

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	366
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

Source: National Cooperative Highway Research Program (NCHRP) Report 457- Evaluating Intersection Improvements: An Engineering Study Guide

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

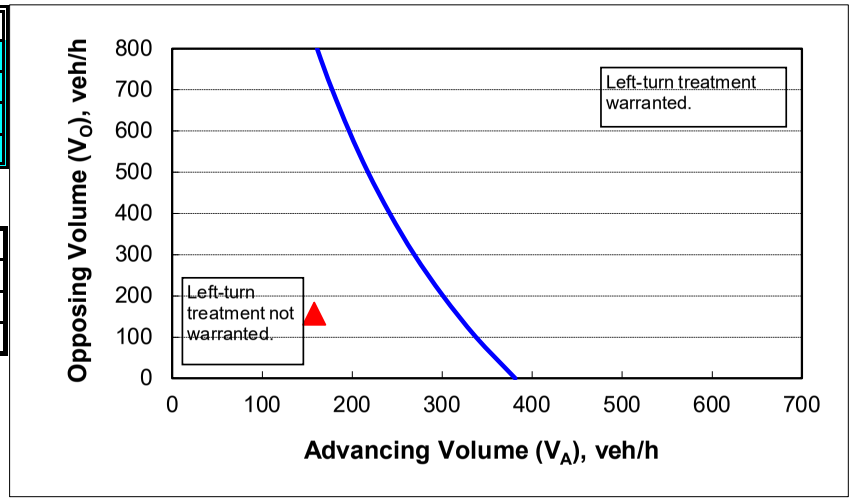
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	24%
Advancing volume (V_A), veh/h:	158
Opposing volume (V_O), veh/h:	157

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	316
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

Source: National Cooperative Highway Research Program (NCHRP) Report 457- Evaluating Intersection Improvements: An Engineering Study Guide

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

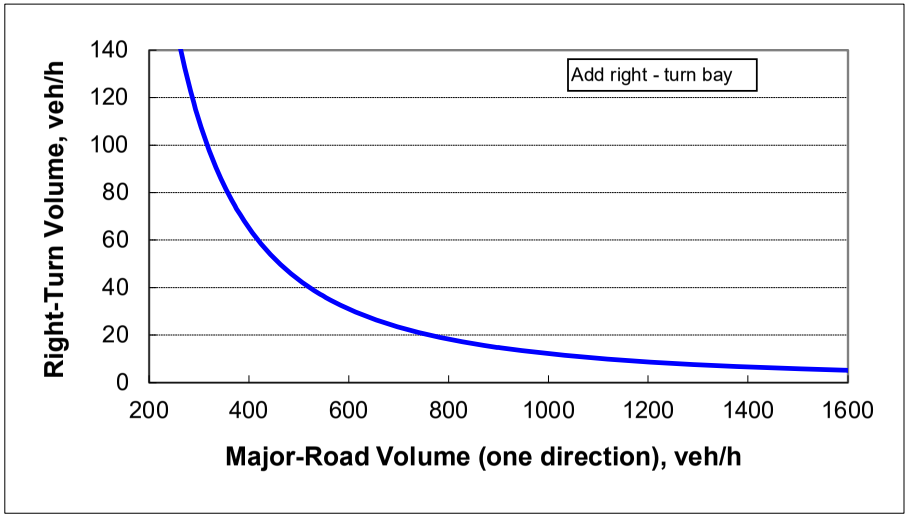
INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	141
Right-turn volume, veh/h:	21

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	439
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Source: National Cooperative Highway Research Program (NCHRP) Report 457- Evaluating Intersection Improvements: An Engineering Study Guide

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

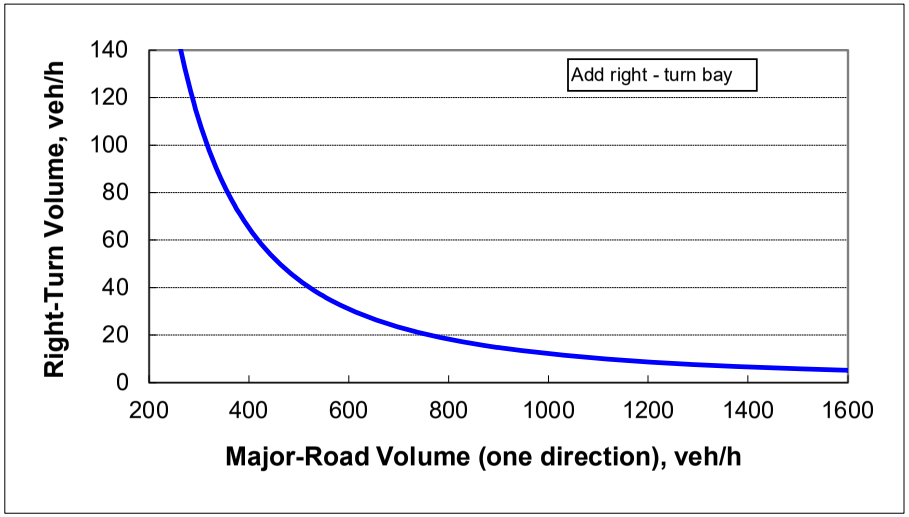
INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	157
Right-turn volume, veh/h:	71

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	361
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Source: National Cooperative Highway Research Program (NCHRP) Report 457- Evaluating Intersection Improvements: An Engineering Study Guide