Marion County
Board of County Commissioners

Office of the County Engineer

412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

July 24, 2025

KITTELSON & ASSOCIATES
KOK WAN MAH
225 E. ROBINSON STREET, #355
ORLANDO, FL 32801

SUBJECT: **TRAFFIC STUDY/ METHODOLOGY APPROVAL LETTER**
PROJECT NAME: OAK SHORES ESTATES PUD
PROJECT #2025050062 APPLICATION: #32879 PARCEL #9064-0000-02

Dear Kok Wan Mah,

The Traffic Methodology dated May 22, 2025 for the above referenced project was approved by Marion County on July 24, 2025. Please submit the Traffic Study in accordance with this approved Methodology. The following comments are for your review. You need not reply to the comments, and if the comments have been previously completed, simply disregard.

Feel free to contact the Office of the County Engineer at (352) 671-8686 or DevelopmentReview@marionfl.org should you have questions.

Sincerely,

Your Development Review Team
Office of the County Engineer

Marion County
Board of County Commissioners

Office of the County Engineer
412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Email: DevelopmentReview@marionfl.org

February 10, 2026

Kok Wan Mah
Kittelson Engineering

Subject: Traffic Impact Analysis - Study
Plan Name: OAK SHORES ESTATES PUD
Plan Number: 33439
Parcel Number: 9064-0000-02
Additional Parcel Numbers:
Adjacent Street:
Intersecting Street From:
Intersecting Street To:

Dear Kok Wan,

The study for the above referenced plan number was approved by the Office of the County Engineer on Not Stated. 2/10/26 The following comments, if any, are for your record.

No Comments

Feel free to contact us at (352) 671-8686 or DevelopmentReview@marionfl.org with questions.

Sincerely,

Your Development Review Team
Office of the County Enginee

KITTELSON & ASSOCIATES

OAK SHORE ESTATES TRAFFIC IMPACT ANALYSIS

MARION COUNTY, FLORIDA

January 2026

PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida, practicing with Kittelson & Associates, a corporation authorized to operate as a Professional Engineering business by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have approved the Oak Shores Estates TIA in Marion County, Florida dated January 2026.

PROJECT: Oak Shores Estates TIA

LOCATION: Marion County, Florida

CLIENT: Heather Island, LLC

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

NAME: Kok Wan Mah

P.E. NUMBER: 56739

DATE: January 20, 2026

The item has been digitally signed and sealed by Kok Wan Mah on the date adjacent to the seal.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Oak Shore Estates
Traffic Impact Analysis
Marion County, Florida

Prepared for:
Heather Island, LLC
9925 SE 58th Avenue
Belleview, FL 34420

Prepared by:
Kittelson & Associates, Inc.
225 East Robinson Street, Suite 355
Orlando, FL 32801
407.540.0555

Project Manager:
Kok Wan Mah, P.E.
Principal Engineer

Project Principal:
Stephanie Shealey, P.E., PTOE, PTP
Associate Engineer

Project Number 31548

January 2026

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Section 1
Introduction

INTRODUCTION

Kittelson & Associates, Inc. has been retained by Heather Island, LLC to conduct a Traffic Impact Analysis (TIA) for the proposed Oak Shores Estate residential development. The project site consists of an area of 47.70-acres, located east of Oak Road, south of Locust Pass Way, and west of SE 108th Terrace Road, Marion County, Florida. **Figure 1** illustrates the project location.

The proposed development is planned to accommodate up to 192 single-family residential units. Based upon the generated project trips, a Transportation Impact Study (TIS) will be conducted per the MARION COUNTY TRAFFIC IMPACT ANALYSIS GUIDELINES (September 2022).

PROJECT DESCRIPTION

The development will be constructed in a single phase with an anticipated buildout year of 2028. Access to the development will be provided at two (2) locations: a) Driveway 1 with full access to Oak Road, b) Driveway 2 with full access to Locust Pass Way. These access points with the development location are depicted in the site plan available in **Appendix A**.

STUDY AREA

The study area was determined using a test for significance documented in the methodology provided as **Appendix B**. The following roadway segments and intersections are included in the analysis:

Roadway Segment:

- SR 464 / SE Maricamp Road / CR 464
    - SE 25th Avenue to SE 44th Avenue
    - SE 44th Avenue to SR 35
    - SR 35 to Emerald Road North
    - Emerald Road North to Oak Road
    - Oak Road to Emerald Road South
    - Emerald Road South to SE 110th Street Road
- SE 110th Street Road
    - CR 25 to Oak Road
    - Oak Road to CR 464
- SE 108th Terrace Road
    - CR 25 to SE 110th Street Road
- SE 114th Street Road
    - SE Maricamp Road / CR 464 to SE 135 Avenue
- SR 35
    - Laurel Road to SR 464
    - SR 464 to SE 28th Street

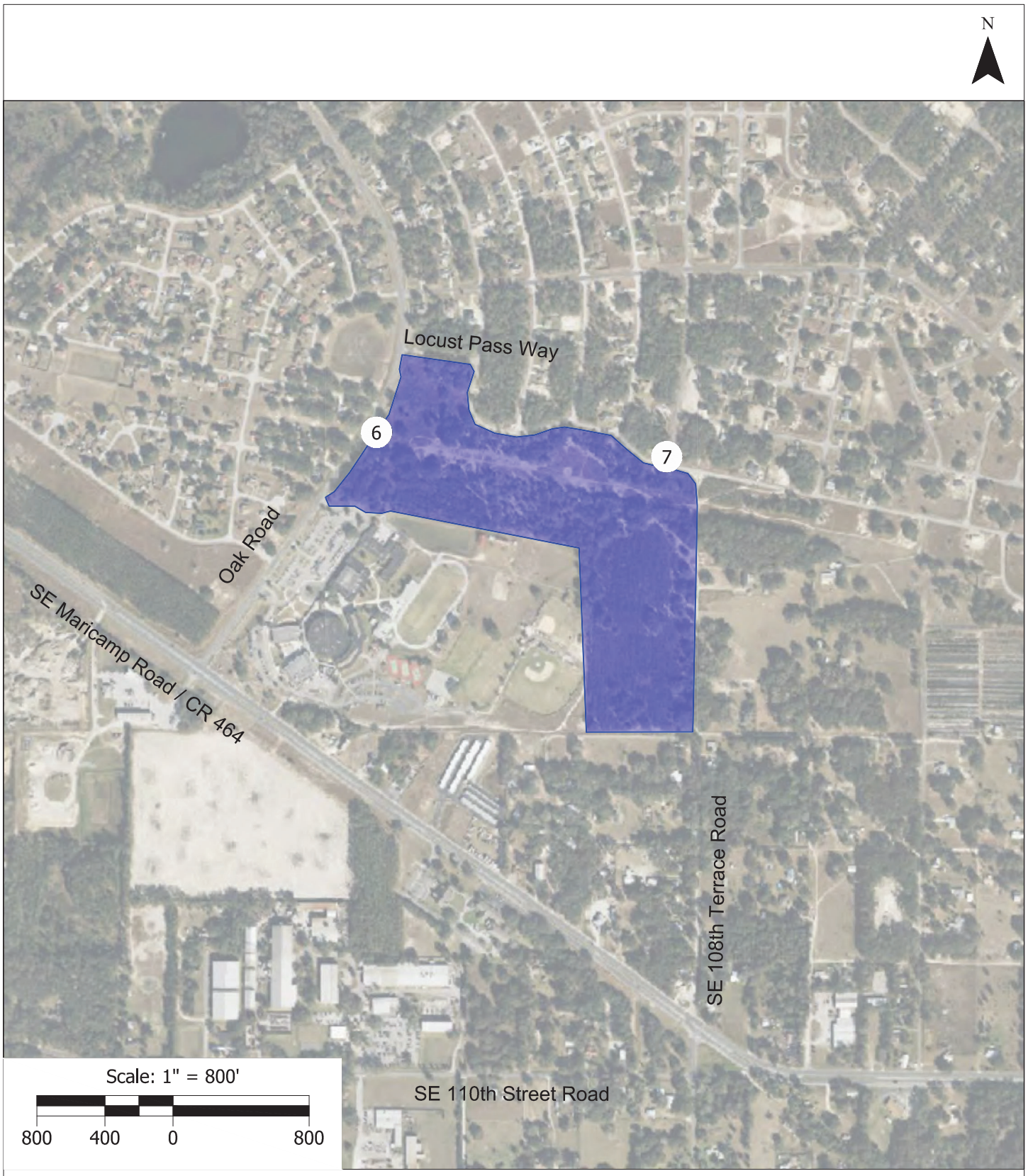
Intersections:

- SE Maricamp Road / CR 464 at Oak Road North (South)
- SE Maricamp Road / CR 464 at Emerald Road South (Stop Controlled)

- SE Maricamp Road / CR 464 at Oak Road South (Stop Controlled)
- SE Maricamp Road / CR 464 at SE 108th Terrace Road (Signalized)
- Oak Road at Locust Pass Way (Stop Controlled)
- Oak Road at Driveway 1 (Stop Controlled)
- Locust Pass Way at Driveway 2 (Stop Controlled)

PLANNED AND PROGRAMMED IMPROVEMENTS

There is no planned Improvement within the study area, as per the Ocala Marion County Transportation Improvement Program Fiscal Years 2026 to 2030. The impacts of this development will be discussed further in the Future Volume Development section.



(X) - Site Accesses

Site Vicinity Map & Study Area
Belleview, Florida

Figure
1

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Section 2
Existing Conditions

EXISTING CONDITIONS

This section summarizes the existing transportation conditions including geometry, existing traffic flow and traffic control system observed in the study area, and an assessment of the study area roadways and intersections.

DATA COLLECTION

Existing turning movement counts (TMCs) were collected on May 6, 2025, at the following locations and times:

- SE Maricamp Road / CR 464 at Oak Road North (4:00-6:00 PM)
- SE Maricamp Road / CR 464 at Emerald Road South (4:00-6:00 PM)
- SE Maricamp Road / CR 464 at Oak Road South (7:00-9:00 AM & 4:00-6:00 PM)
- SE Maricamp Road / CR 464 at SE 108th Terrace Road (4:00-6:00 PM)
- Oak Road at Locust Pass Way (7:00-9:00 AM & 4:00-6:00 PM)
- Oak Track Pass at Oak Road (7:00-9:00 AM & 4:00-6:00 PM)
- Locust Pass loop at Locust Pass (7:00-9:00 AM & 4:00-6:00 PM)

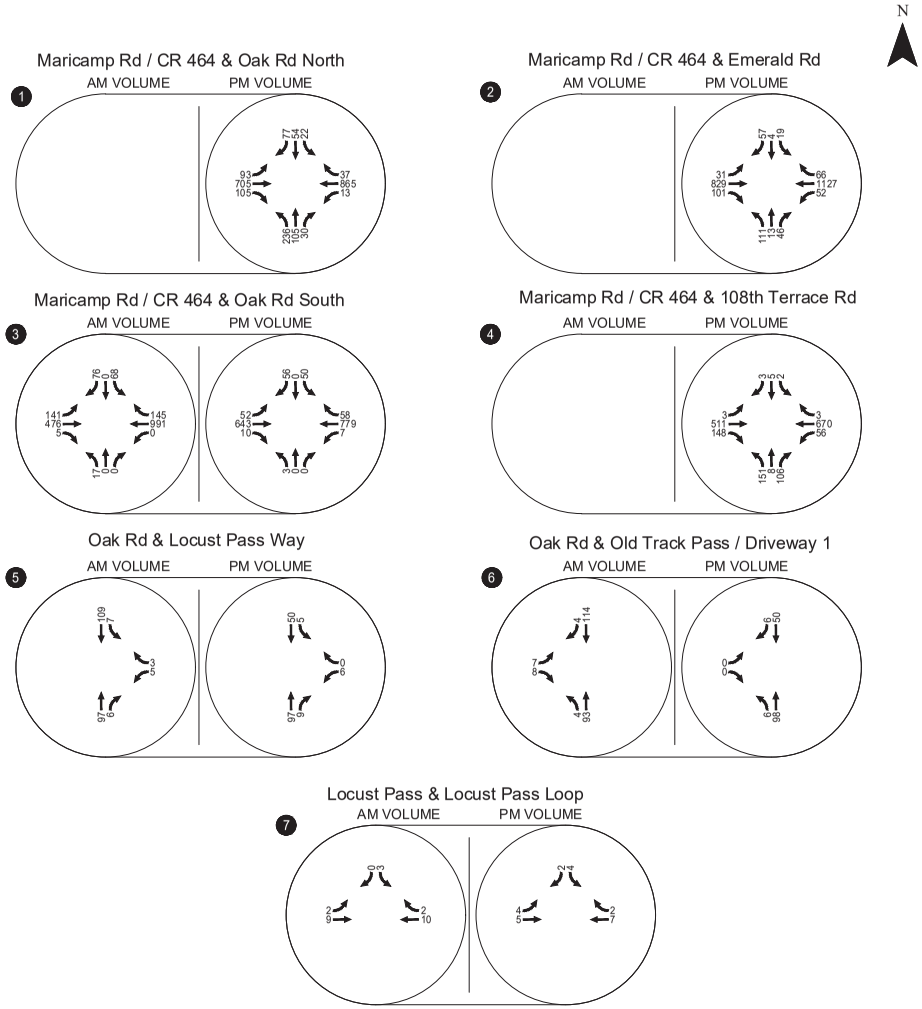
The existing TMCs were analyzed without adjustment, as the corresponding seasonal factor from FDOT's Florida Traffic Online (FTO) 2024 data was 0.98. The raw TMCs and FDOT Peak Season Category Report are included in **Appendix C**. **Figure 2** presents the existing AM and PM peak hour traffic volumes. Heavy truck percentages were derived from the TMCs and applied to each study intersection for all study periods.

EXISTING ROADWAY CAPACITY ANALYSIS

Kittelson performed a roadway capacity analysis to quantify the existing level of service (LOS) for the study roadways during the PM peak hour. The objective of analysis was to assess operational conditions along the project site adjacent corridors.

The level of service and remaining capacity for each of the study roadways were determined based on the Ocala Marion Transportation Planning Organization (TPO) 2023 Congestion Management Process (CMP) Database is shown in **Appendix C** and was used for existing volumes. A comparison of the peak hour peak direction (PHPD) roadway traffic volumes was made against the roadway capacities to determine the existing level of service. The existing roadway capacity analysis was performed for the roadway shown in **Table 1**.

In summary, the study roadway segment operates acceptably and is shown to have sufficient capacity under existing conditions.



Ⓧ - Site Accesses

- Study Intersections

Existing AM / PM Traffic Volumes
Ocala, Florida

Figure
2

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Table 1: Existing Roadway Capacity Analysis

Roadway	Limits	No. of Lanes	Fun Class	LOS Std.	Daily Capacity	Pk Hr Pk Dir Capacity	2024 AADT*	PM PH NB/EB Vol	PM PH SB/WB Vol	v/c
CR 464	Emerald Road (N) to Oak Road	4	Arterial	E	35,820	1,800	16,000	808	632	0.45
	Oak Road To Emerald Road (S)	4	Arterial	E	35,820	1,800	16,000	808	632	0.45
	Emerald Road (S) to SE 110 Street	4	Arterial	E	35,820	1,800	10,000	505	395	0.28
	SE 110 Street to CR 25	2	Arterial	E	11,232	576	3,000	151	119	0.26

*Ocala Marion 2025 Traffic Counts Report

Source: Ocala Marion TPO CMP Database (2023); FDOT Traffic Online

EXISTING INTERSECTION CAPACITY ANALYSIS

The existing conditions of seven intersections were evaluated in this study. The evaluation was conducted in Synchro 12 Software, following the methods outlined in the Highway Capacity Manual. **Figure 3** illustrates the existing lane configurations of the intersections. Signal timing data, provided by Marion County, are included in **Appendix D**.

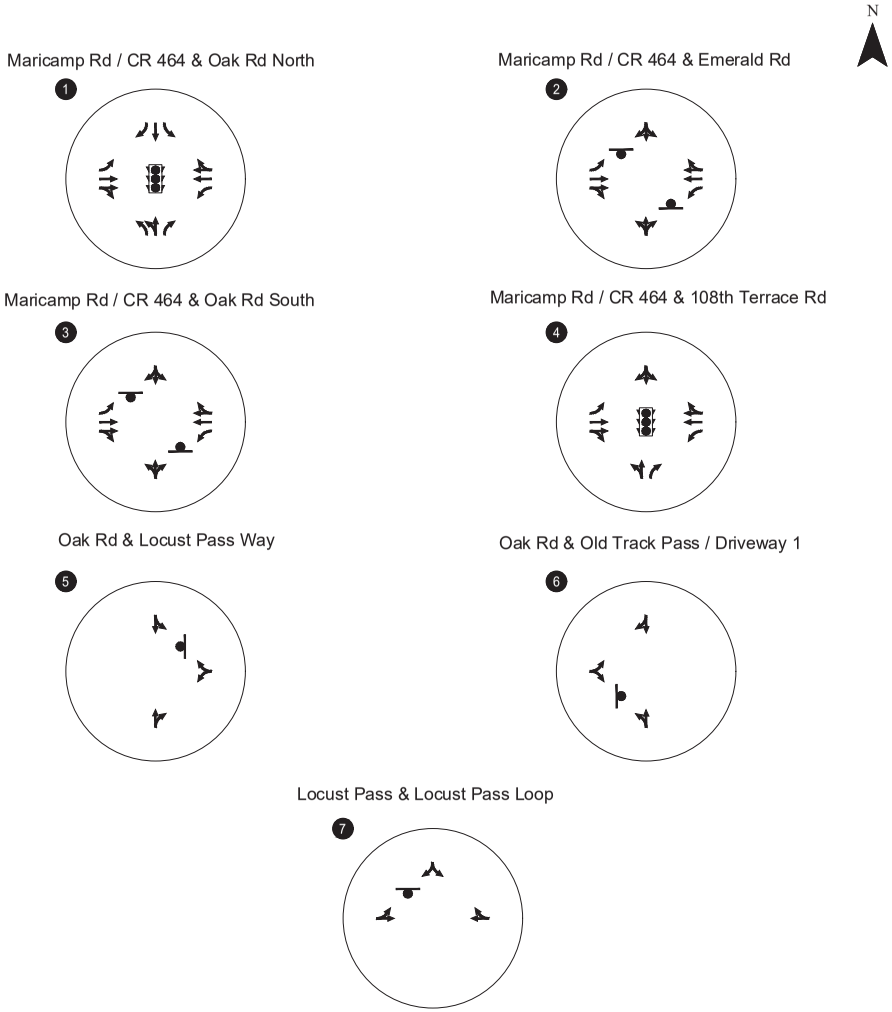
In coordination with the County, the intersections of SE Maricamp Road / CR 464 at Oak Road North, SE Maricamp Road / CR 464 at Emerald Road South, and Maricamp Road / CR 464 at SE 108th Terrace Road were evaluated for PM peak hours only. All other intersections within the study area were analyzed for both AM and PM peak hours. The results of the intersection capacity analysis for existing conditions during the AM and PM peak hours are summarized in **Table 2**, with detailed Synchro analysis printouts provided in **Appendix E**.

As shown in **Table 2** , all study intersections and their respective movements currently operate at an overall Level of Service (LOS) E or better, with the highest observed v/c ratio being 0.82. The only exception is the northbound movement at the SE Maricamp Road / CR 464 and Emerald Road South intersection, which is stop-controlled and operates at LOS F under existing conditions, with a v/c ratio of 1.21.

Table 2: Existing Conditions Intersection Capacity Analysis

Intersection	Control Type	Performance Measure	AM Peak Period					PM Peak Period				
			Overall	EB	WB	NB	SB	Overall	EB	WB	NB	SB
1 – SE Maricamp Road / CR 464 at Oak Road North	Signalized	Delay (s/veh)						30.4	22.2	22.2	59.1	66.4
		LOS						C	C	C	E	E
		v/c ratio*						-	0.81	0.50	0.82	0.66
2 – SE Maricamp Road / CR 464 at Emerald Road South	Two-Way Stop Controlled (TWSC)**	Delay (s/veh)						-	12.4	10.9	199.2	34.8
		LOS						-	B	B	F	D
		v/c ratio*						-	0.07	0.09	1.21	0.43
3 – SE Maricamp Road / CR 464 at Oak Road South	Stop Controlled	Delay (s/veh)	-	13.7	0	42.0	46.1	-	10.3	11.1	22	22.9
		LOS	-	B	A	E	E	-	B	B	C	C
		v/c ratio*	-	0.26	-	0.15	0.65	-	0.08	0.01	0.02	0.37
4 – SE Maricamp Road / CR 464 at SE 108th Terrace Road	Signalized	Delay (s/veh)						14.8	12.1	12.6	35.5	29.9
		LOS						B	B	B	D	C
		v/c ratio*						-	0.38	0.39	0.59	0.03
5 – Oak Road at Locust Pass Way	TWSC	Delay (s/veh)	-	-	9.8	-	7.5	-	-	9.6	-	7.5
		LOS	-	-	A	-	A	-	-	A	-	A
		v/c ratio*	-	-	0.01	-	0.01	-	-	0.01	-	0.004
6 – Oak Track Pass at Oak Road	TWSC	Delay (s/veh)	-	9.6	-	7.5	-	-	0	-	7.3	-
		LOS	-	A	-	A	-	-	A	-	A	-
		v/c ratio*	-	0.02	-	0.004	-	-	-	-	0.004	-
7 – Locust Pass Loop at Locust Pass Way	TWSC**	Delay (s/veh)	-	7.2	-	-	8.6	-	7.2	-	-	8.6
		LOS	-	A	-	-	A	-	A	-	-	0.01
		v/c ratio*	-	0.001	-	-	0.003	-	0.004	-	-	A

*v/c ratio reported for the highest movement



- Signal
- Stop Sign
- Site Accesses
- Study Intersections

Existing Lane Configurations
Ocala, Florida

Figure
3

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Section 3
Future Volume Development

FUTURE VOLUME DEVELOPMENT

The proposed development is anticipated to be built out by 2028. Future traffic volumes for the buildout year were estimated by combining background growth with distributed project trips. The following sections describe the methodology used to develop the future traffic volumes. The spreadsheet used to generate the no-build and build volumes is provided in **Appendix F**.

BACKGROUND GROWTH

The Ocala Marion TPO 2023 Online Traffic Counts Map provides preferred growth rates for the study roadways as documented in the traffic methodology in **Appendix B**.

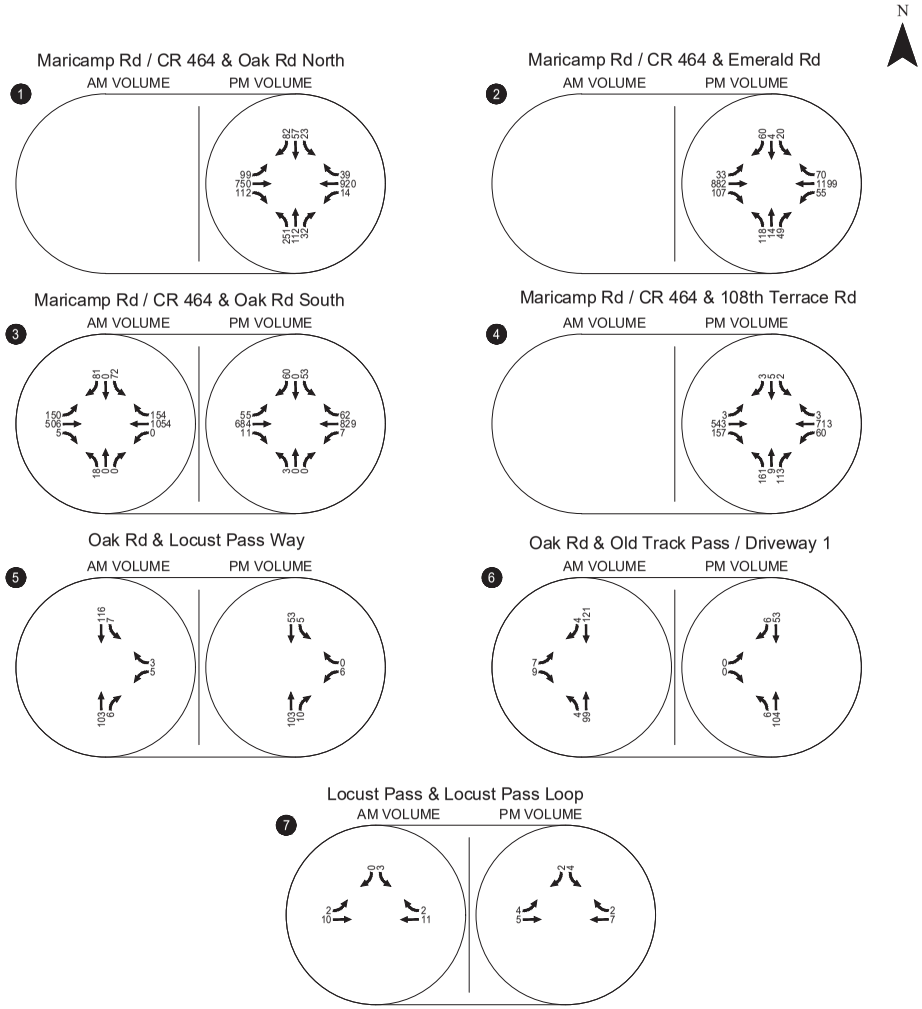
A composite annual average growth rate of 2.12% was used for the study area. The growth rate is shown in **Table 3**. Growth used for future background conditions is proposed to use the background growth of 2.12% per year plus vested trips.

Table 3: 2028 Growth Rate

Segment	Limits	2023 AADT	Annual Growth Rate	Weighted Growth
CR 464	Emerald Rd N to Oak Road	15,600	2.09%	978
CR 464	Oak Rd to Emerald Rd S	9,800	8.12%	2,387
CR 464	Emerald Rd S SE 110th St Rd	9,300	1.86%	519
CR 464	SE 110th Street Road to CR 25	2,700	1.00%	81
Composite Annual Average Growth Rate				**2.12%**

2028 NO-BUILD VOLUMES

The selected 2.12% percent annual growth rate was applied to the existing 2024 roadway segment volumes and 2025 turning movement counts (**shown in Figure 2)** to develop the 2028 no-build volumes. **Figure 4** shows the no-build volumes for the 2028 turning movements volumes.



Ⓧ - Site Accesses

- Study Intersections

Background AM / PM Traffic Volumes
Ocala, Florida

Figure
4

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TRIP GENERATION

The Daily, AM, and PM peak hour trip generation for the proposed development is summarized **Table 4.** The projected trips were estimated based on the equations outlined in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The proposed development is designed to accomodate a maximum of 192 single-family homes (ITE code 210). The ITE Trip Generation summary sheets are available in **Appendix G.**

Table 4: Project Trip Generation

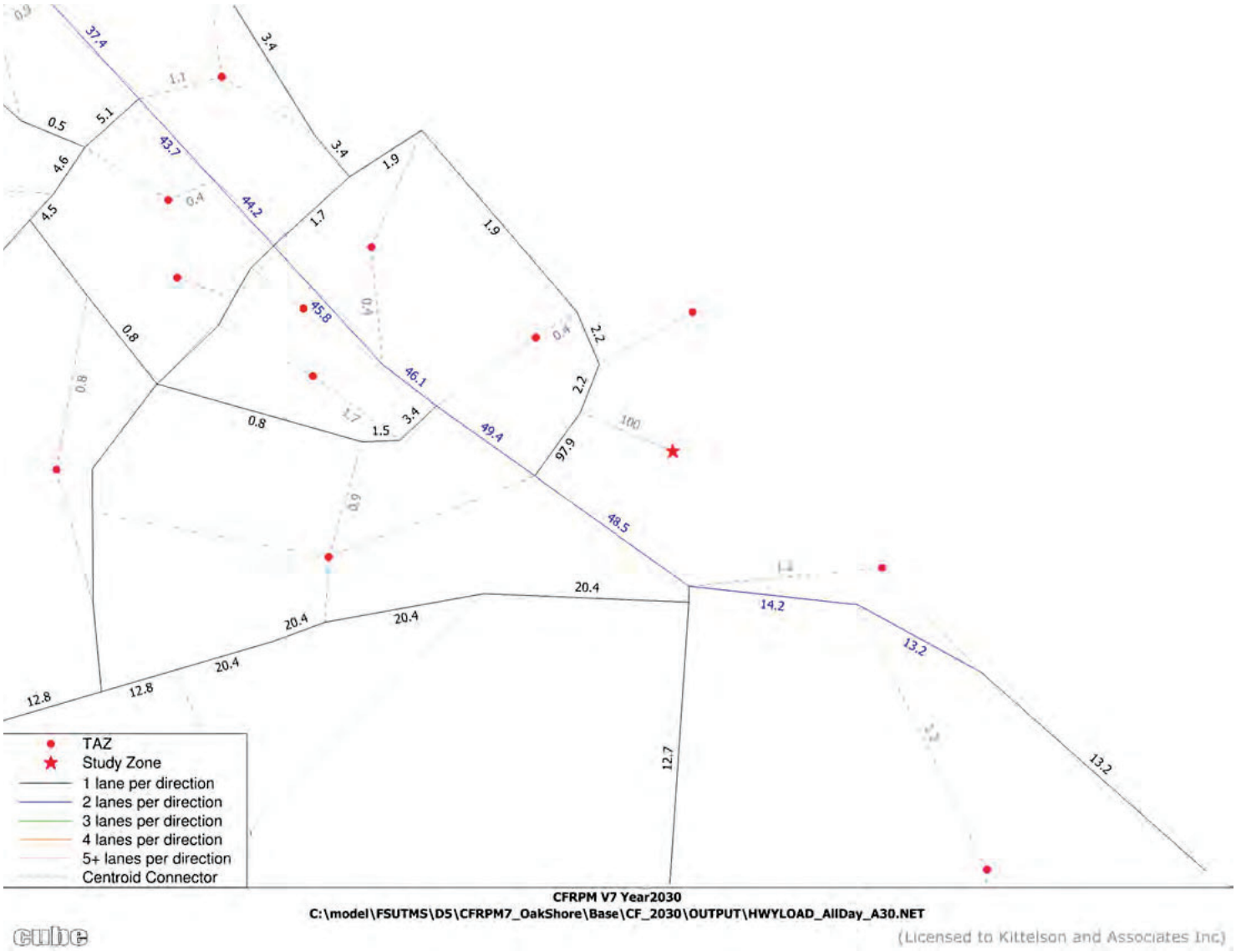
Land Use Type	ITE Code	Intensity	Daily	AM Peak-Hour Trips			PM Peak-Hour Trips		
				In	Out	Total	In	Out	Total
Single Family Residential	210	192 DU	1,839	34	101	135	116	67	183
Total			**1,839**	**34**	**101**	**135**	**116**	**67**	**183**

The proposed development is projected to generate 1,839 new daily trips which includes 135 new AM peak hour trips, and 183 new PM peak hour trips for the buildout condition.

TRIP DISTRIBUTION AND ASSIGNMENT

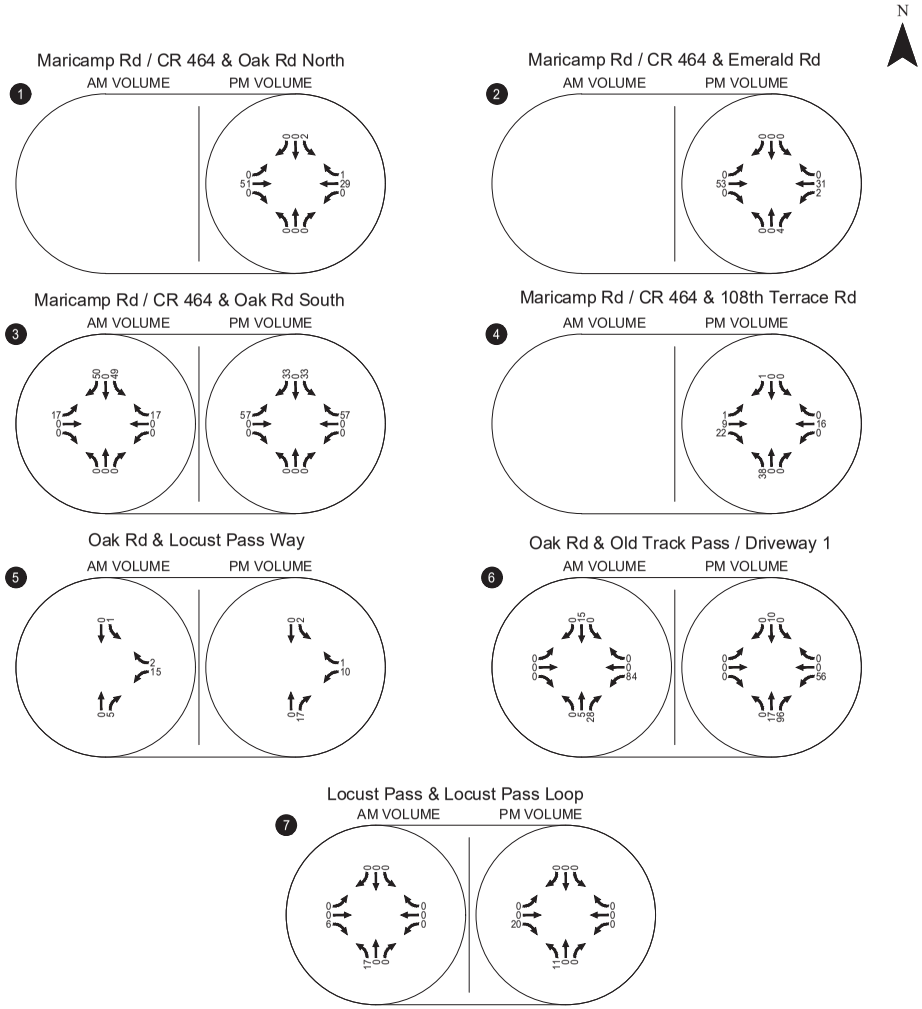
The distribution of site generated traffic is a function of population in surrounding areas, existing travel patterns, ease of access to the site, and traffic conditions on area roadways. Primary project traffic will be assigned to adjacent roadways and intersections based on results from the existing plus committed Central Florida Regional Planning Model (CFRPMv7), utilizing the corresponding network. Model outputs are presented in **Figure 5** and **Appendix H**.

Figure 5: Project Trip Distribution



FUTURE BUILD VOLUMES

The project trips were distributed according to the model results shown in **Figure 5** and added to the 2028 no-build volumes to develop the 2028 build volumes. The project trips are shown in **Figure 6**. The 2028 build volumes are shown in **Figure 7.**



(X) - Site Accesses

(#) - Study Intersections

Project AM / PM Trips Volumes
Ocala, Florida

Figure
6

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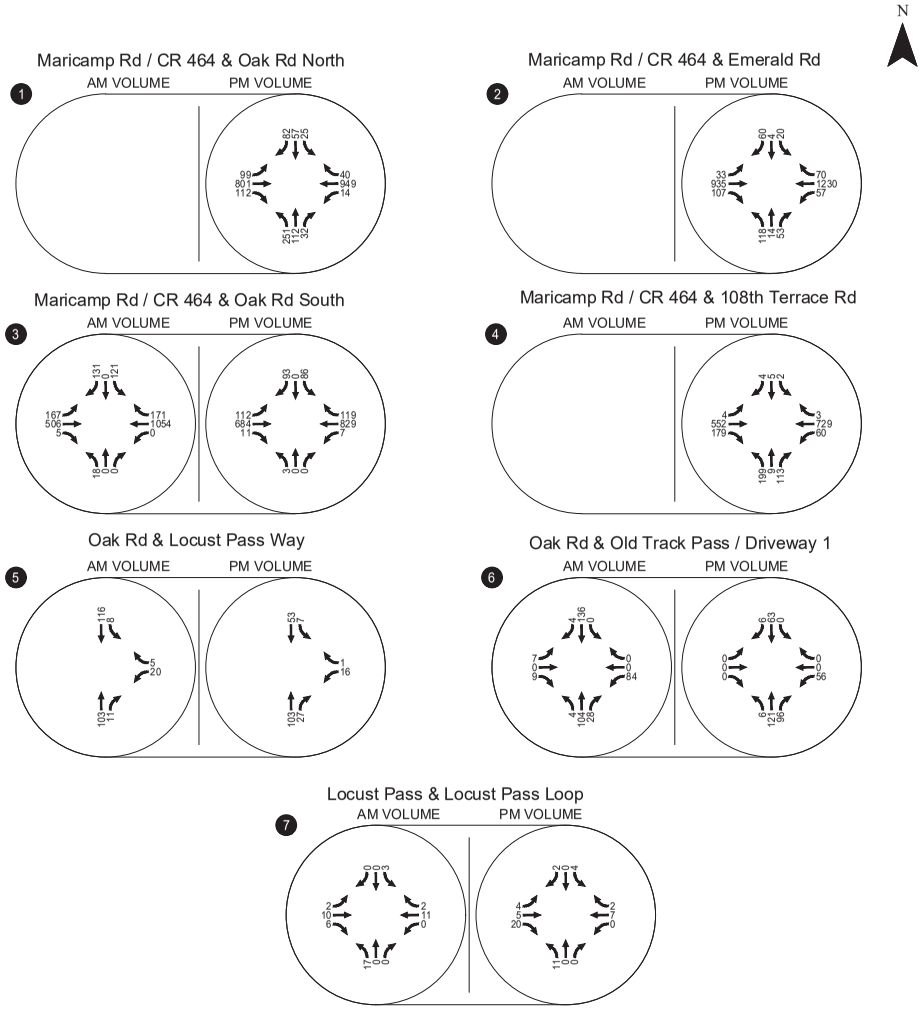

(X) - Site Accesses

(#) - Study Intersections

Build Out AM / PM Traffic Volumes
Ocala, Florida

Figure
7

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Section 4
Future Conditions

FUTURE CONDITIONS

This section summarizes the analysis of the future traffic conditions for before and after project buildout. The objective of this analysis was to determine the impacts of the site-generated traffic volumes on the surrounding roadways and study intersections.

2028 NO-BUILD ROADWAY CAPACITY ANALYSIS

The PM peak hour 2028 future background capacity analysis for the study area roadways is shown in **Table 5**. This scenario includes a background growth of 2.12% per year.

As seen in **Table 5**, the analysis concludes that the segments of SE Maricamp Road / CR 464 between SR 35 to CR 25 operates at an acceptable level of service for the no-build traffic conditions. Based on the future background roadway capacity analysis, there are no recommendations to be made for the roadway segments.

Table 5: 2028 Future No-Build Roadway Capacity Analysis

Roadway	Limits	No. of Lanes	Fun Class	LOS Std.	Daily Capacity	Pk Hr Pk Dir Capacity	Historical Growth	Background PM PH NB/EB Vol	Background PM PH SB/WB Vol	No-Build v/c
CR 464	Emerald Road (N) to Oak Road	4	Arterial	E	35,820	1,800	2.12%	877	686	0.49
	Oak Road To Emerald Road (S)	4	Arterial	E	35,820	1,800	2.12%	877	686	0.49
	Emerald Road (S) to SE 110 Street	4	Arterial	E	35,820	1,800	2.12%	548	428	0.30
	SE 110 Street to CR 25	2	Arterial	E	11,232	576	2.12%	164	129	0.28

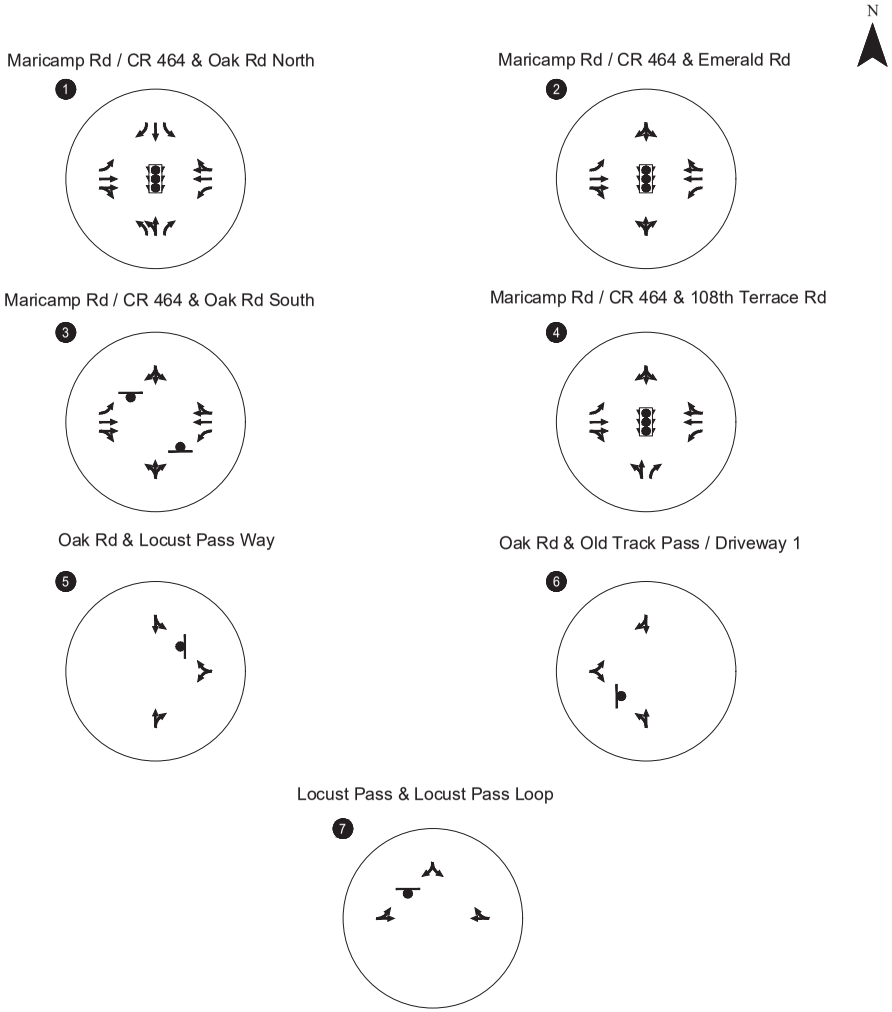
2028 NO-BUILD INTERSECTION CAPACITY ANALYSIS

The no-build intersection lane configurations remain the same as existing conditions, except at the intersection of SE Maricamp Road / CR 464 and Emerald Road South, as shown in **Figure 8** . The results of the intersection capacity analysis for the AM and PM peak hours are presented in **Table 6**. The analysis includes v/c ratios, delays per turning movement (in seconds), and the corresponding Level of Service (LOS).

As shown in **Table 6**, under future no-build conditions (excluding project traffic), the study intersections are projected to operate at an overall LOS of E or better. All v/c ratios remain below 1.0, except for the northbound movement at the SE Maricamp Road / CR 464 and Emerald Road South intersection, which is already over capacity during existing PM peak-hour conditions (as shown in Table 2) with an LOS F and a v/c ratio of 1.21. Under future no-build conditions, this v/c ratio is expected to increase to 1.36.

To address this deficiency, the intersection of Emerald Road and SE Maricamp Road / CR 464 is proposed for full signalization. With this improvement, the northbound movement is expected to operate at an acceptable level, reducing the v/c ratio from 1.36 to 0.51. The proposed improvement is reflected in the third row of **Table 6.**

The future no-build Synchro intersection report printouts are provided in **Appendix I**.



- Signal
- Stop Sign
- Site Accesses
- Study Intersections

Background Lane Configurations
Ocala, Florida

Figure
8

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Table 6: 2028 No-Build Intersection Capacity Analysis

Intersection	Control Type	Performance Measure	AM Peak Period					PM Peak Period				
			Overall	EB	WB	NB	SB	Overall	EB	WB	NB	SB
1 – SE Maricamp Road / CR 464 at Oak Road North	Signalized	Delay (s/veh)						31.5	23.5	24.1	58.5	66.2
		LOS						C	C	C	E	E
		v/c ratio*						-	0.81	0.54	0.83	0.67
2 – SE Maricamp Road / CR 464 at Emerald Road South	TWSC	Delay (s/veh)						-	13.1	11.4	284.9	42.7
		LOS						-	B	B	F	E
		v/c ratio*						-	0.08	0.10	1.36	0.50
2i – SE Maricamp Road / CR 464 at Emerald Road South	Signalized (Proposed improvement)	Delay (s/veh)						23.4	19.5	22.0	46.6	41.2
		LOS						C	B	C	D	D
		v/c ratio*						-	0.73	0.78	0.51	0.72
3 – SE Maricamp Road / CR 464 at Oak Road South	TWSC	Delay (s/veh)	-	14.8	0	51.4	63.1	-	10.7	11.4	23.7	25.8
		LOS	-	B	A	F	F	-	B	B	C	D
		v/c ratio*	-	0.30	0	0.20	0.8	-	0.01	0.01	0.02	0.42
4 – SE Maricamp Road / CR 464 at SE 108th Terrace Road	Signalized	Delay (s/veh)						15.4	12.7	13.3	35.6	29.4
		LOS						B	B	B	D	C
		v/c ratio*						-	0.41	0.42	0.60	0.03
5 – Oak Road at Locust Pass Way	TWSC	Delay (s/veh)	-	-	9.9	-	7.5	-	-	9.7	-	7.5
		LOS	-	-	A	-	A	-	-	A	-	A
		v/c ratio*	-	-	0.01	-	0.01	-	-	0.01	-	0.004
6 – Oak Track Pass at Oak Road	TWSC	Delay (s/veh)	-	9.6	-	7.5	-	-	0	-	7.3	-
		LOS	-	A	-	A	-	-	A	-	A	-
		v/c ratio*	-	0.03	-	0.004	-	-	-	-	0.004	-
7 – Locust Pass Loop at Locust Pass Way	TWSC	Delay (s/veh)	-	7.2	-	-	8.7	-	7.2	-	-	8.6
		LOS	-	A	-	-	A	-	A	-	-	A
		v/c ratio*	-	0.001	-	-	0.003	-	0.004	-	-	0.009

*v/c ratio reported for the highest movement

2028 BUILD ROADWAY CAPACITY ANALYSIS

Table 7 presents the PM peak hour roadway capacity analysis for the study area under the 2028 build scenario. The results indicate that all roadway segments are projected to operate within capacity. The highest volume-to-capacity (v/c) ratio is estimated at 0.52 for the segment between Emerald Road (N) and Oak Road (N). All other segments are expected to maintain a v/c ratio of 0.34 or lower, demonstrating sufficient capacity under the building condition.

YEAR 2028 BUILDOUT INTERSECTION CAPACITY ANALYSIS

The lane configurations for the buildout are shown in **Figure 9**. The results of the intersection capacity analysis for the AM and PM peak hour under build out future conditions are shown in **Table 8.** The analysis reflects the v/c ratios, delays per turning movement (in seconds), and the operating LOS.

As shown in **Table 8**, Driveway 1 and Driveway 2 are expected to operate with an overall intersection LOS B or better. The remaining intersections are projected to operate at LOS E or better without overcapacity movements, except for the southbound movement at the intersection of SE Maricamp Road / CR 464 and Oak Road.

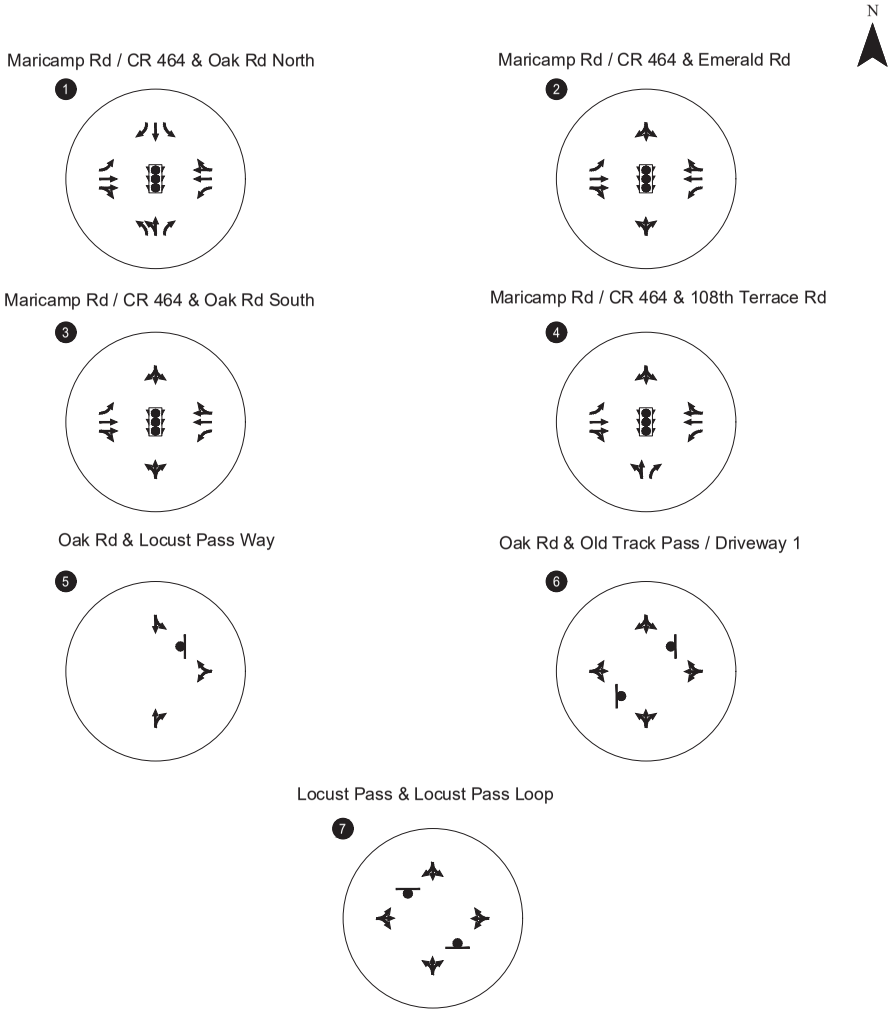
Note that the same improvement identified under the future no-build scenario was carried over to the future build scenario for the intersection of Emerald Road and SE Maricamp Road / CR 464.

Under buildout conditions, the southbound movement at the intersection of Oak Road and SE Maricamp Road / CR 464 is expected to be over capacity, with a v/c ratio of 1.34 and LOS F for the AM peak-hour. To address this deficiency, full signalization of the intersection is proposed. With this improvement, the southbound movement's v/c ratio is expected to decrease to 0.68, and the overall intersection is projected to operate at LOS C. The proposed improvement is shown in the fourth row of **Table 8.**

The future buildout conditions Synchro intersection report printouts are provided in **Appendix K**.

Table 7: 2028 Future Build Roadway Capacity Analysis

Roadway	Limits	No. of Lanes	Fun Class	LOS Std.	Daily Capacity	Pk Hr Pk Dir Capacity	Total No-Build PM PH NB/EB Vol	Total No-Build PM PH SB/WB Vol	Max Model Distribution	PM PH NB/EB Project Trips	PM PH SB/WB Project Trips	Total Build PM PH NB/EB Vol	Total Build PM PH SB/WB Vol	Build v/c
CR 464	Emerald Road (N) to Oak Road (N)	4	Arterial	E	35,820	1,800	877	686	44%	51	30	928	716	0.52
	Oak Road (N) To Emerald Road (S)	4	Arterial	E	35,820	1,800	877	686	46%	53	31	930	717	0.52
	Emerald Road (S) to Oak Road (S)	4	Arterial	E	35,820	1,800	548	428	49%	57	33	605	461	0.34
	Oak Road (S) to SE 110th	4	Arterial	E	35,820	1,800	548	428	49%	32	56	580	484	0.32
	SE 110 Street to CR 25	2	Arterial	E	11,232	576	164	129	14%	10	16	174	145	0.30



- Signal
- Stop Sign
- Site Accesses
- Study Intersections

Build Out Lane Configurations
Ocala, Florida

Figure
9

KITTELSON & ASSOCIATES

H:\31\31548 - Oak Shores Estates TIA\Methodology\Report\Figures\31548.dwg Jan 01, 2026 - 9:41am - salmed Layout Tab: Build Lane Config

Table 8: Year 2028 Build Intersection Capacity Analysis

Intersection	Control Type	Performance Measure	AM Peak Period					PM Peak Period				
			Overall	EB	WB	NB	SB	Overall	EB	WB	NB	SB
1 – SE Maricamp Road / CR 464 at Oak Road North	Signalized	Delay (s/veh)						31.2	23.6	23.7	58.5	66.1
		LOS						C	C	C	E	E
		v/c ratio*						-	0.81	0.56	0.83	0.67
2 – SE Maricamp Road / CR 464 at Emerald Road South	Signalized	Delay (s/veh)						23.8	20.1	22.4	46.8	41.2
		LOS						C	C	C	D	D
		v/c ratio*						-	0.73	0.78	0.52	0.31
3 – SE Maricamp Road / CR 464 at Oak Road South	TWSC**	Delay (s/veh)	-	15.6	0	79.1	227.7	-	11.7	11.4	30.7	54.6
		LOS	-	C	A	F	F	-	B	B	D	F
		v/c ratio*	-	0.34	0	0.28	1.34	-	0.19	0.01	0.02	0.77
3i – SE Maricamp Road / CR 464 at Oak Road South	Signalized (Proposed improvement)	Delay (s/veh)	28.1	23.6	25.6	38.3	51.6	21.8	18.9	19.6	37.5	46.3
		LOS	C	C	C	D	D	C	B	B	D	D
		v/c ratio*	-	0.87	0.67	0.06	0.63	-	0.83	0.82	0.01	0.47
4 – SE Maricamp Road / CR 464 at SE 108th Terrace Road	Signalized	Delay (s/veh)						17.4	14.3	15.1	36.6	27.6
		LOS						B	B	B	D	C
		v/c ratio*						-	0.46	0.46	0.65	0.03
5 – Oak Road at Locust Pass Way	TWSC	Delay (s/veh)	-	-	10.4	-	7.5	-	-	9.8	-	7.6
		LOS	-	-	B	-	A	-	-	A	-	A
		v/c ratio*	-	-	0.05	-	0.01	-	-	0.02	-	0.01
6 – Driveway 1/ Oak Track Pass at Oak Road	TWSC	Delay (s/veh)	-	9.9	12.3	7.6	0	-	0	11.1	7.3	0
		LOS	-	A	B	A	A	-	A	B	A	A
		v/c ratio*	-	0.03	0.18	0.004	0	-	-	0.09	0.004	-
7 – Driveway 2/ Locus Pass Loop at Locust Pass Way	TWSC	Delay (s/veh)	-	7.2	0	8.7	8.7	-	7.2	0	8.8	8.6
		LOS	-	A	A	A	A	-	A	A	A	A
		v/c ratio*	-	0.001	-	0.02	0.003	-	0.004	-	0.02	0.01

*v/c ratio reported for the highest movement

INTERSECTION TURN LANE AND QUEUE ANALYSIS

A queueing analysis was conducted for the study intersections to determine the impacts of the project development on intersection queueing in the study area. **Table 9** shows the queueing results for the existing, background, and buildout conditions at these intersections. An indication is provided for whether the lane length is exceeded in the existing, background, or buildout condition. Two intersections have a turning movement where a turn lane deficiency is caused by the project:

- SE Maricamp Road / CR 464 at Oak Road North: Southbound Left Turn (2 feet)
- SE Maricamp Road / CR 464 at Oak Road South: Eastbound Left Turn (115 feet)

The required deceleration length is determined from the FDOT Design Manual Exhibit 212-1 for state roads. Design speed (posted speed plus five) was used for FDOT intersections.

115 feet of left turn extension would be needed for eastbound left turn at the intersection of SE Maricamp Road / CR 464 at Oak Road South. However, implementing this improvement is not feasible at this time due to site-specific physical constraints. The available distance between the end of the existing left turn lane and the nearby median opening is only 35 feet. This restricted space significantly constrains the possibility of extending the left turn lane. In order to proceed with the extension, the median opening would need to be removed, and it would interfere with outbound movements at the adjacent Candler Clay Pit facility. Thus, the improvement is not recommended.

A right-turn warrant analysis was conducted at the project entrance at Oak Road for PM peak period. As per NCHRP 457, an exclusive northbound right-turn at Driveway 1/ Oak Track Pass at Oak Road is not warranted.

A left-turn warrant analysis was conducted at the stop-controlled intersection of Oak Road at Lucast pass way for PM peak period. As per NCHRP 457, an exclusive southbound left-turn is not warranted.

The turn lane warrant analysis results are provided in the **Appendix M**.

Table 9: Intersection Queue Analysis

Intersection	Movement	Speed	Total Existing Lane Length (ft)	Required Deceleration (ft)	Existing Conditions Analysis			2028 Future Background Conditions Analysis			2028 Future Buildout Conditions Analysis			Cause for Deficiency
					95th % Queue (ft)	Total Required Turn Lane Length (ft)	Lane Length Def (ft)	95th % Queue (ft)	Total Required Turn Lane Length (ft)	Lane Length Deficiency (ft)	95th % Queue (ft)	Total Required Turn Lane Length (ft)	Lane Length Deficiency (ft)	
SE Maricamp Road / CR 464 at Oak Road North	SBL	30	130	145	38	183	53	38	183	53	40	185	55	2 ft by the project
SE Maricamp Road / CR 464 at Emerald Road South	WBL	50	185	350	8	358	173	100	450	265	100	450	265	N/A
SE Maricamp Road / CR 464 at Oak Road South	EBL	50	495	350	25	375	0	30	380	0	260	610	115	115 ft by the project
SE Maricamp Road / CR 464 at SE 108th Terrace Road	EBL	50	185	350	0	350	165	0	350	165	0	350	165	N/A

PROPORTIONATE SHARE CALCULATIONS

The cost the identified improvement and its proportionate share was calculated for the following intersection:

- SE Maricamp Road / CR 464 at Oak Road South
    - Conversion of the intersection from stop-control to an actuated, coordinated signal system.

According to the Synchro analysis, the southbound left-turn lane during the background AM peak has a volume of 72 vehicles per hour (veh/h), with a v/c ratio of 0.77 and a Level of Service (LOS) F. In the buildout AM peak, the volume increases to 121 veh/h, with a v/c ratio of 1.34 and an LOS F.

With the improved signalized intersection, the southbound movement achieves a v/c ratio of 0.63 and an LOS D. The added project trips on the southbound left-turn movement total 49 veh/h, representing 40.5% of the total volume. Therefore, the Oak Shores Estates development is responsible for 40.5% of the cost associated with signalizing the intersection at SE Maricamp Road / CR 464 and Oak Road South.

MULTIMODAL ASSESSMENT

A multimodal assessment was conducted to determine existing and proposed alternate modes of transportation within the immediate project study area. The following is a summary of transit, pedestrian, and bicycle facilities:

TRANSIT

SunTran provides transit services throughout Marion County. The Red Route runs along SE Maricamp Road (CR 464), with the nearest stop located approximately 0.10 miles from Driveway 1, near Lake Weir High School. This stop serves as the turnaround point for the route, marking its final stop before it begins its return trip.

PEDESTRIAN FACILTIES

Within the study area, a 6-foot sidewalk is present on the east side of Oak Road that will extend across Driveway 1 at Oak Road. However, sidewalk is not present on the west side of Oak Road. Notably, there are no sidewalks along Locust Pass Way, where Driveway 2 will be located. At SE Maricamp / CR464 from Oak Road to SE 108th Terrace Road, sidewalk is present on the northside of the roadway. Near the project site, the only pedestrian crosswalk (10 feet wide) is found closer to the intersection of Oak Track and Oak Road (0.15 miles from driveway 1.

BICYCLE FACILTIES

There are no existing bicycle lanes along SE Maricamp / CR 464 or Oak Road.

Section 5
Conclusions

CONCLUSIONS

This traffic analysis was prepared to evaluate the traffic impacts associated with the proposed Oak Shores Estates residential development, located east of Oak Road, south of Locust Pass Way, and west of SE 108th Terrace Road, in support of obtaining concurrency approval through Marion County.

The following summarizes the study findings:

findings:

Trip Generation

- The proposed development is expected to generate 1839 new daily trips, 135 new AM peak hour trips, and 183 new PM peak hour trips.

Proposed Access

- Access to the development will be provided at two (2) locations:
  a) Driveway 1 with full access to Oak Road,
  b) Driveway 2 with full access to Locust Pass Way

Existing Conditions

- The study roadway segment operates acceptably and is shown to have sufficient capacity under existing conditions.
- All intersections operate at an overall LOS of E or better with a v/c ratio below 1.00, except for the northbound movement at SE Maricamp Road / CR 464 and Emerald Road South, which is stop-controlled and operates at LOS F with a v/c ratio of 1.21.

Background Conditions

- The study roadway segment is projected to operate acceptably and maintain sufficient capacity under future background conditions.
- All intersections are expected to operate at an overall LOS of E or better, except the intersection of Maricamp Road / CR 464 and Emerald Road South, which is projected to operate at LOS F with a v/c ratio of 1.36 for the northbound movement.
- To address this deficiency, a signal is proposed at this intersection. With this improvement, the northbound movement is expected to operate at LOS D with a v/c ratio of 0.51.

Buildout Conditions

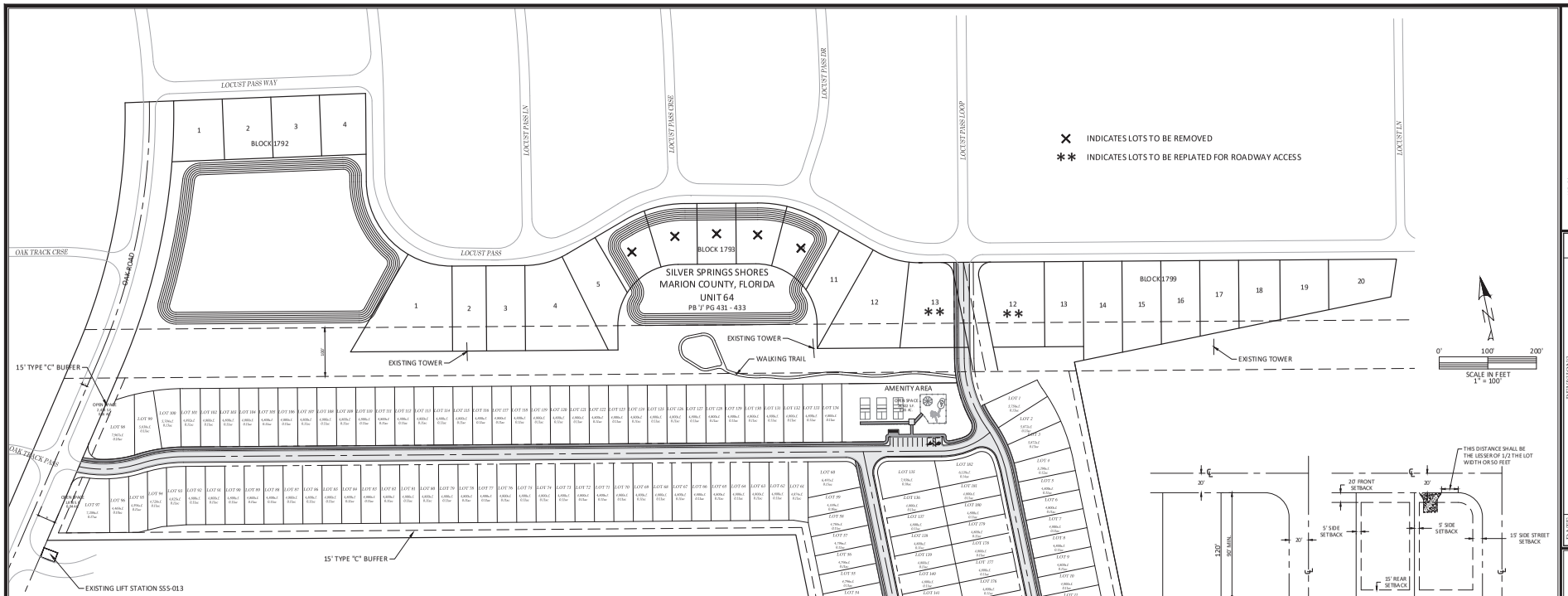
- The roadway segment is projected to operate acceptably under buildout traffic conditions.
- Under future buildout conditions, study intersections are expected to operate at an overall LOS of E or better, except for the southbound movement at SE Maricamp Road / CR 464 and Oak Road South, which is projected to operate at LOS F with a v/c ratio of 1.34.
- To address this deficiency, a signal is proposed at this intersection. With this improvement, the southbound movement is expected to operate at LOS D with a v/c ratio of 0.47.
- The project is responsible for 40.5% of the cost associated with signalizing the intersection at SE Maricamp Road / CR 464 and Oak Road South.

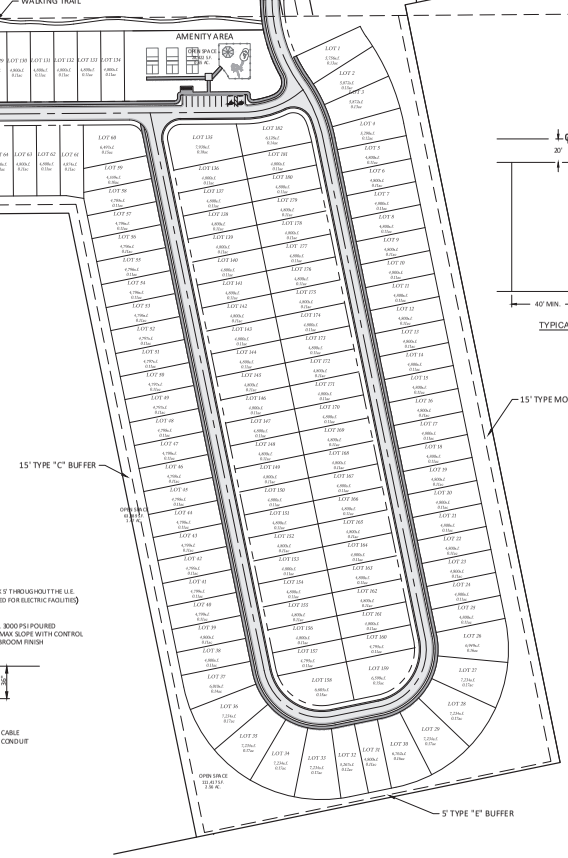
Turn Lane Analysis

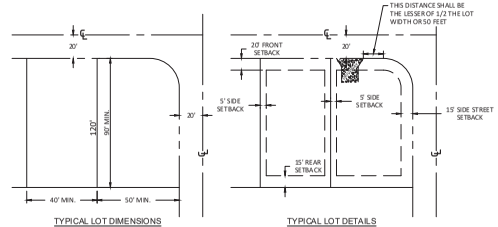
- Based on the turn lane analyses at the study intersections, 115 feet of left turn extension would be needed for eastbound left turn at the intersection of SE Maricamp Road / CR 464 at Oak Road South. But the left turn lane extension is not feasible due to limited available distance between the end of

the existing left turn lane and the nearby median opening at SE Maricamp Road / CR 464 at Candler Clay Pit Road, which is only 35 feet. It is recommended that the project provide a mitigative prop share cost responsibility for the 115 feet. Alternatively, the turn lane can be constructed to extend beyond the median opening for the Candler Clay Pit pending County approval.

Appendix A:
Preliminary Site Plan







TYPICAL LOT DIMENSIONS
N.T.S

TYPICAL LOT DETAILS
N.T.S

PROJECT DATA

PARCELS:
9064-0000-02, 9064-1793+01, 9064-1793+05,
9064-1792-01, 9064-1792-02, 9064-1792-03,
9064-1792-04, 9064-1793-01, 9064-1793-02,
9064-1793-03, 9064-1793-04, 9064-1793-05,
9064-1793-06, 9064-1793-07, 9064-1793-08,
9064-1793-09, 9064-1793-10, 9064-1793-11,
9064-1793-12, 9064-1793-13, 9064-1799-12,
9064-1799-13, 9064-1799-14, 9064-1799-15,
9064-1799-16, 9064-1799-17, 9064-1799-18,
9064-1799-19, 9064-1799-20, 9064-1799+01

SITE:
TOTAL AREA 47.70

LAND USE & ZONING:
FUTURE LAND USE: HIGH RESIDENTIAL, PUBLIC
CURRENT ZONING: PUD

UNITS PROVIDED:
MIN. LOT SIZE 40' X 120 ' = 182 UNITS
* LOTS MINIMUM 75' DEPTH

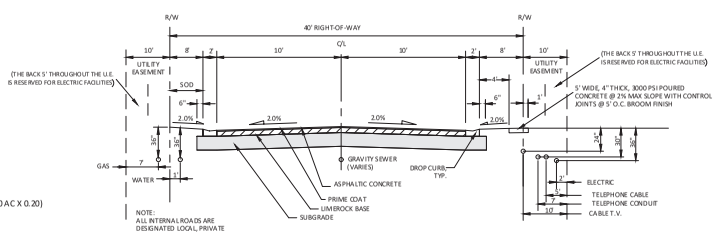
DRA AREA:
PROVIDED: ±6.24 AC (%);

OPEN SPACE:
BUFFERS 1.63 A.C.
DRA ±1.29 A.C. (±5.16 X 0.25)
OTHER OPEN SPACE 9.82 A.C.
TOTAL OPEN SPACE PROVIDED: ±12.74 (26.7%)
MINIMUM OPEN SPACE TO BE PROVIDED: ± 9.54 (47.70 A C X 0.20)

UTILITIES
ELECTRIC BY: DUKE ENERGY
POTABLE WATER BY: MARION COUNTY UTILITIES
FIRE BY: MARION COUNTY FIRE RESCUE
SANITARY SEWER BY: TBD

SITE DEVELOPMENT STANDARDS

MIN. FRONT	20'
MIN. REAR	15'
MIN. SIDE	5'
MIN. HEIGHT	40'



NOTE:
ALL INTERNAL ROADS ARE DESIGNATED LOCAL, PRIVATE

40' PRIVATE LOCAL RIGHT-OF-WAY ROADWAY SECTION

N.T.S

Wilson & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545

REVISIONS

DATE

OAK SHORES ESTATES PUD
MARION COUNTY, FLORIDA

PRELIMINARY PLAN
40' HOME SITES

DATE 4/24/25
DRAWN BY JA
CHKD. BY TJ
JOB NO. 24-9128

SHT.

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

S:\Marion County\Rainey Lake Weir HS Property\PLANNING\Concept Plan 40 X 120.dwg, 01, 4/24/2025 3:03:11 PM

Appendix B:
TIA Methodology

KITTELSON & ASSOCIATES
225 East Robinson Street, Suite 355
Orlando, FL 32801
P 407.540.0555 F 407.540.0550

TECHNICAL MEMORANDUM

May 22, 2025 Project# 31548

To: Marion County Development Review
Office of the County Engineer
412 SE 25th Avenue
Ocala, FL 34471

From: Kok Wan Mah, PE; Misbaou Bah

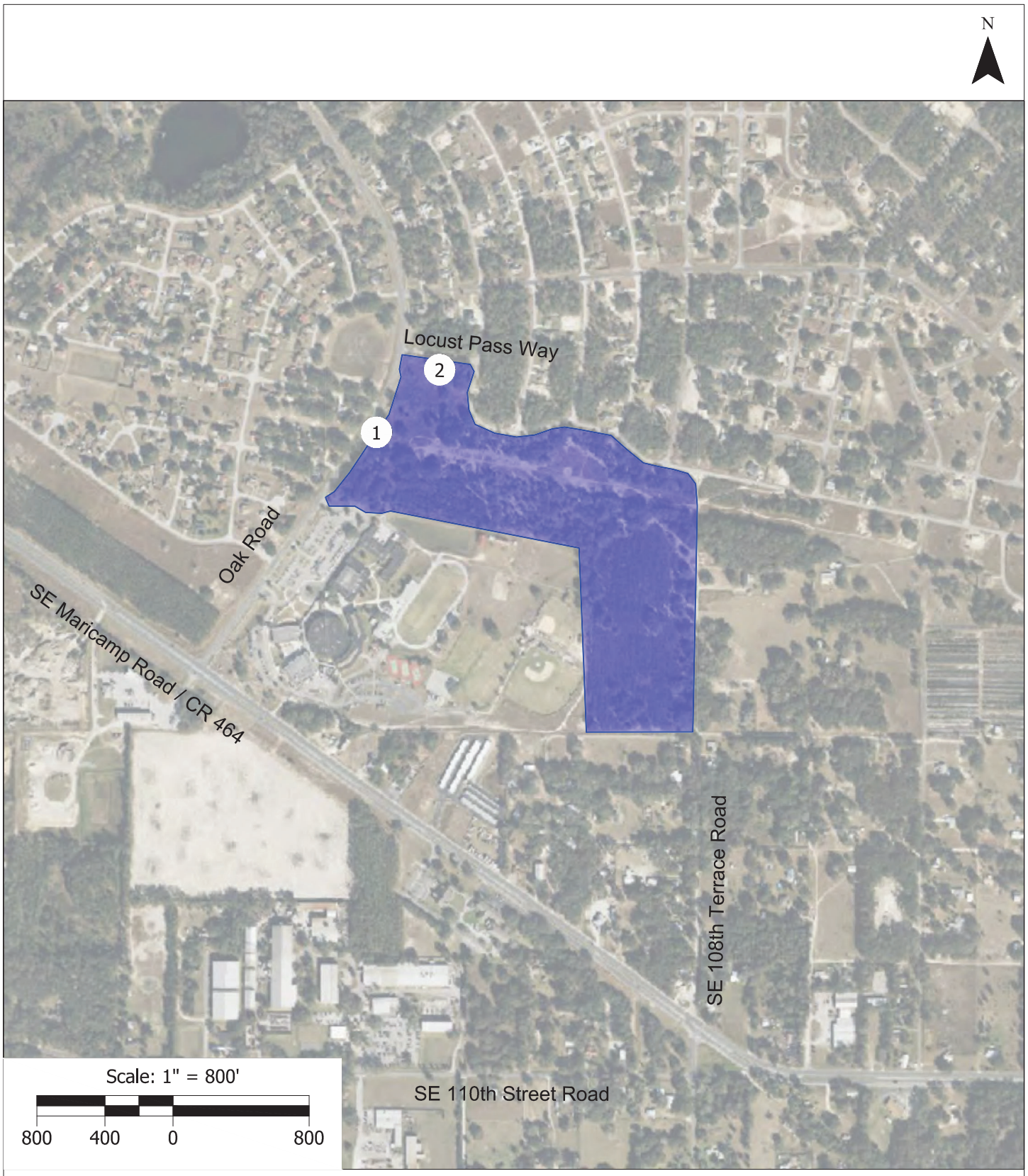
RE: Oak Shores Estates – Traffic Methodology

Introduction and Project Description

This technical memorandum provides a recommended Transportation Impact Study (TIS) methodology for the proposed Oak Shores Property project located in Marion County, Florida, east of Oak Road, south of Locust Pass Way, and west of SE 108th Terrace Road. The site consists of an area of 47.70 acres. The proposed project includes up to 192 single family residential units.

The development will be constructed in a single phase with an anticipated buildout year of 2028. Access to the proposed property will be two (2) full access driveways driveway on Oak Road and Locust Pass Way. **Figure 1** shows the location of the proposed site. The site plan is found in **Appendix A**.

The proposed methodology is based on the requirements contained in the *Marion County Traffic Impact Analysis Guidelines*.



(X) - Site Accesses

Site Vicinity Map & Study Area
Belleview, Florida

Figure
1

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Trip Generation

The trip generation analysis was conducted using information published by the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*. **Table 1** summarizes the resulting trip generation analysis for the total weekday daily, weekday AM and Weekday PM peak hour vehicles trip generation for the proposed development. As the development is anticipated to consist of a single land use group (residential), no internal capture or pass-by trips would be generated by the site.

Table 1: Project Trip Generation

Land Use	ITE Code	Intensity	Weekday Daily Trips	AM Peak Period			PM Peak Period		
				In	Out	Total	In	Out	Total
Single-Family Detached Housing	**210**	**192 DU**	**1,839**	***34***	***101***	**135**	***116***	***67***	**183**

The proposed development is expected to generate 1,839 new daily trip ends, 135 new AM peak hour trips, and 183 new PM peak hour trips for the buildout condition. The ITE Trip Generation summary sheets can be found in **Appendix B**.

Trip Distribution & Assignment

The project trip distribution and assignment were estimated based on a select zone analysis using the Central Florida Regional Planning Model (CFRPM), Version 7, project driveway distribution, and local traffic patterns. The models provide a macroscopic assignment of project trips within the study area. The model plot is included in **Appendix D**.

The CFRFM depicts approximately 49% of project traffic travels to/from the north on SE Maricamp Road / CR 464, 49% of project traffic travels to/from the south on SE Maricamp Road / CR 464. **Figure 2,** summarize the proposed distribution and trip assignment.

Planned and Programmed Improvements

Per the Ocala Marion County Transportation Improvement Program Fiscal Years 2025 to 2029, there are no planned capacity improvements within the study area.

(X) - Site Accesses

XX% Trip Distribution Percentage

Proposed Site Trip Distribution
Belleview, Florida

Figure
2

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KITTELSON & ASSOCIATES

Study Area Determination

Per *Marion County Traffic Impact Analysis Guidelines*, a study area for a Traffic Study level of analysis includes public roadways where the net new project's traffic consumes at least three (3) percent of the maximum service volume based on the adopted level of service. **Table 2** presents the project's significance review. Roadway segment maximum service volumes and the existing traffic counts were obtained from the Ocala Marion Congestion Management Process (CMP), dated August 2023, included in **Appendix C.** Project trips were calculated using trips generated by the proposed development and trip distribution presented in previous sections.

Based on the expected trip generation, distribution, assignment, and significance review, the following roadway segments were tested for significance.

Roadway segments:

- SR 464 / SE Maricamp Road / CR 464
    - SE 25th Avenue to SE 44th Avenue
    - SE 44th Avenue to SR 35
    - SR 35 to Emerald Road North
    - Emerald Road North to Oak Road
    - Oak Road to Emerald Road South
    - Emerald Road South to SE 110th Street Road
- SE 110th Street Road
    - CR 25 to Oak Road
    - Oak Road to CR 464
- SE 108th Terrace Road
    - CR 25 to SE 110th Street Road
- SE 114th Street Road
    - SE Maricamp Road / CR 464 to SE 135 Avenue
- SR 35
    - Laurel Road to SR 464
    - SR 464 to SE 28th Street

Intersections to be included within the study area:

1. SE Maricamp Road / CR 464 at Oak Road North (South)
2. SE Maricamp Road / CR 464 at Emerald Road South (Stop Controlled)
3. SE Maricamp Road / CR 464 at Oak Road South (Stop Controlled)
4. SE Maricamp Road / CR 464 at SE 108th Terrace Road (Signalized)
5. Oak Road at Locust Pass Way (Stop Controlled)
6. Oak Road at Driveway 1 (Stop Controlled)
7. Locust Pass Way at Driveway 2 (Stop Controlled)

Counts from the intersection turning movements will be used to develop existing baseline volumes.

Table 2. Project Trip Significance

Segment ID	Road Name	From/To	Lanes	Func. Class	Flow	Daily Capacity	Peak hour Dir Capacity	2023 AADT	2023 PHPD Volume*	% of Project Trips	#PM Project Trips	Project Sig	v/c	Significant	Adjacent to Site?	In Study Area
1660	SR 464	SE 25 Av to SE 44 Av	4	Arterial	Interrupted	38,430	1,901	34,800	1,644	15%	17	0.89%	0.86	No	No	**No**
1690	SR 464	SE 44 Av to SR 35	4	Arterial	Interrupted	38,430	1,901	33,200	1,569	17%	20	1.05%	0.83	No	No	**No**
1710	CR 464	SR 35 to Emerald Rd (N)	4	Arterial	Interrupted	35,820	1,800	34,300	1,732	44%	51	2.83%	0.96	No	No	**No**
1770	CR 464	Emerald Road (N) to Oak Rd	4	Arterial	interrupted	35,820	1,800	15,600	788	46%	53	2.94%	0.44	No	No	**Yes**
1780	CR 464	Oak Rd To Emerald Rd (S)	4	Arterial	Interrupted	35,820	1,800	9,800	495	49%	57	3.17%	0.28	Yes	No	**Yes**
1790	CR 464	Emerald Rd (S) to SE 110 St	4	Arterial	Interrupted	35,820	1,800	9,300	470	49%	57	3.17%	0.26	Yes	No	**Yes**
1800.2	CR 464	SE 110 St Rd to CR 25	2	Arterial	Interrupted	11,232	576	2,700	136	14%	16	2.78%	0.24	No	No	**Yes**
3840.1	SE 110 ST RD	CR 25 to Oak Rd	2	Collector	Uninterrupted	29,340	1,449	3,400	172	13%	15	1.04%	0.12	No	No	**No**
3850.1	SE 110 ST RD	Oak Rd to CR 464	2	Collector	Uninterrupted	29,340	1,449	3,400	172	20%	23	1.59%	0.12	No	No	**No**
3770	SE 108 Ter Rd	CR 25 to SE 110 ST Rd	2	Collector	Uninterrupted	29,340	1,449	1,950*	98	13%	15	1.04%	0.07	No	No	**No**
1850	SE 114th ST RD	CR 464 to SE 135 AV	2	Collector	Uninterrupted	29,340	1,449	5,500	278	12%	14	0.97%	0.19	No	No	**No**
5100	SR 35	Laurel Rd to SR 464	4	Arterial	Uninterrupted	55,700	2,910	27,600	1,394	0%	0	0.00%	0.48	No	No	**No**
5110	SR 35	SR 464 to SE 28 ST	4	Arterial	Uninterrupted	55,700	2,910	20,700	1,045	5%	6	0.21%	0.36	No	No	**No**

*The 2023 AADT was not included in the Marion County CMP Database. The value was obtained from the FDOT Florida Traffic Online Website (cosite: 368018)

FUTURE VOLUMES BUILDOUT (2028)

Traffic counts will be collected at the study intersections, including heavy vehicles percentages. The seasonal factor will be applied to existing peak hour data. If the seasonal factor is less than 1.0, then the counts will not be seasonally adjusted.

Historical average annual daily traffic (AADT) volumes along the study roadways were initially reviewed using data from the Ocala Marion Transportation Planning Organization (TPO) Database, as included in **Appendix C**. A composite growth rate of **2.12%** annually was determined, as shown in **Table 3,** and will be applied for future conditions analysis for all study roadway segments. The calculated composite annual average is based on the weighted average growth rate for the study area roadways published in the Ocala Marion CMP Database. **Table 3** presents the calculation of the composite rate.

Table 3: Growth Rate Determination

Segment	Limits	2023 AADT	Annual Growth Rate	Weighted Growth
CR 464	Emerald Rd N to Oak Road	15,600	2.09%	978
CR 464	Oak Rd to Emerald Rd S	9,800	8.12%	2,387
CR 464	Emerald Rd S SE 110th St Rd	9,300	1.86%	519
CR 464	SE 110th Street Road to CR 25	2,700	1.00%	81
			Composite Annual Average Growth Rate	**2.12%**

In addition to the annual growth rate, future vested trips will be accounted for in the development of traffic volumes. A request will be made to Marion County for any approved TIA in the area.

FUTURE CONDITIONS OPERATIONAL ANALYSIS

The TIA will analyze weekday AM and PM peak hour traffic operations at the following intersections for existing conditions and Future Year 2028 Background (No Build) and Buildout conditions:

- SE Maricamp Road / CR 464 at Oak Road South (Stop Controlled)
- Oak Road at Locust Pass Way (Stop Controlled)

Site driveways will be analyzed for the AM and PM peak hours for buildout conditions.

Additionally, weekday PM peak hour traffic operations will be analyzed at all other intersections within the study area.

The intersection operations analyses will use the HCM 7th Edition methodology included in Synchro 12 software. These analyses will assess overall intersection delay and level of service (LOS), as well as queues, delays, and LOS by movement for the study intersections. Roadway segments will be analyzed for existing and Future Year 2028 No Build and Future Buildout conditions using peak-hour peak-direction roadway capacities published in the Ocala Marion TPO CMP Database 2023. For segments where capacities are not provided in the CMP Database, FDOT Generalized LOS Tables will be used. For roadways or intersections found to be operating deficiently due to the addition of site-generated trips, recommendations will be provided to address the identified deficiencies.

Turn lanes access to the property will be evaluated according to the *FDOT Multimodal Access Management Guidebook* (October 2023): Turn Lanes and U-Turns.

Appendix C:
Traffic Data Collection

Raw Turning Movement Counts

DE TRAFFIC

detraffic.com
(386)341-4186
Maricamp Rd at Water Rd
Marion County, Fl

File Name : 01 MariCamp at Water
Site Code : 00000001
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	Maricamp Rd Southbound					Water Rd Westbound					Maricamp Rd Northbound					Water Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
07:00 AM	3	163	9	1	176	5	6	4	3	18	2	219	2	1	224	6	2	6	2	16	434
07:15 AM	4	179	7	1	191	4	4	5	2	15	1	236	2	1	240	4	2	7	2	15	461
07:30 AM	7	226	9	2	244	5	2	4	4	15	6	281	2	2	291	5	4	5	1	15	565
07:45 AM	4	220	12	1	237	4	2	7	6	19	4	316	2	0	322	8	6	5	2	21	599
Total	18	788	37	5	848	18	14	20	15	67	13	1052	8	4	1077	23	14	23	7	67	2059
08:00 AM	9	222	16	0	247	6	1	4	4	15	3	329	4	1	337	8	4	4	3	19	618
08:15 AM	7	236	19	2	264	5	2	6	1	14	2	355	6	2	365	9	2	8	4	23	666
08:30 AM	7	215	10	3	235	4	5	4	3	16	3	307	4	1	315	12	4	8	2	26	592
08:45 AM	7	210	9	3	229	6	1	6	1	14	4	307	3	0	314	10	6	7	2	25	582
Total	30	883	54	8	975	21	9	20	9	59	12	1298	17	4	1331	39	16	27	11	93	2458
04:00 PM	4	227	5	2	238	2	6	4	1	13	2	243	4	0	249	9	2	1	2	14	514
04:15 PM	7	236	4	1	248	1	2	7	2	12	6	274	3	0	283	7	0	2	2	11	554
04:30 PM	10	272	5	3	290	3	4	3	1	11	3	320	3	0	326	8	0	5	1	14	641
04:45 PM	5	225	6	4	240	2	5	2	3	12	1	287	4	0	292	11	0	5	3	19	563
Total	26	960	20	10	1016	8	17	16	7	48	12	1124	14	0	1150	35	2	13	8	58	2272
05:00 PM	10	209	11	2	232	5	4	3	5	17	3	274	3	0	280	9	1	6	4	20	549
05:15 PM	2	220	5	1	228	5	6	4	3	18	5	283	6	0	294	17	2	2	4	25	565
05:30 PM	4	239	6	2	251	5	0	6	2	13	4	270	5	0	279	9	1	1	2	13	556
05:45 PM	6	217	6	2	231	2	2	6	1	11	2	265	6	0	273	7	0	1	1	9	524
Total	22	885	28	7	942	17	12	19	11	59	14	1092	20	0	1126	42	4	10	11	67	2194
Grand Total	96	3516	139	30	3781	64	52	75	42	233	51	4566	59	8	4684	139	36	73	37	285	8983
Apprch %	2.5	93	3.7	0.8		27.5	22.3	32.2	18		1.1	97.5	1.3	0.2		48.8	12.6	25.6	13		
Total %	1.1	39.1	1.5	0.3	42.1	0.7	0.6	0.8	0.5	2.6	0.6	50.8	0.7	0.1	52.1	1.5	0.4	0.8	0.4	3.2	
Automobiles	92	3441	137	30	3700	63	51	71	42	227	48	4467	57	8	4580	136	36	69	37	278	8785
% Automobiles	95.8	97.9	98.6	100	97.9	98.4	98.1	94.7	100	97.4	94.1	97.8	96.6	100	97.8	97.8	100	94.5	100	97.5	97.8
Commercial	4	75	2	0	81	1	1	4	0	6	3	99	2	0	104	3	0	4	0	7	198
% Commercial	4.2	2.1	1.4	0	2.1	1.6	1.9	5.3	0	2.6	5.9	2.2	3.4	0	2.2	2.2	0	5.5	0	2.5	2.2

DE TRAFFIC

detraffic.com
(386)341-4186
Maricamp Rd at Water Rd
Marion County, Fl

File Name : 01 MariCamp at Water
Site Code : 00000001
Start Date : 5/6/2025
Page No : 2

	Maricamp Rd Southbound					Water Rd Westbound					Maricamp Rd Northbound					Water Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	4	220	12	1	237	4	2	7	6	19	4	316	2	0	322	8	6	5	2	21	599
08:00 AM	9	222	16	0	247	6	1	4	4	15	3	329	4	1	337	8	4	4	3	19	618
08:15 AM	7	236	19	2	264	5	2	6	1	14	2	355	6	2	365	9	2	8	4	23	666
08:30 AM	7	215	10	3	235	4	5	4	3	16	3	307	4	1	315	12	4	8	2	26	592
Total Volume	27	893	57	6	983	19	10	21	14	64	12	1307	16	4	1339	37	16	25	11	89	2475
% App. Total	2.7	90.8	5.8	0.6		29.7	15.6	32.8	21.9		0.9	97.6	1.2	0.3		41.6	18	28.1	12.4		
PHF	.750	.946	.750	.500	.931	.792	.500	.750	.583	.842	.750	.920	.667	.500	.917	.771	.667	.781	.688	.856	.929
Automobiles	26	874	56	6	962	19	9	19	14	61	10	1289	16	4	1319	35	16	24	11	86	2428
% Automobiles	96.3	97.9	98.2	100	97.9	100	90.0	90.5	100	95.3	83.3	98.6	100	100	98.5	94.6	100	96.0	100	96.6	98.1
Commercial	1	19	1	0	21	0	1	2	0	3	2	18	0	0	20	2	0	1	0	3	47
% Commercial	3.7	2.1	1.8	0	2.1	0	10.0	9.5	0	4.7	16.7	1.4	0	0	1.5	5.4	0	4.0	0	3.4	1.9

DE TRAFFIC

detraffic.com
(386)341-4186
Maricamp Rd at Water Rd
Marion County, Fl

File Name : 01 MariCamp at Water
Site Code : 00000001
Start Date : 5/6/2025
Page No : 3

Peak Hour Data

Peak Hour Begins at 07:45 AM

Automobiles
Commercial

North

Maricamp Rd

	Right	Thru	Left	R/R	Out	In	Total
	56	874	26	6	1343	962	2305
	1	19	1	0	22	21	43
	57	893	27	6	1365	983	2348

Water Rd

	Left	Thru	Right	R/R	Out	In	Total
	35	16	24	11	75	86	161
	2	0	1	0	4	3	7
	37	16	25	11	79	89	168

Water Rd

	Right	Thru	Left	R/R	Out	In	Total
	19	9	19	14	58	61	119
	2	1	0	0	1	3	4
	21	10	19	14	59	64	123

Maricamp Rd

	Left	Thru	Right	R/R	Out	In	Total
	10	1289	16	4	917	1319	2236
	2	18	0	0	20	20	40
	12	1307	16	4	937	1339	2276

DE TRAFFIC

detraffic.com
(386)341-4186
Maricamp Rd at Water Rd
Marion County, Fl

File Name : 01 MariCamp at Water
Site Code : 00000001
Start Date : 5/6/2025
Page No : 4

	Maricamp Rd Southbound					Water Rd Westbound					Maricamp Rd Northbound					Water Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	10	272	5	3	290	3	4	3	1	11	3	320	3	0	326	8	0	5	1	14	641
04:45 PM	5	225	6	4	240	2	5	2	3	12	1	287	4	0	292	11	0	5	3	19	563
05:00 PM	10	209	11	2	232	5	4	3	5	17	3	274	3	0	280	9	1	6	4	20	549
05:15 PM	2	220	5	1	228	5	6	4	3	18	5	283	6	0	294	17	2	2	4	25	565
Total Volume	27	926	27	10	990	15	19	12	12	58	12	1164	16	0	1192	45	3	18	12	78	2318
% App. Total	2.7	93.5	2.7	1		25.9	32.8	20.7	20.7		1	97.7	1.3	0		57.7	3.8	23.1	15.4		
PHF	.675	.851	.614	.625	.853	.750	.792	.750	.600	.806	.600	.909	.667	.000	.914	.662	.375	.750	.750	.780	.904
Automobiles	25	907	27	10	969	14	19	11	12	56	12	1132	15	0	1159	44	3	17	12	76	2260
% Automobiles	92.6	97.9	100	100	97.9	93.3	100	91.7	100	96.6	100	97.3	93.8	0	97.2	97.8	100	94.4	100	97.4	97.5
Commercial	2	19	0	0	21	1	0	1	0	2	0	32	1	0	33	1	0	1	0	2	58
% Commercial	7.4	2.1	0	0	2.1	6.7	0	8.3	0	3.4	0	2.7	6.3	0	2.8	2.2	0	5.6	0	2.6	2.5

DE TRAFFIC

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Maricamp Rd at Water Rd
Marion County, Fl

File Name : 01 MariCamp at Water
Site Code : 00000001
Start Date : 5/6/2025
Page No : 5

Peak Hour Data

Peak Hour Begins at 04:30 PM

Automobiles
Commercial

North

Maricamp Rd

	Out	In	Total
	1187	969	2156
	34	21	55
	1221	990	2211

	Right	Thru	Left	R/R
	27	907	25	10
	0	19	2	0
	27	926	27	10

Water Rd

	Out	In	Total
	43	56	99
	3	2	5
	46	58	104

	Right	Thru	Left	R/R
	11	19	14	12
	1	0	1	0
	12	19	15	12

Maricamp Rd

	Left	Thru	Right	R/R
	12	1132	15	0
	0	32	1	0
	12	1164	16	0

	Out	In	Total
	938	1159	2097
	21	33	54
	959	1192	2151

Water Rd

	Out	In	Total
	58	76	134
	0	2	2
	58	78	136

	Left	Thru	Right	R/R
	44	3	17	12
	1	0	1	0
	45	3	18	12

DE TRAFFIC

detraffic.com
(386)341-4186
Maricamp Rd at Water Rd
Marion County, Fl

File Name : 01 MariCamp at Water
Site Code : 00000001
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	Maricamp Rd Southbound					Water Rd Westbound					Maricamp Rd Northbound					Water Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

DE TRAFFIC

detraffic.com
(386)341-4186
Maricamp Rd at Esmerald Rd
Marion County, Fl

File Name : 02 MariCamp at Esmerald
Site Code : 00000002
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	Maricamp Rd Southbound					Emerald Rd Westbound					Maricamp Rd Northbound					Emerald Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
07:00 AM	3	136	11	3	153	8	2	8	1	19	2	219	2	0	223	16	2	9	0	27	422
07:15 AM	5	148	16	1	170	7	3	9	2	21	1	228	6	2	237	17	1	12	0	30	458
07:30 AM	6	202	19	3	230	9	6	9	0	24	6	271	4	1	282	18	2	15	0	35	571
07:45 AM	5	189	19	4	217	8	4	11	1	24	4	306	8	3	321	20	2	14	0	36	598
Total	19	675	65	11	770	32	15	37	4	88	13	1024	20	6	1063	71	7	50	0	128	2049
08:00 AM	5	186	24	4	219	8	5	19	3	35	5	329	11	2	347	24	2	9	0	35	636
08:15 AM	5	218	18	5	246	6	4	15	1	26	2	346	9	1	358	27	1	8	0	36	666
08:30 AM	6	190	17	6	219	4	7	6	2	19	2	303	8	3	316	26	2	13	0	41	595
08:45 AM	4	177	18	4	203	6	4	11	1	22	2	306	7	2	317	22	1	9	0	32	574
Total	20	771	77	19	887	24	20	51	7	102	11	1284	35	8	1338	99	6	39	0	144	2471
04:00 PM	6	204	16	0	226	3	2	9	1	15	9	240	6	3	258	21	6	8	1	36	535
04:15 PM	4	205	22	2	233	6	0	11	3	20	8	268	9	4	289	30	3	9	2	44	586
04:30 PM	9	240	21	2	272	4	2	13	1	20	12	307	11	6	336	30	3	9	3	45	673
04:45 PM	10	191	29	1	231	5	2	15	2	24	15	282	15	3	315	23	3	9	2	37	607
Total	29	840	88	5	962	18	6	48	7	79	44	1097	41	16	1198	104	15	35	8	162	2401
05:00 PM	8	193	24	0	225	4	0	11	1	16	17	270	14	4	305	28	4	11	1	44	590
05:15 PM	8	179	34	3	224	6	2	7	2	17	17	272	9	2	300	22	5	11	2	40	581
05:30 PM	8	203	26	2	239	3	1	8	1	13	15	264	9	2	290	21	4	13	1	39	581
05:45 PM	9	171	17	4	201	2	1	7	3	13	19	253	7	3	282	19	3	4	3	29	525
Total	33	746	101	9	889	15	4	33	7	59	68	1059	39	11	1177	90	16	39	7	152	2277
Grand Total	101	3032	331	44	3508	89	45	169	25	328	136	4464	135	41	4776	364	44	163	15	586	9198
Apprch %	2.9	86.4	9.4	1.3		27.1	13.7	51.5	7.6		2.8	93.5	2.8	0.9		62.1	7.5	27.8	2.6		
Total %	1.1	33	3.6	0.5	38.1	1	0.5	1.8	0.3	3.6	1.5	48.5	1.5	0.4	51.9	4	0.5	1.8	0.2	6.4	
Automobiles	96	2972	326	44	3438	87	41	167	25	320	134	4377	133	41	4685	361	43	161	15	580	9023
% Automobiles	95	98	98.5	100	98	97.8	91.1	98.8	100	97.6	98.5	98.1	98.5	100	98.1	99.2	97.7	98.8	100	99	98.1
Commercial	5	60	5	0	70	2	4	2	0	8	2	87	2	0	91	3	1	2	0	6	175
% Commercial	5	2	1.5	0	2	2.2	8.9	1.2	0	2.4	1.5	1.9	1.5	0	1.9	0.8	2.3	1.2	0	1	1.9

DE TRAFFIC

detraffic.com
(386)341-4186
Maricamp Rd at Esmerald Rd
Marion County, Fl

File Name : 02 MariCamp at Esmerald
Site Code : 00000002
Start Date : 5/6/2025
Page No : 2

	Maricamp Rd Southbound					Emerald Rd Westbound					Maricamp Rd Northbound					Emerald Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	5	189	19	4	217	8	4	11	1	24	4	306	8	3	321	20	2	14	0	36	598
08:00 AM	5	186	24	4	219	8	5	19	3	35	5	329	11	2	347	24	2	9	0	35	636
08:15 AM	5	218	18	5	246	6	4	15	1	26	2	346	9	1	358	27	1	8	0	36	666
08:30 AM	6	190	17	6	219	4	7	6	2	19	2	303	8	3	316	26	2	13	0	41	595
Total Volume	21	783	78	19	901	26	20	51	7	104	13	1284	36	9	1342	97	7	44	0	148	2495
% App. Total	2.3	86.9	8.7	2.1		25	19.2	49	6.7		1	95.7	2.7	0.7		65.5	4.7	29.7	0		
PHF	.875	.898	.813	.792	.916	.813	.714	.671	.583	.743	.650	.928	.818	.750	.937	.898	.875	.786	.000	.902	.937
Automobiles	19	771	77	19	886	24	19	50	7	100	13	1266	36	9	1324	96	7	43	0	146	2456
% Automobiles	90.5	98.5	98.7	100	98.3	92.3	95.0	98.0	100	96.2	100	98.6	100	100	98.7	99.0	100	97.7	0	98.6	98.4
Commercial	2	12	1	0	15	2	1	1	0	4	0	18	0	0	18	1	0	1	0	2	39
% Commercial	9.5	1.5	1.3	0	1.7	7.7	5.0	2.0	0	3.8	0	1.4	0	0	1.3	1.0	0	2.3	0	1.4	1.6

DE TRAFFIC

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(386)341-4186
Maricamp Rd at Esmerald Rd
Marion County, Fl

File Name : 02 MariCamp at Esmerald
Site Code : 00000002
Start Date : 5/6/2025
Page No : 3

Peak Hour Data

Peak Hour Begins at 07:45 AM

Automobiles
Commercial

North

Maricamp Rd

	Out	In	Total
	1412	886	2298
	20	15	35
	1432	901	2333

	Right	Thru	Left	R/R
	77	771	19	19
	1	12	2	0
	78	783	21	19

Emerald Rd

	Out	In	Total
	109	146	255
	2	2	4
	111	148	259

	Left	Thru	Right	R/R
	96	7	43	0
	1	0	1	0
	97	7	44	0

	Right	Thru	Left	R/R
	50	19	24	7
	1	1	2	0
	51	20	26	7

Emerald Rd

	Out	In	Total
	62	100	162
	2	4	6
	64	104	168

Maricamp Rd

	Left	Thru	Right	R/R
	13	1266	36	9
	0	18	0	0
	13	1284	36	9

	Out	In	Total
	838	1324	2162
	15	18	33
	853	1342	2195

DE TRAFFIC

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(386)341-4186
Maricamp Rd at Esmerald Rd
Marion County, Fl

File Name : 02 MariCamp at Esmerald
Site Code : 00000002
Start Date : 5/6/2025
Page No : 4

	Maricamp Rd Southbound					Emerald Rd Westbound					Maricamp Rd Northbound					Emerald Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	4	205	22	2	233	6	0	11	3	20	8	268	9	4	289	30	3	9	2	44	586
04:30 PM	9	240	21	2	272	4	2	13	1	20	12	307	11	6	336	30	3	9	3	45	673
04:45 PM	10	191	29	1	231	5	2	15	2	24	15	282	15	3	315	23	3	9	2	37	607
05:00 PM	8	193	24	0	225	4	0	11	1	16	17	270	14	4	305	28	4	11	1	44	590
Total Volume	31	829	96	5	961	19	4	50	7	80	52	1127	49	17	1245	111	13	38	8	170	2456
% App. Total	3.2	86.3	10	0.5		23.8	5	62.5	8.8		4.2	90.5	3.9	1.4		65.3	7.6	22.4	4.7		
PHF	.775	.864	.828	.625	.883	.792	.500	.833	.583	.833	.765	.918	.817	.708	.926	.925	.813	.864	.667	.944	.912
Automobiles	30	811	94	5	940	19	2	50	7	78	50	1103	48	17	1218	110	12	38	8	168	2404
% Automobiles	96.8	97.8	97.9	100	97.8	100	50.0	100	100	97.5	96.2	97.9	98.0	100	97.8	99.1	92.3	100	100	98.8	97.9
Commercial	1	18	2	0	21	0	2	0	0	2	2	24	1	0	27	1	1	0	0	2	52
% Commercial	3.2	2.2	2.1	0	2.2	0	50.0	0	0	2.5	3.8	2.1	2.0	0	2.2	0.9	7.7	0	0	1.2	2.1

DE TRAFFIC

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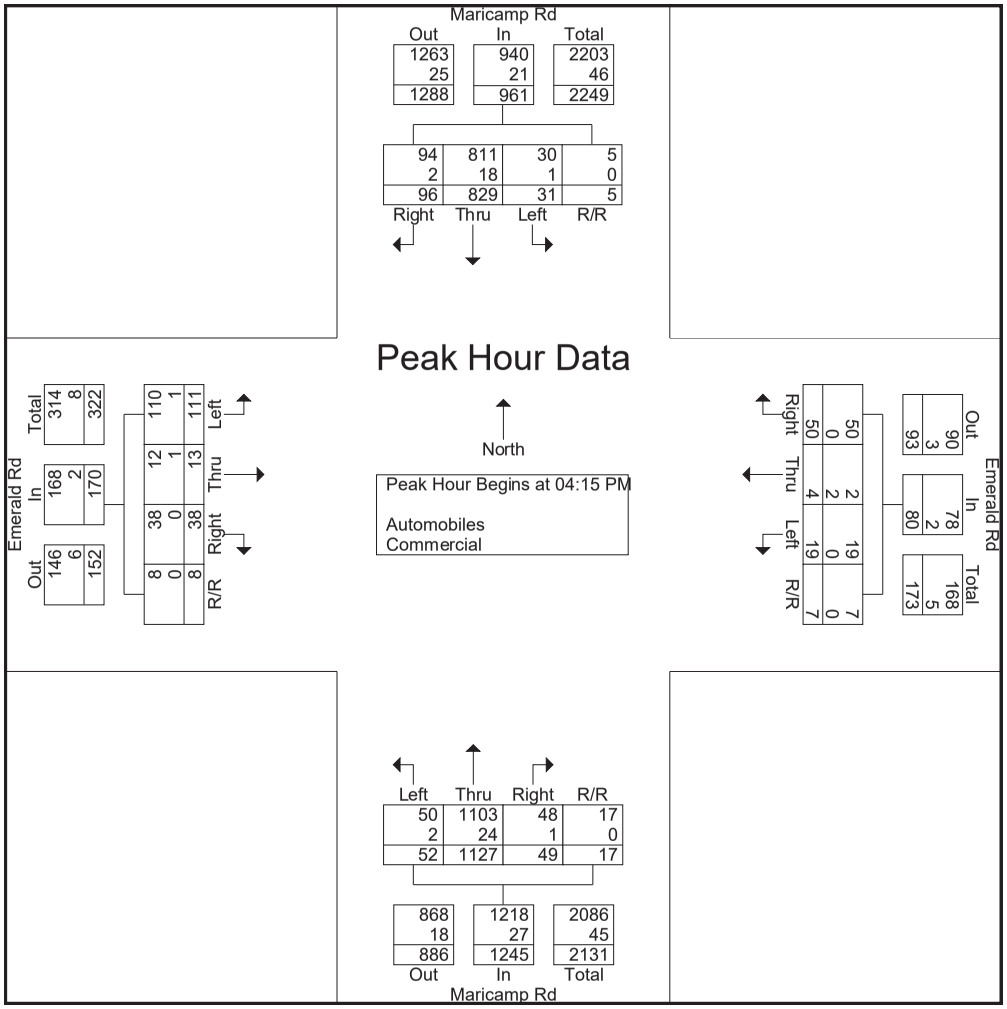
Maricamp Rd at Esmerald Rd
Marion County, Fl

File Name : 02 MariCamp at Esmerald
Site Code : 00000002
Start Date : 5/6/2025
Page No : 5



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Maricamp Rd at Esmerald Rd
Marion County, Fl

File Name : 02 MariCamp at Esmerald
Site Code : 00000002
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	Maricamp Rd Southbound					Emerald Rd Westbound					Maricamp Rd Northbound					Emerald Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

DE TRAFFIC

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(386)341-4186
Maricamp Rd at Oak Rd
Marion County, Fl

File Name : 03 MariCamp at Oak Road West
Site Code : 00000003
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	Maricamp Rd Southbound					Oak Rd Westbound					Maricamp Rd Northbound					Oak Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
07:00 AM	9	106	40	3	158	4	23	17	8	52	4	187	0	1	192	10	10	2	1	23	425
07:15 AM	10	125	34	2	171	8	21	18	5	52	4	175	2	0	181	22	13	4	3	42	446
07:30 AM	7	191	34	6	238	13	28	19	4	64	9	216	1	0	226	25	16	2	2	45	573
07:45 AM	10	158	46	5	219	7	10	18	6	41	2	275	6	1	284	12	13	2	3	30	574
Total	36	580	154	16	786	32	82	72	23	209	19	853	9	2	883	69	52	10	9	140	2018
08:00 AM	10	169	25	2	206	6	18	19	5	48	6	302	5	0	313	15	10	1	4	30	597
08:15 AM	16	194	26	2	238	6	12	18	5	41	4	316	6	0	326	11	9	1	3	24	629
08:30 AM	16	165	28	6	215	8	16	17	4	45	2	264	7	1	274	14	9	1	6	30	564
08:45 AM	13	158	23	3	197	7	18	16	6	47	3	286	8	2	299	10	11	2	4	27	570
Total	55	686	102	13	856	27	64	70	20	181	15	1168	26	3	1212	50	39	5	17	111	2360
04:00 PM	23	177	15	1	216	7	15	19	9	50	8	182	9	1	200	58	20	8	7	93	559
04:15 PM	23	172	27	2	224	8	15	7	8	38	2	201	9	3	215	52	26	2	5	85	562
04:30 PM	22	217	15	4	258	7	7	8	13	35	3	216	8	0	227	84	21	4	3	112	632
04:45 PM	22	160	24	7	213	3	18	8	13	42	1	232	7	1	241	43	29	2	4	78	574
Total	90	726	81	14	911	25	55	42	43	165	14	831	33	5	883	237	96	16	19	368	2327
05:00 PM	26	156	26	0	208	4	14	9	11	38	7	216	8	1	232	57	29	3	7	96	574
05:15 PM	22	148	26	4	200	3	11	7	11	32	4	216	7	0	227	46	35	3	6	90	549
05:30 PM	26	164	29	4	223	4	11	4	8	27	6	202	7	0	215	41	29	6	3	79	544
05:45 PM	24	132	22	3	181	6	14	7	7	34	4	209	9	0	222	36	35	4	2	77	514
Total	98	600	103	11	812	17	50	27	37	131	21	843	31	1	896	180	128	16	18	342	2181
Grand Total	279	2592	440	54	3365	101	251	211	123	686	69	3695	99	11	3874	536	315	47	63	961	8886
Apprch %	8.3	77	13.1	1.6		14.7	36.6	30.8	17.9		1.8	95.4	2.6	0.3		55.8	32.8	4.9	6.6		
Total %	3.1	29.2	5	0.6	37.9	1.1	2.8	2.4	1.4	7.7	0.8	41.6	1.1	0.1	43.6	6	3.5	0.5	0.7	10.8	
Automobiles	274	2528	418	54	3274	99	234	201	123	657	65	3695	97	11	3868	522	306	46	63	937	8736
% Automobiles	98.2	97.5	95	100	97.3	98	93.2	95.3	100	95.8	94.2	100	98	100	99.8	97.4	97.1	97.9	100	97.5	98.3
Commercial	5	64	22	0	91	2	17	10	0	29	4	0	2	0	6	14	9	1	0	24	150
% Commercial	1.8	2.5	5	0	2.7	2	6.8	4.7	0	4.2	5.8	0	2	0	0.2	2.6	2.9	2.1	0	2.5	1.7

DE TRAFFIC

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(386)341-4186
Maricamp Rd at Oak Rd
Marion County, Fl

File Name : 03 MariCamp at Oak Road West
Site Code : 00000003
Start Date : 5/6/2025
Page No : 2

	Maricamp Rd Southbound					Oak Rd Westbound					Maricamp Rd Northbound					Oak Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	7	191	34	6	238	13	28	19	4	64	9	216	1	0	226	25	16	2	2	45	573
07:45 AM	10	158	46	5	219	7	10	18	6	41	2	275	6	1	284	12	13	2	3	30	574
08:00 AM	10	169	25	2	206	6	18	19	5	48	6	302	5	0	313	15	10	1	4	30	597
08:15 AM	16	194	26	2	238	6	12	18	5	41	4	316	6	0	326	11	9	1	3	24	629
Total Volume	43	712	131	15	901	32	68	74	20	194	21	1109	18	1	1149	63	48	6	12	129	2373
% App. Total	4.8	79	14.5	1.7		16.5	35.1	38.1	10.3		1.8	96.5	1.6	0.1		48.8	37.2	4.7	9.3		
PHF	.672	.918	.712	.625	.946	.615	.607	.974	.833	.758	.583	.877	.750	.250	.881	.630	.750	.750	.750	.717	.943
Automobiles	41	697	119	15	872	30	62	72	20	184	17	1109	18	1	1145	56	47	6	12	121	2322
% Automobiles	95.3	97.9	90.8	100	96.8	93.8	91.2	97.3	100	94.8	81.0	100	100	100	99.7	88.9	97.9	100	100	93.8	97.9
Commercial	2	15	12	0	29	2	6	2	0	10	4	0	0	0	4	7	1	0	0	8	51
% Commercial	4.7	2.1	9.2	0	3.2	6.3	8.8	2.7	0	5.2	19.0	0	0	0	0.3	11.1	2.1	0	0	6.2	2.1

DE TRAFFIC

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(386)341-4186
Maricamp Rd at Oak Rd
Marion County, Fl

File Name : 03 MariCamp at Oak Road West
Site Code : 00000003
Start Date : 5/6/2025
Page No : 3

Peak Hour Data

Peak Hour Begins at 07:30 AM

Automobiles
Commercial

North

Maricamp Rd

	Out	In	Total
	1237	872	2109
	9	29	38
	1246	901	2147

	Right	Thru	Left	R/R
	119	697	41	15
	12	15	2	0
	131	712	43	15

Oak Rd

	Out	In	Total
	198	121	319
	22	8	30
	220	129	349

	Left	Thru	Right	R/R
	56	47	6	12
	7	1	0	0
	63	48	6	12

Oak Rd

	Out	In	Total
	106	184	290
	3	10	13
	109	194	303

	Right	Thru	Left	R/R
	72	62	30	20
	2	6	2	0
	74	68	32	20

Maricamp Rd

	Left	Thru	Right	R/R
	17	1109	18	1
	4	0	0	0
	21	1109	18	1

	Out	In	Total
	733	1145	1878
	17	4	21
	750	1149	1899

DE TRAFFIC

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(386)341-4186
Maricamp Rd at Oak Rd
Marion County, Fl

File Name : 03 MariCamp at Oak Road West
Site Code : 00000003
Start Date : 5/6/2025
Page No : 4

	Maricamp Rd Southbound					Oak Rd Westbound					Maricamp Rd Northbound					Oak Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	23	172	27	2	224	8	15	7	8	38	2	201	9	3	215	52	26	2	5	85	562
04:30 PM	22	217	15	4	258	7	7	8	13	35	3	216	8	0	227	84	21	4	3	112	632
04:45 PM	22	160	24	7	213	3	18	8	13	42	1	232	7	1	241	43	29	2	4	78	574
05:00 PM	26	156	26	0	208	4	14	9	11	38	7	216	8	1	232	57	29	3	7	96	574
Total Volume	93	705	92	13	903	22	54	32	45	153	13	865	32	5	915	236	105	11	19	371	2342
% App. Total	10.3	78.1	10.2	1.4		14.4	35.3	20.9	29.4		1.4	94.5	3.5	0.5		63.6	28.3	3	5.1		
PHF	.894	.812	.852	.464	.875	.688	.750	.889	.865	.911	.464	.932	.889	.417	.949	.702	.905	.688	.679	.828	.926
Automobiles	91	687	90	13	881	22	52	30	45	149	13	865	30	5	913	233	101	11	19	364	2307
% Automobiles	97.8	97.4	97.8	100	97.6	100	96.3	93.8	100	97.4	100	100	93.8	100	99.8	98.7	96.2	100	100	98.1	98.5
Commercial	2	18	2	0	22	0	2	2	0	4	0	0	2	0	2	3	4	0	0	7	35
% Commercial	2.2	2.6	2.2	0	2.4	0	3.7	6.3	0	2.6	0	0	6.3	0	0.2	1.3	3.8	0	0	1.9	1.5

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Maricamp Rd at Oak Rd
Marion County, Fl

File Name : 03 MariCamp at Oak Road West
Site Code : 00000003
Start Date : 5/6/2025
Page No : 5

Peak Hour Data

Peak Hour Begins at 04:15 PM

Automobiles
Commercial

North

Maricamp Rd

	Out	In	Total
	1128	881	2009
	5	22	27
	1133	903	2036

	Right	Thru	Left	R/R
	90	687	91	13
	2	18	2	0
	92	705	93	13

Oak Rd

	Out	In	Total
	155	364	519
	4	7	11
	159	371	530

	Left	Thru	Right	R/R
	233	101	11	19
	3	4	0	0
	236	105	11	19

Oak Rd

	Out	In	Total
	222	149	371
	8	4	12
	230	153	383

	Right	Thru	Left	R/R
	30	52	22	45
	2	2	0	0
	32	54	22	45

Maricamp Rd

	Left	Thru	Right	R/R
	13	865	30	5
	0	0	2	0
	13	865	32	5

	Out	In	Total
	720	913	1633
	18	2	20
	738	915	1653

DE TRAFFIC

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(386)341-4186
Maricamp Rd at Oak Rd
Marion County, Fl

File Name : 03 MariCamp at Oak Road West
Site Code : 00000003
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	Maricamp Rd Southbound					Oak Rd Westbound					Maricamp Rd Northbound					Oak Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

DE TRAFFIC

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(386)341-4186
Oak Road at Maricamp Rd
Marion County, Fl

File Name : 04 maricamp at oak rd
Site Code : 00000004
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	Oak Road Southbound				Maricamp Rd Westbound				Marion County Facility Northbound				Maricamp Rd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	11	1	22	34	1	150	7	158	0	0	0	0	8	92	6	106	298
07:15 AM	14	0	15	29	0	156	13	169	0	0	0	0	17	109	2	128	326
07:30 AM	18	0	23	41	0	201	21	222	0	0	0	0	24	168	0	192	455
07:45 AM	10	0	19	29	0	241	23	264	3	0	0	3	26	130	0	156	452
Total	53	1	79	133	1	748	64	813	3	0	0	3	75	499	8	582	1531
08:00 AM	11	0	14	25	0	283	21	304	11	0	0	11	38	116	3	157	497
08:15 AM	20	0	19	39	0	247	52	299	3	0	0	3	31	125	0	156	497
08:30 AM	27	0	24	51	0	220	49	269	0	0	0	0	46	105	2	153	473
08:45 AM	26	0	22	48	0	210	43	253	3	0	0	3	34	112	2	148	452
Total	84	0	79	163	0	960	165	1125	17	0	0	17	149	458	7	614	1919
04:00 PM	28	0	20	48	0	175	11	186	3	0	0	3	14	157	1	172	409
04:15 PM	10	0	14	24	2	205	14	221	0	0	0	0	15	145	0	160	405
04:30 PM	8	0	13	21	4	204	21	229	0	0	0	0	12	183	3	198	448
04:45 PM	4	0	9	13	1	195	12	208	0	0	0	0	11	158	6	175	396
Total	50	0	56	106	7	779	58	844	3	0	0	3	52	643	10	705	1658
05:00 PM	8	0	6	14	0	205	8	213	1	0	0	1	9	140	0	149	377
05:15 PM	4	0	7	11	1	204	5	210	0	0	0	0	9	129	1	139	360
05:30 PM	6	0	6	12	0	191	6	197	0	0	0	0	16	136	0	152	361
05:45 PM	4	0	7	11	0	204	13	217	0	0	0	0	16	107	0	123	351
Total	22	0	26	48	1	804	32	837	1	0	0	1	50	512	1	563	1449
Grand Total	209	1	240	450	9	3291	319	3619	24	0	0	24	326	2112	26	2464	6557
Apprch %	46.4	0.2	53.3		0.2	90.9	8.8		100	0	0		13.2	85.7	1.1		
Total %	3.2	0	3.7	6.9	0.1	50.2	4.9	55.2	0.4	0	0	0.4	5	32.2	0.4	37.6	
Automobiles	206	1	237	444	5	3223	302	3530	17	0	0	17	313	2054	23	2390	6381
% Automobiles	98.6	100	98.8	98.7	55.6	97.9	94.7	97.5	70.8	0	0	70.8	96	97.3	88.5	97	97.3
Commercial	3	0	3	6	4	68	17	89	7	0	0	7	13	58	3	74	176
% Commercial	1.4	0	1.2	1.3	44.4	2.1	5.3	2.5	29.2	0	0	29.2	4	2.7	11.5	3	2.7

DE TRAFFIC

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(386)341-4186
Oak Road at Maricamp Rd
Marion County, Fl

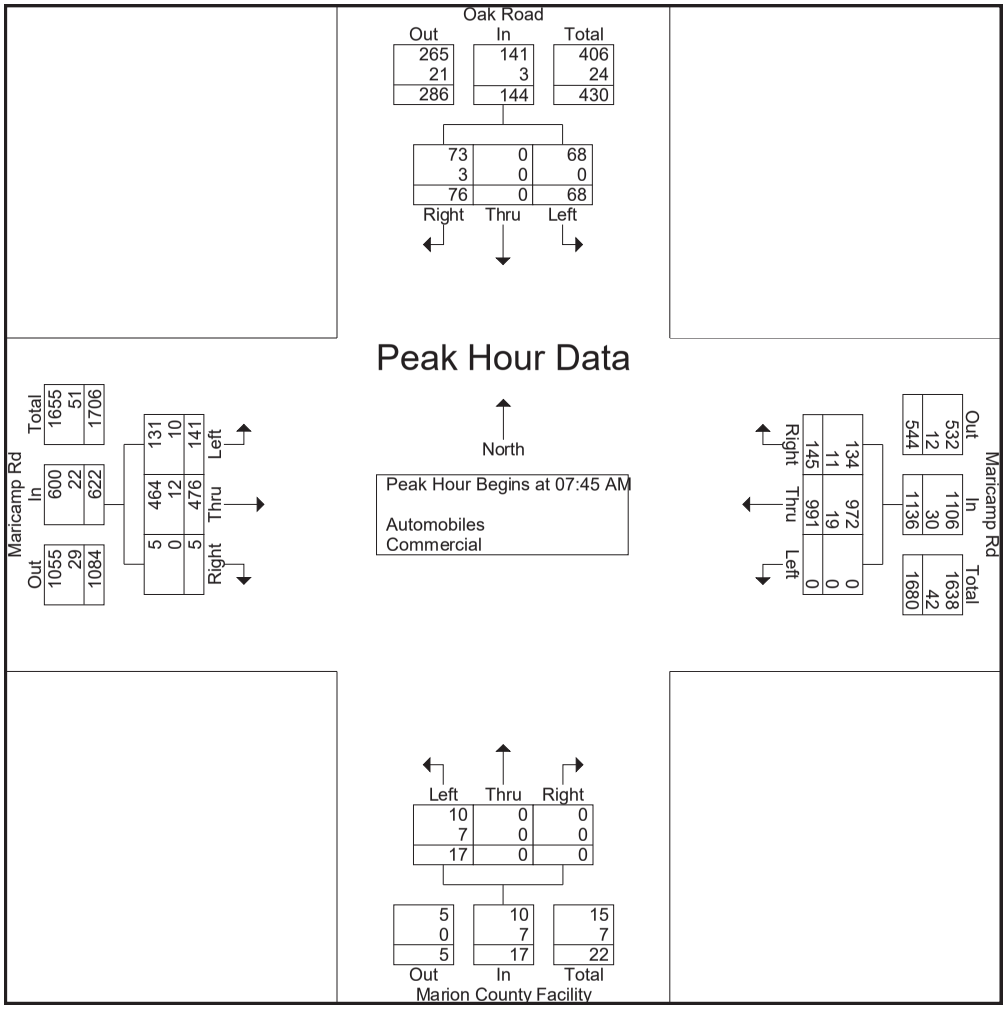
File Name : 04 maricamp at oak rd
Site Code : 00000004
Start Date : 5/6/2025
Page No : 2

	Oak Road Southbound				Maricamp Rd Westbound				Marion County Facility Northbound				Maricamp Rd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	10	0	19	29	0	241	23	264	3	0	0	3	26	130	0	156	452
08:00 AM	11	0	14	25	0	283	21	304	11	0	0	11	38	116	3	157	497
08:15 AM	20	0	19	39	0	247	52	299	3	0	0	3	31	125	0	156	497
08:30 AM	27	0	24	51	0	220	49	269	0	0	0	0	46	105	2	153	473
Total Volume	68	0	76	144	0	991	145	1136	17	0	0	17	141	476	5	622	1919
% App. Total	47.2	0	52.8		0	87.2	12.8		100	0	0		22.7	76.5	0.8		
PHF	.630	.000	.792	.706	.000	.875	.697	.934	.386	.000	.000	.386	.766	.915	.417	.990	.965
Automobiles	68	0	73	141	0	972	134	1106	10	0	0	10	131	464	5	600	1857
% Automobiles	100	0	96.1	97.9	0	98.1	92.4	97.4	58.8	0	0	58.8	92.9	97.5	100	96.5	96.8
Commercial	0	0	3	3	0	19	11	30	7	0	0	7	10	12	0	22	62
% Commercial	0	0	3.9	2.1	0	1.9	7.6	2.6	41.2	0	0	41.2	7.1	2.5	0	3.5	3.2

DE TRAFFIC

detraffic.com
(386)341-4186
Oak Road at Maricamp Rd
Marion County, Fl

File Name : 04 maricamp at oak rd
Site Code : 00000004
Start Date : 5/6/2025
Page No : 3



DE TRAFFIC

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(386)341-4186
Oak Road at Maricamp Rd
Marion County, Fl

File Name : 04 maricamp at oak rd
Site Code : 00000004
Start Date : 5/6/2025
Page No : 4

	Oak Road Southbound				Maricamp Rd Westbound				Marion County Facility Northbound				Maricamp Rd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	28	0	20	48	0	175	11	186	3	0	0	3	14	157	1	172	409
04:15 PM	10	0	14	24	2	205	14	221	0	0	0	0	15	145	0	160	405
04:30 PM	8	0	13	21	4	204	21	229	0	0	0	0	12	183	3	198	448
04:45 PM	4	0	9	13	1	195	12	208	0	0	0	0	11	158	6	175	396
Total Volume	50	0	56	106	7	779	58	844	3	0	0	3	52	643	10	705	1658
% App. Total	47.2	0	52.8		0.8	92.3	6.9		100	0	0		7.4	91.2	1.4		
PHF	.446	.000	.700	.552	.438	.950	.690	.921	.250	.000	.000	.250	.867	.878	.417	.890	.925
Automobiles	49	0	56	105	3	763	54	820	3	0	0	3	50	626	7	683	1611
% Automobiles	98.0	0	100	99.1	42.9	97.9	93.1	97.2	100	0	0	100	96.2	97.4	70.0	96.9	97.2
Commercial	1	0	0	1	4	16	4	24	0	0	0	0	2	17	3	22	47
% Commercial	2.0	0	0	0.9	57.1	2.1	6.9	2.8	0	0	0	0	3.8	2.6	30.0	3.1	2.8

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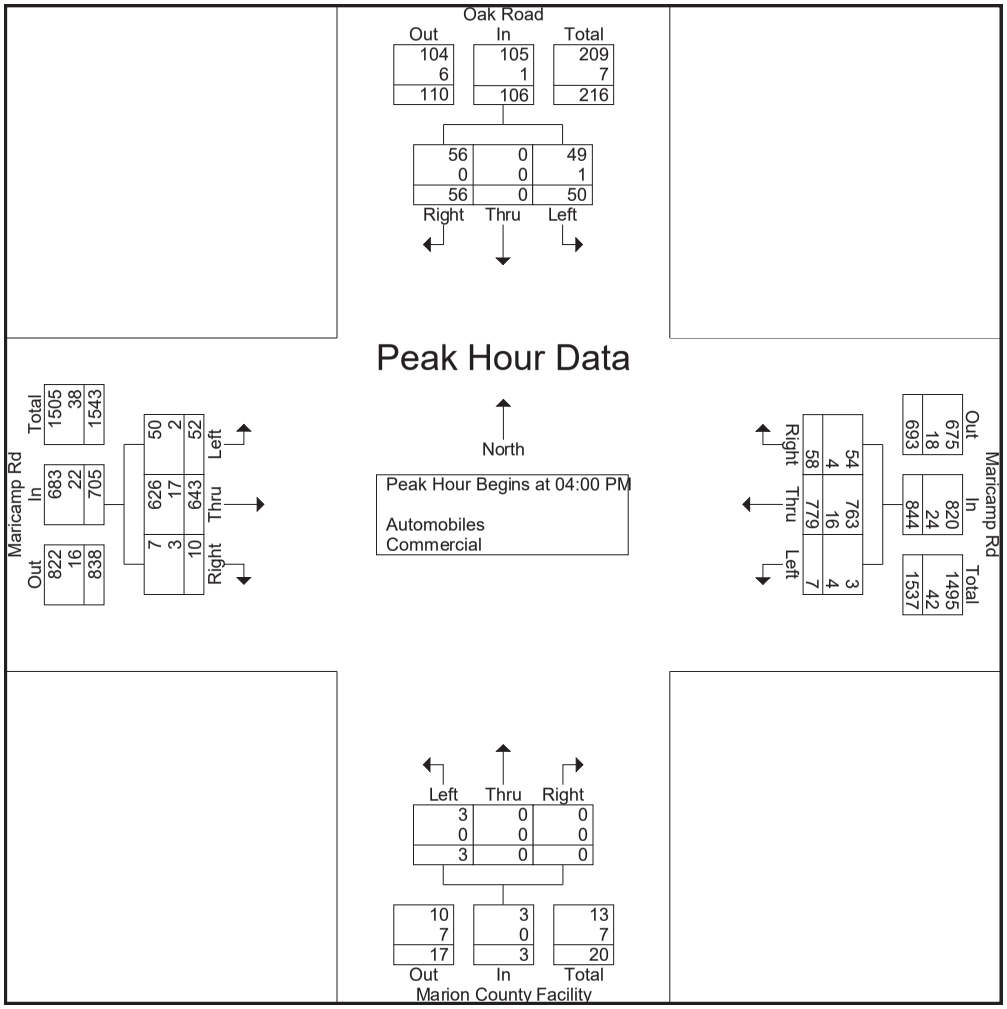
Site Code : 00000004
Start Date : 5/6/2025
Page No : 5



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Oak Road at Maricamp Rd
Marion County, Fl

File Name : 04 maricamp at oak rd
Site Code : 00000004
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	Oak Road Southbound					Maricamp Rd Westbound					Marion County Facility Northbound					Maricamp Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

DE TRAFFIC

detraffic.com
(386)341-4186
SE 108th Terrace Rd at Maricamp Rd
Marion County, Fl

File Name : 05 maricamp at 108th
Site Code : 00000108
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	SE 108th Terrace Rd Southbound					Maricamp Rd Westbound					SE 108th Terrace Rd Northbound					Maricamp Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
07:00 AM	0	1	0	0	1	11	127	3	0	141	17	2	6	3	28	0	64	24	0	88	258
07:15 AM	1	1	2	1	5	27	136	1	0	164	15	0	6	6	27	0	75	41	2	118	314
07:30 AM	2	1	0	0	3	24	177	2	0	203	24	2	12	4	42	2	127	52	1	182	430
07:45 AM	1	3	0	1	5	17	218	1	1	237	16	1	11	5	33	0	112	42	2	156	431
Total	4	6	2	2	14	79	658	7	1	745	72	5	35	18	130	2	378	159	5	544	1433
08:00 AM	2	2	1	0	5	21	236	2	0	259	25	1	9	8	43	1	99	35	3	138	445
08:15 AM	1	1	1	1	4	25	247	4	1	277	26	2	20	4	52	1	106	43	1	151	484
08:30 AM	1	2	0	0	3	17	220	3	0	240	25	0	12	7	44	2	101	26	0	129	416
08:45 AM	2	1	1	1	5	11	209	2	0	222	16	1	8	8	33	1	107	25	2	135	395
Total	6	6	3	2	17	74	912	11	1	998	92	4	49	27	172	5	413	129	6	553	1740
04:00 PM	0	2	1	0	3	19	164	0	0	183	18	1	15	8	42	0	119	53	3	175	403
04:15 PM	0	1	0	1	2	18	181	0	0	199	38	1	18	8	65	0	107	35	4	146	412
04:30 PM	1	1	0	0	2	11	154	2	0	167	67	3	24	11	105	1	138	28	2	169	443
04:45 PM	1	1	0	1	3	8	171	1	0	180	28	3	14	8	53	2	147	17	6	172	408
Total	2	5	1	2	10	56	670	3	0	729	151	8	71	35	265	3	511	133	15	662	1666
05:00 PM	1	0	0	2	3	25	166	2	1	194	22	1	15	10	48	3	128	17	3	151	396
05:15 PM	1	1	1	1	4	16	177	1	0	194	24	3	6	6	39	1	109	19	4	133	370
05:30 PM	1	0	1	0	2	11	158	1	0	170	26	2	9	7	44	6	111	19	2	138	354
05:45 PM	2	0	2	0	4	16	173	2	0	191	19	3	3	8	33	3	91	13	6	113	341
Total	5	1	4	3	13	68	674	6	1	749	91	9	33	31	164	13	439	68	15	535	1461
Grand Total	17	18	10	9	54	277	2914	27	3	3221	406	26	188	111	731	23	1741	489	41	2294	6300
Apprch %	31.5	33.3	18.5	16.7		8.6	90.5	0.8	0.1		55.5	3.6	25.7	15.2		1	75.9	21.3	1.8		
Total %	0.3	0.3	0.2	0.1	0.9	4.4	46.3	0.4	0	51.1	6.4	0.4	3	1.8	11.6	0.4	27.6	7.8	0.7	36.4	
Automobiles	17	17	9	9	52	260	2846	25	3	3134	391	26	176	111	704	23	1694	473	41	2231	6121
% Automobiles	100	94.4	90	100	96.3	93.9	97.7	92.6	100	97.3	96.3	100	93.6	100	96.3	100	97.3	96.7	100	97.3	97.2
Commercial	0	1	1	0	2	17	68	2	0	87	15	0	12	0	27	0	47	16	0	63	179
% Commercial	0	5.6	10	0	3.7	6.1	2.3	7.4	0	2.7	3.7	0	6.4	0	3.7	0	2.7	3.3	0	2.7	2.8

DE TRAFFIC

detraffic.com
(386)341-4186
SE 108th Terrace Rd at Maricamp Rd
Marion County, Fl

File Name : 05 maricamp at 108th
Site Code : 00000108
Start Date : 5/6/2025
Page No : 2

	SE 108th Terrace Rd Southbound					Maricamp Rd Westbound					SE 108th Terrace Rd Northbound					Maricamp Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	2	1	0	0	3	24	177	2	0	203	24	2	12	4	42	2	127	52	1	182	430
07:45 AM	1	3	0	1	5	17	218	1	1	237	16	1	11	5	33	0	112	42	2	156	431
08:00 AM	2	2	1	0	5	21	236	2	0	259	25	1	9	8	43	1	99	35	3	138	445
08:15 AM	1	1	1	1	4	25	247	4	1	277	26	2	20	4	52	1	106	43	1	151	484
Total Volume	6	7	2	2	17	87	878	9	2	976	91	6	52	21	170	4	444	172	7	627	1790
% App. Total	35.3	41.2	11.8	11.8		8.9	90	0.9	0.2		53.5	3.5	30.6	12.4		0.6	70.8	27.4	1.1		
PHF	.750	.583	.500	.500	.850	.870	.889	.563	.500	.881	.875	.750	.650	.656	.817	.500	.874	.827	.583	.861	.925
Automobiles	6	7	2	2	17	85	865	9	2	961	88	6	50	21	165	4	433	169	7	613	1756
% Automobiles	100	100	100	100	100	97.7	98.5	100	100	98.5	96.7	100	96.2	100	97.1	100	97.5	98.3	100	97.8	98.1
Commercial	0	0	0	0	0	2	13	0	0	15	3	0	2	0	5	0	11	3	0	14	34
% Commercial	0	0	0	0	0	2.3	1.5	0	0	1.5	3.3	0	3.8	0	2.9	0	2.5	1.7	0	2.2	1.9

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Marion County, Fl

File Name : 05 maricamp at 108th
Site Code : 00000108
Start Date : 5/6/2025
Page No : 3

Peak Hour Data

Peak Hour Begins at 07:30 AM

Automobiles
Commercial

North

SE 108th Terrace Rd

	Out	In	Total
	19	17	36
	0	0	0
	19	17	36

	Right	Thru	Left	R/R
	2	7	6	2
	0	0	0	0
	2	7	6	2

Maricamp Rd

	Out	In	Total
	489	961	1450
	13	15	28
	502	976	1478

	Right	Thru	Left	R/R
	9	878	87	2
	0	13	2	0
	9	865	85	2

Maricamp Rd

	Out	In	Total
	955	613	1568
	16	14	30
	971	627	1598

	Left	Thru	Right	R/R
	4	433	169	7
	0	11	3	0
	4	444	172	7

SE 108th Terrace Rd

	Left	Thru	Right	R/R
	88	6	50	21
	3	0	2	0
	91	6	52	21

	Out	In	Total
	261	165	426
	5	5	10
	266	170	436

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	SE 108th Terrace Rd Southbound					Maricamp Rd Westbound					SE 108th Terrace Rd Northbound					Maricamp Rd Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	2	1	0	3	19	164	0	0	183	18	1	15	8	42	0	119	53	3	175	403
04:15 PM	0	1	0	1	2	18	181	0	0	199	38	1	18	8	65	0	107	35	4	146	412
04:30 PM	1	1	0	0	2	11	154	2	0	167	67	3	24	11	105	1	138	28	2	169	443
04:45 PM	1	1	0	1	3	8	171	1	0	180	28	3	14	8	53	2	147	17	6	172	408
Total Volume	2	5	1	2	10	56	670	3	0	729	151	8	71	35	265	3	511	133	15	662	1666
% App. Total	20	50	10	20		7.7	91.9	0.4	0		57	3	26.8	13.2		0.5	77.2	20.1	2.3		
PHF	.500	.625	.250	.500	.833	.737	.925	.375	.000	.916	.563	.667	.740	.795	.631	.375	.869	.627	.625	.946	.940
Automobiles	2	4	1	2	9	44	646	1	0	691	142	8	67	35	252	3	500	125	15	643	1595
% Automobiles	100	80.0	100	100	90.0	78.6	96.4	33.3	0	94.8	94.0	100	94.4	100	95.1	100	97.8	94.0	100	97.1	95.7
Commercial	0	1	0	0	1	12	24	2	0	38	9	0	4	0	13	0	11	8	0	19	71
% Commercial	0	20.0	0	0	10.0	21.4	3.6	66.7	0	5.2	6.0	0	5.6	0	4.9	0	2.2	6.0	0	2.9	4.3

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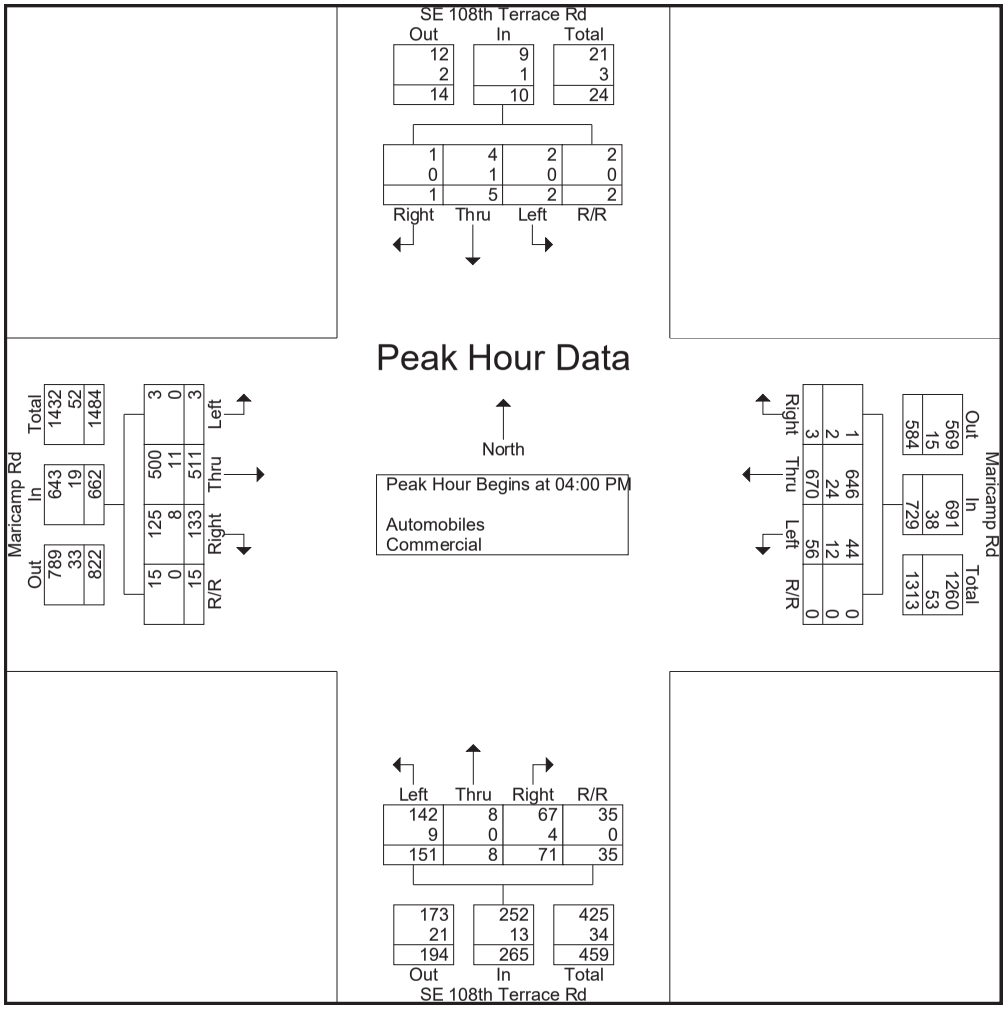
Page No : 5



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Marion County, Fl

File Name : 05 maricamp at 108th
Site Code : 00000108
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	SE 108th Terrace Rd Southbound					Maricamp Rd Westbound					SE 108th Terrace Rd Northbound					Maricamp Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2
Apprch %	0	0	0	0		0	0	0	100		0	0	0	0		0	0	0	100		
Total %	0	0	0	0	0	0	0	0	50	50	0	0	0	0	0	0	0	0	50	50	

DE TRAFFIC

detraffic.com
(386)341-4186
CR 464 at CR 25
Marion County, Fl

File Name : 06 CR 25 at CR 464
Site Code : 00046425
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	CR 464 Southbound					CR 25 Westbound					N/A Northbound				CR 25 Eastbound				
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	20	0	8	0	28	0	59	21	2	82	0	0	0	0	4	44	0	48	158
07:15 AM	24	0	7	1	32	0	66	20	3	89	0	0	0	0	6	63	0	69	190
07:30 AM	36	0	8	0	44	0	74	19	2	95	0	0	0	0	4	48	0	52	191
07:45 AM	26	0	9	2	37	0	81	24	2	107	0	0	0	0	6	55	0	61	205
Total	106	0	32	3	141	0	280	84	9	373	0	0	0	0	20	210	0	230	744
08:00 AM	26	0	8	0	34	0	78	26	1	105	0	0	0	0	4	46	0	50	189
08:15 AM	19	0	5	3	27	0	65	24	3	92	0	0	0	0	5	54	0	59	178
08:30 AM	25	0	4	1	30	0	73	21	2	96	0	0	0	0	4	44	0	48	174
08:45 AM	20	0	6	2	28	0	52	16	1	69	0	0	0	0	6	53	0	59	156
Total	90	0	23	6	119	0	268	87	7	362	0	0	0	0	19	197	0	216	697
04:00 PM	25	0	9	0	34	0	53	23	2	78	0	0	0	0	3	69	0	72	184
04:15 PM	22	0	4	2	28	0	51	23	3	77	0	0	0	0	10	56	0	66	171
04:30 PM	21	0	1	1	23	0	39	27	4	70	0	0	0	0	8	54	0	62	155
04:45 PM	15	0	1	0	16	0	74	25	2	101	0	0	0	0	6	71	0	77	194
Total	83	0	15	3	101	0	217	98	11	326	0	0	0	0	27	250	0	277	704
05:00 PM	31	0	3	0	34	0	51	36	6	93	0	0	0	0	6	63	0	69	196
05:15 PM	20	0	4	1	25	0	63	31	4	98	0	0	0	0	7	70	0	77	200
05:30 PM	19	0	6	2	27	0	58	34	4	96	0	0	0	0	4	73	0	77	200
05:45 PM	16	0	6	1	23	0	53	30	2	85	0	0	0	0	6	67	0	73	181
Total	86	0	19	4	109	0	225	131	16	372	0	0	0	0	23	273	0	296	777
Grand Total	365	0	89	16	470	0	990	400	43	1433	0	0	0	0	89	930	0	1019	2922
Apprch %	77.7	0	18.9	3.4		0	69.1	27.9	3		0	0	0		8.7	91.3	0		
Total %	12.5	0	3	0.5	16.1	0	33.9	13.7	1.5	49	0	0	0	0	3	31.8	0	34.9	
Automobiles	351	0	87	16	454	0	969	380	43	1392	0	0	0	0	88	914	0	1002	2848
% Automobiles	96.2	0	97.8	100	96.6	0	97.9	95	100	97.1	0	0	0	0	98.9	98.3	0	98.3	97.5
Commercial	14	0	2	0	16	0	21	20	0	41	0	0	0	0	1	16	0	17	74
% Commercial	3.8	0	2.2	0	3.4	0	2.1	5	0	2.9	0	0	0	0	1.1	1.7	0	1.7	2.5

DE TRAFFIC

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(386)341-4186
CR 464 at CR 25
Marion County, Fl

File Name : 06 CR 25 at CR 464
Site Code : 00046425
Start Date : 5/6/2025
Page No : 2

	CR 464 Southbound					CR 25 Westbound					N/A Northbound				CR 25 Eastbound				
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 07:15 AM																			
07:15 AM	24	0	7	1	32	0	66	20	3	89	0	0	0	0	6	63	0	69	190
07:30 AM	36	0	8	0	44	0	74	19	2	95	0	0	0	0	4	48	0	52	191
07:45 AM	26	0	9	2	37	0	81	24	2	107	0	0	0	0	6	55	0	61	205
08:00 AM	26	0	8	0	34	0	78	26	1	105	0	0	0	0	4	46	0	50	189
Total Volume	112	0	32	3	147	0	299	89	8	396	0	0	0	0	20	212	0	232	775
% App. Total	76.2	0	21.8	2		0	75.5	22.5	2		0	0	0		8.6	91.4	0		
PHF	.778	.000	.889	.375	.835	.000	.923	.856	.667	.925	.000	.000	.000	.000	.833	.841	.000	.841	.945
Automobiles	107	0	32	3	142	0	293	86	8	387	0	0	0	0	19	207	0	226	755
% Automobiles	95.5	0	100	100	96.6	0	98.0	96.6	100	97.7	0	0	0	0	95.0	97.6	0	97.4	97.4
Commercial	5	0	0	0	5	0	6	3	0	9	0	0	0	0	1	5	0	6	20
% Commercial	4.5	0	0	0	3.4	0	2.0	3.4	0	2.3	0	0	0	0	5.0	2.4	0	2.6	2.6

DE TRAFFIC

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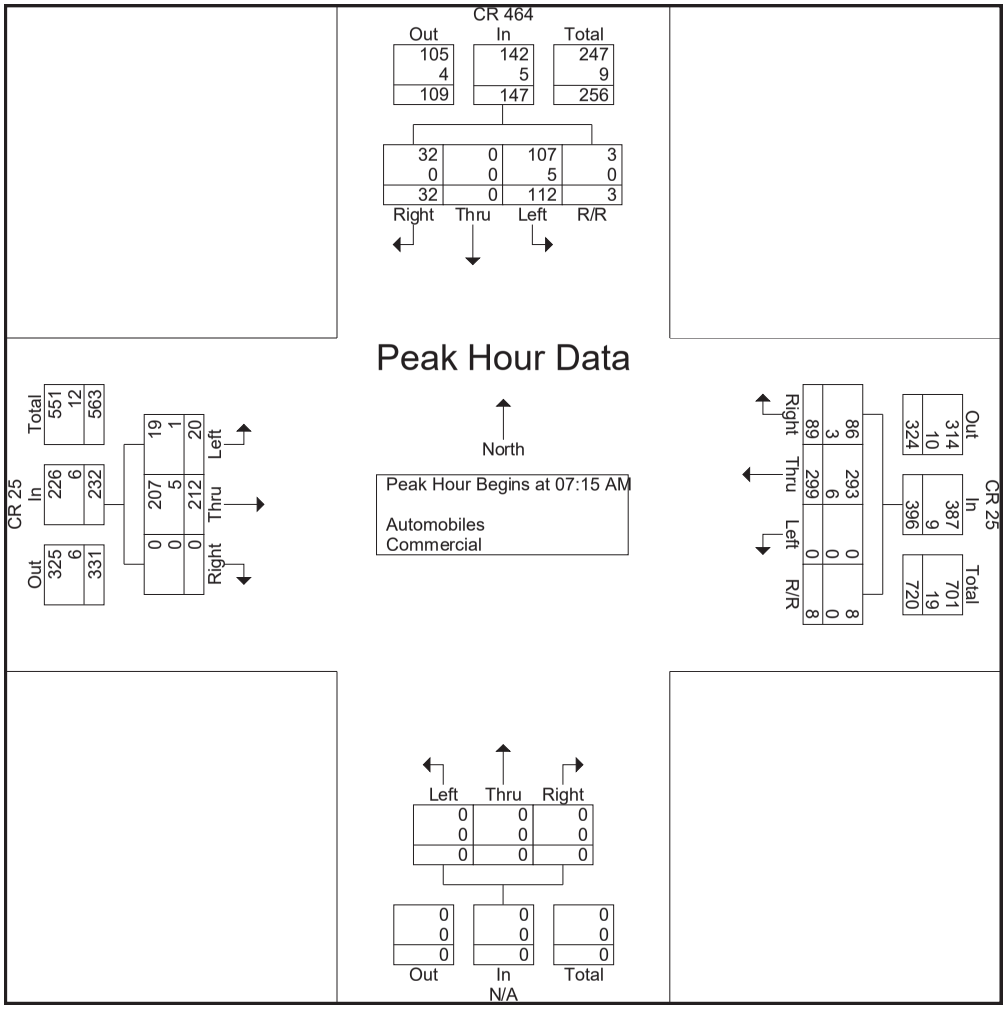
(386)341-4186
CR 464 at CR 25
Marion County, Fl

File Name : 06 CR 25 at CR 464
Site Code : 00046425
Start Date : 5/6/2025
Page No : 3



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CR 464 at CR 25
Marion County, Fl

File Name : 06 CR 25 at CR 464
Site Code : 00046425
Start Date : 5/6/2025
Page No : 4

	CR 464 Southbound					CR 25 Westbound					N/A Northbound				CR 25 Eastbound				
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 04:45 PM																			
04:45 PM	15	0	1	0	16	0	74	25	2	101	0	0	0	0	6	71	0	77	194
05:00 PM	31	0	3	0	34	0	51	36	6	93	0	0	0	0	6	63	0	69	196
05:15 PM	20	0	4	1	25	0	63	31	4	98	0	0	0	0	7	70	0	77	200
05:30 PM	19	0	6	2	27	0	58	34	4	96	0	0	0	0	4	73	0	77	200
Total Volume	85	0	14	3	102	0	246	126	16	388	0	0	0	0	23	277	0	300	790
% App. Total	83.3	0	13.7	2.9		0	63.4	32.5	4.1		0	0	0		7.7	92.3	0		
PHF	.685	.000	.583	.375	.750	.000	.831	.875	.667	.960	.000	.000	.000	.000	.821	.949	.000	.974	.988
Automobiles	85	0	13	3	101	0	243	120	16	379	0	0	0	0	23	275	0	298	778
% Automobiles	100	0	92.9	100	99.0	0	98.8	95.2	100	97.7	0	0	0	0	100	99.3	0	99.3	98.5
Commercial	0	0	1	0	1	0	3	6	0	9	0	0	0	0	0	2	0	2	12
% Commercial	0	0	7.1	0	1.0	0	1.2	4.8	0	2.3	0	0	0	0	0	0.7	0	0.7	1.5

DE TRAFFIC

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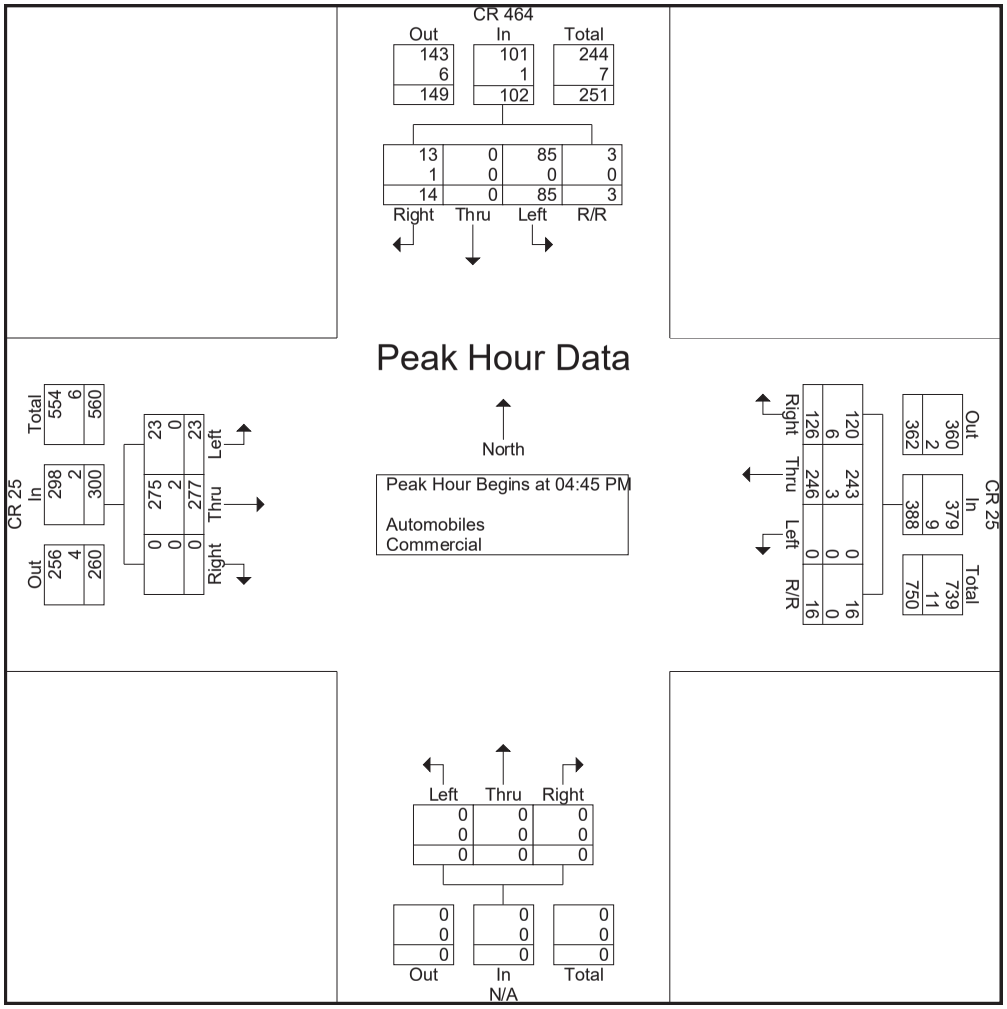
(386)341-4186
CR 464 at CR 25
Marion County, Fl

File Name : 06 CR 25 at CR 464
Site Code : 00046425
Start Date : 5/6/2025
Page No : 5



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(386)341-4186
CR 464 at CR 25
Marion County, Fl

File Name : 06 CR 25 at CR 464
Site Code : 00046425
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	CR 464 Southbound					CR 25 Westbound					N/A Northbound					CR 25 Eastbound					
Start Time	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	R/R	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

DE TRAFFIC

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(386)341-4186
Oak Rd at Oak Track Pass
Marion County, Fl

File Name : 07 Oak Track at Oak
Site Code : 00000007
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	Oak Road Southbound				N/A Westbound				Oak Road Northbound				Oak Track Pass Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	35	1	36	0	0	0	0	0	7	0	7	0	0	0	0	43
07:15 AM	0	24	0	24	0	0	0	0	0	5	0	5	0	0	0	0	29
07:30 AM	0	18	0	18	0	0	0	0	0	10	0	10	0	0	0	0	28
07:45 AM	0	17	0	17	0	0	0	0	0	9	0	9	0	0	1	1	27
Total	0	94	1	95	0	0	0	0	0	31	0	31	0	0	1	1	127
08:00 AM	0	24	0	24	0	0	0	0	1	11	0	12	2	0	1	3	39
08:15 AM	0	38	2	40	0	0	0	0	0	31	0	31	1	0	1	2	73
08:30 AM	0	26	1	27	0	0	0	0	1	28	0	29	2	0	3	5	61
08:45 AM	0	26	1	27	0	0	0	0	2	23	0	25	2	0	3	5	57
Total	0	114	4	118	0	0	0	0	4	93	0	97	7	0	8	15	230
04:00 PM	0	6	0	6	0	0	0	0	1	21	0	22	1	0	0	1	29
04:15 PM	0	5	1	6	0	0	0	0	0	20	0	20	0	0	1	1	27
04:30 PM	0	8	2	10	0	0	0	0	0	24	0	24	2	0	1	3	37
04:45 PM	0	12	1	13	0	0	0	0	1	20	0	21	1	0	1	2	36
Total	0	31	4	35	0	0	0	0	2	85	0	87	4	0	3	7	129
05:00 PM	0	16	2	18	0	0	0	0	2	23	0	25	1	0	1	2	45
05:15 PM	0	16	2	18	0	0	0	0	1	24	0	25	2	0	0	2	45
05:30 PM	0	10	1	11	0	0	0	0	1	27	0	28	1	0	1	2	41
05:45 PM	0	8	1	9	0	0	0	0	2	24	0	26	1	0	2	3	38
Total	0	50	6	56	0	0	0	0	6	98	0	104	5	0	4	9	169
Grand Total	0	289	15	304	0	0	0	0	12	307	0	319	16	0	16	32	655
Apprch %	0	95.1	4.9		0	0	0		3.8	96.2	0		50	0	50		
Total %	0	44.1	2.3	46.4	0	0	0	0	1.8	46.9	0	48.7	2.4	0	2.4	4.9	
Automobiles	0	279	15	294	0	0	0	0	12	283	0	295	15	0	15	30	619
% Automobiles	0	96.5	100	96.7	0	0	0	0	100	92.2	0	92.5	93.8	0	93.8	93.8	94.5
Commercial	0	10	0	10	0	0	0	0	0	24	0	24	1	0	1	2	36
% Commercial	0	3.5	0	3.3	0	0	0	0	0	7.8	0	7.5	6.2	0	6.2	6.2	5.5

DE TRAFFIC

detraffic.com
(386)341-4186
Oak Rd at Oak Track Pass
Marion County, Fl

File Name : 07 Oak Track at Oak
Site Code : 00000007
Start Date : 5/6/2025
Page No : 2

	Oak Road Southbound				N/A Westbound				Oak Road Northbound				Oak Track Pass Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	24	0	24	0	0	0	0	1	11	0	12	2	0	1	3	39
08:15 AM	0	38	2	40	0	0	0	0	0	31	0	31	1	0	1	2	73
08:30 AM	0	26	1	27	0	0	0	0	1	28	0	29	2	0	3	5	61
08:45 AM	0	26	1	27	0	0	0	0	2	23	0	25	2	0	3	5	57
Total Volume	0	114	4	118	0	0	0	0	4	93	0	97	7	0	8	15	230
% App. Total	0	96.6	3.4		0	0	0		4.1	95.9	0		46.7	0	53.3		
PHF	.000	.750	.500	.738	.000	.000	.000	.000	.500	.750	.000	.782	.875	.000	.667	.750	.788
Automobiles	0	110	4	114	0	0	0	0	4	76	0	80	7	0	8	15	209
% Automobiles	0	96.5	100	96.6	0	0	0	0	100	81.7	0	82.5	100	0	100	100	90.9
Commercial	0	4	0	4	0	0	0	0	0	17	0	17	0	0	0	0	21
% Commercial	0	3.5	0	3.4	0	0	0	0	0	18.3	0	17.5	0	0	0	0	9.1

DE TRAFFIC

detraffic.com
(386)341-4186
Oak Rd at Oak Track Pass
Marion County, Fl

File Name : 07 Oak Track at Oak
Site Code : 00000007
Start Date : 5/6/2025
Page No : 3

Peak Hour Data

Peak Hour Begins at 08:00 AM

Automobiles
Commercial

North

Oak Road

Out	In	Total
83	114	197
17	4	21
100	118	218

Right	Thru	Left
4	110	0
0	4	0
4	114	0

Oak Road

Left	Thru	Right
4	76	0
0	17	0
4	93	0

Out	In	Total
118	80	198
4	17	21
122	97	219

Oak Track Pass

Out	In	Total
8	15	23
0	0	0
8	15	23

Right	Thru	Left
8	0	7
0	0	0
8	0	7

N/A

Out	In	Total
0	0	0
0	0	0
0	0	0

Right	Thru	Left
0	0	0
0	0	0
0	0	0

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(386)341-4186
Oak Rd at Oak Track Pass
Marion County, Fl

File Name : 07 Oak Track at Oak
Site Code : 00000007
Start Date : 5/6/2025
Page No : 4

	Oak Road Southbound				N/A Westbound				Oak Road Northbound				Oak Track Pass Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	16	2	18	0	0	0	0	2	23	0	25	1	0	1	2	45
05:15 PM	0	16	2	18	0	0	0	0	1	24	0	25	2	0	0	2	45
05:30 PM	0	10	1	11	0	0	0	0	1	27	0	28	1	0	1	2	41
05:45 PM	0	8	1	9	0	0	0	0	2	24	0	26	1	0	2	3	38
Total Volume	0	50	6	56	0	0	0	0	6	98	0	104	5	0	4	9	169
% App. Total	0	89.3	10.7		0	0	0		5.8	94.2	0		55.6	0	44.4		
PHF	.000	.781	.750	.778	.000	.000	.000	.000	.750	.907	.000	.929	.625	.000	.500	.750	.939
Automobiles	0	48	6	54	0	0	0	0	6	95	0	101	4	0	4	8	163
% Automobiles	0	96.0	100	96.4	0	0	0	0	100	96.9	0	97.1	80.0	0	100	88.9	96.4
Commercial	0	2	0	2	0	0	0	0	0	3	0	3	1	0	0	1	6
% Commercial	0	4.0	0	3.6	0	0	0	0	0	3.1	0	2.9	20.0	0	0	11.1	3.6

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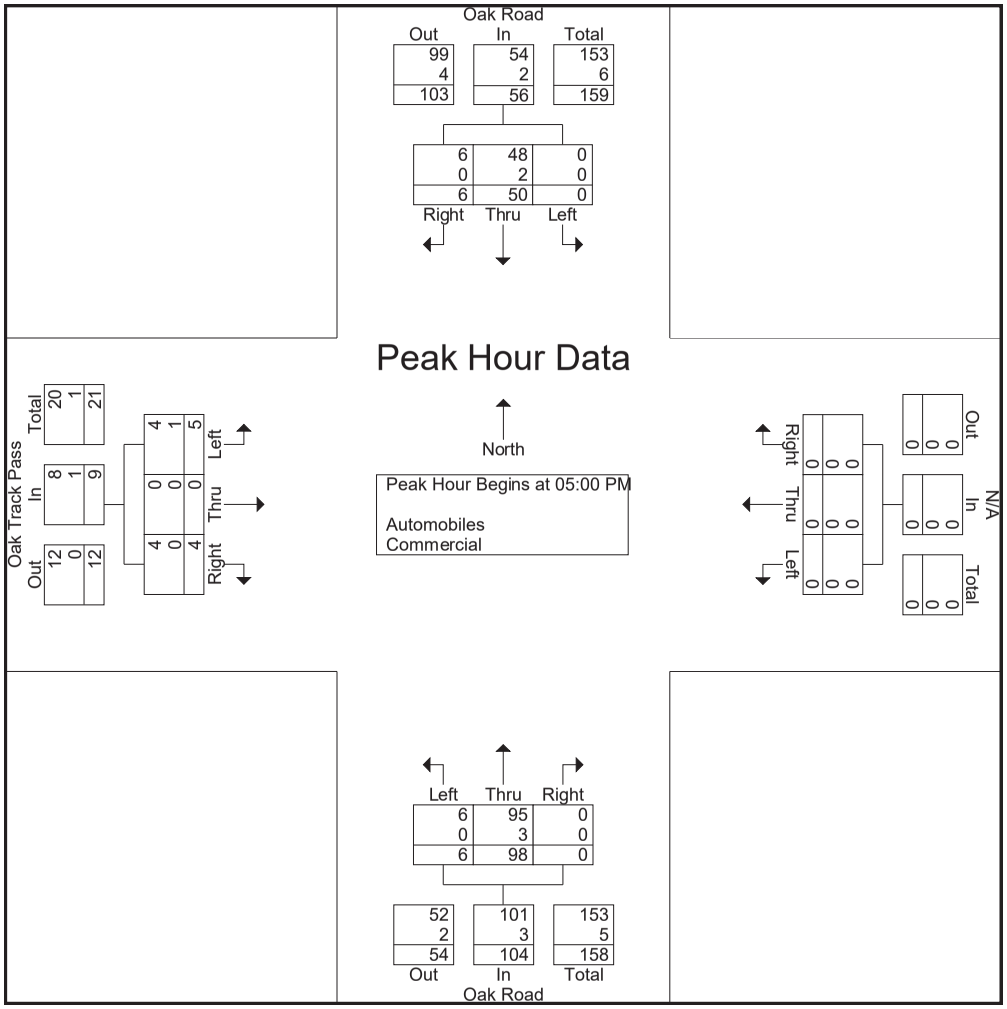
Oak Rd at Oak Track Pass
Marion County, Fl

File Name : 07 Oak Track at Oak
Site Code : 00000007
Start Date : 5/6/2025
Page No : 5



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(386)341-4186
Oak Rd at Oak Track Pass
Marion County, Fl

File Name : 07 Oak Track at Oak
Site Code : 00000007
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	Oak Road Southbound					N/A Westbound					Oak Road Northbound					Oak Track Pass Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
07:30 AM	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	5
Total	0	0	0	4	4	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	10
08:00 AM	0	0	0	3	3	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	4
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3
08:30 AM	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	6	6	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	10
04:00 PM	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
04:15 PM	0	0	0	4	4	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	8
04:30 PM	0	0	0	5	5	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	10
04:45 PM	0	0	0	4	4	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	8
Total	0	0	0	17	17	0	0	0	0	0	0	0	0	13	13	0	0	0	0	0	30
05:00 PM	0	0	0	6	6	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	10
05:15 PM	0	0	0	4	4	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	7
05:30 PM	0	0	0	5	5	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	10
Total	0	0	0	15	15	0	0	0	0	0	0	0	0	12	12	0	0	0	0	0	27
Grand Total	0	0	0	42	42	0	0	0	0	0	0	0	0	35	35	0	0	0	0	0	77
Apprch %	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	54.5	54.5	0	0	0	0	0	0	0	0	45.5	45.5	0	0	0	0	0	

DE TRAFFIC

detraffic.com
(386)341-4186
Oak Rd at Locust Pass Way
Marion County, Fl

File Name : 08 oak at locust pass
Site Code : 00000008
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	Oak Road Southbound				Locust Pass Way Westbound				Oak Road Northbound				N/A Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	35	0	35	0	0	1	1	0	6	1	7	0	0	0	0	43
07:15 AM	1	21	0	22	2	0	2	4	0	5	1	6	0	0	0	0	32
07:30 AM	2	18	0	20	1	0	0	1	0	10	0	10	0	0	0	0	31
07:45 AM	0	15	0	15	2	0	1	3	0	9	3	12	0	0	0	0	30
Total	3	89	0	92	5	0	4	9	0	30	5	35	0	0	0	0	136
08:00 AM	1	22	0	23	2	0	0	2	0	13	2	15	0	0	0	0	40
08:15 AM	3	37	0	40	1	0	2	3	0	31	2	33	0	0	0	0	76
08:30 AM	2	26	0	28	0	0	0	0	0	28	2	30	0	0	0	0	58
08:45 AM	1	24	0	25	2	0	1	3	0	25	0	25	0	0	0	0	53
Total	7	109	0	116	5	0	3	8	0	97	6	103	0	0	0	0	227
04:00 PM	0	5	0	5	0	0	0	0	0	22	0	22	0	0	0	0	27
04:15 PM	2	7	0	9	1	0	0	1	0	20	1	21	0	0	0	0	31
04:30 PM	1	9	0	10	1	0	0	1	0	26	3	29	0	0	0	0	40
04:45 PM	3	10	0	13	3	0	0	3	0	21	3	24	0	0	0	0	40
Total	6	31	0	37	5	0	0	5	0	89	7	96	0	0	0	0	138
05:00 PM	1	15	0	16	1	0	0	1	0	22	1	23	0	0	0	0	40
05:15 PM	0	15	0	15	0	0	0	0	0	26	3	29	0	0	0	0	44
05:30 PM	1	10	0	11	2	0	0	2	0	28	2	30	0	0	0	0	43
05:45 PM	0	7	0	7	1	0	0	1	0	25	0	25	0	0	0	0	33
Total	2	47	0	49	4	0	0	4	0	101	6	107	0	0	0	0	160
Grand Total	18	276	0	294	19	0	7	26	0	317	24	341	0	0	0	0	661
Apprch %	6.1	93.9	0		73.1	0	26.9		0	93	7		0	0	0		
Total %	2.7	41.8	0	44.5	2.9	0	1.1	3.9	0	48	3.6	51.6	0	0	0	0	
Automobiles	18	265	0	283	19	0	7	26	0	298	19	317	0	0	0	0	626
% Automobiles	100	96	0	96.3	100	0	100	100	0	94	79.2	93	0	0	0	0	94.7
Commercial	0	11	0	11	0	0	0	0	0	19	5	24	0	0	0	0	35
% Commercial	0	4	0	3.7	0	0	0	0	0	6	20.8	7	0	0	0	0	5.3

DE TRAFFIC

detraffic.com
(386)341-4186
Oak Rd at Locust Pass Way
Marion County, Fl

File Name : 08 oak at locust pass
Site Code : 00000008
Start Date : 5/6/2025
Page No : 2

	Oak Road Southbound				Locust Pass Way Westbound				Oak Road Northbound				N/A Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	1	22	0	23	2	0	0	2	0	13	2	15	0	0	0	0	40
08:15 AM	3	37	0	40	1	0	2	3	0	31	2	33	0	0	0	0	76
08:30 AM	2	26	0	28	0	0	0	0	0	28	2	30	0	0	0	0	58
08:45 AM	1	24	0	25	2	0	1	3	0	25	0	25	0	0	0	0	53
Total Volume	7	109	0	116	5	0	3	8	0	97	6	103	0	0	0	0	227
% App. Total	6	94	0		62.5	0	37.5		0	94.2	5.8		0	0	0		
PHF	.583	.736	.000	.725	.625	.000	.375	.667	.000	.782	.750	.780	.000	.000	.000	.000	.747
Automobiles	7	105	0	112	5	0	3	8	0	83	3	86	0	0	0	0	206
% Automobiles	100	96.3	0	96.6	100	0	100	100	0	85.6	50.0	83.5	0	0	0	0	90.7
Commercial	0	4	0	4	0	0	0	0	0	14	3	17	0	0	0	0	21
% Commercial	0	3.7	0	3.4	0	0	0	0	0	14.4	50.0	16.5	0	0	0	0	9.3

DE TRAFFIC

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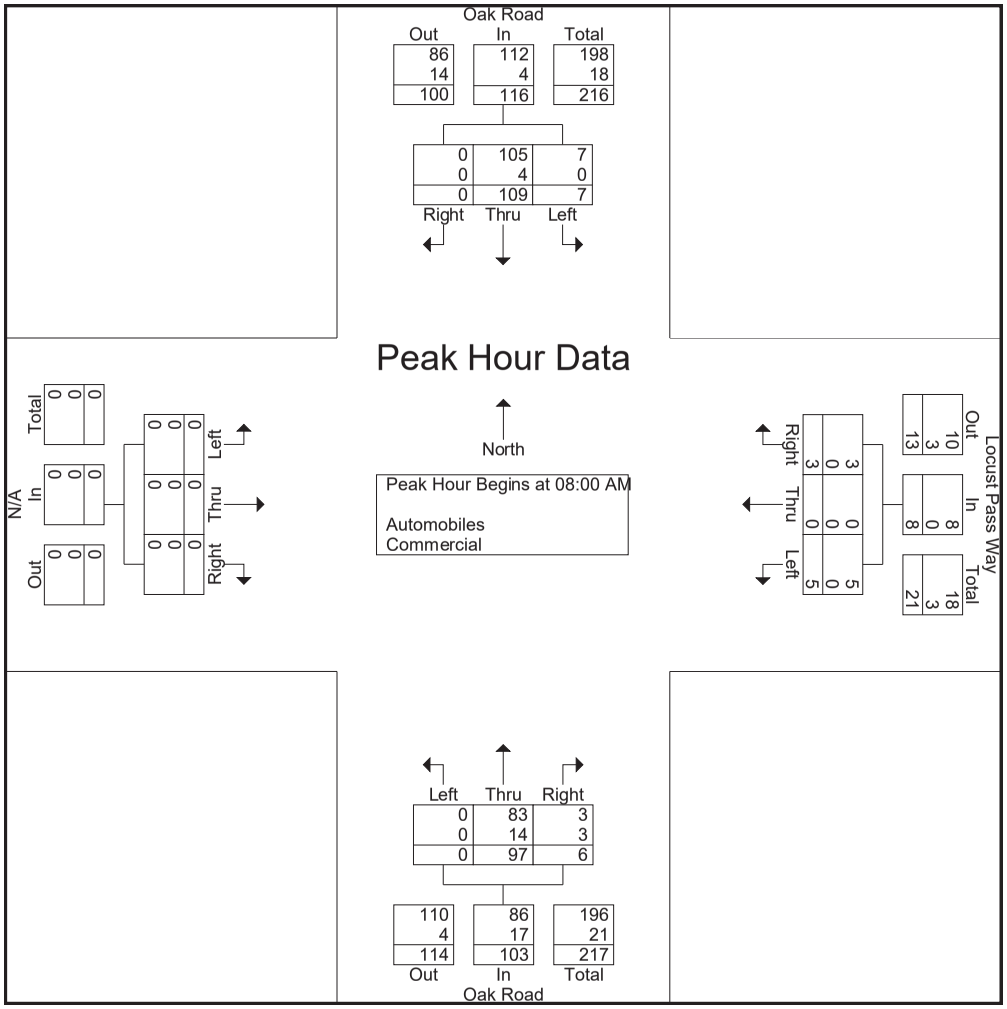
(386)341-4186
Oak Rd at Locust Pass Way
Marion County, Fl

File Name : 08 oak at locust pass
Site Code : 00000008
Start Date : 5/6/2025
Page No : 3



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(386)341-4186
Oak Rd at Locust Pass Way
Marion County, Fl

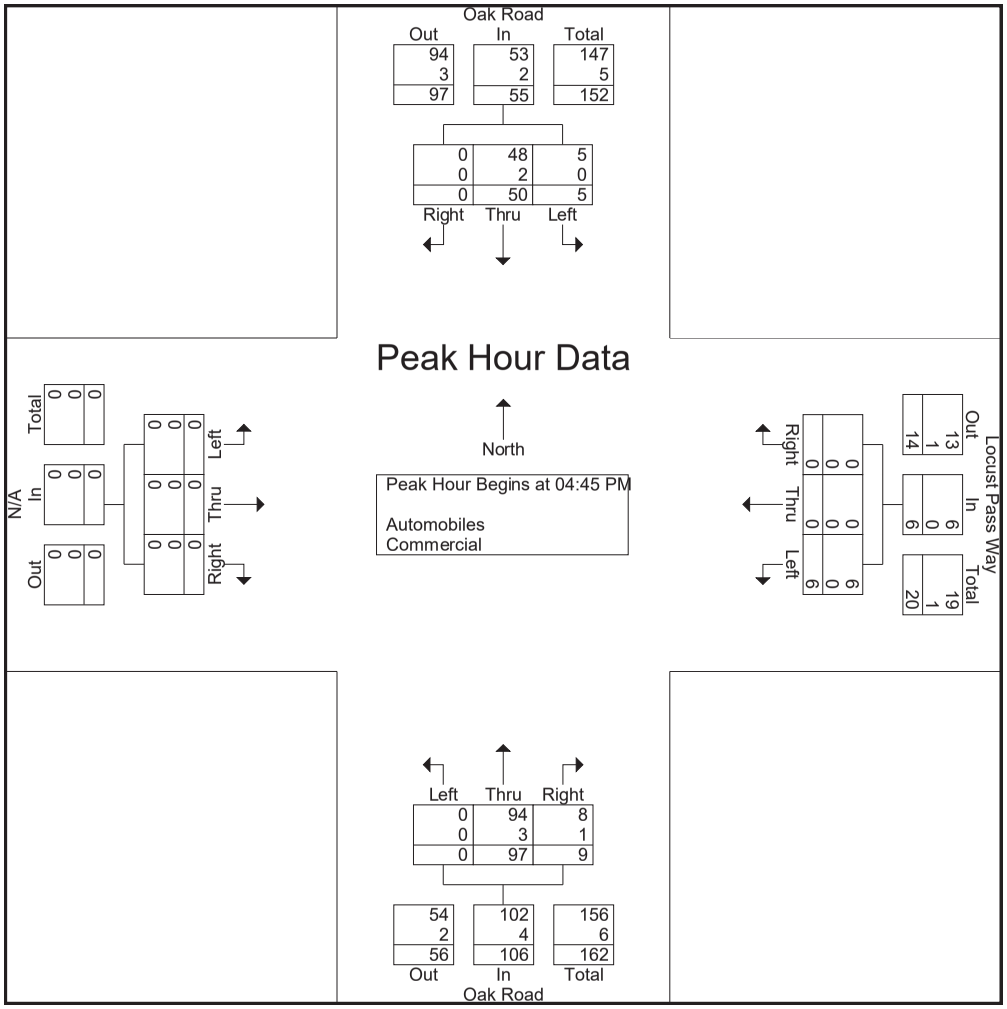
File Name : 08 oak at locust pass
Site Code : 00000008
Start Date : 5/6/2025
Page No : 4

	Oak Road Southbound				Locust Pass Way Westbound				Oak Road Northbound				N/A Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	3	10	0	13	3	0	0	3	0	21	3	24	0	0	0	0	40
05:00 PM	1	15	0	16	1	0	0	1	0	22	1	23	0	0	0	0	40
05:15 PM	0	15	0	15	0	0	0	0	0	26	3	29	0	0	0	0	44
05:30 PM	1	10	0	11	2	0	0	2	0	28	2	30	0	0	0	0	43
Total Volume	5	50	0	55	6	0	0	6	0	97	9	106	0	0	0	0	167
% App. Total	9.1	90.9	0		100	0	0		0	91.5	8.5		0	0	0		
PHF	.417	.833	.000	.859	.500	.000	.000	.500	.000	.866	.750	.883	.000	.000	.000	.000	.949
Automobiles	5	48	0	53	6	0	0	6	0	94	8	102	0	0	0	0	161
% Automobiles	100	96.0	0	96.4	100	0	0	100	0	96.9	88.9	96.2	0	0	0	0	96.4
Commercial	0	2	0	2	0	0	0	0	0	3	1	4	0	0	0	0	6
% Commercial	0	4.0	0	3.6	0	0	0	0	0	3.1	11.1	3.8	0	0	0	0	3.6

DE TRAFFIC

detraffic.com
(386)341-4186
Oak Rd at Locust Pass Way
Marion County, Fl

File Name : 08 oak at locust pass
Site Code : 00000008
Start Date : 5/6/2025
Page No : 5



DE TRAFFIC

detraffic.com
(386)341-4186
Oak Rd at Locust Pass Way
Marion County, Fl

File Name : 08 oak at locust pass
Site Code : 00000008
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	Oak Road Southbound					Locust Pass Way Westbound					Oak Road Northbound					N/A Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
07:30 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
Total	0	0	0	4	4	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	7
08:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
08:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
Total	0	0	0	2	2	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	5
04:00 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
04:30 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
04:45 PM	0	0	0	3	3	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	7
Total	0	0	0	8	8	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	15
05:00 PM	0	0	0	3	3	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	9
05:15 PM	0	0	0	4	4	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	8
05:30 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	5
Total	0	0	0	9	9	0	0	0	0	0	0	0	0	13	13	0	0	0	0	0	22
Grand Total	0	0	0	23	23	0	0	0	0	0	0	0	0	26	26	0	0	0	0	0	49
Apprch %	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	46.9	46.9	0	0	0	0	0	0	0	0	53.1	53.1	0	0	0	0	0	

DE TRAFFIC

detraffic.com
(386)341-4186
Locust Pass Loop at Locust Pass
Marion County, Fl

File Name : 09 Locust at Locust Loop
Site Code : 00000009
Start Date : 5/6/2025
Page No : 1

Groups Printed- Automobiles - Commercial

	Locust Pass Loop Southbound				Locust Pass Westbound				N/A Northbound				Locust Pass Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	0	0	0	3
07:15 AM	1	0	2	3	0	0	0	0	0	0	0	0	0	3	0	3	6
07:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	1	0	0	1	5
07:45 AM	0	0	0	0	0	3	1	4	0	0	0	0	0	2	0	2	6
Total	1	0	3	4	0	9	1	10	0	0	0	0	1	5	0	6	20
08:00 AM	2	0	0	2	0	3	0	3	0	0	0	0	0	2	0	2	7
08:15 AM	0	0	1	1	0	1	0	1	0	0	0	0	2	3	0	5	7
08:30 AM	1	0	0	1	0	3	1	4	0	0	0	0	0	2	0	2	7
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	1	2	0	3	6
Total	3	0	1	4	0	10	1	11	0	0	0	0	3	9	0	12	27
04:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
04:15 PM	1	0	0	1	0	2	1	3	0	0	0	0	2	1	0	3	7
04:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
04:45 PM	0	0	2	2	0	1	1	2	0	0	0	0	0	1	0	1	5
Total	1	0	3	4	0	7	2	9	0	0	0	0	2	5	0	7	20
05:00 PM	1	0	1	2	0	3	0	3	0	0	0	0	2	2	0	4	9
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
05:30 PM	0	0	0	0	0	2	1	3	0	0	0	0	1	1	0	2	5
05:45 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total	1	0	2	3	0	7	1	8	0	0	0	0	3	8	0	11	22
Grand Total	6	0	9	15	0	33	5	38	0	0	0	0	9	27	0	36	89
Apprch %	40	0	60		0	86.8	13.2		0	0	0		25	75	0		
Total %	6.7	0	10.1	16.9	0	37.1	5.6	42.7	0	0	0	0	10.1	30.3	0	40.4	
Automobiles	6	0	9	15	0	33	5	38	0	0	0	0	9	27	0	36	89
% Automobiles	100	0	100	100	0	100	100	100	0	0	0	0	100	100	0	100	100
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DE TRAFFIC

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(386)341-4186
Locust Pass Loop at Locust Pass
Marion County, Fl

File Name : 09 Locust at Locust Loop
Site Code : 00000009
Start Date : 5/6/2025
Page No : 2

	Locust Pass Loop Southbound				Locust Pass Westbound				N/A Northbound				Locust Pass Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	3	1	4	0	0	0	0	0	2	0	2	6
08:00 AM	2	0	0	2	0	3	0	3	0	0	0	0	0	2	0	2	7
08:15 AM	0	0	1	1	0	1	0	1	0	0	0	0	2	3	0	5	7
08:30 AM	1	0	0	1	0	3	1	4	0	0	0	0	0	2	0	2	7
Total Volume	3	0	1	4	0	10	2	12	0	0	0	0	2	9	0	11	27
% App. Total	75	0	25		0	83.3	16.7		0	0	0		18.2	81.8	0		
PHF	.375	.000	.250	.500	.000	.833	.500	.750	.000	.000	.000	.000	.250	.750	.000	.550	.964
Automobiles	3	0	1	4	0	10	2	12	0	0	0	0	2	9	0	11	27
% Automobiles	100	0	100	100	0	100	100	100	0	0	0	0	100	100	0	100	100
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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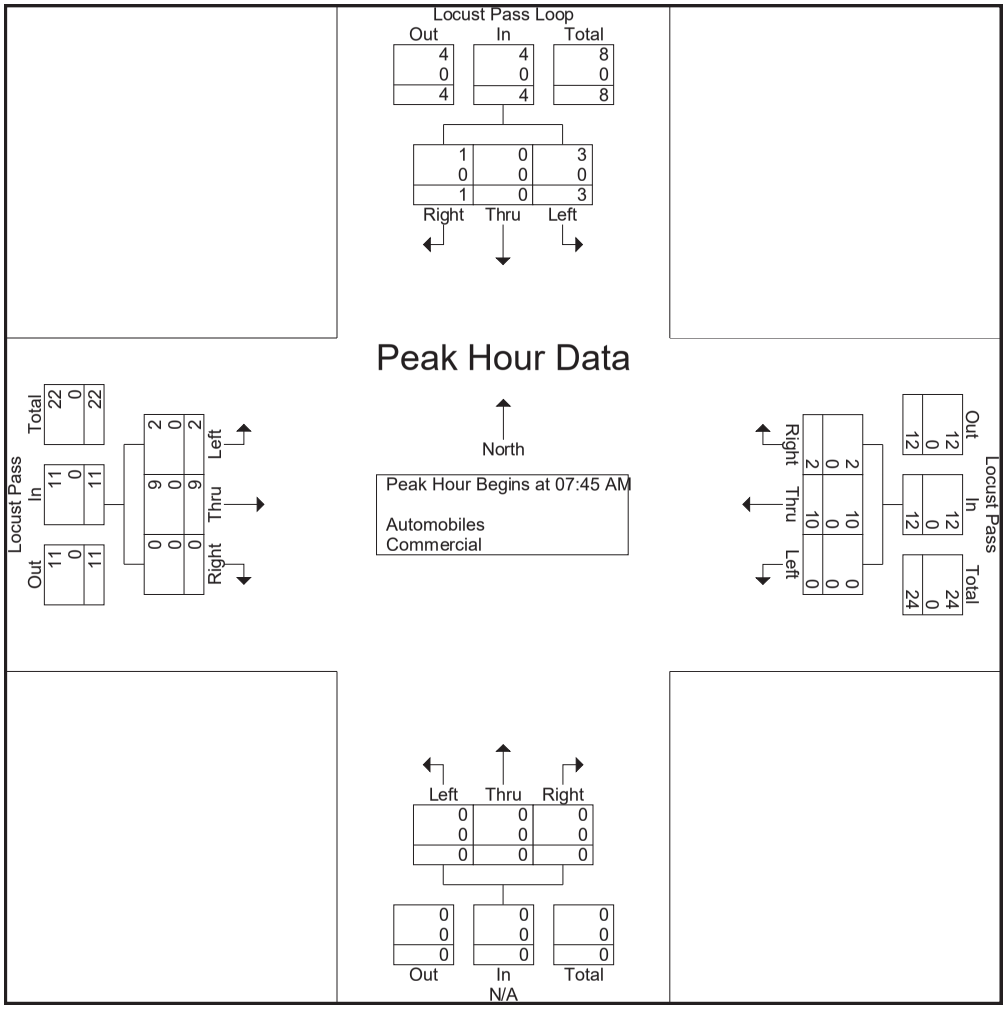
Locust Pass Loop at Locust Pass
Marion County, Fl

File Name : 09 Locust at Locust Loop
Site Code : 00000009
Start Date : 5/6/2025
Page No : 3



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Locust Pass Loop at Locust Pass
Marion County, Fl

File Name : 09 Locust at Locust Loop
Site Code : 00000009
Start Date : 5/6/2025
Page No : 4

	Locust Pass Loop Southbound				Locust Pass Westbound				N/A Northbound				Locust Pass Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	0	0	1	0	2	1	3	0	0	0	0	2	1	0	3	7
04:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
04:45 PM	0	0	2	2	0	1	1	2	0	0	0	0	0	1	0	1	5
05:00 PM	1	0	1	2	0	3	0	3	0	0	0	0	2	2	0	4	9
Total Volume	2	0	4	6	0	7	2	9	0	0	0	0	4	5	0	9	24
% App. Total	33.3	0	66.7		0	77.8	22.2		0	0	0		44.4	55.6	0		
PHF	.500	.000	.500	.750	.000	.583	.500	.750	.000	.000	.000	.000	.500	.625	.000	.563	.667
Automobiles	2	0	4	6	0	7	2	9	0	0	0	0	4	5	0	9	24
% Automobiles	100	0	100	100	0	100	100	100	0	0	0	0	100	100	0	100	100
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DE TRAFFIC

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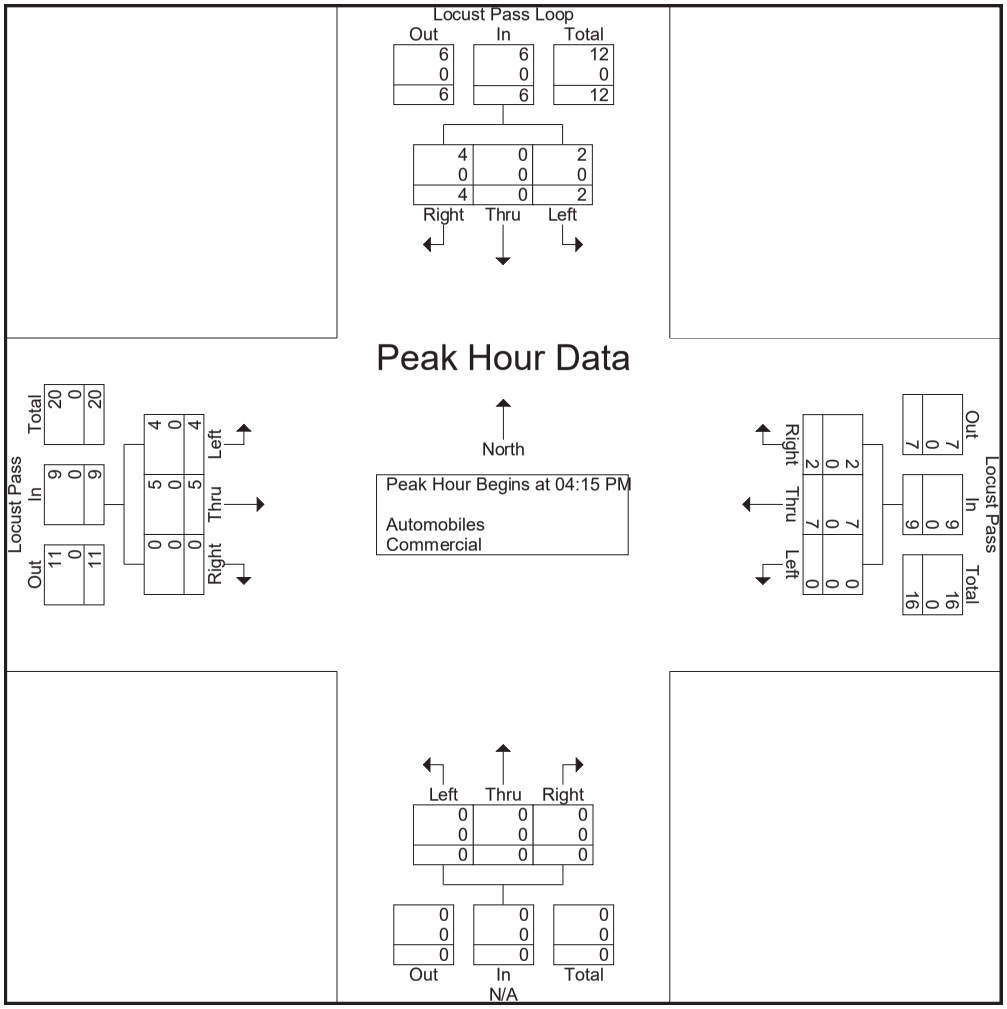
Locust Pass Loop at Locust Pass
Marion County, Fl

File Name : 09 Locust at Locust Loop
Site Code : 00000009
Start Date : 5/6/2025
Page No : 5



DE TRAFFIC

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(386)341-4186
Locust Pass Loop at Locust Pass
Marion County, Fl

File Name : 09 Locust at Locust Loop
Site Code : 00000009
Start Date : 5/6/2025
Page No : 6

Groups Printed- Peds

	Locust Pass Loop Southbound					Locust Pass Westbound					N/A Northbound					Locust Pass Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	2
Apprch %	0	0	0	0		0	0	100	0		0	0	0	0		0	0	0	100		
Total %	0	0	0	0	0	0	0	50	0	50	0	0	0	0	0	0	0	0	50	50	

NB Approach

SB Approach

EB Approach

WB Approach

de traffic	Maricamp Rd at Water Rd	Marion County
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14 / Sheet Number: 1

NB Approach

SB Approach

EB Approach

WB Approach

de traffic	Maricamp Rd at Emerald Road West	Marion County
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14 / Sheet Number: 2

NB Approach

SB Approach

EB Approach

WB Approach

de traffic	Maricamp Rd at Oak Road West	Marion County
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14 / Sheet Number: 3

NB Approach

SB Approach

EB Approach

WB Approach

de traffic	Maricamp Rd at Oak Road East	Marion County
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14 / Sheet Number: 4

NB Approach

SB Approach

EB Approach

WB Approach

de traffic	Maricamp Rd at SE 108th Terrace Rd	Marion County
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14 / Sheet Number: 5

SB Approach

EB Approach

WB Approach

de traffic	CR 464 at CR 25	Marion County	
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14	Sheet Number: 6

NB Approach

SB Approach

EB Approach

de traffic	Oak Track Pass at Oak Road East	Marion County	
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14	Sheet Number: 7

NB Approach

SB Approach

WB Approach

de traffic	Oak Road East at Locust Pass Way	Marion County	
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14	Sheet Number: 8

SB Approach

EB Approach

WB Approach

de traffic	Locust Pass at Locust Pass Way	Marion County	
	detraffic.com 9239 Outlook Rock Trl. Windermere Fl. 34786	Project Number: KA-25-14	Sheet Number: 9

Peak Season Factor Category Report

2024 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 3600 MARION COUNTYWIDE

MOCF: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2024 - 01/06/2024	0.99	1.03
2	01/07/2024 - 01/13/2024	1.02	1.06
3	01/14/2024 - 01/20/2024	1.05	1.09
4	01/21/2024 - 01/27/2024	1.03	1.07
5	01/28/2024 - 02/03/2024	1.02	1.06
6	02/04/2024 - 02/10/2024	1.00	1.04
* 7	02/11/2024 - 02/17/2024	0.98	1.02
* 8	02/18/2024 - 02/24/2024	0.97	1.01
* 9	02/25/2024 - 03/02/2024	0.96	1.00
*10	03/03/2024 - 03/09/2024	0.95	0.99
*11	03/10/2024 - 03/16/2024	0.94	0.98
*12	03/17/2024 - 03/23/2024	0.95	0.99
*13	03/24/2024 - 03/30/2024	0.95	0.99
*14	03/31/2024 - 04/06/2024	0.95	0.99
*15	04/07/2024 - 04/13/2024	0.96	1.00
*16	04/14/2024 - 04/20/2024	0.96	1.00
*17	04/21/2024 - 04/27/2024	0.97	1.01
*18	04/28/2024 - 05/04/2024	0.97	1.01
*19	05/05/2024 - 05/11/2024	0.98	1.02
20	05/12/2024 - 05/18/2024	0.99	1.03
21	05/19/2024 - 05/25/2024	0.99	1.03
22	05/26/2024 - 06/01/2024	0.99	1.03
23	06/02/2024 - 06/08/2024	0.99	1.03
24	06/09/2024 - 06/15/2024	1.00	1.04
25	06/16/2024 - 06/22/2024	1.00	1.04
26	06/23/2024 - 06/29/2024	1.01	1.05
27	06/30/2024 - 07/06/2024	1.02	1.06
28	07/07/2024 - 07/13/2024	1.02	1.06
29	07/14/2024 - 07/20/2024	1.03	1.07
30	07/21/2024 - 07/27/2024	1.04	1.08
31	07/28/2024 - 08/03/2024	1.04	1.08
32	08/04/2024 - 08/10/2024	1.05	1.09
33	08/11/2024 - 08/17/2024	1.05	1.09
34	08/18/2024 - 08/24/2024	1.06	1.10
35	08/25/2024 - 08/31/2024	1.06	1.10
36	09/01/2024 - 09/07/2024	1.07	1.11
37	09/08/2024 - 09/14/2024	1.07	1.11
38	09/15/2024 - 09/21/2024	1.08	1.13
39	09/22/2024 - 09/28/2024	1.06	1.10
40	09/29/2024 - 10/05/2024	1.04	1.08
41	10/06/2024 - 10/12/2024	1.02	1.06
42	10/13/2024 - 10/19/2024	1.00	1.04
43	10/20/2024 - 10/26/2024	1.00	1.04
44	10/27/2024 - 11/02/2024	1.00	1.04
45	11/03/2024 - 11/09/2024	1.00	1.04
46	11/10/2024 - 11/16/2024	1.01	1.05
47	11/17/2024 - 11/23/2024	1.00	1.04
48	11/24/2024 - 11/30/2024	1.00	1.04
49	12/01/2024 - 12/07/2024	1.00	1.04
50	12/08/2024 - 12/14/2024	0.99	1.03
51	12/15/2024 - 12/21/2024	0.99	1.03
52	12/22/2024 - 12/28/2024	1.02	1.06
53	12/29/2024 - 12/31/2024	1.05	1.09

* PEAK SEASON

2023 Ocala Marion TPO CMP Database

Ocala Marion TPO CMP Database - August 2023

SEGMENT ID	ROAD NAME	FROM	TO	LANES (2023)	FUNCTIONAL CLASSIFICATION	FLOW	FDOT CLASS	DAILY SERVICE VOLUME (2023)	PEAK HOUR DIRECTIONAL SERVICE VOLUME (2023)	LANES (2028)	DAILY SERVICE VOLUME (2028)	PEAK HOUR DIRECTIONAL SERVICE VOLUME (2028)	URBAN / RURAL	DIVIDED / UNDIVIDED	MAINTAINING AGENCY	ADOPTED LOS STANDARD	2023 AADT	2023 DAILY V/MSV	2023 DAILY LOS	GROWTH RATE	2028 AADT	2028 DAILY V/MSV	2028 DAILY LOS
1710	CR 464	SR 35	EMERALD RD (N)	4	ARTERIAL	INTERRUPTED	1	35,820	1,800	4	35,820	1,800	Urban	D	COUNTY	E	34,300	0.96	D	1.00%	36,100	1.01	F
1770	CR 464	EMERALD RD (N)	OAK RD	4	ARTERIAL	INTERRUPTED	1	35,820	1,800	4	35,820	1,800	Urban	D	COUNTY	E	15,600	0.44	C	2.09%	17,300	0.48	C
1780	CR 464	OAK RD	EMERALD RD (S)	4	ARTERIAL	INTERRUPTED	1	35,820	1,800	4	35,820	1,800	Urban	D	COUNTY	E	9,800	0.27	C	8.12%	14,500	0.40	C
1790	CR 464	EMERALD RD (S)	SE 110 ST	4	ARTERIAL	INTERRUPTED	1	35,820	1,800	4	35,820	1,800	Urban	D	COUNTY	E	9,300	0.26	C	1.86%	10,200	0.28	C
1800.2	CR 464	SE 110 ST	CR 25	2	ARTERIAL	INTERRUPTED	2	11,232	576	2	11,232	576	Urban	U	COUNTY	E	2,700	0.24	C	1.00%	2,900	0.26	C
3770	SE 108 TER RD	CR 25	SE 110 ST RD	2	COLLECTOR	UNINTERRUPTED		29,340	1,449	2	29,340	1,449	Urban	U	COUNTY	E	ot Counte	N/A	N/A	1.00%	lot Counte	N/A	N/A
3840.1	SE 110 ST RD	CR 25	OAK RD	2	COLLECTOR	UNINTERRUPTED		29,340	1,449	2	29,340	1,449	Urban	U	COUNTY	E	3,400	0.12	B	1.00%	3,600	0.12	B
3850.1	SE 110 ST RD	OAK RD	CR 464	2	COLLECTOR	UNINTERRUPTED		29,340	1,449	2	29,340	1,449	Urban	U	COUNTY	E	3,400	0.12	B	1.00%	3,600	0.12	B
1850	SE 114TH ST RD	CR 464	SE 135 AV	2	COLLECTOR	UNINTERRUPTED		29,340	1,449	2	29,340	1,449	Urban	U	COUNTY	E	5,500	0.19	B	9.34%	8,500	0.29	B
5100	SR 35	LAUREL RD	SR 464	4	ARTERIAL	INTERRUPTED		55,700	2,910	4	55,700	2,910	Urban	D	STATE	D	27,600	0.5	B	4.27%	34,100	0.61	C
5110	SR 35	SR 464	SE 28 ST	4	ARTERIAL	INTERRUPTED		55,700	2,910	4	55,700	2,910	Urban	D	STATE	D	20,700	0.37	B	1.00%	21,800	0.39	B
1660	SR 464	SE 25 AV	SE 44 AV	4	ARTERIAL	INTERRUPTED		38,430	1,901	4	38,430	1,901	Urban	D	STATE	D	34,800	0.91	D	1.00%	36,600	0.95	D
1690	SR 464	SE 44 AV	SR 35	4	ARTERIAL	INTERRUPTED		38,430	1,901	4	38,430	1,901	Urban	D	STATE	D	33,200	0.86	D	1.25%	35,300	0.92	D

Appendix D:
Signal Timings

Marion County
Office of the County Engineer

Signal ID	Major Street	Minor Street	Date	Technician
# 69	CR 464	SE 108 terr rd	8/25/2025	Bruce Youman

PHASE	1	2	3	4	5	6	7	8
DIRECTION	EB/LT	WB		NB	WB/LT	EB		SB
LEFT TURN MODE								
MIN GREEN	10	20	0	7	10	28	0	7
PASSAGE	4.0	5.0	0.0	5.0	4.0	5.0	0.0	5.0
MAX 1	25	35	0	20	25	35	0	20
MAX 2								
YELLOW	4.0	4.0	40.0	4.0	4.0	4.0	4.0	4.0
ALL RED	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
WALK		7		7		7		7
PED CLR		22		21		22		21
VEH RECALL		Min				Min		
NON-LOCK CALL	x		x	x	x		x	x
DUAL ENTRY		x				x		
NO SIMUL GAP								

Signal Operating Plan

Additional Notes (Turning Retrictions?, Overlaps?, Etc.)

Coordination? Yes No X

Plan	Cycle	Phase Splits 1	2	3	4	5	6	7	8	Offset	Seq	Spec Func	Coord Mode	Force Mode

Mon-Thu

Start Time	Plan

Fri

Start Time	Plan

Sat

Start Time	Plan

Sun

Start Time	Plan

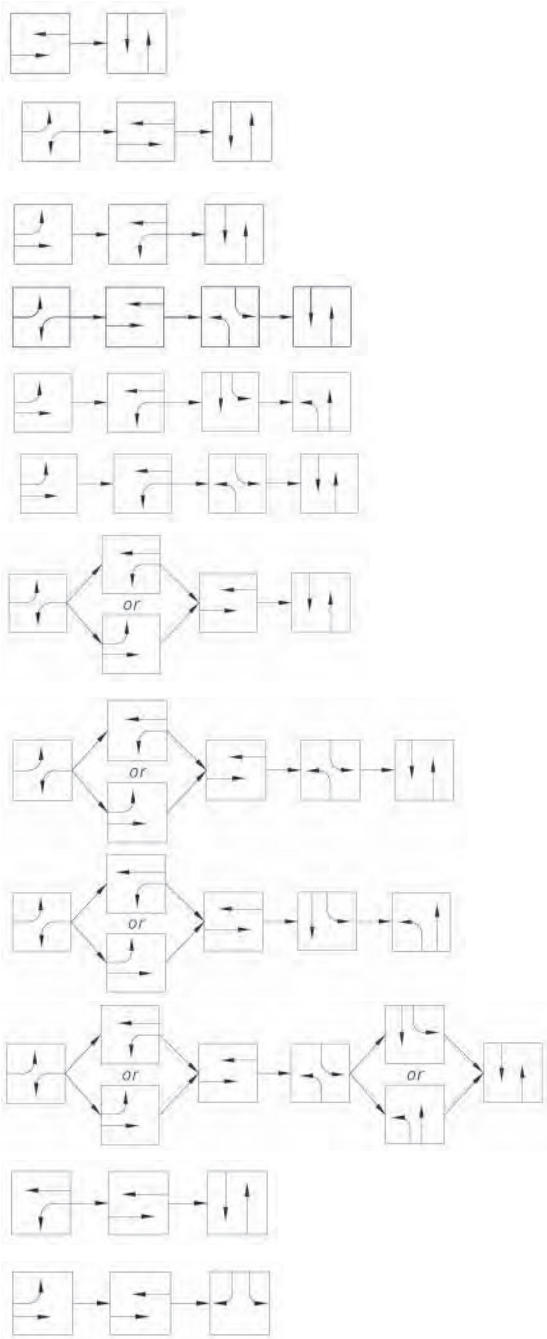
General Coordination Data

Coord Mode (Normal)	
Max Mode	
Correction Mode	
Offset Mode	
Force Mode (Normal)	

Detector Data

Veh Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase	1	5	2	2	2	2	4	8	6	6	6	6				
Veh Detector	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Phase																

Ped Detector	1	2	3	4	5	6	7	8
Phase		2		4		6		8



Marion County
Office of the County Engineer

Signal ID	Major Street	Minor Street	Date	Technician
# 66	CR 464	OAK rd	8/26/2025	Bruce Youman

PHASE	1	2	3	4	5	6	7	8
DIRECTION	EBLT	WB		NB	WBLT	EB		SB
LEFT TURN MODE	Prot				Prot			
MIN GREEN	6	17		6	6	17		6
PASSAGE	4.0	40.0		4.0	4.0	4.0		4.0
MAX 1	16	45		25	16	45		25
MAX 2	30	50		50	30	50		50
YELLOW	5.2	5.2		3.7	5.1	5.2		4.4
ALL RED	2.2	2.0		2.8	2.3	2.0		2.5
WALK		7		7				7
PED CLR		26		24				30
VEH RECALL		min				min		
NON-LOCK CALL	X			X	X			X
DUAL ENTRY		X				X		
NO SIMUL GAP								

Signal Operating Plan

Additional Notes (Turning Retrictions?, Overlaps?, Etc.)

Coordination? Yes X No

Plan	Cycle	Phase Splits 1	2	3	4	5	6	7	8	Offset	Seq	Spec Func	Coord Mode	Force Mode
001		20	51		24	20	51		25	116	1		0 - Normal	
002	120	22	48		28	20	50		22	116	1		0 - Normal	
003	130	22	47		39	20	49		22	96	1		0 - Normal	

Mon-Thu

Start Time	Plan
6:30	001
9:30	002
14:00	003

Fri

Start Time	Plan
6:30	001
9:30	002
14:00	003

Sat

Start Time	Plan

Sun

Start Time	Plan

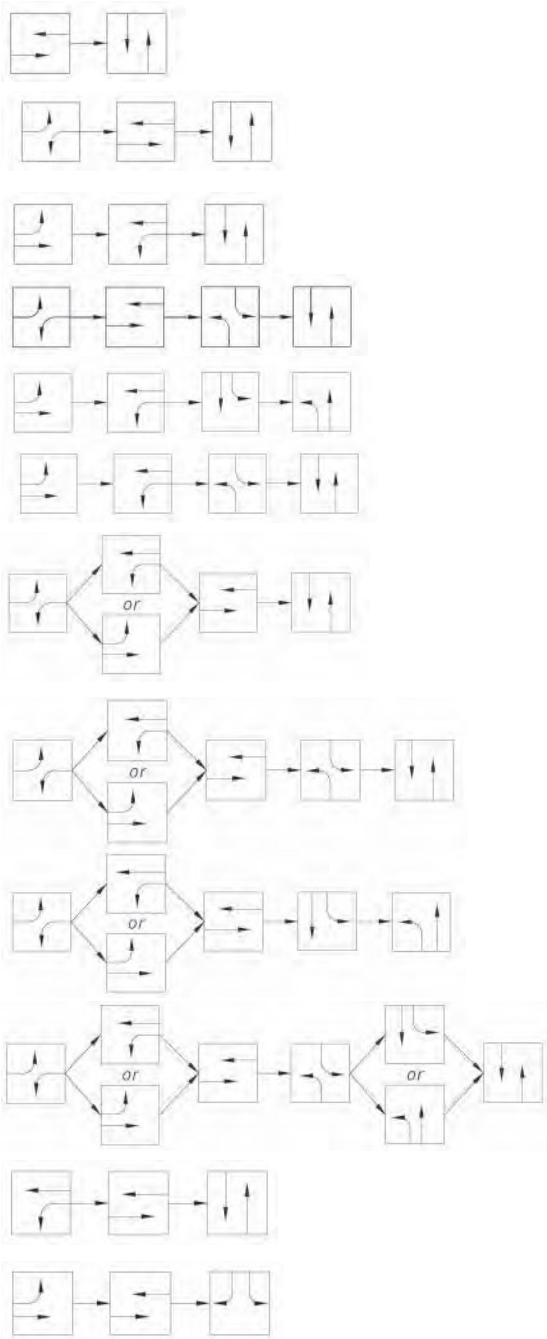
General Coordination Data

Coord Mode (Normal)	
Max Mode	
Correction Mode	
Offset Mode	
Force Mode (Normal)	

Detector Data

Veh Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase	1	2	8	4	5	6	4	8								
Veh Detector	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Phase																

Ped Detector	1	2	3	4	5	6	7	8
Phase		2		4				8



Appendix E:
Existing Synchro Reports

Existing Conditions (AM Peak)

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	141	476	5	0	991	145	17	0	0	68	0	76
Future Vol, veh/h	141	476	5	0	991	145	17	0	0	68	0	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	182	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	7	3	0	0	2	8	41	0	0	0	0	4
Mvmt Flow	147	496	5	0	1032	151	18	0	0	71	0	79

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1183	0	0	501	0	0	1308	1976	251	1649	1903	592
Stage 1	-	-	-	-	-	-	792	792	-	1108	1108	-
Stage 2	-	-	-	-	-	-	516	1183	-	542	795	-
Critical Hdwy	4.24	-	-	4.1	-	-	8.32	6.5	6.9	7.5	6.5	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	7.32	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.32	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.27	-	-	2.2	-	-	3.91	4	3.3	3.5	4	3.34
Pot Cap-1 Maneuver	558	-	-	1074	-	-	84	63	755	~ 66	70	445
Stage 1	-	-	-	-	-	-	274	403	-	227	288	-
Stage 2	-	-	-	-	-	-	421	265	-	498	402	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	558	-	-	1074	-	-	51	46	755	~ 49	51	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	115	93	-	149	157	-
Stage 1	-	-	-	-	-	-	202	297	-	227	288	-
Stage 2	-	-	-	-	-	-	346	265	-	367	297	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.11	0	42.01	46.12
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	115	558	-	-	1074	-	-	230
HCM Lane V/C Ratio	0.154	0.263	-	-	-	-	-	0.654
HCM Ctrl Dly (s/v)	42	13.7	-	-	0	-	-	46.1
HCM Lane LOS	E	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.5	1	-	-	0	-	-	4

Notes

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

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	3	97	6	7	109
Future Vol, veh/h	5	3	97	6	7	109
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	14	50	0	4
Mvmt Flow	7	4	129	8	9	145

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	300	136	0	0	140	0
Stage 1	136	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	695	918	-	-	1455	-
Stage 1	895	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	689	915	-	-	1451	-
Mov Cap-2 Maneuver	689	-	-	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	864	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.81	0	0.45
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	759	109	-
HCM Lane V/C Ratio	-	-	0.014	0.006	-
HCM Ctrl Dly (s/v)	-	-	9.8	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	8	4	93	114	4
Future Vol, veh/h	7	8	4	93	114	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	18	4	0
Mvmt Flow	9	10	5	118	144	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	275	147	149	0	-	0
Stage 1	147	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	719	905	1444	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	717	905	1444	-	-	-
Mov Cap-2 Maneuver	717	-	-	-	-	-
Stage 1	882	-	-	-	-	-
Stage 2	903	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.57	0.31	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	74	-	806	-	-
HCM Lane V/C Ratio	0.004	-	0.024	-	-
HCM Ctrl Dly (s/v)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	9	10	2	3	0
Future Vol, veh/h	2	9	10	2	3	0
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	9	10	2	3	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	14	0	-	0	26	12
Stage 1	-	-	-	-	12	-
Stage 2	-	-	-	-	14	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1618	-	-	-	995	1074
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1015	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1617	-	-	-	991	1073
Mov Cap-2 Maneuver	-	-	-	-	991	-
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.31	0	8.64
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	327	-	-	-	991
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Ctrl Dly (s/v)	7.2	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Existing Conditions (PM Peak)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	705	105	13	865	37	236	105	30	22	54	77
Future Volume (veh/h)	93	705	105	13	865	37	236	105	30	22	54	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1870	1900	1900	1811	1885	1841	1900	1900	1841	1811
Adj Flow Rate, veh/h	100	758	99	14	930	35	184	212	12	24	58	35
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	2	0	0	6	1	4	0	0	4	6
Cap, veh/h	124	1816	237	33	1873	70	251	257	225	86	88	73
Arrive On Green	0.07	0.58	0.58	0.02	0.53	0.53	0.14	0.14	0.14	0.05	0.05	0.05
Sat Flow, veh/h	1781	3135	409	1810	3547	134	1795	1841	1610	1810	1841	1535
Grp Volume(v), veh/h	100	426	431	14	473	492	184	212	12	24	58	35
Grp Sat Flow(s),veh/h/ln	1781	1763	1782	1810	1805	1876	1795	1841	1610	1810	1841	1535
Q Serve(g_s), s	7.2	17.4	17.5	1.0	21.8	21.8	12.8	14.6	0.8	1.7	4.0	2.9
Cycle Q Clear(g_c), s	7.2	17.4	17.5	1.0	21.8	21.8	12.8	14.6	0.8	1.7	4.0	2.9
Prop In Lane	1.00		0.23	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	1021	1032	33	953	990	251	257	225	86	88	73
V/C Ratio(X)	0.81	0.42	0.42	0.42	0.50	0.50	0.73	0.82	0.05	0.28	0.66	0.48
Avail Cap(c_a), veh/h	200	1021	1032	175	953	990	449	460	403	210	214	178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	15.2	15.2	63.1	19.6	19.6	53.6	54.4	48.5	59.8	60.9	60.3
Incr Delay (d2), s/veh	11.7	1.3	1.2	8.3	1.8	1.8	4.1	6.6	0.1	1.7	8.3	4.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	11.0	11.2	0.9	13.9	14.3	10.1	11.6	0.6	1.5	3.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	71.3	16.4	16.4	71.4	21.5	21.4	57.7	60.9	48.6	61.5	69.2	65.2
LnGrp LOS	E	B	B	E	C	C	E	E	D	E	E	E
Approach Vol, veh/h		957			979			408			117	
Approach Delay, s/veh		22.2			22.2			59.1			66.4	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.4	75.8		24.7	9.8	82.5		13.1
Change Period (Y+Rc), s	7.4	7.2		6.5	7.4	7.2		6.9
Max Green Setting (Gmax), s	14.6	39.8		32.5	12.6	41.8		15.1
Max Q Clear Time (g_c+I1), s	9.2	23.8		16.6	3.0	19.5		6.0
Green Ext Time (p_c), s	0.1	4.9		1.6	0.0	4.9		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	30.4
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	15.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	829	101	52	1127	66	111	13	46	19	4	57
Future Vol, veh/h	31	829	101	52	1127	66	111	13	46	19	4	57
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	178	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	2	2	4	2	2	1	8	0	0	50	0
Mvmt Flow	34	911	111	57	1238	73	122	14	51	21	4	63

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1311	0	0	1022	0	0	1770	2460	511	1920	2479	655
Stage 1	-	-	-	-	-	-	1035	1035	-	1389	1389	-
Stage 2	-	-	-	-	-	-	736	1425	-	531	1090	-
Critical Hdwy	4.16	-	-	4.18	-	-	7.52	6.66	6.9	7.5	7.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.66	-	6.5	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.66	-	6.5	6.5	-
Follow-up Hdwy	2.23	-	-	2.24	-	-	3.51	4.08	3.3	3.5	4.5	3.3
Pot Cap-1 Maneuver	518	-	-	663	-	-	~ 53	28	513	42	15	413
Stage 1	-	-	-	-	-	-	250	295	-	153	137	-
Stage 2	-	-	-	-	-	-	379	189	-	505	205	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	518	-	-	663	-	-	~ 36	24	513	28	13	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	127	94	-	101	65	-
Stage 1	-	-	-	-	-	-	234	275	-	140	125	-
Stage 2	-	-	-	-	-	-	284	173	-	403	191	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.4	0.46	199.22	34.84
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	154	518	-	-	663	-	-	206
HCM Lane V/C Ratio	1.214	0.066	-	-	0.086	-	-	0.426
HCM Ctrl Dly (s/v)	199.2	12.4	-	-	10.9	-	-	34.8
HCM Lane LOS	F	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	10.7	0.2	-	-	0.3	-	-	2

Notes

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

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	643	10	7	779	58	3	0	0	50	0	56
Future Vol, veh/h	52	643	10	7	779	58	3	0	0	50	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	182	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	3	30	57	2	7	0	0	0	2	0	0
Mvmt Flow	57	699	11	8	847	63	3	0	0	54	0	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	910	0	0	710	0	0	1256	1742	355	1356	1716	455
Stage 1	-	-	-	-	-	-	817	817	-	893	893	-
Stage 2	-	-	-	-	-	-	439	925	-	463	823	-
Critical Hdwy	4.18	-	-	5.24	-	-	7.5	6.5	6.9	7.54	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Follow-up Hdwy	2.24	-	-	2.77	-	-	3.5	4	3.3	3.52	4	3.3
Pot Cap-1 Maneuver	732	-	-	600	-	-	130	88	647	108	91	558
Stage 1	-	-	-	-	-	-	341	393	-	303	362	-
Stage 2	-	-	-	-	-	-	572	351	-	549	391	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	732	-	-	600	-	-	106	80	647	98	83	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	215	183	-	212	200	-
Stage 1	-	-	-	-	-	-	314	363	-	299	358	-
Stage 2	-	-	-	-	-	-	503	346	-	506	360	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.76	0.09	22.03	22.88
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	215	732	-	-	600	-	-	315
HCM Lane V/C Ratio	0.015	0.077	-	-	0.013	-	-	0.366
HCM Ctrl Dly (s/v)	22	10.3	-	-	11.1	-	-	22.9
HCM Lane LOS	C	B	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0	0.3	-	-	0	-	-	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	511	148	56	670	3	151	8	106	2	5	3
Future Volume (veh/h)	3	511	148	56	670	3	151	8	106	2	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1811	1589	1841	907	1811	1900	1811	1900	1604	1900
Adj Flow Rate, veh/h	3	544	141	60	713	3	161	9	0	2	5	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	6	21	4	67	6	0	6	0	20	0
Cap, veh/h	607	1431	369	532	1828	8	279	11		86	157	27
Arrive On Green	0.13	0.51	0.51	0.13	0.51	0.51	0.14	0.14	0.00	0.14	0.14	0.14
Sat Flow, veh/h	1810	2795	722	1513	3572	15	1382	77	1535	219	1140	194
Grp Volume(v), veh/h	3	345	340	60	349	367	170	0	0	8	0	0
Grp Sat Flow(s),veh/h/ln	1810	1777	1740	1513	1749	1838	1460	0	1535	1553	0	0
Q Serve(g_s), s	0.0	9.4	9.5	1.2	9.7	9.7	8.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.4	9.5	1.2	9.7	9.7	9.1	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.41	1.00		0.01	0.95		1.00	0.25		0.12
Lane Grp Cap(c), veh/h	607	910	891	532	895	941	289	0		271	0	0
V/C Ratio(X)	0.00	0.38	0.38	0.11	0.39	0.39	0.59	0.00		0.03	0.00	0.00
Avail Cap(c_a), veh/h	811	910	891	702	895	941	343	0		324	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.9	11.8	11.8	6.1	11.9	11.9	33.6	0.0	0.0	29.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	1.3	1.2	1.9	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	5.6	5.5	0.5	6.1	6.4	5.7	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.9	12.1	12.1	6.2	13.2	13.1	35.5	0.0	0.0	29.9	0.0	0.0
LnGrp LOS	A	B	B	A	B	B	D			C		
Approach Vol, veh/h		688			776			170			8	
Approach Delay, s/veh		12.1			12.6			35.5			29.9	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	47.0		17.0	16.0	47.0		17.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	19.0	29.0		14.0	19.0	29.0		14.0
Max Q Clear Time (g_c+I1), s	2.0	11.7		11.1	3.2	11.5		2.4
Green Ext Time (p_c), s	0.0	3.5		0.2	0.1	3.5		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		14.8
HCM 7th LOS		B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	97	9	5	50
Future Vol, veh/h	6	0	97	9	5	50
Conflicting Peds, #/hr	0	0	0	17	17	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	3	11	0	4
Mvmt Flow	6	0	102	9	5	53

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	187	124	0	0	129	0
Stage 1	124	-	-	-	-	-
Stage 2	63	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	807	932	-	-	1470	-
Stage 1	907	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	791	917	-	-	1446	-
Mov Cap-2 Maneuver	791	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	961	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.59	0	0.68
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	791	164	-
HCM Lane V/C Ratio	-	-	0.008	0.004	-
HCM Ctrl Dly (s/v)	-	-	9.6	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	6	98	50	6
Future Vol, veh/h	0	0	6	98	50	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	4	0
Mvmt Flow	0	0	6	104	53	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	173	56	60	0	-	0
Stage 1	56	-	-	-	-	-
Stage 2	117	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	821	1016	1557	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	818	1016	1557	-	-	-
Mov Cap-2 Maneuver	818	-	-	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	913	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0.42	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	104	-	-	-	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	7	2	4	2
Future Vol, veh/h	4	5	7	2	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	7	10	3	6	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	13	0	-	0	31	12
Stage 1	-	-	-	-	12	-
Stage 2	-	-	-	-	19	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1618	-	-	-	988	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1618	-	-	-	984	1075
Mov Cap-2 Maneuver	-	-	-	-	984	-
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1009	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	3.21	0	8.59
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	1012
HCM Lane V/C Ratio	0.004	-	-	-	0.009
HCM Ctrl Dly (s/v)	7.2	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Appendix F:
Volume Development Spreadsheet

AM Peak Hour

		Eastbound			Westbound			Northbound			Southbound		
		L	T	R	L	T	R	L	T	R	L	T	R
SE Maricamp Road / CR 464 at Oak Road South	Raw Volume	141	476	5	0	991	145	17	0	0	68	0	76
	Existing	141	476	5	0	991	145	17	0	0	68	0	76
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	150	506	5	0	1054	154	18	0	0	72	0	81
	Project	17	0	0	0	0	17	0	0	0	49	0	50
	Total Volume	**167**	**506**	**5**	**0**	**1054**	**171**	**18**	**0**	**0**	**121**	**0**	**131**
Oak Road at Locust Pass Way	Raw Volume	0	0	0	5	0	3	0	97	6	7	109	0
	Existing	0	0	0	5	0	3	0	97	6	7	109	0
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	0	0	0	5	0	3	0	103	6	7	116	0
	Vested Trip	0	0	0	15	0	2	0	0	5	1	0	0
	Total Volume	**0**	**0**	**0**	**20**	**0**	**5**	**0**	**103**	**11**	**8**	**116**	**0**
Oak Track Pass at Oak Road	Raw Volume	7	0	8	0	0	0	4	93	0	0	114	4
	Existing	7	0	8	0	0	0	4	93	0	0	114	4
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	7	0	9	0	0	0	4	99	0	0	121	4
	Project	0	0	0	84	0	0	0	5	28	0	15	0
	Total Volume	**7**	**0**	**9**	**84**	**0**	**0**	**4**	**104**	**28**	**0**	**136**	**4**
Locust Pass Loop at Locust Pass Way	Raw Volume	2	9	0	0	10	2	0	0	0	3	0	0
	Existing	2	9	0	0	10	2	0	0	0	3	0	0
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	2	10	0	0	11	2	0	0	0	3	0	0
	Project	0	0	6	0	0	0	17	0	0	0	0	0
	Total Volume	**2**	**10**	**6**	**0**	**11**	**2**	**17**	**0**	**0**	**3**	**0**	**0**

PM Peak Hour

		Eastbound			Westbound			Northbound			Southbound		
		L	T	R	L	T	R	L	T	R	L	T	R
SE Maricamp Road / CR 464 at Oak Road North	Raw Volume	93	705	105	13	865	37	236	105	30	22	54	77
	Existing	93	705	105	13	865	37	236	105	30	22	54	77
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	99	750	112	14	920	39	251	112	32	23	57	82
	Project	0	51	0	0	29	1	0	0	0	2	0	0
	Total Volume	**99**	**801**	**112**	**14**	**949**	**40**	**251**	**112**	**32**	**25**	**57**	**82**
SE Maricamp Road / CR 464 at Emerald Road South	Raw Volume	31	829	101	52	1,127	66	111	13	46	19	4	57
	Existing	31	829	101	52	1,127	66	111	13	46	19	4	57
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	33	882	107	55	1199	70	118	14	49	20	4	61
	Project	0	53	0	2	31	0	0	0	4	0	0	0
	Total Volume	**33**	**935**	**107**	**57**	**1230**	**70**	**118**	**14**	**53**	**20**	**4**	**61**
SE Maricamp Road / CR 464 at Oak Road South	Raw Volume	52	643	10	7	779	58	3	0	0	50	0	56
	Existing	52	643	10	7	779	58	3	0	0	50	0	56
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	55	684	11	7	829	62	3	0	0	53	0	60
	Project	57	0	0	0	0	57	0	0	0	33	0	33
	Total Volume	**112**	**684**	**11**	**7**	**829**	**119**	**3**	**0**	**0**	**86**	**0**	**93**
SE Maricamp Road / CR 464 at SE 108th Terrace Road	Raw Volume	3	511	148	56	670	3	151	8	106	2	5	3
	Existing	3	511	148	56	670	3	151	8	106	2	5	3
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	3	543	157	60	713	3	161	9	113	2	5	3
	Project	1	9	22	0	16	0	38	0	0	0	0	1
	Total Volume	**4**	**552**	**179**	**60**	**729**	**3**	**199**	**9**	**113**	**2**	**5**	**4**
Oak Road at Locust Pass Way	Raw Volume	0	0	0	6	0	0	0	97	9	5	50	0
	Existing	0	0	0	6	0	0	0	97	9	5	50	0
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	0	0	0	6	0	0	0	103	10	5	53	0
	Vested Trip	0	0	0	10	0	1	0	0	17	2	0	0
	Total Volume	**0**	**0**	**0**	**16**	**0**	**1**	**0**	**103**	**27**	**7**	**53**	**0**
Oak Track Pass at Oak Road	Raw Volume	0	0	0	0	0	0	6	98	0	0	50	6
	Existing	0	0	0	0	0	0	6	98	0	0	50	6
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	0	0	0	0	0	0	6	104	0	0	53	6
	Project	0	0	0	56	0	0	0	17	96	0	10	0
	Total Volume	**0**	**0**	**0**	**56**	**0**	**0**	**6**	**121**	**96**	**0**	**63**	**6**
Locust Pass Loop at Locust Pass Way	Raw Volume	4	5	0	0	7	2	0	0	0	4	0	2
	Existing	4	5	0	0	7	2	0	0	0	4	0	2
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	4	5	0	0	7	2	0	0	0	4	0	2
	Project	0	0	20	0	0	0	11	0	0	0	0	0
	Total Volume	**4**	**5**	**20**	**0**	**7**	**2**	**11**	**0**	**0**	**4**	**0**	**2**

Appendix G:
ITE Trip Generation Summary Sheets

Single-Family Detached Housing
(210)

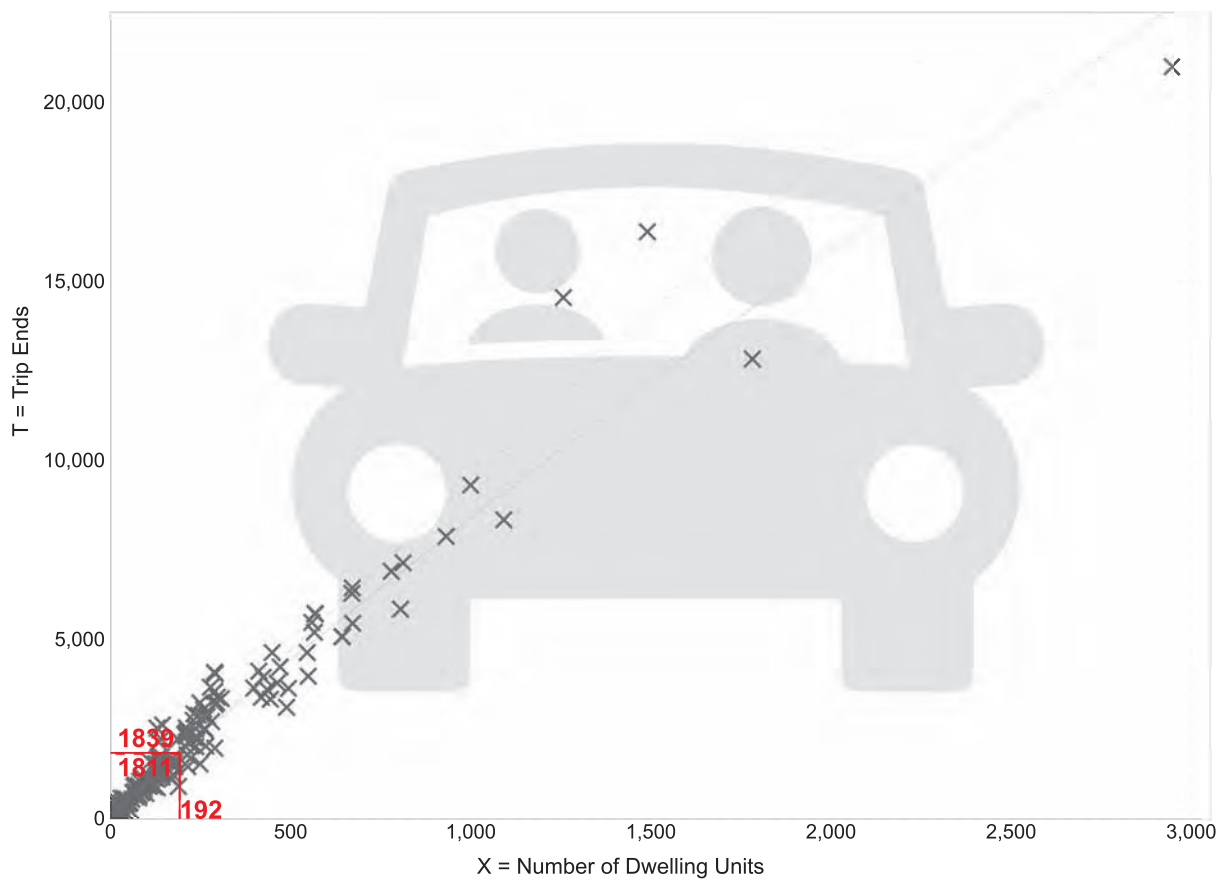
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

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



Fitted Curve Equation: Ln(T) = 0.92 Ln(X) + 2.68 **R^2= 0.95**

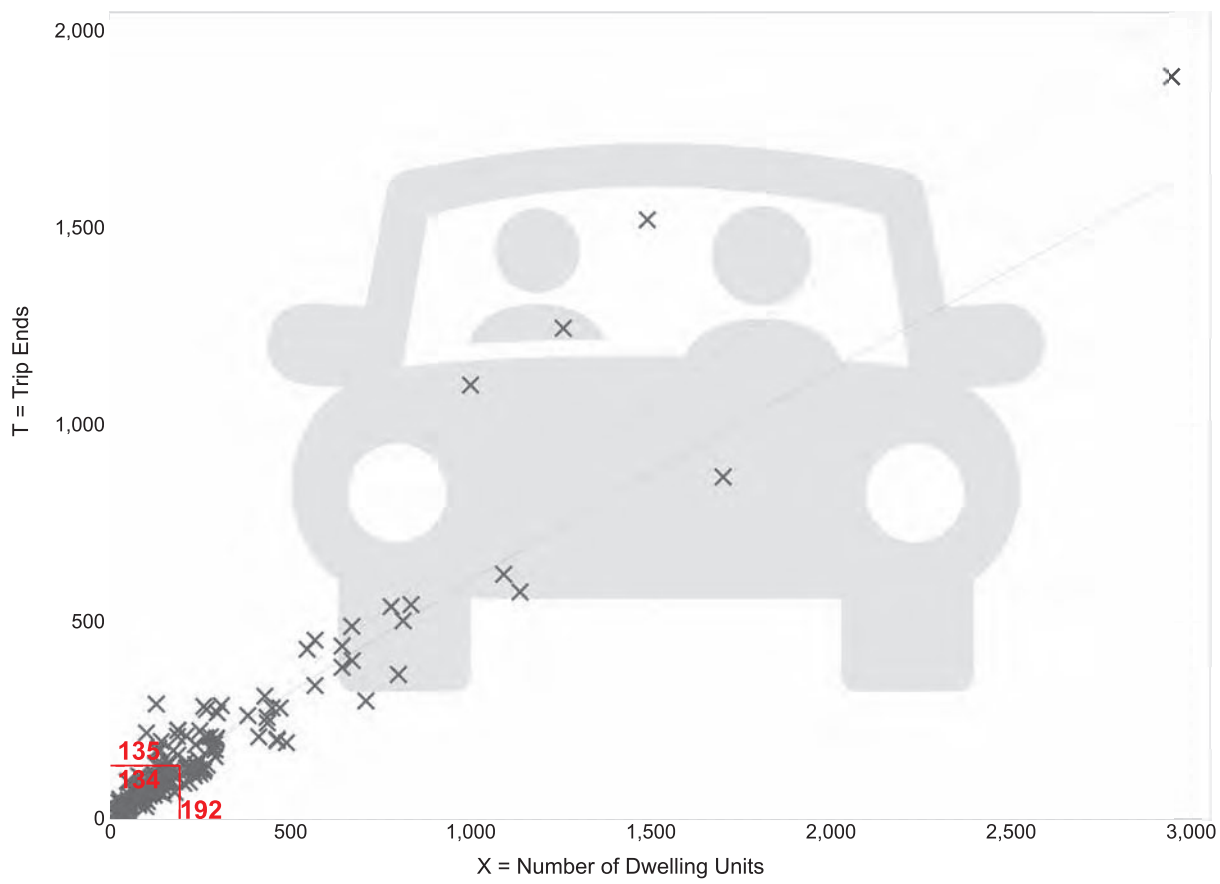
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	192
Avg. Num. of Dwelling Units:	226
Directional Distribution:	25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

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

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.91 Ln(X) + 0.12 **R^2= 0.90**

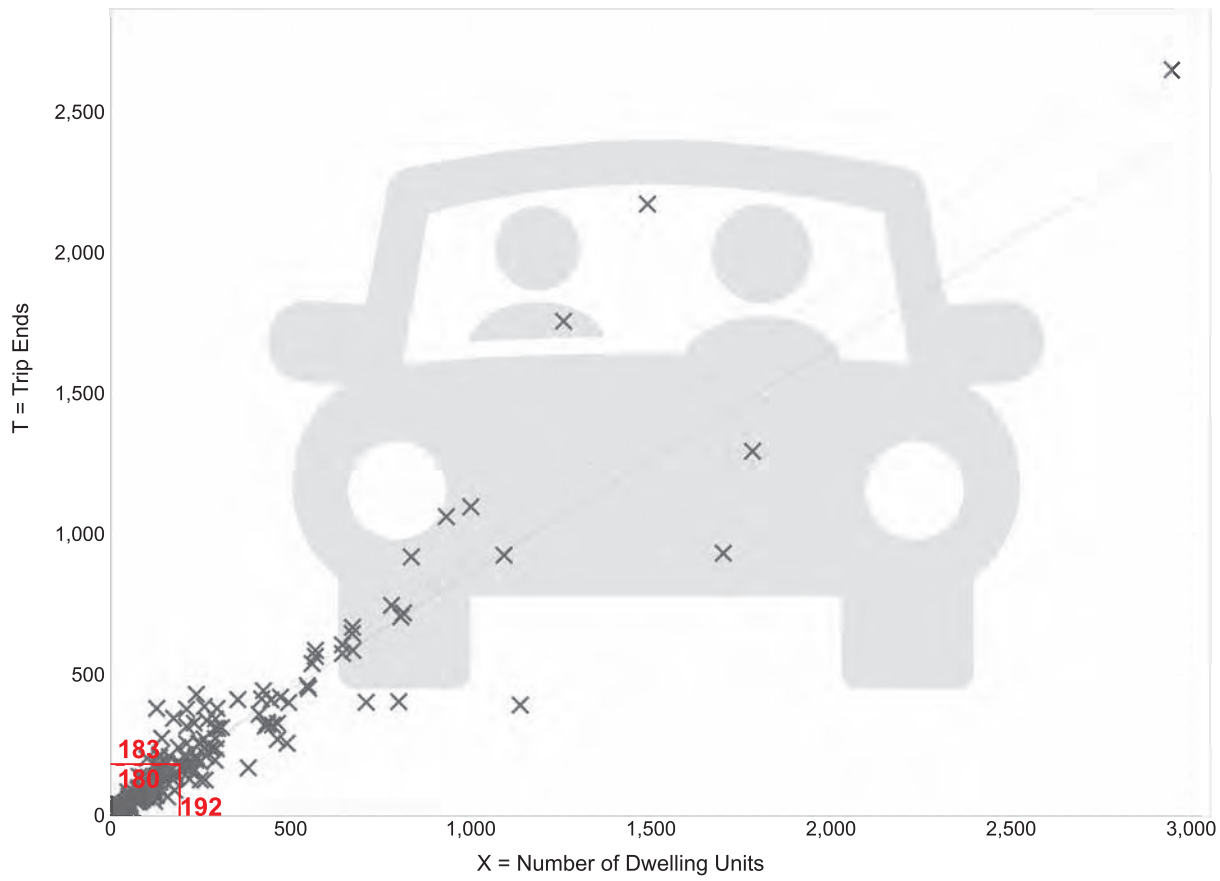
Single-Family Detached Housing
(210)

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

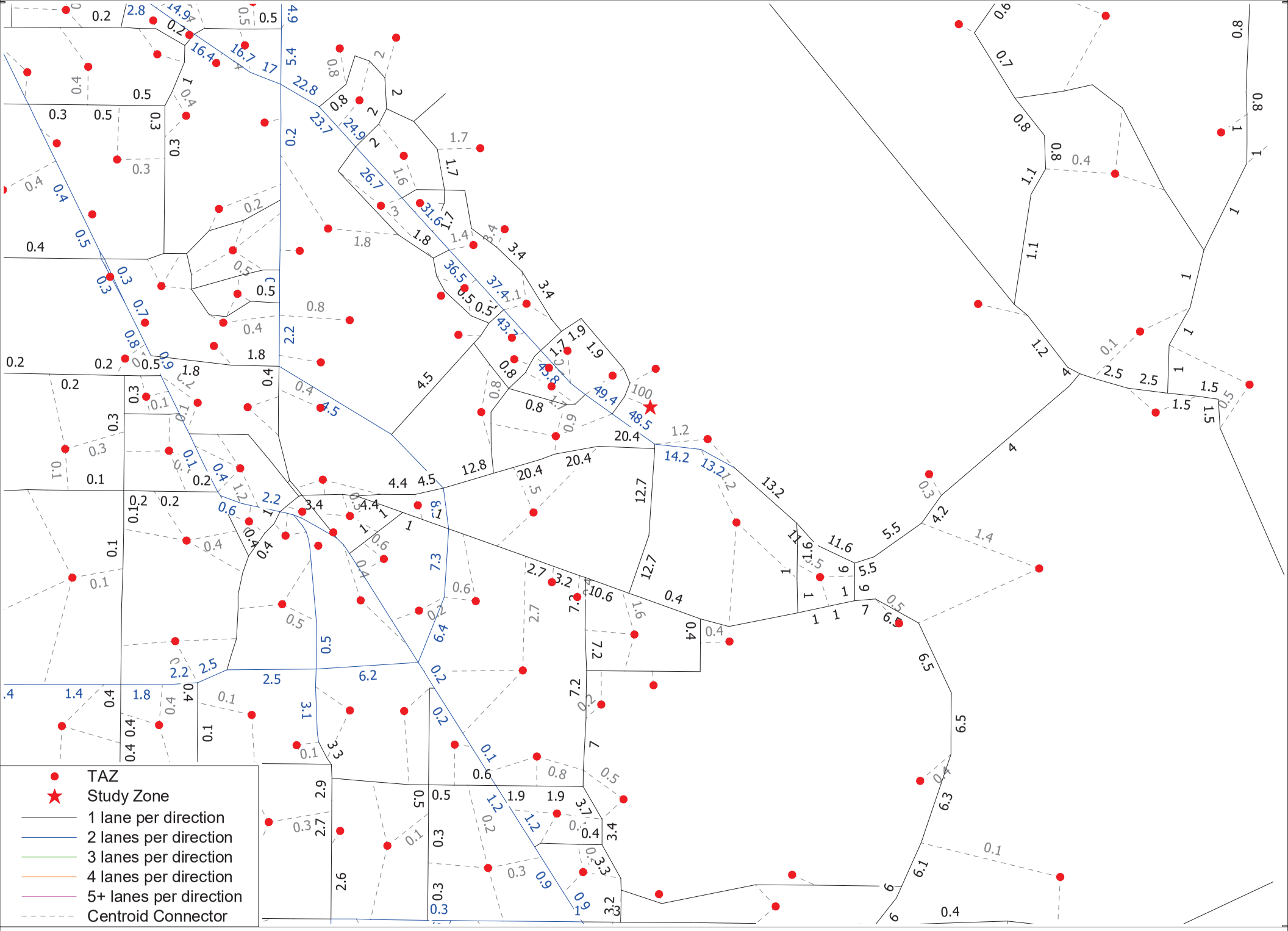
Data Plot and Equation



× **Study Site** ——— **Fitted Curve** - - - - **Average Rate**

Fitted Curve Equation: Ln(T) = 0.94 Ln(X) + 0.27 **R^2= 0.92**

Appendix H:
CFRPM Travel Demand Model Plot



CFRPM V7 Year2030

C:\model\FSUTMS\D5\CFRPM7_OakShore\Base\CF_2030\OUTPUT\HWYLOAD_AllDay_A30.NET

cube

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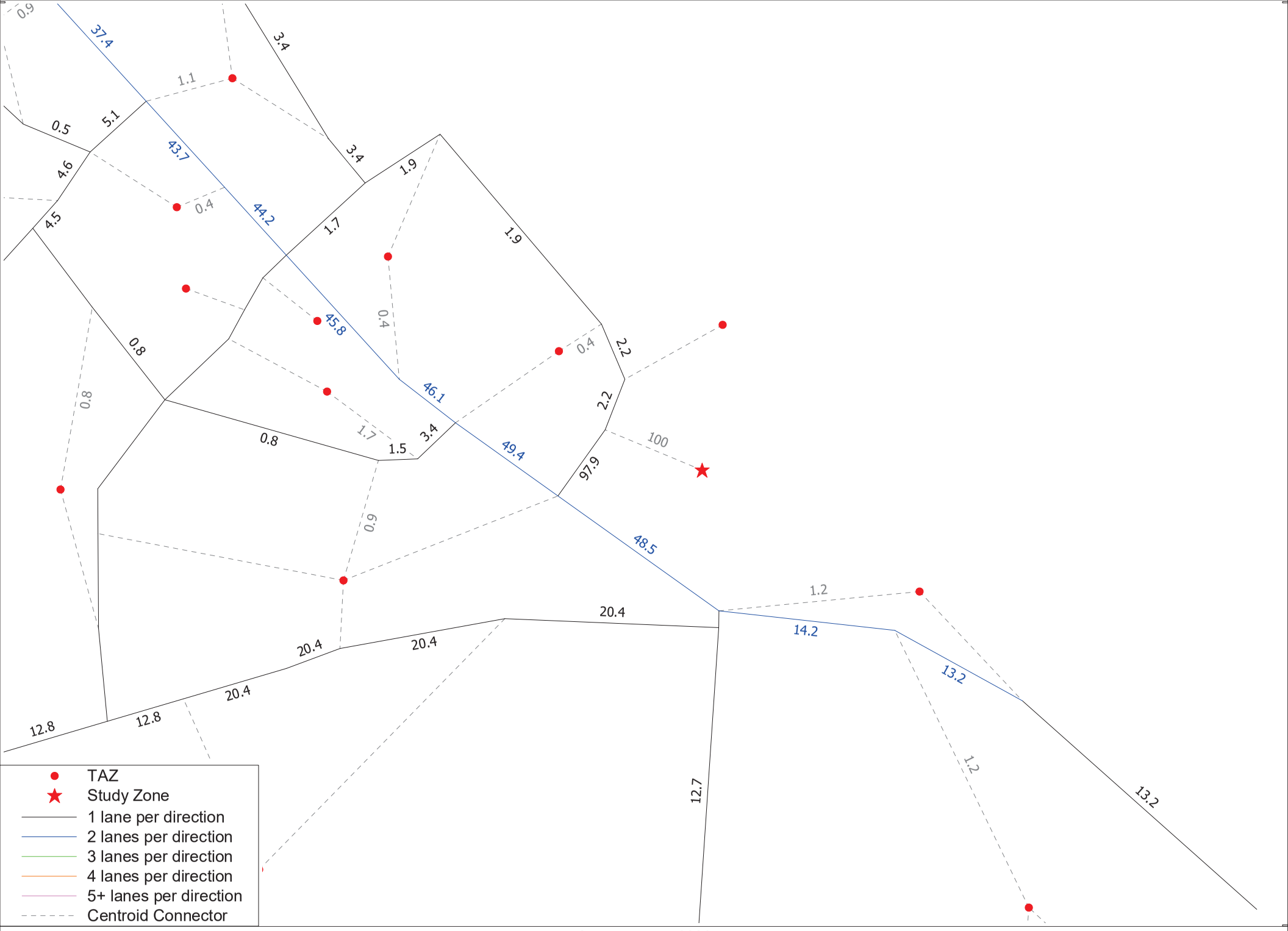

CFRPM V7 Year2030

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Appendix I:
Background Conditions Analysis

AM Peak Analysis

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	506	5	0	1054	154	18	0	0	72	0	81
Future Vol, veh/h	150	506	5	0	1054	154	18	0	0	72	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	182	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	7	3	0	0	2	8	41	0	0	0	0	4
Mvmt Flow	156	527	5	0	1098	160	19	0	0	75	0	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1258	0	0	532	0	0	1391	2101	266	1754	2023	629
Stage 1	-	-	-	-	-	-	842	842	-	1178	1178	-
Stage 2	-	-	-	-	-	-	549	1258	-	576	845	-
Critical Hdwy	4.24	-	-	4.1	-	-	8.32	6.5	6.9	7.5	6.5	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	7.32	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.32	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.27	-	-	2.2	-	-	3.91	4	3.3	3.5	4	3.34
Pot Cap-1 Maneuver	522	-	-	1045	-	-	72	52	738	~ 55	59	420
Stage 1	-	-	-	-	-	-	254	383	-	206	267	-
Stage 2	-	-	-	-	-	-	400	244	-	475	382	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	522	-	-	1045	-	-	40	37	738	~ 39	41	420
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	72	-	133	141	-
Stage 1	-	-	-	-	-	-	178	268	-	206	267	-
Stage 2	-	-	-	-	-	-	320	244	-	333	267	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.36	0	51.37	63.15
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	96	522	-	-	1045	-	-	208
HCM Lane V/C Ratio	0.195	0.299	-	-	-	-	-	0.766
HCM Ctrl Dly (s/v)	51.4	14.8	-	-	0	-	-	63.1
HCM Lane LOS	F	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.7	1.2	-	-	0	-	-	5.3

Notes

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

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	3	103	6	7	116
Future Vol, veh/h	5	3	103	6	7	116
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	14	50	0	4
Mvmt Flow	7	4	137	8	9	155

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	318	144	0	0	148	0
Stage 1	144	-	-	-	-	-
Stage 2	173	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	680	908	-	-	1446	-
Stage 1	888	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	673	906	-	-	1441	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.9	0	0.43
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	745	102	-
HCM Lane V/C Ratio	-	-	0.014	0.006	-
HCM Ctrl Dly (s/v)	-	-	9.9	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	9	4	99	121	4
Future Vol, veh/h	7	9	4	99	121	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	18	4	0
Mvmt Flow	9	11	5	125	153	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	291	156	158	0	-	0
Stage 1	156	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	704	895	1434	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	701	895	1434	-	-	-
Mov Cap-2 Maneuver	701	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	896	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.63	0.29	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	70	-	799	-	-
HCM Lane V/C Ratio	0.004	-	0.025	-	-
HCM Ctrl Dly (s/v)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	10	11	2	3	0
Future Vol, veh/h	2	10	11	2	3	0
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	11	12	2	3	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	15	0	-	0	28	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1616	-	-	-	992	1072
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1013	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1615	-	-	-	988	1071
Mov Cap-2 Maneuver	-	-	-	-	988	-
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1012	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.21	0	8.65
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	300	-	-	-	988
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Ctrl Dly (s/v)	7.2	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

PM Peak Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	750	112	14	920	39	251	112	32	23	57	82
Future Volume (veh/h)	99	750	112	14	920	39	251	112	32	23	57	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1870	1900	1900	1811	1885	1841	1900	1900	1841	1811
Adj Flow Rate, veh/h	106	806	106	15	989	37	195	225	14	25	61	40
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	2	0	0	6	1	4	0	0	4	6
Cap, veh/h	130	1781	234	35	1827	68	264	271	237	90	91	76
Arrive On Green	0.07	0.57	0.57	0.02	0.51	0.51	0.15	0.15	0.15	0.05	0.05	0.05
Sat Flow, veh/h	1781	3132	412	1810	3548	133	1795	1841	1610	1810	1841	1535
Grp Volume(v), veh/h	106	454	458	15	503	523	195	225	14	25	61	40
Grp Sat Flow(s),veh/h/ln	1781	1763	1781	1810	1805	1876	1795	1841	1610	1810	1841	1535
Q Serve(g_s), s	7.6	19.4	19.4	1.1	24.4	24.4	13.5	15.4	1.0	1.7	4.2	3.3
Cycle Q Clear(g_c), s	7.6	19.4	19.4	1.1	24.4	24.4	13.5	15.4	1.0	1.7	4.2	3.3
Prop In Lane	1.00		0.23	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	1003	1013	35	930	966	264	271	237	90	91	76
V/C Ratio(X)	0.81	0.45	0.45	0.43	0.54	0.54	0.74	0.83	0.06	0.28	0.67	0.53
Avail Cap(c_a), veh/h	200	1003	1013	175	930	966	449	460	403	210	214	178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.4	16.3	16.3	63.0	21.2	21.2	53.0	53.9	47.7	59.6	60.7	60.3
Incr Delay (d2), s/veh	13.7	1.5	1.5	8.1	2.3	2.2	4.0	6.5	0.1	1.7	8.2	5.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	12.1	12.2	1.0	15.4	15.9	10.5	12.2	0.7	1.5	3.9	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.1	17.8	17.7	71.2	23.5	23.4	57.1	60.4	47.8	61.2	69.0	65.9
LnGrp LOS	E	B	B	E	C	C	E	E	D	E	E	E
Approach Vol, veh/h		1018			1041			434			126	
Approach Delay, s/veh		23.5			24.1			58.5			66.4	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.9	74.1		25.6	9.9	81.1		13.3
Change Period (Y+Rc), s	7.4	7.2		6.5	7.4	7.2		6.9
Max Green Setting (Gmax), s	14.6	39.8		32.5	12.6	41.8		15.1
Max Q Clear Time (g_c+I1), s	9.6	26.4		17.4	3.1	21.4		6.2
Green Ext Time (p_c), s	0.1	4.9		1.7	0.0	5.1		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	31.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	23

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	882	107	55	1199	70	118	14	49	20	4	60
Future Vol, veh/h	33	882	107	55	1199	70	118	14	49	20	4	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	178	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	2	2	4	2	2	1	8	0	0	50	0
Mvmt Flow	36	969	118	60	1318	77	130	15	54	22	4	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1395	0	0	1087	0	0	1882	2616	543	2042	2636	697
Stage 1	-	-	-	-	-	-	1101	1101	-	1477	1477	-
Stage 2	-	-	-	-	-	-	782	1515	-	565	1159	-
Critical Hdwy	4.16	-	-	4.18	-	-	7.52	6.66	6.9	7.5	7.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.66	-	6.5	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.66	-	6.5	6.5	-
Follow-up Hdwy	2.23	-	-	2.24	-	-	3.51	4.08	3.3	3.5	4.5	3.3
Pot Cap-1 Maneuver	481	-	-	626	-	-	~ 44	22	489	34	11	388
Stage 1	-	-	-	-	-	-	228	274	-	135	122	-
Stage 2	-	-	-	-	-	-	356	171	-	482	187	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	481	-	-	626	-	-	~ 28	18	489	~ 21	9	388
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 111	80	-	87	55	-
Stage 1	-	-	-	-	-	-	211	253	-	122	110	-
Stage 2	-	-	-	-	-	-	256	154	-	373	173	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.42	0.47	$ 306.09	42.73
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	135	481	-	-	626	-	-	184
HCM Lane V/C Ratio	1.468	0.075	-	-	0.097	-	-	0.501
HCM Ctrl Dly (s/v)	$ 306.1	13.1	-	-	11.4	-	-	42.7
HCM Lane LOS	F	B	-	-	B	-	-	E
HCM 95th %tile Q(veh)	13.5	0.2	-	-	0.3	-	-	2.5

Notes

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

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	684	11	7	829	62	3	0	0	53	0	60
Future Vol, veh/h	55	684	11	7	829	62	3	0	0	53	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	182	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	3	30	57	2	7	0	0	0	2	0	0
Mvmt Flow	60	743	12	8	901	67	3	0	0	58	0	65

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	968	0	0	755	0	0	1335	1853	378	1441	1825	484
Stage 1	-	-	-	-	-	-	869	869	-	950	950	-
Stage 2	-	-	-	-	-	-	466	984	-	491	875	-
Critical Hdwy	4.18	-	-	5.24	-	-	7.5	6.5	6.9	7.54	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Follow-up Hdwy	2.24	-	-	2.77	-	-	3.5	4	3.3	3.52	4	3.3
Pot Cap-1 Maneuver	695	-	-	571	-	-	114	75	626	93	78	534
Stage 1	-	-	-	-	-	-	317	372	-	280	341	-
Stage 2	-	-	-	-	-	-	552	329	-	528	370	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	695	-	-	571	-	-	90	68	626	84	70	534
Mov Cap-2 Maneuver	-	-	-	-	-	-	196	166	-	194	184	-
Stage 1	-	-	-	-	-	-	290	340	-	276	337	-
Stage 2	-	-	-	-	-	-	478	325	-	482	338	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.78	0.09	23.72	25.85
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	196	695	-	-	571	-	-	293
HCM Lane V/C Ratio	0.017	0.086	-	-	0.013	-	-	0.419
HCM Ctrl Dly (s/v)	23.7	10.7	-	-	11.4	-	-	25.8
HCM Lane LOS	C	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.1	0.3	-	-	0	-	-	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	543	157	60	713	3	161	9	113	2	5	3
Future Volume (veh/h)	3	543	157	60	713	3	161	9	113	2	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1811	1589	1841	907	1811	1900	1811	1900	1604	1900
Adj Flow Rate, veh/h	3	578	151	64	759	3	171	10	0	2	5	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	6	21	4	67	6	0	6	0	20	0
Cap, veh/h	581	1407	366	510	1802	7	288	12		89	165	28
Arrive On Green	0.13	0.50	0.50	0.13	0.50	0.50	0.15	0.15	0.00	0.15	0.15	0.15
Sat Flow, veh/h	1810	2789	727	1513	3573	14	1379	81	1535	224	1135	194
Grp Volume(v), veh/h	3	368	361	64	371	391	181	0	0	8	0	0
Grp Sat Flow(s),veh/h/ln	1810	1777	1739	1513	1749	1838	1460	0	1535	1554	0	0
Q Serve(g_s), s	0.0	10.3	10.4	1.3	10.7	10.7	9.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.3	10.4	1.3	10.7	10.7	9.7	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.42	1.00		0.01	0.94		1.00	0.25		0.12
Lane Grp Cap(c), veh/h	581	896	877	510	882	927	300	0		283	0	0
V/C Ratio(X)	0.01	0.41	0.41	0.13	0.42	0.42	0.60	0.00		0.03	0.00	0.00
Avail Cap(c_a), veh/h	785	896	877	680	882	927	343	0		325	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	12.4	12.4	6.5	12.5	12.5	33.3	0.0	0.0	29.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	1.5	1.4	2.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	6.2	6.1	0.6	6.8	7.1	6.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.2	12.7	12.7	6.6	14.0	13.9	35.6	0.0	0.0	29.4	0.0	0.0
LnGrp LOS	A	B	B	A	B	B	D			C		
Approach Vol, veh/h		732			826			181			8	
Approach Delay, s/veh		12.7			13.3			35.6			29.4	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	46.4		17.6	16.0	46.4		17.6
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	19.0	29.0		14.0	19.0	29.0		14.0
Max Q Clear Time (g_c+I1), s	2.0	12.7		11.7	3.3	12.4		2.4
Green Ext Time (p_c), s	0.0	3.7		0.2	0.1	3.7		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		15.4
HCM 7th LOS		B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	103	10	5	53
Future Vol, veh/h	6	0	103	10	5	53
Conflicting Peds, #/hr	0	0	0	17	17	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	3	11	0	4
Mvmt Flow	6	0	108	11	5	56

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	197	131	0	0	136	0
Stage 1	131	-	-	-	-	-
Stage 2	66	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	796	924	-	-	1461	-
Stage 1	900	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	780	909	-	-	1437	-
Mov Cap-2 Maneuver	780	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.65	0	0.65
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	780	155	-
HCM Lane V/C Ratio	-	-	0.008	0.004	-
HCM Ctrl Dly (s/v)	-	-	9.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	6	104	53	6
Future Vol, veh/h	0	0	6	104	53	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	3	4	0
Mvmt Flow	0	0	6	109	56	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	181	59	62	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	122	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	813	1012	1554	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	908	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	810	1012	1554	-	-	-
Mov Cap-2 Maneuver	810	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	908	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	98	-	-	-	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	5	7	2	4	2
Future Vol, veh/h	4	5	7	2	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	7	10	3	6	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	13	0	-	0	31	12
Stage 1	-	-	-	-	12	-
Stage 2	-	-	-	-	19	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1618	-	-	-	988	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1618	-	-	-	984	1075
Mov Cap-2 Maneuver	-	-	-	-	984	-
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1009	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	3.21	0	8.59
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	1012
HCM Lane V/C Ratio	0.004	-	-	-	0.009
HCM Ctrl Dly (s/v)	7.2	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Appendix J:
Volume Derivation Sheets

AM Peak Hour

		Eastbound			Westbound			Northbound			Southbound		
		L	T	R	L	T	R	L	T	R	L	T	R
SE Maricamp Road / CR 464 at Oak Road South	Raw Volume	141	476	5	0	991	145	17	0	0	68	0	76
	Existing	141	476	5	0	991	145	17	0	0	68	0	76
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	150	506	5	0	1054	154	18	0	0	72	0	81
	Project	17	0	0	0	0	17	0	0	0	49	0	50
	Total Volume	**167**	**506**	**5**	**0**	**1054**	**171**	**18**	**0**	**0**	**121**	**0**	**131**
Oak Road at Locust Pass Way	Raw Volume	0	0	0	5	0	3	0	97	6	7	109	0
	Existing	0	0	0	5	0	3	0	97	6	7	109	0
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	0	0	0	5	0	3	0	103	6	7	116	0
	Vested Trip	0	0	0	15	0	2	0	0	5	1	0	0
	Total Volume	**0**	**0**	**0**	**20**	**0**	**5**	**0**	**103**	**11**	**8**	**116**	**0**
Oak Track Pass at Oak Road	Raw Volume	7	0	8	0	0	0	4	93	0	0	114	4
	Existing	7	0	8	0	0	0	4	93	0	0	114	4
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	7	0	9	0	0	0	4	99	0	0	121	4
	Project	0	0	0	84	0	0	0	5	28	0	15	0
	Total Volume	**7**	**0**	**9**	**84**	**0**	**0**	**4**	**104**	**28**	**0**	**136**	**4**
Locust Pass Loop at Locust Pass Way	Raw Volume	2	9	0	0	10	2	0	0	0	3	0	0
	Existing	2	9	0	0	10	2	0	0	0	3	0	0
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	2	10	0	0	11	2	0	0	0	3	0	0
	Project	0	0	6	0	0	0	17	0	0	0	0	0
	Total Volume	**2**	**10**	**6**	**0**	**11**	**2**	**17**	**0**	**0**	**3**	**0**	**0**

PM Peak Hour

		Eastbound			Westbound			Northbound			Southbound		
		L	T	R	L	T	R	L	T	R	L	T	R
SE Maricamp Road / CR 464 at Oak Road North	Raw Volume	93	705	105	13	865	37	236	105	30	22	54	77
	Existing	93	705	105	13	865	37	236	105	30	22	54	77
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	99	750	112	14	920	39	251	112	32	23	57	82
	Project	0	51	0	0	29	1	0	0	0	2	0	0
	Total Volume	**99**	**801**	**112**	**14**	**949**	**40**	**251**	**112**	**32**	**25**	**57**	**82**
SE Maricamp Road / CR 464 at Emerald Road South	Raw Volume	31	829	101	52	1,127	66	111	13	46	19	4	57
	Existing	31	829	101	52	1,127	66	111	13	46	19	4	57
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	33	882	107	55	1199	70	118	14	49	20	4	61
	Project	0	53	0	2	31	0	0	0	4	0	0	0
	Total Volume	**33**	**935**	**107**	**57**	**1230**	**70**	**118**	**14**	**53**	**20**	**4**	**61**
SE Maricamp Road / CR 464 at Oak Road South	Raw Volume	52	643	10	7	779	58	3	0	0	50	0	56
	Existing	52	643	10	7	779	58	3	0	0	50	0	56
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	55	684	11	7	829	62	3	0	0	53	0	60
	Project	57	0	0	0	0	57	0	0	0	33	0	33
	Total Volume	**112**	**684**	**11**	**7**	**829**	**119**	**3**	**0**	**0**	**86**	**0**	**93**
SE Maricamp Road / CR 464 at SE 108th Terrace Road	Raw Volume	3	511	148	56	670	3	151	8	106	2	5	3
	Existing	3	511	148	56	670	3	151	8	106	2	5	3
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	3	543	157	60	713	3	161	9	113	2	5	3
	Project	1	9	22	0	16	0	38	0	0	0	0	1
	Total Volume	**4**	**552**	**179**	**60**	**729**	**3**	**199**	**9**	**113**	**2**	**5**	**4**
Oak Road at Locust Pass Way	Raw Volume	0	0	0	6	0	0	0	97	9	5	50	0
	Existing	0	0	0	6	0	0	0	97	9	5	50	0
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	0	0	0	6	0	0	0	103	10	5	53	0
	Vested Trip	0	0	0	10	0	1	0	0	17	2	0	0
	Total Volume	**0**	**0**	**0**	**16**	**0**	**1**	**0**	**103**	**27**	**7**	**53**	**0**
Oak Track Pass at Oak Road	Raw Volume	0	0	0	0	0	0	6	98	0	0	50	6
	Existing	0	0	0	0	0	0	6	98	0	0	50	6
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	0	0	0	0	0	0	6	104	0	0	53	6
	Project	0	0	0	56	0	0	0	17	96	0	10	0
	Total Volume	**0**	**0**	**0**	**56**	**0**	**0**	**6**	**121**	**96**	**0**	**63**	**6**
Locust Pass Loop at Locust Pass Way	Raw Volume	4	5	0	0	7	2	0	0	0	4	0	2
	Existing	4	5	0	0	7	2	0	0	0	4	0	2
	Growth Rate	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%	2.12%
	Future background	4	5	0	0	7	2	0	0	0	4	0	2
	Project	0	0	20	0	0	0	11	0	0	0	0	0
	Total Volume	**4**	**5**	**20**	**0**	**7**	**2**	**11**	**0**	**0**	**4**	**0**	**2**

Appendix K:
Buildout Conditions Analysis

AM Peak Analysis

Intersection	
Int Delay, s/veh	28.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	167	506	5	0	1054	171	18	0	0	121	0	131
Future Vol, veh/h	167	506	5	0	1054	171	18	0	0	121	0	131
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	182	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	7	3	0	0	2	8	41	0	0	0	0	4
Mvmt Flow	174	527	5	0	1098	178	19	0	0	126	0	136

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1276	0	0	532	0	0	1427	2154	266	1798	2067	638
Stage 1	-	-	-	-	-	-	878	878	-	1187	1187	-
Stage 2	-	-	-	-	-	-	549	1276	-	611	880	-
Critical Hdwy	4.24	-	-	4.1	-	-	8.32	6.5	6.9	7.5	6.5	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	7.32	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.32	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.27	-	-	2.2	-	-	3.91	4	3.3	3.5	4	3.34
Pot Cap-1 Maneuver	514	-	-	1045	-	-	67	49	738	~ 51	55	415
Stage 1	-	-	-	-	-	-	240	369	-	203	264	-
Stage 2	-	-	-	-	-	-	400	240	-	452	368	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	514	-	-	1045	-	-	30	32	738	~ 34	36	415
Mov Cap-2 Maneuver	-	-	-	-	-	-	67	56	-	~ 125	132	-
Stage 1	-	-	-	-	-	-	159	244	-	203	264	-
Stage 2	-	-	-	-	-	-	269	240	-	299	243	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	3.83	0	79.14	227.71
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	67	514	-	-	1045	-	-	197
HCM Lane V/C Ratio	0.282	0.339	-	-	-	-	-	1.335
HCM Ctrl Dly (s/v)	79.1	15.6	-	-	0	-	-	227.7
HCM Lane LOS	F	C	-	-	A	-	-	F
HCM 95th %tile Q(veh)	1	1.5	-	-	0	-	-	14.9

Notes

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

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	5	103	11	8	116
Future Vol, veh/h	20	5	103	11	8	116
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	14	27	0	4
Mvmt Flow	27	7	137	15	11	155

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	324	148	0	0	155	0
Stage 1	148	-	-	-	-	-
Stage 2	176	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	674	904	-	-	1438	-
Stage 1	885	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	667	902	-	-	1433	-
Mov Cap-2 Maneuver	667	-	-	-	-	-
Stage 1	882	-	-	-	-	-
Stage 2	852	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.37	0	0.49
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	704	116	-
HCM Lane V/C Ratio	-	-	0.047	0.007	-
HCM Ctrl Dly (s/v)	-	-	10.4	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	9	84	0	0	4	104	28	0	136	4
Future Vol, veh/h	7	0	9	84	0	0	4	104	28	0	136	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	10	10	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	18	0	0	4	0
Mvmt Flow	9	0	11	106	0	0	5	132	35	0	172	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	316	362	175	342	347	159	177	0	0	177	0	0
Stage 1	175	175	-	169	169	-	-	-	-	-	-	-
Stage 2	142	187	-	172	177	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	640	569	874	616	580	891	1411	-	-	1411	-	-
Stage 1	832	758	-	837	762	-	-	-	-	-	-	-
Stage 2	866	749	-	834	756	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	638	561	874	600	572	883	1411	-	-	1398	-	-
Mov Cap-2 Maneuver	638	561	-	600	572	-	-	-	-	-	-	-
Stage 1	832	758	-	826	752	-	-	-	-	-	-	-
Stage 2	863	739	-	824	756	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.92	12.29	0.22	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	51	-	-	752	600	1398	-	-
HCM Lane V/C Ratio	0.004	-	-	0.027	0.177	-	-	-
HCM Ctrl Dly (s/v)	7.6	0	-	9.9	12.3	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.6	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	10	6	0	11	2	17	0	0	3	0	0
Future Vol, veh/h	2	10	6	0	11	2	17	0	0	3	0	0
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	10	6	0	11	2	18	0	0	3	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	15	0	0	17	0	0	29	32	14	28	34	14
Stage 1	-	-	-	-	-	-	18	18	-	14	14	-
Stage 2	-	-	-	-	-	-	11	15	-	15	21	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1617	-	-	1614	-	-	985	864	1072	986	862	1072
Stage 1	-	-	-	-	-	-	1007	885	-	1012	888	-
Stage 2	-	-	-	-	-	-	1014	887	-	1011	882	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1615	-	-	1614	-	-	984	862	1072	984	860	1071
Mov Cap-2 Maneuver	-	-	-	-	-	-	984	862	-	984	860	-
Stage 1	-	-	-	-	-	-	1005	883	-	1011	887	-
Stage 2	-	-	-	-	-	-	1014	887	-	1009	881	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.8	0	8.73	8.67
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	984	186	-	-	1614	-	-	984
HCM Lane V/C Ratio	0.018	0.001	-	-	-	-	-	0.003
HCM Ctrl Dly (s/v)	8.7	7.2	0	-	0	-	-	8.7
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

PM Peak Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	801	112	14	949	40	251	112	32	25	57	82
Future Volume (veh/h)	99	801	112	14	949	40	251	112	32	25	57	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1870	1900	1900	1811	1885	1841	1900	1900	1841	1811
Adj Flow Rate, veh/h	106	861	105	15	1020	38	195	225	12	27	61	36
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	3	2	0	0	6	1	4	0	0	4	6
Cap, veh/h	130	1799	219	35	1828	68	264	271	237	89	91	76
Arrive On Green	0.07	0.57	0.57	0.02	0.52	0.52	0.15	0.15	0.15	0.05	0.05	0.05
Sat Flow, veh/h	1781	3163	386	1810	3549	132	1795	1841	1610	1810	1841	1535
Grp Volume(v), veh/h	106	480	486	15	519	539	195	225	12	27	61	36
Grp Sat Flow(s),veh/h/ln	1781	1763	1786	1810	1805	1876	1795	1841	1610	1810	1841	1535
Q Serve(g_s), s	7.6	21.0	21.0	1.1	25.4	25.4	13.5	15.4	0.8	1.9	4.2	3.0
Cycle Q Clear(g_c), s	7.6	21.0	21.0	1.1	25.4	25.4	13.5	15.4	0.8	1.9	4.2	3.0
Prop In Lane	1.00		0.22	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	1003	1016	35	930	966	264	271	237	89	91	76
V/C Ratio(X)	0.81	0.48	0.48	0.43	0.56	0.56	0.74	0.83	0.05	0.30	0.67	0.47
Avail Cap(c_a), veh/h	200	1003	1016	175	930	966	449	460	403	210	214	178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.69	0.69	0.69	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.4	16.6	16.6	63.0	21.4	21.4	53.1	53.9	47.6	59.6	60.8	60.1
Incr Delay (d2), s/veh	13.7	1.6	1.6	5.7	1.7	1.6	4.0	6.5	0.1	1.9	8.3	4.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	12.9	13.0	1.0	14.8	15.3	10.5	12.2	0.6	1.6	3.9	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.1	18.2	18.2	68.7	23.1	23.1	57.1	60.4	47.7	61.5	69.0	64.7
LnGrp LOS	E	B	B	E	C	C	E	E	D	E	E	E
Approach Vol, veh/h		1072			1073			432			124	
Approach Delay, s/veh		23.6			23.7			58.5			66.1	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.9	74.2		25.6	9.9	81.2		13.3
Change Period (Y+Rc), s	7.4	7.2		6.5	7.4	7.2		6.9
Max Green Setting (Gmax), s	14.6	39.8		32.5	12.6	41.8		15.1
Max Q Clear Time (g_c+I1), s	9.6	27.4		17.4	3.1	23.0		6.2
Green Ext Time (p_c), s	0.1	4.8		1.7	0.0	5.3		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	31.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	935	107	57	1230	70	118	14	53	20	4	60
Future Volume (veh/h)	33	935	107	57	1230	70	118	14	53	20	4	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1841	1870	1870	1885	1781	1900	1900	1159	1900
Adj Flow Rate, veh/h	36	1027	118	63	1352	77	130	15	58	22	4	66
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	2	2	4	2	2	1	8	0	0	50	0
Cap, veh/h	49	1878	216	81	2060	117	259	35	99	85	23	189
Arrive On Green	0.03	0.58	0.58	0.05	0.60	0.60	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1767	3212	369	1753	3418	194	803	132	374	192	88	710
Grp Volume(v), veh/h	36	568	577	63	701	728	203	0	0	92	0	0
Grp Sat Flow(s),veh/h/ln	1767	1777	1804	1753	1777	1835	1310	0	0	990	0	0
Q Serve(g_s), s	2.6	25.4	25.4	4.6	33.7	33.9	8.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.6	25.4	25.4	4.6	33.7	33.9	18.2	0.0	0.0	9.4	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.11	0.64		0.29	0.24		0.72
Lane Grp Cap(c), veh/h	49	1039	1055	81	1071	1106	393	0	0	297	0	0
V/C Ratio(X)	0.73	0.55	0.55	0.78	0.65	0.66	0.52	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	105	1039	1055	155	1071	1106	393	0	0	297	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	62.7	16.5	16.5	61.4	16.9	17.0	42.0	0.0	0.0	38.5	0.0	0.0
Incr Delay (d2), s/veh	16.2	1.8	1.8	15.0	3.1	3.1	4.8	0.0	0.0	2.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	14.7	14.9	4.2	19.1	19.8	10.3	0.0	0.0	4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.9	18.3	18.3	76.4	20.1	20.1	46.7	0.0	0.0	41.2	0.0	0.0
LnGrp LOS	E	B	B	E	C	C	D			D		
Approach Vol, veh/h		1181			1492			203			92	
Approach Delay, s/veh		20.1			22.4			46.7			41.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	82.9		39.0	10.5	80.5		39.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	74.3		34.5	11.5	70.5		34.5
Max Q Clear Time (g_c+I1), s	4.6	35.9		20.2	6.6	27.4		11.4
Green Ext Time (p_c), s	0.0	11.5		1.0	0.0	8.2		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	684	11	7	829	119	3	0	0	86	0	93
Future Vol, veh/h	112	684	11	7	829	119	3	0	0	86	0	93
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	182	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	3	30	57	2	7	0	0	0	2	0	0
Mvmt Flow	122	743	12	8	901	129	3	0	0	93	0	101

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1030	0	0	755	0	0	1459	2039	378	1596	1980	515
Stage 1	-	-	-	-	-	-	993	993	-	981	981	-
Stage 2	-	-	-	-	-	-	466	1046	-	615	999	-
Critical Hdwy	4.18	-	-	5.24	-	-	7.5	6.5	6.9	7.54	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.54	5.5	-
Follow-up Hdwy	2.24	-	-	2.77	-	-	3.5	4	3.3	3.52	4	3.3
Pot Cap-1 Maneuver	658	-	-	571	-	-	92	57	626	~ 71	62	510
Stage 1	-	-	-	-	-	-	267	326	-	268	330	-
Stage 2	-	-	-	-	-	-	552	308	-	445	324	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	658	-	-	571	-	-	59	46	626	~ 57	50	510
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	119	-	164	153	-
Stage 1	-	-	-	-	-	-	218	266	-	264	326	-
Stage 2	-	-	-	-	-	-	436	304	-	363	264	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.62	0.08	30.69	54.6
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	143	658	-	-	571	-	-	253
HCM Lane V/C Ratio	0.023	0.185	-	-	0.013	-	-	0.769
HCM Ctrl Dly (s/v)	30.7	11.7	-	-	11.4	-	-	54.6
HCM Lane LOS	D	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.1	0.7	-	-	0	-	-	5.6

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	552	179	60	729	3	199	9	113	2	5	4
Future Volume (veh/h)	4	552	179	60	729	3	199	9	113	2	5	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1811	1589	1841	907	1811	1900	1811	1900	1604	1900
Adj Flow Rate, veh/h	4	587	173	64	776	3	212	10	0	2	5	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	2	6	21	4	67	6	0	6	0	20	0
Cap, veh/h	550	1292	380	478	1705	7	328	11		90	173	59
Arrive On Green	0.13	0.48	0.48	0.13	0.48	0.48	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	1810	2707	796	1513	3573	14	1389	66	1535	201	1002	344
Grp Volume(v), veh/h	4	385	375	64	380	399	222	0	0	9	0	0
Grp Sat Flow(s),veh/h/ln	1810	1777	1726	1513	1749	1838	1455	0	1535	1547	0	0
Q Serve(g_s), s	0.1	11.6	11.6	1.4	11.6	11.6	11.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	11.6	11.6	1.4	11.6	11.6	11.9	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.46	1.00		0.01	0.95		1.00	0.22		0.22
Lane Grp Cap(c), veh/h	550	848	824	478	834	877	339	0		322	0	0
V/C Ratio(X)	0.01	0.45	0.46	0.13	0.46	0.46	0.65	0.00		0.03	0.00	0.00
Avail Cap(c_a), veh/h	754	848	824	648	834	877	343	0		325	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.2	14.0	14.0	7.6	14.0	14.0	32.2	0.0	0.0	27.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	1.8	1.7	4.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	7.1	6.9	0.6	7.6	7.9	7.7	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.2	14.3	14.4	7.7	15.8	15.7	36.6	0.0	0.0	27.6	0.0	0.0
LnGrp LOS	A	B	B	A	B	B	D			C		
Approach Vol, veh/h		764			843			222			9	
Approach Delay, s/veh		14.3			15.1			36.6			27.6	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	44.2		19.8	16.0	44.2		19.8
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	19.0	29.0		14.0	19.0	29.0		14.0
Max Q Clear Time (g_c+I1), s	2.1	13.6		13.9	3.4	13.6		2.4
Green Ext Time (p_c), s	0.0	3.8		0.0	0.1	3.7		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	17.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	1	103	27	7	53
Future Vol, veh/h	16	1	103	27	7	53
Conflicting Peds, #/hr	0	0	0	17	17	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	3	4	0	4
Mvmt Flow	17	1	108	28	7	56

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	210	140	0	0	154	0
Stage 1	140	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	783	914	-	-	1439	-
Stage 1	892	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	766	899	-	-	1416	-
Mov Cap-2 Maneuver	766	-	-	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.77	0	0.88
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	773	210	-
HCM Lane V/C Ratio	-	-	0.023	0.005	-
HCM Ctrl Dly (s/v)	-	-	9.8	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	56	0	0	6	121	96	0	63	6
Future Vol, veh/h	0	0	0	56	0	0	6	121	96	0	63	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	27	27	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	0	0	0	60	0	0	6	129	102	0	67	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	212	341	70	287	293	207	73	0	0	258	0	0
Stage 1	70	70	-	220	220	-	-	-	-	-	-	-
Stage 2	141	271	-	67	73	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	750	584	998	670	621	839	1539	-	-	1319	-	-
Stage 1	945	840	-	787	725	-	-	-	-	-	-	-
Stage 2	866	689	-	948	838	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	746	567	998	649	602	817	1539	-	-	1285	-	-
Mov Cap-2 Maneuver	746	567	-	649	602	-	-	-	-	-	-	-
Stage 1	945	840	-	763	703	-	-	-	-	-	-	-
Stage 2	862	668	-	948	838	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	11.1	0.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	44	-	-	-	649	1285	-	-
HCM Lane V/C Ratio	0.004	-	-	-	0.092	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	0	11.1	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	5	20	0	7	2	11	0	0	4	0	2
Future Vol, veh/h	4	5	20	0	7	2	11	0	0	4	0	2
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	7	30	0	10	3	16	0	0	6	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	13	0	0	38	0	0	46	49	23	31	62	12
Stage 1	-	-	-	-	-	-	35	35	-	12	12	-
Stage 2	-	-	-	-	-	-	10	13	-	19	50	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1618	-	-	1585	-	-	961	847	1059	982	833	1075
Stage 1	-	-	-	-	-	-	986	870	-	1014	890	-
Stage 2	-	-	-	-	-	-	1016	888	-	1005	857	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1618	-	-	1583	-	-	954	843	1058	978	829	1075
Mov Cap-2 Maneuver	-	-	-	-	-	-	954	843	-	978	829	-
Stage 1	-	-	-	-	-	-	981	865	-	1014	890	-
Stage 2	-	-	-	-	-	-	1013	888	-	1001	853	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1	0	8.84	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	954	214	-	-	1583	-	-	1008
HCM Lane V/C Ratio	0.017	0.004	-	-	-	-	-	0.009
HCM Ctrl Dly (s/v)	8.8	7.2	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection Improvements

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	506	5	0	1054	171	18	0	0	121	0	131
Future Volume (veh/h)	167	506	5	0	1054	171	18	0	0	121	0	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1856	1900	1900	1870	1781	1292	1900	1900	1900	1900	1841
Adj Flow Rate, veh/h	174	527	5	0	1098	178	19	0	0	126	0	136
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	7	3	0	0	2	8	41	0	0	0	0	4
Cap, veh/h	200	2458	23	1	1639	265	314	0	0	213	9	195
Arrive On Green	0.12	0.69	0.69	0.00	0.54	0.54	0.24	0.00	0.00	0.24	0.00	0.24
Sat Flow, veh/h	1711	3578	34	1810	3063	495	1062	0	0	703	37	799
Grp Volume(v), veh/h	174	260	272	0	636	640	19	0	0	262	0	0
Grp Sat Flow(s),veh/h/ln	1711	1763	1849	1810	1777	1781	1062	0	0	1540	0	0
Q Serve(g_s), s	13.0	7.0	7.0	0.0	33.7	33.9	0.0	0.0	0.0	18.0	0.0	0.0
Cycle Q Clear(g_c), s	13.0	7.0	7.0	0.0	33.7	33.9	2.0	0.0	0.0	20.0	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.28	1.00		0.00	0.48		0.52
Lane Grp Cap(c), veh/h	200	1211	1270	1	951	953	314	0	0	416	0	0
V/C Ratio(X)	0.87	0.21	0.21	0.00	0.67	0.67	0.06	0.00	0.00	0.63	0.00	0.00
Avail Cap(c_a), veh/h	307	1211	1270	70	951	953	314	0	0	416	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	56.4	7.5	7.5	0.0	21.9	21.9	37.9	0.0	0.0	44.6	0.0	0.0
Incr Delay (d2), s/veh	15.2	0.4	0.4	0.0	3.7	3.8	0.4	0.0	0.0	7.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.4	4.4	4.6	0.0	20.0	20.1	0.9	0.0	0.0	13.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	71.6	7.9	7.9	0.0	25.6	25.7	38.3	0.0	0.0	51.6	0.0	0.0
LnGrp LOS	E	A	A		C	C	D			D		
Approach Vol, veh/h		706			1276			19			262	
Approach Delay, s/veh		23.6			25.6			38.3			51.6	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.7	74.1		36.2	0.0	93.8		36.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	23.3	61.5		31.7	5.0	79.8		31.7
Max Q Clear Time (g_c+I1), s	15.0	35.9		4.0	0.0	9.0		22.0
Green Ext Time (p_c), s	0.3	8.7		0.1	0.0	2.9		1.0

Intersection Summary		
HCM 7th Control Delay, s/veh		28.1
HCM 7th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	684	11	7	829	119	3	0	0	86	0	93
Future Volume (veh/h)	112	684	11	7	829	119	3	0	0	86	0	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1856	1455	1055	1870	1796	1900	1900	1900	1870	1900	1900
Adj Flow Rate, veh/h	122	743	12	8	901	129	3	0	0	93	0	101
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	3	30	57	2	7	0	0	0	2	0	0
Cap, veh/h	148	2287	37	10	1777	254	339	0	0	206	14	194
Arrive On Green	0.08	0.64	0.64	0.01	0.57	0.57	0.24	0.00	0.00	0.24	0.00	0.24
Sat Flow, veh/h	1753	3551	57	1005	3120	447	1169	0	0	680	57	801
Grp Volume(v), veh/h	122	369	386	8	513	517	3	0	0	194	0	0
Grp Sat Flow(s),veh/h/ln	1753	1763	1845	1005	1777	1790	1169	0	0	1539	0	0
Q Serve(g_s), s	8.9	12.2	12.2	1.0	22.7	22.7	0.0	0.0	0.0	11.8	0.0	0.0
Cycle Q Clear(g_c), s	8.9	12.2	12.2	1.0	22.7	22.7	0.3	0.0	0.0	14.0	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.25	1.00		0.00	0.48		0.52
Lane Grp Cap(c), veh/h	148	1136	1189	10	1012	1020	339	0	0	414	0	0
V/C Ratio(X)	0.83	0.32	0.32	0.82	0.51	0.51	0.01	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	290	1136	1189	50	1012	1020	339	0	0	414	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.6	10.4	10.4	64.3	16.9	16.9	37.4	0.0	0.0	42.5	0.0	0.0
Incr Delay (d2), s/veh	9.0	0.6	0.6	85.3	1.7	1.7	0.0	0.0	0.0	3.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	7.5	7.8	0.9	13.7	13.8	0.1	0.0	0.0	9.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.5	11.0	11.0	149.5	18.6	18.6	37.5	0.0	0.0	46.3	0.0	0.0
LnGrp LOS	E	B	B	F	B	B	D			D		
Approach Vol, veh/h		877			1038			3			194	
Approach Delay, s/veh		18.9			19.6			37.5			46.3	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.5	78.5		36.0	5.8	88.2		36.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	21.5	63.5		31.5	6.5	78.5		31.5
Max Q Clear Time (g_c+I1), s	10.9	24.7		2.3	3.0	14.2		16.0
Green Ext Time (p_c), s	0.2	6.9		0.0	0.0	4.5		1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C

Appendix L:
Turn Lane Documentation

Intersection	Movement	Speed	Total Existing Lane Length (ft)	Required Deceleration (ft)	Existing Conditions Analysis			2028 Future Background Conditions Analysis			2028 Future Buildout Conditions Analysis			Cause for Deficiency
					95th % Queue (ft)	Total Required Turn Lane Length (ft)	Lane Length Def (ft)	95th % Queue (ft)	Total Required Turn Lane Length (ft)	Lane Length Deficiency (ft)	95th % Queue (ft)	Total Required Turn Lane Length (ft)	Lane Length Deficiency (ft)	
SE Maricamp Road / CR 464 at Oak Road North	SBL	30	130	145	38	183	53	38	183	53	40	185	55	2
2 – SE Maricamp Road / CR 464 at Emerald Road South	WBL	50	185	350	8	358	173	100	450	265	98	448	263	0
SE Maricamp Road / CR 464 at Oak Road South	EBL	50	495	350	25	375	0	30	380	0	260	610	115	115
SE Maricamp Road / CR 464 at SE 108th Terrace Road	EBL	50	185	350	0	350	165	0	350	165	0	350	165	0

Appendix M
NCHRP 457 Turn Lane Analysis

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

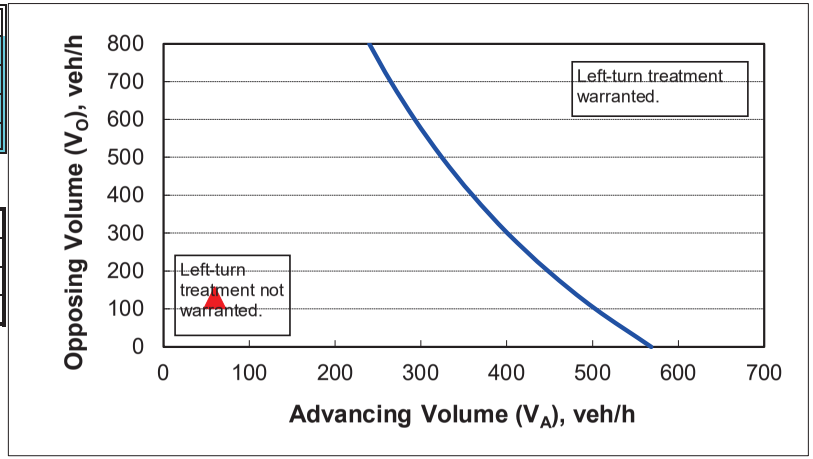
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	12%
Advancing volume (V_A), veh/h:	60
Opposing volume (V_O), veh/h:	130

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	486
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

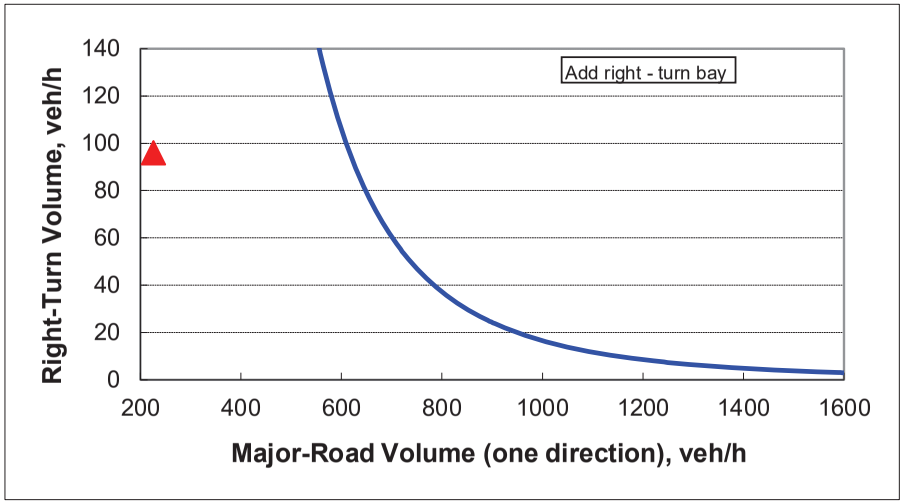
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	226
Right-turn volume, veh/h:	96

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	3689
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