

APPENDIX K

TRANSPORTATION REPORTS



Traffic Study

for the:

Compass Northern Gateway Project

In the City of Menifee

September 2023

Kimley»»Horn

**TRAFFIC STUDY
FOR THE PROPOSED
COMPASS NORTHERN GATEWAY PROJECT
IN THE CITY OF MENIFEE**

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**TRAFFIC STUDY
FOR THE PROPOSED
COMPASS NORTHERN GATEWAY PROJECT
IN THE CITY OF MENIFEE**

INTRODUCTION

Purpose and Study Objectives

This traffic study has been prepared to address the traffic-related effects of the proposed Compass Northern Gateway Project in the City of Menifee. This traffic study has been conducted in accordance with the City of Menifee *LOS Traffic Study Guidelines* (October 2020), and in accordance with the City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (January 2022).

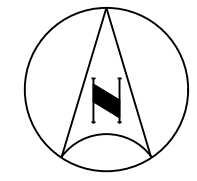
This report includes a description of existing traffic conditions in the surrounding area, estimated project trip generation and distribution, future traffic growth, and an assessment of project-related effects on the roadway system. Where necessary, circulation system improvements have been identified to address project-related effects at the study locations.

Project Overview

The Compass Northern Gateway Project consists of constructing three separate sites located on the south side of Ethanac Road in the City of Menifee. Site 1 (Corsica Lane) is approximately 13.99 acres and is generally bounded by vacant land to the north, Goetz Road to the west, Wheat Street to the east, and vacant land to the south. Site 2 (Wheat Street) is approximately 4.72 acres and is generally bounded by vacant land to the north, residential uses to the west, Wheat Street to the east, and residential uses to the south. Site 3 (Evans Road) is approximately 7.52 acres and is generally bounded by Ethanac Road to the north, Evans Road to the west, a drainage channel to the east with future gas station and industrial uses, and vacant land to the south. The sites are shown in their regional setting on **Figure 1**. Site 1 currently consists of vacant land and one single-family residence. Sites 2 and 3 are currently vacant. The project will involve the construction of six warehouse buildings totaling approximately 490,393 square feet with their respective building square footage noted below:

- Site 1 (Corsica Lane) – approximately 265,821 square feet
 - Building 1 – approximately 154,831 square feet
 - Building 2 – approximately 80,090 square feet
 - Building 3 – approximately 30,900 square feet
- Site 2 (Wheat Street) – approximately 86,676 square feet
- Site 3 (Evans Road) – approximately 137,896 square feet

A copy of the project site plan is provided on **Figure 2**.



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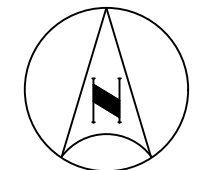
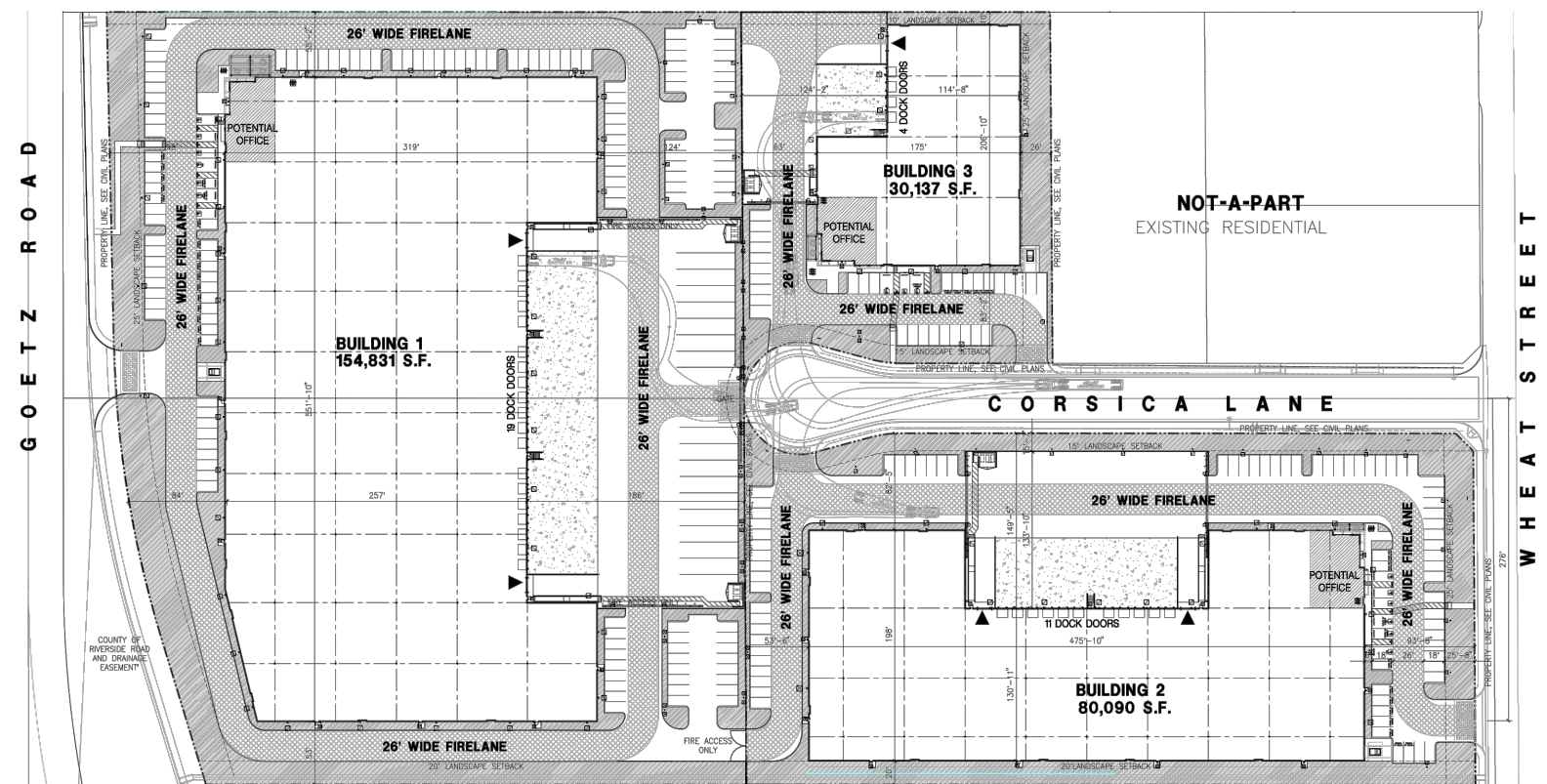
LEGEND:
 = Project Site

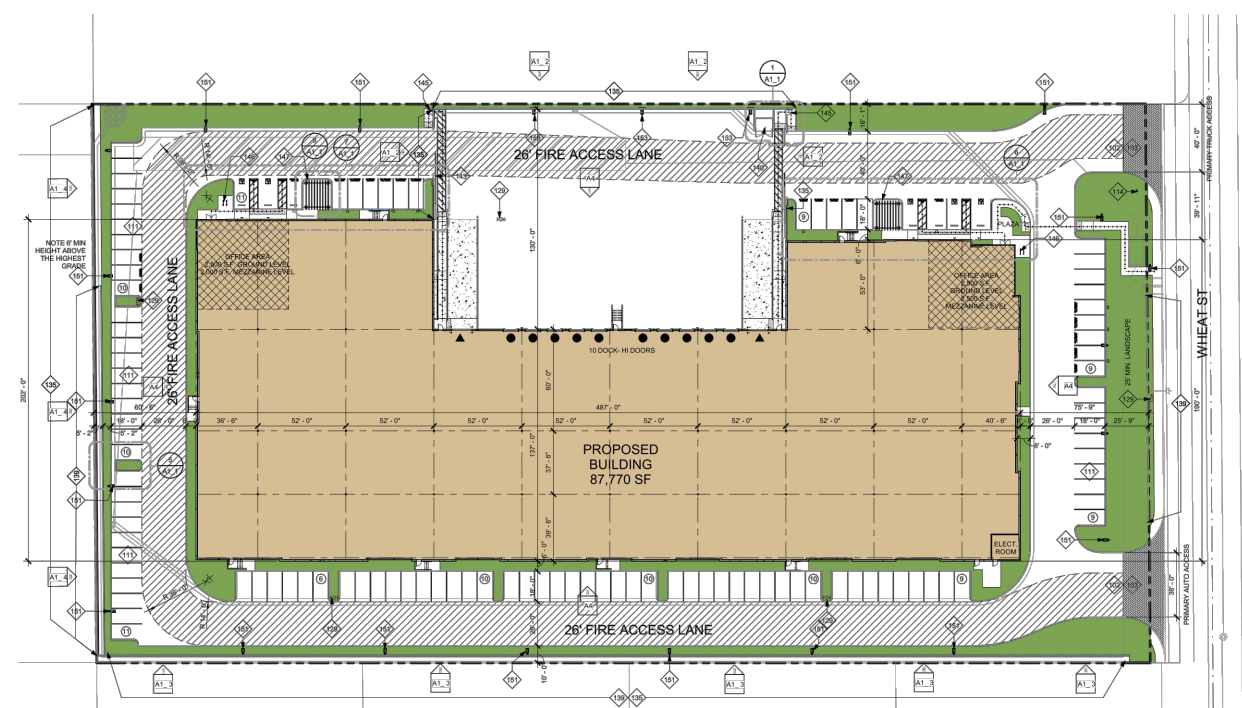
FIGURE 1
VICINITY MAP



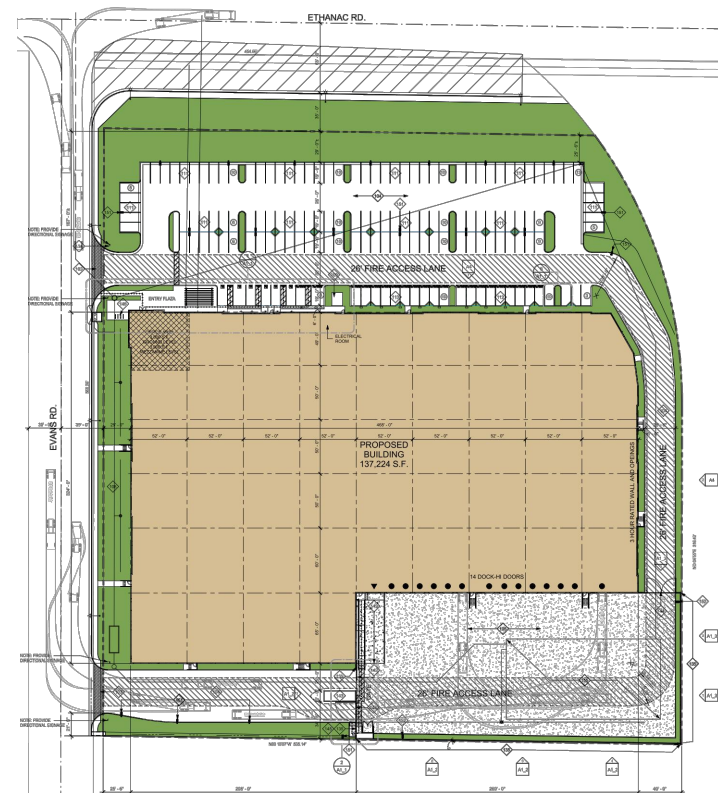
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SITE 1 (CORSICA LANE)



SITE 2 (WHEAT STREET)



SITE 3 (EVANS ROAD)

FIGURE 2
SITE PLAN



Vehicular access provisions for Site 1 (Corsica Lane) would consist of one full-movement truck/auto driveway on Corsica Lane and one full-movement passenger vehicle driveway on Goetz Road. Vehicular access provisions for Site 2 (Wheat Street) would consist of one full-movement truck driveway and one full-movement auto driveway on Wheat Street. Vehicular access provisions for Site 3 (Evans Road) would consist of one full-movement auto driveway and one full-movement truck driveway on Evans Road.

ANALYSIS SCENARIOS AND METHODOLOGY

Analysis Scenarios

In accordance with the City of Menifee *LOS Traffic Study Guidelines*, the project will be evaluated in the morning and evening peak hours for the following conditions:

- Existing Conditions
- Existing Plus Project
- Opening Year 2025 Cumulative
- Opening Year 2025 Cumulative Plus Project

Study Locations

The study locations were established in consultation with City staff through the Scoping Agreement process (Traffic Scoping/Study Application of the City of Menifee *LOS Traffic Study Guidelines*). A copy of the approved Scope of Study Form is provided in **Appendix A**.

Study Intersections:

1. Goetz Road at Ethanac Road
2. Wheat Street at Ethanac Road
3. Murrieta Road at Ethanac Road
4. Evans Road at Ethanac Road
5. Barnett Road/Case Road at Ethanac Road
6. I-215 SB Ramps at Ethanac Road
7. I-215 NB Ramps at Ethanac Road
8. Goetz Road at McLaughlin Road/Goldenrod Avenue
9. Wheat Street at McLaughlin Road
10. Byers Road at Ethanac Road

Study Roadway Segments:

1. Goetz Road: Ethanac Road to McLaughlin Road
2. Ethanac Road: Goetz Road to Wheat Street
3. Ethanac Road: Wheat Street to Murrieta Road
4. Ethanac Road: Murrieta Road to Evans Road
5. Ethanac Road: Evans Road to Case Road
6. Ethanac Road: Case Road to I-215 SB Ramps
7. Ethanac Road: I-215 SB Ramps to I-215 NB Ramps

Existing lane configurations and traffic control at the study intersections are shown on **Figure 3**.

Intersection Analysis – HCM Methodology

Peak hour intersection operations were evaluated using the methodology outlined in the Transportation Resource Board (TRB) Highway Capacity Manual (HCM 6th Edition), consistent with the requirements of the City of Menifee. The intersection analysis was conducted using the Vistro software program and using the input parameters specified in the City of Menifee *LOS Traffic Study Guidelines*.

Per the HCM Methodology, Level of Service (LOS) for signalized intersections is defined in terms of average vehicle delay. Specifically, LOS criteria are stated in terms of the average control delay per vehicle during the peak hours. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay.

The procedure for unsignalized intersection analysis determines the average total delay, expressed in seconds of delay per vehicle, for left turns from the major street and from the stop-controlled minor street traffic stream. Delay values are calculated based on the relationship between traffic on the major street and the availability of acceptable “gaps” in this stream through which conflicting traffic movements can be made.

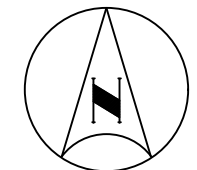
The charts on the following page provide a description of the operating characteristics of each Level of Service and average seconds of delay for signalized and unsignalized intersections.

LEVEL OF SERVICE DEFINITIONS	
Level of Service	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized, and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.
D	This level encompasses a zone of increasing restriction, approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

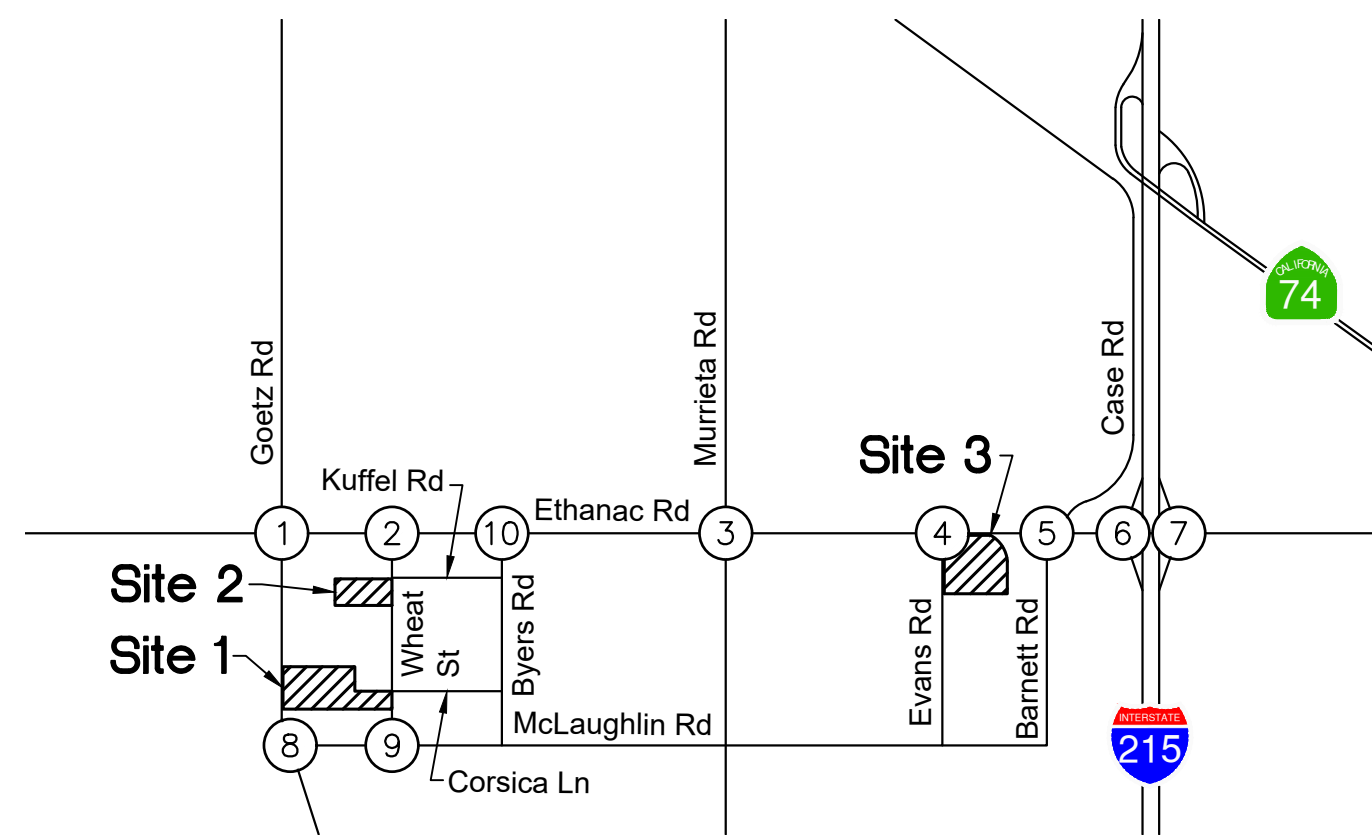
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS		
Level of Service	Signalized Intersection (Average delay per vehicle, in seconds) ¹	Unsignalized Intersections (Average delay per vehicle, in seconds) ²
A	≤ 10	0 – 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

¹ Source: Highway Capacity Manual (HCM 6th Edition), Exhibit 18-4.

² Source: Highway Capacity Manual (HCM 6th Edition), Exhibits 19-1 and 20-2.



NOT TO SCALE



1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
			Future Intersection	

LEGEND:

- = Study Intersection
- = Turn or Through Lane
- = Signal
- = Stop Sign

FIGURE 3
EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

- 7 -

Level of Service Standards and Measure of Significance

The City of Menifee *LOS Traffic Study Guidelines* (October 2020) establishes minimum Level of Service standards, which has identified LOS D as the threshold for acceptable operating conditions for intersections, except at constrained locations in close proximity to I-215, where LOS E is accepted during peak hours.

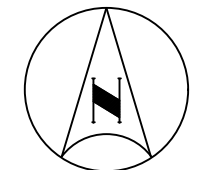
Study intersections and roadway segments are considered to have a project-related effect when any of the following occurs between the “without project” and the “plus project” conditions:

- If the pre-project condition at an intersection or roadway segment is at or better than the minimum acceptable LOS (LOS D, or LOS E at constrained locations near I-215) and the addition of project trips results in an unacceptable LOS (LOS E or LOS F)
- If the pre-project condition is LOS E or F and the project adds 50 or more peak hour trips to the intersection or roadway segment. This type of effect would be considered a cumulative effect in which the project would be required to contribute a fair share payment toward reducing the effect.

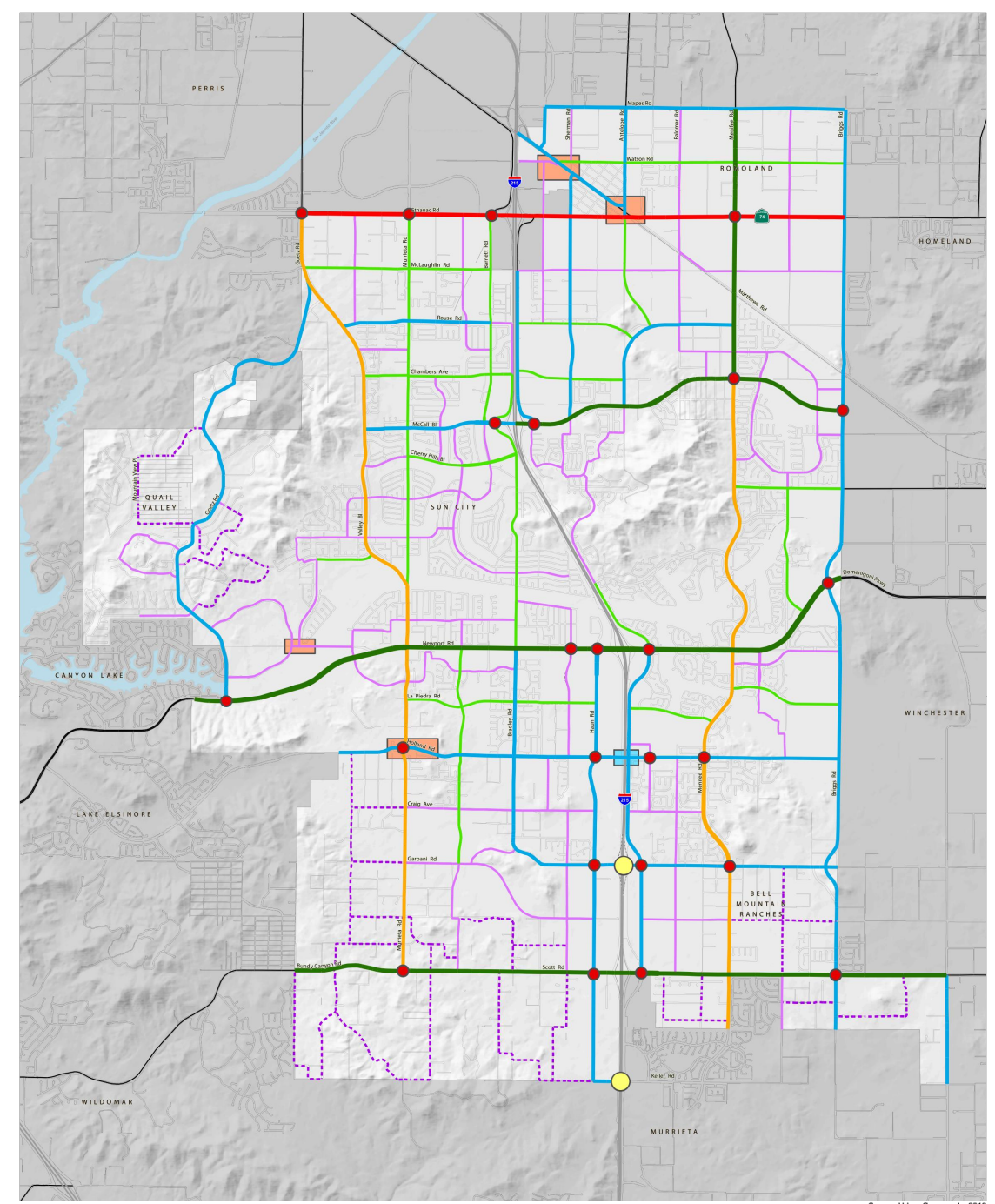
Per the City of Menifee *LOS Traffic Study Guidelines* (October 2020), project-related effects shall be clearly identified as direct or cumulative in the traffic study report. Only feasible improvements shall be recommended in the traffic study report. Analysis of the recommended improvements shall be provided to demonstrate the proposed improvement will reduce the project effect to meet LOS standards.

General Plan Circulation Map

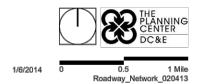
The Cities of Menifee and Perris provide roadway designations for the roadway system serving the project site and the surrounding vicinity. A copy of the City of Menifee and City of Perris Roadway Network is provided on **Figures 4** and **5**, respectively.



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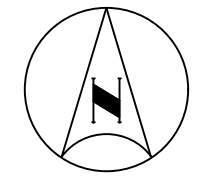
- Expressway (6 to 8 Lanes, Divided)
- Urban Arterial (6 Lanes, Divided)
- Arterial (4 Lanes, Divided)
- Major (4 Lanes, Divided)
- Mountain Arterial (4 Lanes, Undivided)
- Secondary (4 Lanes, Undivided)
- Collector / Interconnected Local (2 Lanes)
- - - Rural Collector / Interconnected Local (2 Lanes)
- Future Freeway Interchange
- Connectivity Analysis Zone - Roadway alignments, intersection geometrics and traffic control features subject to additional assessment
- Future Freeway Overcrossing
- Enhanced Intersection - Additional lanes / Right-of-Way required within 600 feet of the intersection



1/6/2014 0.5 1 Mile Roadway_Network_020413

FIGURE 4
CITY OF MENIFEE - ROADWAY NETWORK





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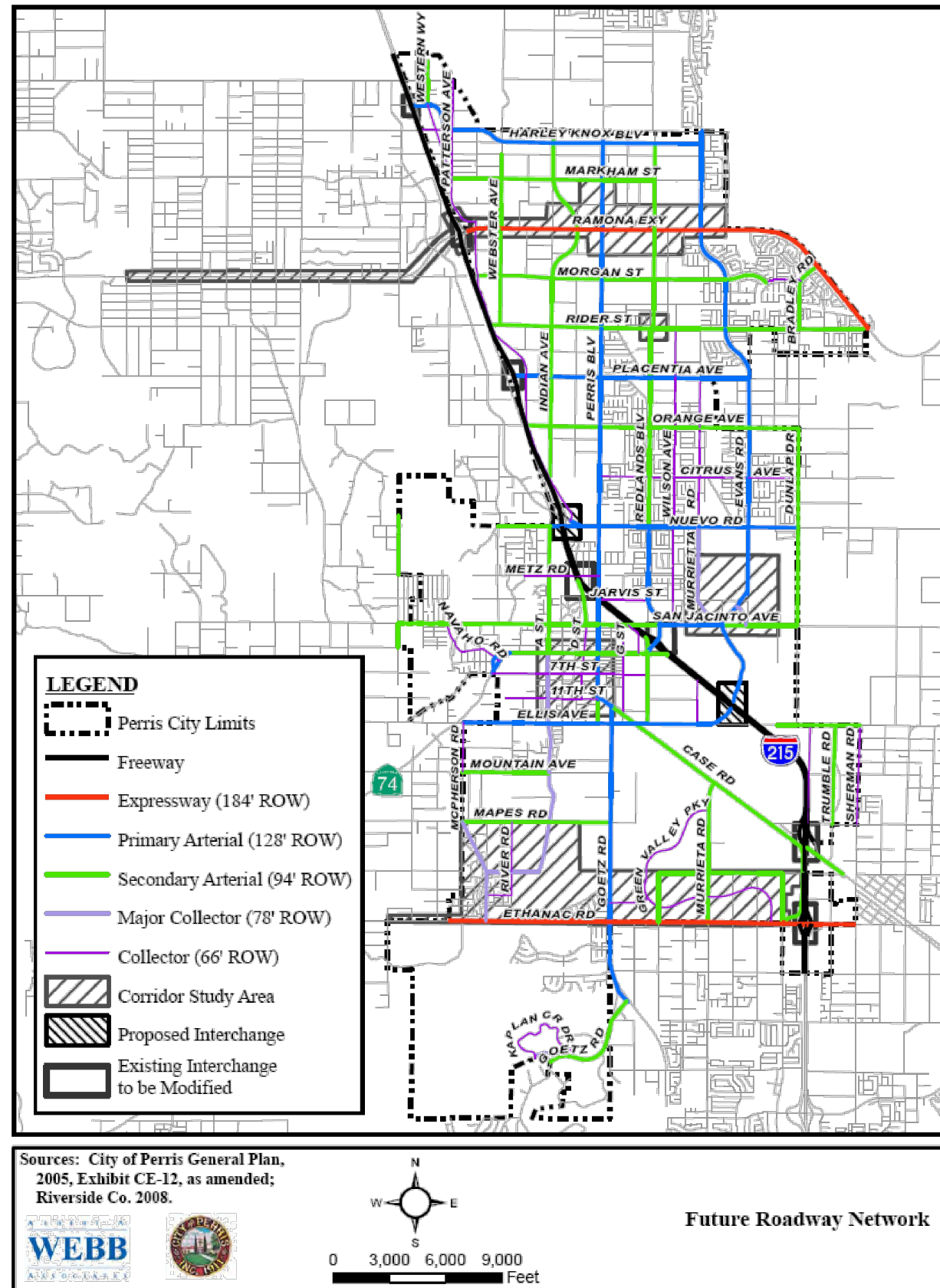


FIGURE 5
CITY OF PERRIS - ROADWAY NETWORK

EXISTING TRAFFIC CONDITIONS

Existing Street System

Regional access to the project site is provided primarily by the Interstate 215 (I-215) Freeway, located approximately two miles east of Sites 1 and 2, and approximately half a mile east of Site 3. In addition, State Route 74 (SR-74) is located approximately two miles northeast of Sites 1 and 2, and approximately one mile northeast of Site 3. The following provides a description of the roadways surrounding the project site.

Goetz Road is a north-south divided roadway with two lanes in each direction. The posted speed limit is 50 mph, and on-street parking is prohibited on both sides. Goetz Road is currently paved. In the City of Menifee General Plan, Goetz Road is designated as an Arterial. In the City of Perris General Plan, Goetz Road is designated as a Primary Arterial.

Murrieta Road is a north-south undivided roadway with one lane in each direction. The posted speed limit is 45 mph. Murrieta Road is currently paved. In the City of Menifee General Plan, Murrieta Road is designated as a Secondary roadway. In the City of Perris General Plan, Murrieta Road is designated as a Secondary Arterial.

Barnett Road is a north-south undivided roadway with one lane in each direction. Barnett Road is currently paved. In the City of Menifee General Plan, Barnett Road is designated as a Secondary roadway.

Ethanac Road is an east-west divided roadway with two lanes in each direction. The posted speed limit is 50 mph, and on-street parking is prohibited on both sides. Ethanac Road is currently paved. In both Cities of Menifee and Perris General Plans, Ethanac Road is designated as an Expressway.

McLaughlin Road is an east-west undivided roadway with one lane in each direction. On-street parking is prohibited on both sides. McLaughlin Road is currently unpaved west of Murrieta Road. In the City of Menifee General Plan, McLaughlin Road is designated as a Secondary Arterial and the speed limit is 45 mph.

Corsica Lane is an east-west roadway with one lane in each direction. Corsica Lane is currently unpaved. Corsica Lane would provide direct access to Site 1.

Wheat Street is a north-south roadway with one lane in each direction. Wheat Street is currently unpaved. Wheat Street would provide direct access to Site 2.

Evans Road is a north-south roadway with one lane in each direction. Evans Road is currently unpaved. In the City of Menifee General Plan, Evans Road is designated as a Collector. Evans Road would provide direct access to Site 3.

Existing Transit Service

Transit service to the City of Menifee is provided by Riverside Transit Agency (RTA), which serves the City of Riverside and surrounding cities. Currently there is no bus stop located near the project area. The closest RTA bus stop to the project site is located on the north side of the Case Road and Ethanac Road intersection. Descriptions of the bus routes serving the project are provided below.

RTA Route 61 operates in the City of Menifee, traveling along Murrieta Road and McCall Boulevard in the project vicinity. Route 61 operates on weekdays from approximately 4:40 AM to 8:15 PM with approximately 1-hour headways and weekends from approximately 6:50 AM to 7:30 PM with 1-hour headways.

RTA Route 74 operates in the City of Menifee, traveling along Ethanac Road and Murrieta Road in the project vicinity. Route 74 operates on weekdays from approximately 5:30 AM to 8:00 PM with approximately 1-hour headways, Weekends from approximately 6:00 AM to 8:00 PM with 1-hour headways.

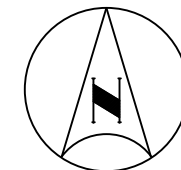
Existing Traffic Volumes

Existing morning peak period (7:00 to 9:00 AM) and evening peak period (4:00 to 6:00 PM) turning movement and daily roadway traffic counts were collected for all study intersections and study roadway segments. The counts were completed in December 2022 and February 2023. Passenger car equivalent (PCE) factors, were then applied to the truck types, based on number of axles (1.5 PCE for 2-axle trucks, 2.0 PCE for 3-axle trucks, and 3.0 PCE for 4+-axle trucks) to determine the total existing PCE volumes. Existing morning and evening peak hour volumes are presented on **Figure 6**. Peak hour intersection traffic count worksheets and daily roadway volume worksheets are provided in **Appendix B**.

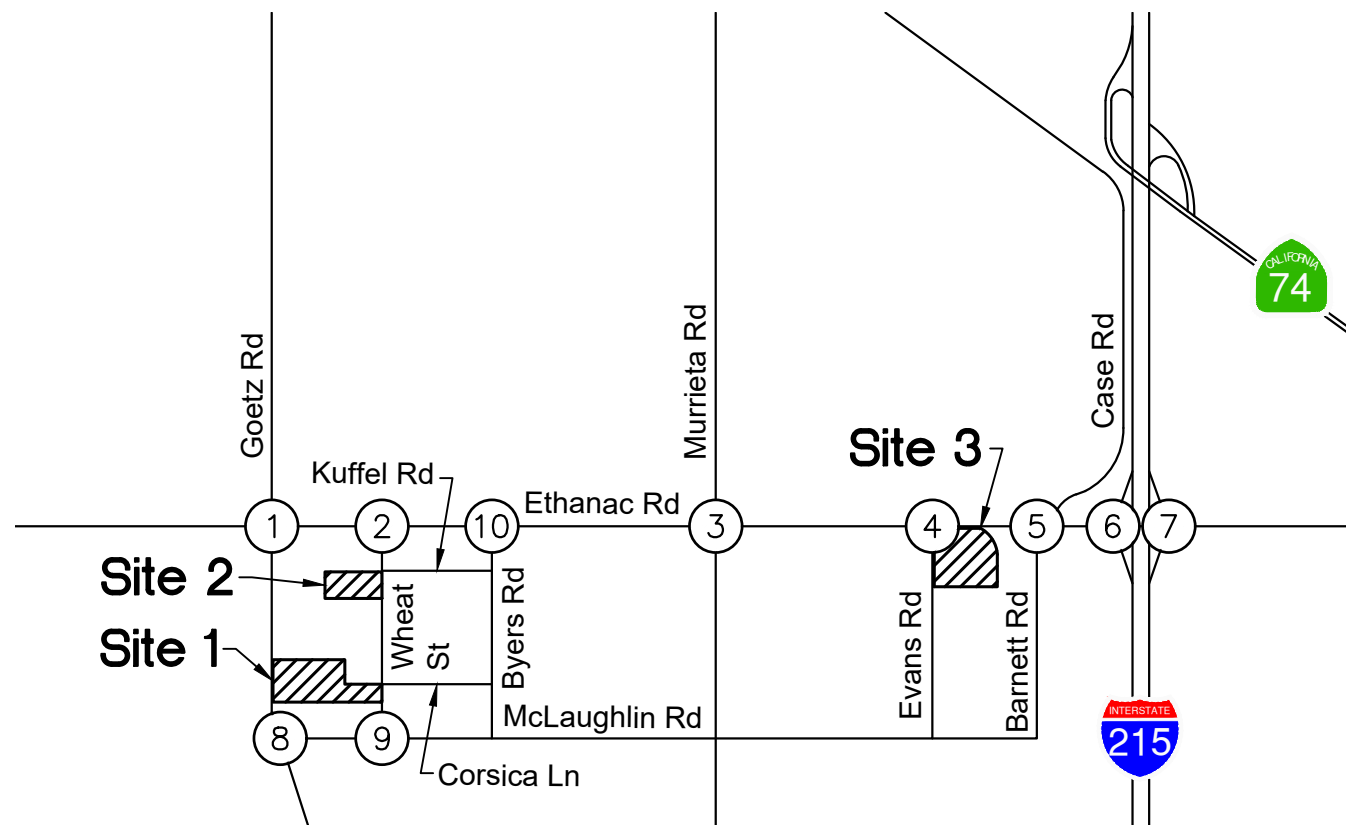
Peak Hour Operation Conditions

Intersection Level of Service analysis was conducted for the morning and evening peak hours using the analysis procedures and assumptions described previously in this report. The results of the intersection analysis for Existing Conditions are shown on **Table 1**. Copies of Existing Conditions intersection analysis worksheets are provided in **Appendix C**.

Review of this table indicates the study intersections currently operate at an acceptable LOS.



NOT TO SCALE



1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd

Note: Volumes reflect PCE adjustments.
See PCE Worksheets in Appendix C.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 6
EXISTING TRAFFIC VOLUMES

**TABLE 1
SUMMARY OF INTERSECTION OPERATION
EXISTING CONDITIONS**

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Goetz Road at Ethanac Road	S	44.2	D	42.4	D
2	Wheat Street at Ethanac Road	U	23.8	C	10.3	B
3	Murrieta Road at Ethanac Road	S	30.6	C	33.9	C
4	Evans Road at Ethanac Road	U	12.2	B	10.5	B
5	Barnett Road/Case Road at Ethanac Road	S	31.4	C	33.1	C
6	I-215 SB Ramps at Ethanac Road	S	22.3	C	27.1	C
7	I-215 NB Ramps at Ethanac Road	S	29.0	C	33.3	C
8	Goetz Road at McLaughlin Road/Goldenrod Avenue	U	16.6	C	14.0	B
9	Wheat Street at McLaughlin Road	U	Future Intersection			
10	Byers Road at Ethanac Road	U	10.7	B	18.3	C

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
- Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

S = Signalized
U = Unsignalized

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the City of Menifee roadway capacity thresholds presented in the following chart.

CITY OF MENIFEE ROADWAY CAPACITY				
Roadway Classification	No. of Lanes	Maximum Two-Way Traffic Volume (ADT)		
		Service Level C	Service Level D	Service Level E
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial	4	29,600	33,400	37,000
Mountain Arterial	2	12,900	14,500	16,100
Mountain Arterial	4	25,500	28,700	31,900
Urban Arterial	6	45,000	50,600	56,300
Urban Arterial	8	69,000	78,000	87,000
Expressway	4	53,000	58,000	64,000
Expressway	6	79,000	87,000	95,000
Expressway	8	106,000	119,000	132,000
Freeway	4	80,000	91,000	100,000
Freeway	6	102,000	123,000	132,000
Freeway	8	136,000	164,000	176,000
Freeway	10	169,000	205,000	220,000
Ramp ⁽¹⁾	1	16,000	18,000	20,000
Notes:				
(1) Ramp Capacity is given as a one-way traffic volume.				

Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020

The results of the roadway analysis for Existing Conditions are shown on **Table 2**. Review of this table indicates the study roadway segments currently operate at an acceptable Level of Service.

**TABLE 2
SUMMARY OF ROADWAY SEGMENT ANALYSIS
EXISTING CONDITIONS**

Roadway	Segment	Existing Configuration	Existing ADT	LOS E Capacity ¹	V/C	LOS
Goetz Road	Ethanac Road to McLaughlin Road	3-Lane Arterial	7,546	27,750	0.272	A
Ethanac Road	Goetz Road to Wheat Street	4-Lane Arterial	13,909	37,000	0.376	A
	Wheat Street to Murrieta Road	4-Lane Arterial	14,059	37,000	0.380	A
	Murrieta Road to Evans Road	4-Lane Arterial	16,595	37,000	0.449	A
	Evans Road to Case Road	4-Lane Arterial	16,845	37,000	0.455	A
	Case Road to I-215 SB Ramps	4-Lane Arterial	24,114	37,000	0.652	B
	I-215 SB Ramps to I-215 NB Ramps	3-Lane Arterial	19,929	27,750	0.718	C

Notes: ¹ Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020

LOS = Level of Service

ADT = Average Daily Traffic

V / C = Volume to Capacity

PROJECT TRAFFIC

Project Trip Generation

Trip generation estimates for the project are based on daily and peak hourly trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition). ITE trip generation estimates for the project are based on the trip generation rate for Warehousing (Land Use 150).

Passenger vehicle and truck mix assumptions were applied to the project land uses based on the ITE Trip Generation Manual (10th Edition, Supplement) and the City of Fontana Truck Trip Generation Study. Passenger car equivalent (PCE) factors were then applied to the truck types, based on number of axles (1.5 PCE for 2-axle trucks, 2.0 PCE for 3-axle trucks, and 3.0 PCE for 4+-axle trucks) to determine the total PCE volumes to be generated by the project. The trip generation rates, PCE factors, and the resulting trip generation estimates for the project are summarized on **Table 3**. Based on Table 3, the total project is estimated to generate 1,181 daily PCE trips, with 113 PCE trips (89 inbound and 24 outbound) in the morning peak hour and 121 PCE trips (32 inbound and 89 outbound) in the evening peak hour.

Trip Distribution and Assignment

Project trip distribution assumptions for the project site were developed considering the proposed site use, and routes to and from the freeway system. Trip distribution assumptions for the proposed project are shown on **Figure 7**. Trip distribution percentages at each study intersection were applied to the project trip generation to determine the project trips through each intersection. The resulting project-related peak hour trips are shown on **Figure 8**. Project trip assignment volumes at the project driveways under Existing Plus Project and Opening Year 2025 Cumulative Plus Project conditions are provided in **Appendix D**.

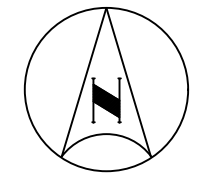
It should be noted that trucks would access Sites 1 and 2 by traveling along the Interstate 215 (I-215) Freeway and exiting onto Ethanac Road. Trucks would travel west along Ethanac Road and turn left onto Byers Road. Trucks would then travel south along Byers Road and turn right onto either Corsica Lane, Kuffel Road, or a future east-west corridor to access the project driveways on Wheat Street.

Trucks would exit Sites 1 and 2 by heading north on Wheat Street from the project driveways. Trucks would continue traveling north along Wheat Street and then turn right onto Ethanac Road. Trucks would continue to travel east along Ethanac Road and use the on-ramps to turn onto the I-215 Freeway and travel in either the northbound or southbound direction outside of the project vicinity away from the project sites.

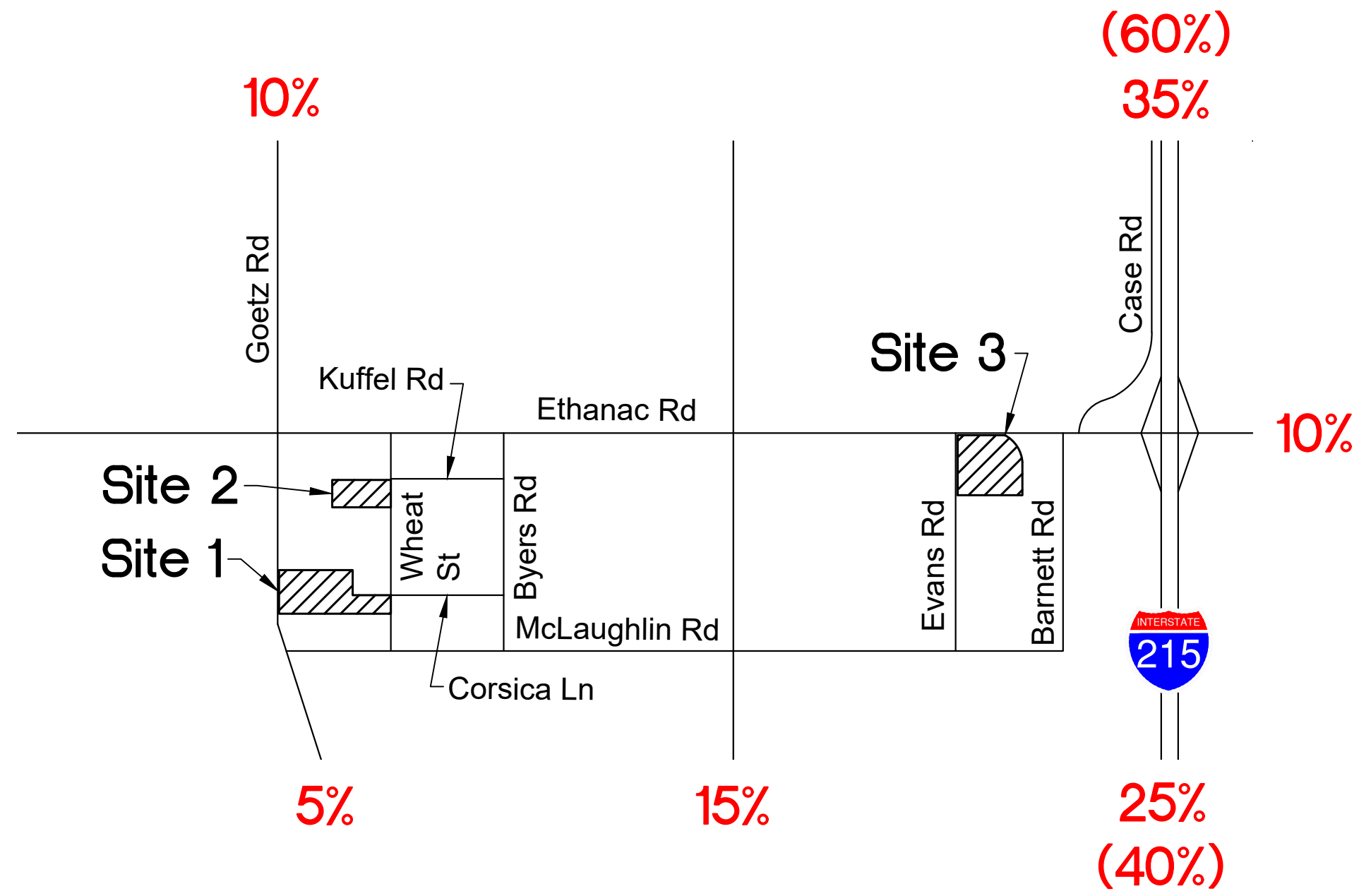
Consistent with California Vehicle Code 35703 (CVC 35703) and the truck routes noted above, no trucks are heading south of the project sites towards McLaughlin Road in the traffic analysis.

**TABLE 3
SUMMARY OF PROJECT TRIP GENERATION
COMPASS NORTHERN GATEWAY PROJECT**

TRIP GENERATION RATES ¹										
ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Warehousing	150	KSF	1.71	0.131	0.039	0.170	0.050	0.130	0.180	
PROJECT TRIP GENERATION										
SITE 1 (Corsica Lane)										
Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Warehousing	265.821	KSF	455	35	10	45	13	35	48	
Passenger Vehicles	73.00%		332	26	7	33	9	26	35	
Trucks	27.00%		123	9	3	12	4	9	13	
SITE 1 (Corsica Lane) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)										
Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	332	1.0	332	26	7	33	9	26	35
2-Axle Trucks	4.57%	21	1.5	32	2	1	3	1	2	3
3-Axle Trucks	6.13%	28	2.0	56	4	1	5	2	4	6
4+ Axle Trucks	16.30%	74	3.0	222	17	5	22	6	17	23
Total Site 1 (Corsica Lane) Truck PCE Trips				310	23	7	30	9	23	32
Total Site 1 (Corsica Lane) PCE Trips				642	49	14	63	18	49	67
SITE 2 (Wheat Street)										
Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Warehousing	86.676	KSF	148	11	3	14	4	11	15	
Passenger Vehicles	73.00%		108	8	2	10	3	8	11	
Trucks	27.00%		40	3	1	4	1	3	4	
SITE 2 (Wheat Street) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)										
Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	108	1.0	108	8	2	10	3	8	11
2-Axle Trucks	4.57%	7	1.5	10	1	0	1	0	1	1
3-Axle Trucks	6.13%	9	2.0	18	1	0	1	0	1	1
4+ Axle Trucks	16.30%	24	3.0	72	5	1	6	2	5	7
Total Site 2 (Wheat Street) Truck PCE Trips				100	7	1	8	2	7	9
Total Site 2 (Wheat Street) PCE Trips				208	15	3	18	5	15	20
SITE 3 (Evans Road)										
Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
Warehousing	137.896	KSF	236	18	5	23	7	18	25	
Passenger Vehicles	73.00%		172	13	4	17	5	13	18	
Trucks	27.00%		64	5	1	6	2	5	7	
SITE 3 (Evans Road) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)										
Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	172	1.0	172	13	4	17	5	13	18
2-Axle Trucks	4.57%	11	1.5	17	1	0	1	0	1	1
3-Axle Trucks	6.13%	14	2.0	28	2	1	3	1	2	3
4+ Axle Trucks	16.30%	38	3.0	114	9	2	11	3	9	12
Total Site 3 (Evans Road) Truck PCE Trips				159	12	3	15	4	12	16
Total Site 3 (Evans Road) PCE Trips				331	25	7	32	9	25	34
Total Proposed Project Passenger Vehicle Trips				612	47	13	60	17	47	64
Total Proposed Project Truck PCE Trips				569	42	11	53	15	42	57
Total Proposed Project PCE Trips				1,181	89	24	113	32	89	121
¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition ² Passenger Vehicles and Truck splits taken from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition Supplement. ³ Truck mix percentages were calculated based on a ratio between the ITE truck splits and the Truck Trip Generation Study - City of Fontana, August 2003 PCE = Passenger Car Equivalent KSF = Thousand Square Feet										



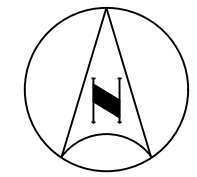
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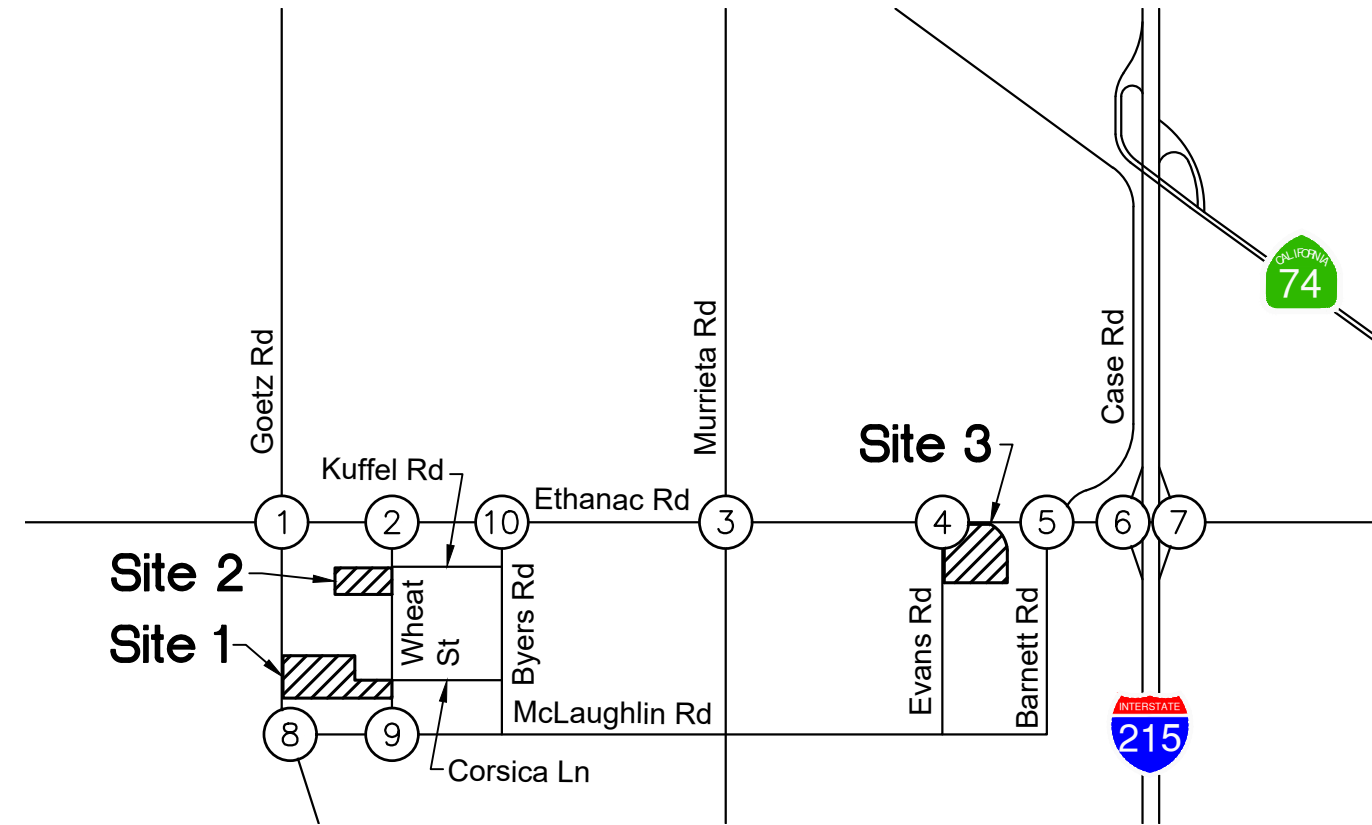
LEGEND:

- = Project Site
- XX%** = Passenger Car Trip Distribution Percentage
- (XX%)** = Truck Trip Distribution Percentage

FIGURE 7
PROJECT TRIP DISTRIBUTION



NOT TO SCALE



1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
$\begin{matrix} \downarrow 3/1 \\ \leftarrow 2/1 \\ \uparrow 0/1 \\ \leftarrow 25/9 \end{matrix}$	$\leftarrow 25/10$	$\leftarrow 55/21$ $\leftarrow 1/2$	$\leftarrow 55/19$ $\leftarrow 21/8$	$\leftarrow 76/27$
$\begin{matrix} \uparrow 1/4 \\ \uparrow 1/0 \end{matrix}$	$\begin{matrix} 2/1 \rightarrow \\ 1/0 \rightarrow \\ 15/55 \rightarrow \end{matrix}$	$\begin{matrix} 17/55 \rightarrow \\ 0/1 \rightarrow \\ 2/1 \rightarrow \end{matrix}$	$\begin{matrix} 15/54 \rightarrow \\ 4/2 \rightarrow \\ 1/4 \rightarrow \\ 6/21 \rightarrow \end{matrix}$	$21/75 \rightarrow$
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd
$\begin{matrix} \downarrow 42/14 \\ \leftarrow 34/13 \end{matrix}$	$\leftarrow 5/2$	$\begin{matrix} \downarrow 0/1 \\ \leftarrow 28/9 \\ \leftarrow 1/4 \\ \leftarrow 0/1 \end{matrix}$	$\begin{matrix} \downarrow 1/5 \\ \leftarrow 1/4 \\ \leftarrow 5/1 \\ 29/9 \rightarrow \end{matrix}$	$\begin{matrix} \leftarrow 25/10 \\ \leftarrow 30/11 \end{matrix}$
$\begin{matrix} 13/46 \rightarrow \\ 8/29 \rightarrow \end{matrix}$	$\begin{matrix} 12/41 \rightarrow \\ 1/5 \rightarrow \\ 29/11 \rightarrow \end{matrix}$	$\begin{matrix} \uparrow 1/0 \\ \uparrow 1/0 \end{matrix}$		$17/56 \rightarrow$

Note: Volumes reflect PCE adjustments.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 8
PROJECT-RELATED TRAFFIC VOLUMES



EXISTING PLUS PROJECT

Project-related traffic was added to the existing traffic volumes, and the resulting traffic volumes at the study locations are shown on **Figure 9**.

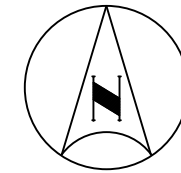
Peak Hour Operating Conditions

Intersection Level of Service analysis was conducted for the morning and evening peak hours for the Existing Plus Project conditions. The results of the intersection analysis are shown on **Table 4**. Intersection analysis worksheets are provided in **Appendix C**.

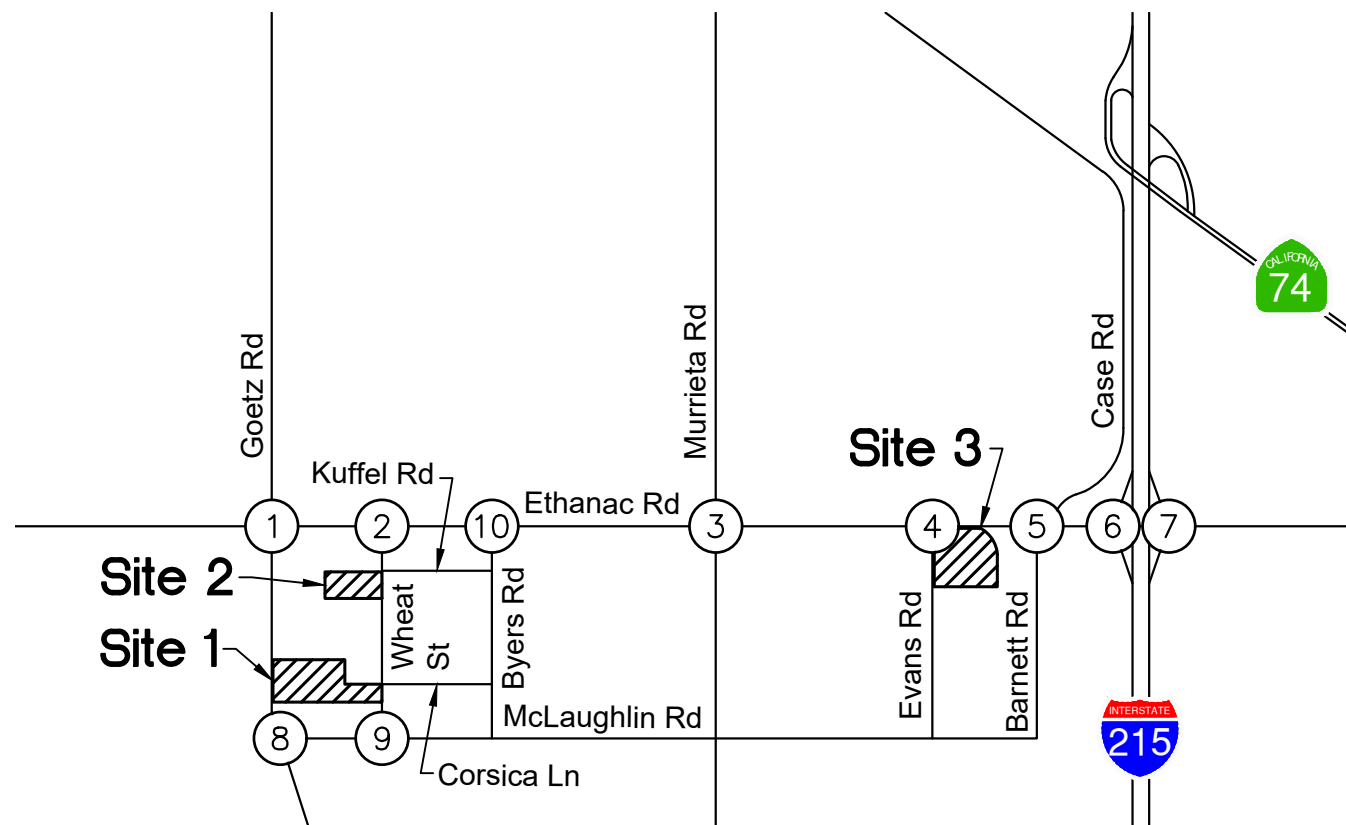
Review of this table indicates that, with the addition of project traffic, all study intersections would continue to operate at an acceptable Level of Service.

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Existing Plus Project conditions are shown on **Table 5**. Review of this table indicates that, with the addition of project traffic, the study roadway segments would continue to operate at an acceptable Level of Service on a daily basis.



NOT TO SCALE



1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd

Note: Volumes reflect PCE adjustments.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 9
EXISTING PLUS PROJECT TRAFFIC VOLUMES

**TABLE 4
SUMMARY OF INTERSECTION OPERATION
EXISTING PLUS PROJECT**

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Change in Delay	Project-Related Effect?	Without Project		With Project		Change in Delay	Project-Related Effect?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Goetz Road at Ethanac Road	S	44.2	D	45.2	D	1.0	No	42.4	D	42.5	D	0.1	No
2	Wheat Street at Ethanac Road	U	23.8	C	24.4	C	0.6	No	10.3	B	10.8	B	0.5	No
3	Murrieta Road at Ethanac Road	S	30.6	C	30.3	C	-0.3	No	33.9	C	33.8	C	-0.1	No
4	Evans Road at Ethanac Road	U	12.2	B	34.3	D	22.1	No	10.5	B	25.5	D	15.0	No
5	Barnett Road/Case Road at Ethanac Road	S	31.4	C	30.9	C	-0.5	No	33.1	C	32.5	C	-0.6	No
6	I-215 SB Ramps at Ethanac Road	S	22.3	C	24.6	C	2.3	No	27.1	C	28.6	C	1.5	No
7	I-215 NB Ramps at Ethanac Road	S	29.0	C	31.0	C	2.0	No	33.3	C	34.8	C	1.5	No
8	Goetz Road at McLaughlin Road/Goldenrod Avenue	U	16.6	C	19.0	C	2.4	No	14.0	B	14.5	B	0.5	No
9	Wheat Street at McLaughlin Road	U	-	-	8.9	A	-	No	-	-	8.6	A	-	No
10	Byers Road at Ethanac Road	U	10.7	B	10.8	B	0.1	No	18.3	C	20.4	C	2.1	No

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
 - Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
 - Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.
- S = Signalized
U = Unsignalized

**TABLE 5
SUMMARY OF ROADWAY SEGMENT ANALYSIS
EXISTING PLUS PROJECT**

Roadway	Segment	Existing Configuration	Existing ADT	Project ADT	Existing Plus Project ADT	LOS E Capacity ¹	V/C	LOS
Goetz Road	Ethanac Road to McLaughlin Road	3-Lane Arterial	7,546	205	7,751	27,750	0.279	A
Ethanac Road	Goetz Road to Wheat Street	4-Lane Arterial	13,909	189	14,098	37,000	0.381	A
	Wheat Street to Murrieta Road	4-Lane Arterial	14,059	548	14,607	37,000	0.395	A
	Murrieta Road to Evans Road	4-Lane Arterial	16,595	771	17,366	37,000	0.469	A
	Evans Road to Case Road	4-Lane Arterial	16,845	999	17,844	37,000	0.482	A
	Case Road to I-215 SB Ramps	4-Lane Arterial	24,114	999	25,113	37,000	0.679	B
	I-215 SB Ramps to I-215 NB Ramps	3-Lane Arterial	19,929	529	20,458	27,750	0.737	C

Notes: 1 Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020
ADT = Average Daily Traffic
V / C = Volume to Capacity
LOS = Level of Service

FUTURE CONDITIONS WITHOUT PROJECT

Opening Year 2025 Cumulative Conditions

The project Opening Year is anticipated to be Year 2025. Based on consultation with City staff, an ambient annual growth rate of 2.0% per year was applied to existing traffic volumes to develop Opening Year 2025 Base forecasts.

Cumulative Projects

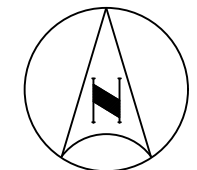
Cumulative Projects consists of development projects that have been approved but are not yet constructed/occupied, and projects that are in various stages of the application and approval process but have not yet been approved. The locations of the Cumulative Projects are shown on **Figure 10**.

Trip Generation

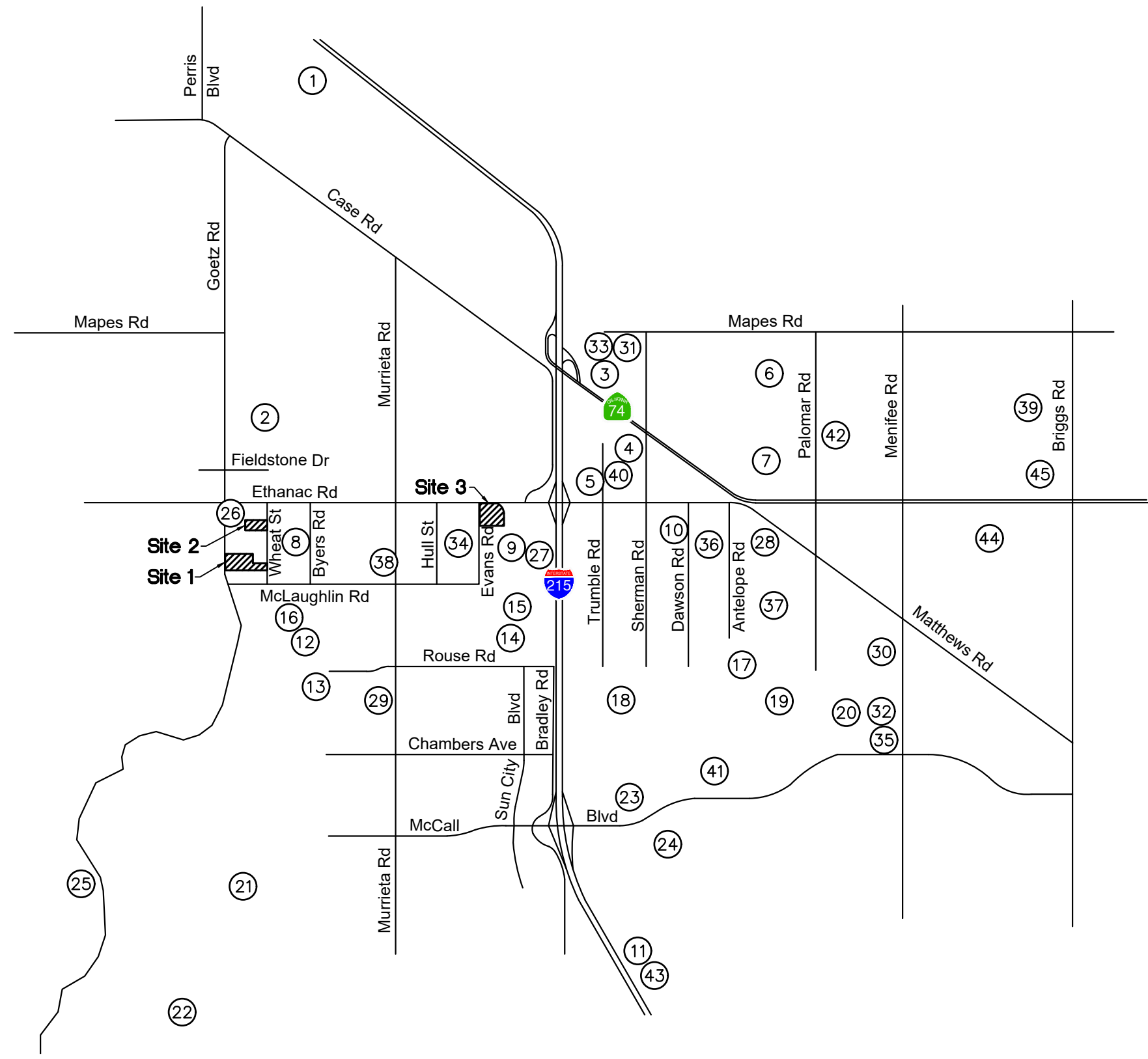
Trip generation information for the Cumulative Projects was obtained from approved traffic studies, where available; or was developed by Kimley-Horn if approved traffic studies were not available. A summary of Cumulative Projects in the project vicinity and the trip generation associated with each is provided on **Table 6**.

Trip Distribution and Assignment

Likewise, trip distribution and assignment for the Cumulative Projects were either obtained from approved traffic studies, where available; or were developed by Kimley-Horn if approved traffic studies were not available. Trip distribution assumptions for Cumulative Projects are provided in **Appendix E**. Traffic volumes associated with the Cumulative Projects were compiled for each of the study intersections and are shown on **Figure 11**. The Cumulative Projects traffic volumes were added to the Opening Year 2025 Base traffic volumes. Traffic volumes for Opening Year 2025 Cumulative are shown on **Figure 12**.



NOT TO SCALE



LEGEND:



-  = Project Site
-  = Cumulative Project

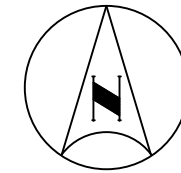
FIGURE 10
LOCATION OF CUMULATIVE PROJECTS

TABLE 6 SUMMARY OF CUMULATIVE PROJECTS												
Proj #	Location	Land Use	Quantity	Units	Trip Generation Estimates							
					AM Peak Hour			PM Peak Hour			Daily	
					In	Out	Total	In	Out	Total		
1	Industrial Warehouse Building	Warehousing	2,300,000	KSF	5,546	419	125	544	160	416	576	
2	Green Valley	Single-Family Detached Housing	623	DU	5,881	115	346	461	389	228	617	
		Multifamily Housing (Mid-Rise)	842	DU	4,580	79	224	303	226	145	371	
		Convenience Market w/ Gasoline Pumps	6	Fueling Position	1,935	62	62	124	69	69	138	
		Pass-by Trips (AM: 63%, PM:66%)						-39	-39	-78	-46	-91
3	On-Deck	Hotel	108	Room	903	30	21	51	33	32	65	
		Quality Restaurant	5,500	KSF	461	3	1	4	29	14	43	
		Pass-by Trips (PM:44%)							-13	-6	-19	
		Fast-Food Restaurant w/o Drive-thru	3,000	KSF	1,039	45	30	75	43	43	86	
		Automated Car Wash	4,500	KSF	734	26	15	41	32	32	64	
		Sub Total			5,072	127	90	217	148	138	286	
4	Paragon Framing	High-Cube Short-Term Storage	5,000	KSF	7	0	0	0	0	0	0	
		General Office Building	5,454	KSF	53	5	1	6	1	5	6	
5	Perris Travel Center	Gasoline Station w/ Convenience Market	16	Fueling Position	3,286	102	98	200	114	110	224	
6	MR-27 LLC (Rancon)	Single-Family Detached Housing	172	DU	1,624	32	95	127	107	63	170	
		Shopping Center	4,888	KSF	185	3	2	5	9	10	19	
		Pass-by Trips (PM:34%)							-3	-3	-6	
		Sub Total			185	3	2	5	6	7	13	
8	Capstone Warehouse	Warehousing	700,037	KSF	4,716	517	122	639	343	536	879	
9	Ethanaq Square	Automated Car Wash	2,080	KSF	339	12	7	19	15	15	30	
		Convenience Market w/ Gasoline Pumps	4	Fueling Position	1,290	42	42	84	46	46	92	
10	Menifee Commerce Center	Warehousing	1,640,130	KSF	9,474	964	249	1,213	633	999	1,632	
11	Village Villas	Multifamily Housing (Low-Rise)	24	DU	176	3	8	11	8	5	13	
12	Cimarron Ridge	Single-Family Detached Housing	756	DU	7,137	140	420	560	472	277	749	
13	Valley Blvd Tract Map	Single-Family Detached Housing	68	DU	642	13	38	51	42	25	67	
14	Sagewood (DR Horton)	Single-Family Detached Housing	174	DU	1,643	32	97	129	109	64	173	
15	McLaughlin Village	Single-Family Detached Housing	126	DU	1,189	23	70	93	79	46	125	
16	TTM 38128	Single-Family Detached Housing	96	DU	906	18	53	71	60	35	95	
17	Talavera (KB Homes)	Single-Family Detached Housing	173	DU	1,633	32	96	128	108	63	171	
18	Legado	Single-Family Detached Housing	1,022	DU	9,648	189	567	756	638	374	1,012	
19	Underwood (KB Homes)	Single-Family Detached Housing	543	DU	5,126	100	301	401	339	199	538	
20	Remington/McCall Mesa	Single-Family Detached Housing	264	DU	2,492	49	147	196	165	97	262	
21	Stonegate (Enclave)	Single-Family Detached Housing	177	DU	1,671	33	98	131	110	65	175	
22	Skyview (Woodside Homes)	Single-Family Detached Housing	246	DU	2,322	46	137	183	154	90	244	
		Gasoline Station w/ Convenience Market	12	Fueling Position	2,766	168	168	336	138	138	276	
		Fast-Food Restaurant w/ Drive-thru	3,900	KSF	1,837	80	77	157	66	61	127	
		Automated Car Wash	1,040	KSF	148	0	0	0	7	7	14	
		Sub Total			4,751	248	245	493	211	206	417	
24	McCall Plaza	Convenience Market w/ Gasoline Pumps	2	Fueling Position	645	21	21	42	23	23	46	
		Pass-by Trips (AM: 63%, PM:66%)						-13	-13	-26	-15	-30
		Shopping Center	1	KSF	38	1	0	1	2	2	4	
		Quality Restaurant	3,100	KSF	260	2	0	2	16	8	24	
		Pass-by Trips (PM:44%)							-7	-4	-11	
		Fast-Food Restaurant w/o Drive-thru	3.2	KSF	1,108	48	32	80	45	45	90	
		Automated Car Wash	2,080	KSF	339	12	7	19	15	15	30	
		Sub Total			2,390	71	47	118	79	74	153	
25	Quail Hills	Single-Family Detached Housing	152	DU	1,435	28	84	112	95	56	151	
		Convenience Market w/ Gasoline Pumps	8	Fueling Position	2,580	83	83	166	92	92	184	
		Pass-by Trips (AM: 63%, PM:66%)						-52	-52	-105	-61	-121
		Discount Home Furnishing Superstore	3	KSF	58	1	1	2	2	2	4	
		Shopping Center	7,040	KSF	266	4	3	7	13	14	27	
		Pass-by Trips (PM:34%) Retail Only							-4	-5	-9	
		Sub Total			2,904	36	35	70	42	43	84	
27	Barnett Warehouse	Warehousing	251,780	KSF	607	46	14	60	17	45	62	
28	Nova Battery Storage	General Light Industrial	3.10	Employees	16	3	1	4	1	3	4	
29	Vista Ridge Apartments	Multifamily Housing (Mid-Rise)	30	DU	163	3	8	11	8	5	13	
30	LDW TTM 38346	Multifamily Housing (Mid-Rise)	162	DU	881	15	43	58	43	28	71	
31	Mapes and Sherman Warehouse	Warehousing	277,578	KSF	669	51	15	66	19	50	69	
32	The Village at Junipero	Multifamily Housing (Mid-Rise)	240	DU	1,306	23	64	87	64	41	105	
33	United Carports Warehouse	Warehousing	58,643	KSF	141	11	3	14	4	11	15	
34	Northern Gateway Commerce Center	Warehousing	1,316,741	KSF	3,176	243	71	314	93	242	335	
35	McCall Square	Shopping Center	84,200	KSF	3,179	49	30	79	154	167	321	
		Mini-Warehouse	150,541	KSF	218	8	6	14	11	12	23	
36	Motte Business Center	High-Cube Fulfillment Center - Non-Sort	1,138,638	KSF	2,308	156	37	193	79	125	204	
37	McLaughlin San Jacinto Warehouses	Warehousing	491,467	KSF	1,185	89	27	116	34	89	123	
38	Ares Warehouse on Murrieta	Warehousing	551,685	KSF	1,330	100	30	130	38	100	138	
39	TR 38133	Single-Family Detached Housing	145	DU	1,369	27	80	107	90	53	143	
40	Trumble and Watson Warehouse	Warehousing	327,631	KSF	790	60	18	78	23	59	82	
41	Cypress and Sands Apartments	Multifamily Housing (Mid-Rise)	136	DU	740	13	36	49	36	23	59	
42	TR 38132	Multifamily Housing (Mid-Rise)	173	DU	941	16	46	62	46	30	76	
43	Kensington Apartments	Multifamily Housing (Mid-Rise)	221	DU	1,202	21	59	80	59	38	97	
44	Menifee Valley SP (Brookfield) ¹	Phase 1 (742 Residential DU, 54 KSF Recreational Community Center, 3.12 MSF of Industrial Uses)	--	--	20,719	1,086	799	1,885	1,132	1,104	2,236	
		Phases 2 and 3 (976 Residential DU, an Elementary School, 120 KSF Recreational Community Center, 2.3 MSF of Industrial Uses, 560 KSF of Commercial Uses)	--	--	36,817	1,428	1,170	2,598	1,768	1,768	3,536	
		Sub Total Trips for Menifee Valley SP			57,536	2,514	1,969	4,483	2,900	2,872	5,772	
45	Harvest Glen Marketplace	Convenience Market w/ Gasoline Pumps	16	Fueling Position	5,160	166	166	332	184	184	368	
		Pass-by Trips (AM: 63%, PM:66%)						-105	-105	-209	-121	-243
		Fast-Food Restaurant w/ Drive-thru	1,102	KSF	519	23	22	45	19	17	36	
		Fast-Food Restaurant w/o Drive-thru	3,268	KSF	1,131	49	33	82	46	46	92	
		Automated Car Wash	3,000	KSF	489	17	10	27	21	21	42	
		Sub Total			7,299	150	126	277	149	147	295	
Total Project Trips					173,174	7,076	6,527	13,603	8,766	8,566	17,332	

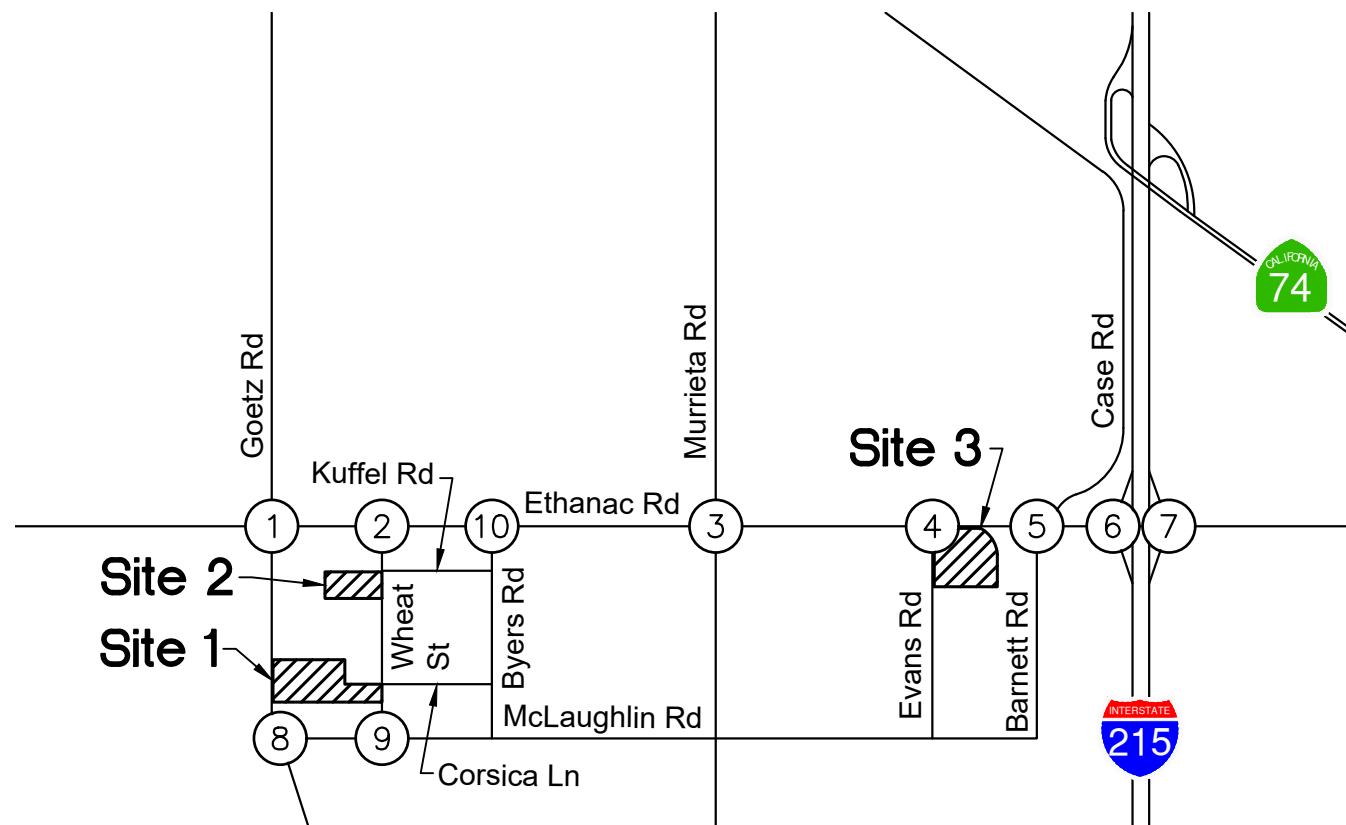
Notes:

¹Traffic Study for Menifee Valley Specific Plan (prepared by LSA; November 2022). Due to the expected Opening Year of the proposed project and the Opening Years for Phases 1, 2, and 3 for the Menifee Valley Specific Plan, only Phase 1 was included in the cumulative analysis. The trips for Phases 2 and 3 are provided for informational purposes only.

DU = Dwelling Unit, KSF = 1,000 square feet, FP = Fueling Position



NOT TO SCALE



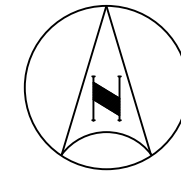
1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd

Note: Volumes reflect PCE adjustments.

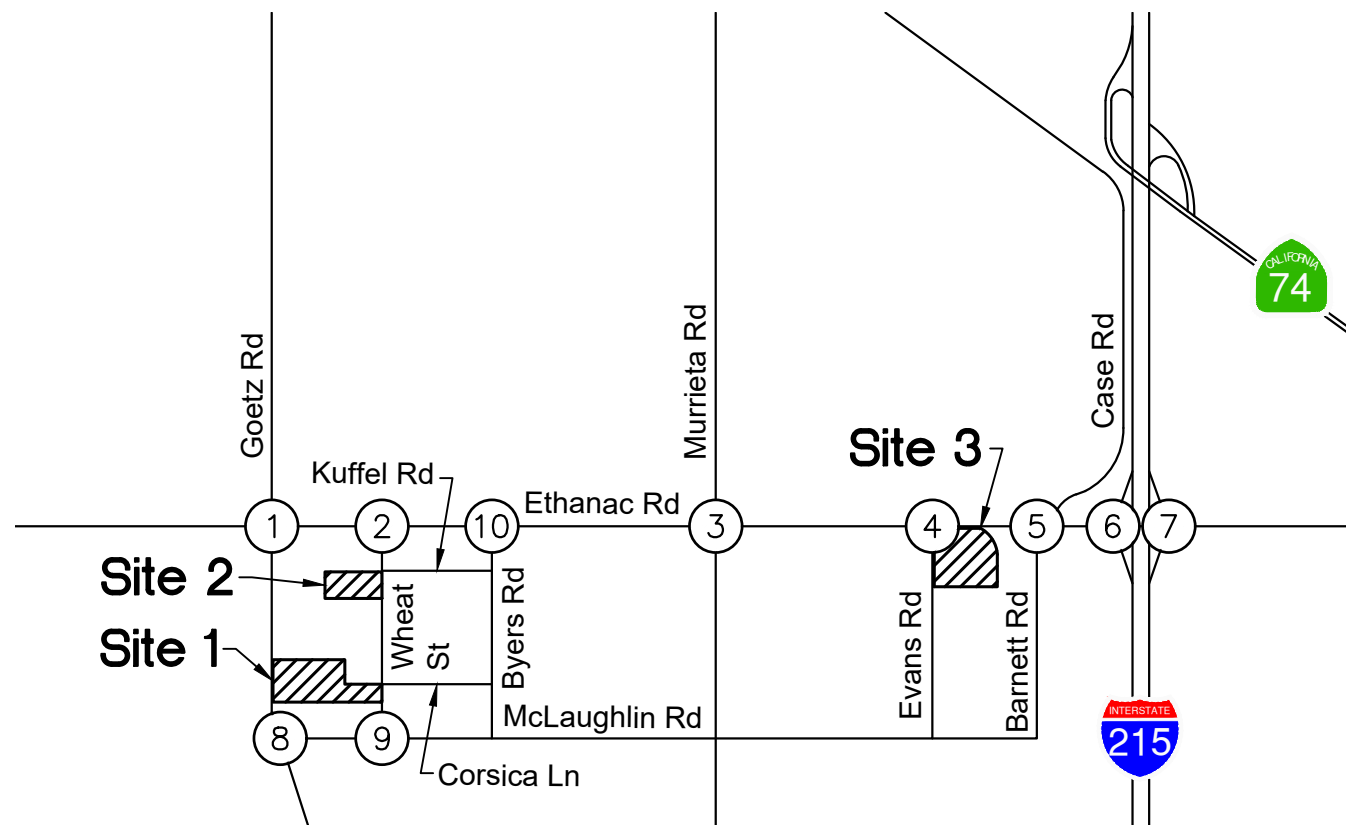
LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 11
CUMULATIVE PROJECTS TRAFFIC VOLUMES



NOT TO SCALE



1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd

Note: Volumes reflect PCE adjustments.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 12
OPENING YEAR 2025 CUMULATIVE TRAFFIC VOLUMES

Peak Hour Operating Conditions

Intersection Level of Service analysis was conducted for Opening Year 2025 Cumulative conditions, and the results are shown on **Table 7**. Intersection analysis worksheets for this condition are provided in **Appendix C**. Review of this table indicates that, with the addition of ambient growth and cumulative projects traffic, the following intersections would operate at an unacceptable Level of Service under Opening Year 2025 conditions:

- #2 – Wheat Street at Ethanac Road: AM & PM – LOS F
- #3 – Murrieta Road at Ethanac Road: AM & PM – LOS F
- #4 – Evans Road at Ethanac Road: AM & PM – LOS F
- #6 – I-215 SB Ramps at Ethanac Road: AM & PM – LOS F
- #7 – I-215 NB Ramps at Ethanac Road: AM & PM – LOS F
- #10 – Byers Road at Ethanac Road: AM & PM – LOS F

The Level of Service for an unsignalized intersection is reported based on the single approach movement with the highest delay, which in this case, would be the northbound approach for intersections 2, 4, and 10. The side street traffic at these intersections experience delay during the peak hours while waiting for an acceptable gap in traffic on Ethanac Road. While the side street approaches operate at a deficient Level of Service based on the highest delay approach, the overall intersection delay would be acceptable. Any queuing that occurs on the side streets are contained on the minor intersection approaches and do not impact the progression of traffic on the main arterials.

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Opening Year 2025 Cumulative conditions are shown on **Table 8**. Review of this table indicates that the following study roadway segments would operate at an unacceptable Level of Service on a daily basis:

- Ethanac Road: Murrieta Road to Evans Road – LOS E
- Ethanac Road: Evans Road to Case Road – LOS E
- Ethanac Road: Case Road to I-215 SB Ramps – LOS F
- Ethanac Road: I-215 SB Ramps to I-215 NB Ramps – LOS F

**TABLE 7
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2025 CUMULATIVE**

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Goetz Road at Ethanac Road	S	47.8	D	43.4	D
2	Wheat Street at Ethanac Road	U	>180	F	>180	F
3	Murrieta Road at Ethanac Road	S	96.4	F	173.9	F
4	Evans Road at Ethanac Road	U	>180	F	>180	F
5	Barnett Road/Case Road at Ethanac Road	S	44.3	D	47.4	D
6	I-215 SB Ramps at Ethanac Road	S	183.9	F	345.8	F
7	I-215 NB Ramps at Ethanac Road	S	193.2	F	370.5	F
8	Goetz Road at McLaughlin Road/Goldenrod Avenue	U	18.9	C	15.9	C
9	Wheat Street at McLaughlin Road	U	8.6	A	8.7	A
10	Byers Road at Ethanac Road	U	>180	F	>180	F

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
- Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

S = Signalized
U = Unsignalized

**TABLE 8
SUMMARY OF ROADWAY SEGMENT ANALYSIS
OPENING YEAR 2025 CUMULATIVE**

Roadway	Segment	Existing ADT	Opening Year 2025 Base ADT	Cumulative Projects	Opening Year 2025 Cumulative ADT	LOS E Capacity ¹	V/C	LOS
Goetz Road	Ethanac Road to McLaughlin Road	7,546	7,848	1,190	9,038	27,750	0.326	A
Ethanac Road	Goetz Road to Wheat Street	13,909	14,465	10,994	25,459	37,000	0.688	B
	Wheat Street to Murrieta Road	14,059	14,621	13,694	28,315	37,000	0.765	C
	Murrieta Road to Evans Road	16,595	17,259	16,226	33,485	37,000	0.905	E
	Evans Road to Case Road	16,845	17,519	18,758	36,277	37,000	0.980	E
	Case Road to I-215 SB Ramps	24,114	25,079	18,758	43,837	37,000	1.185	F
	I-215 SB Ramps to I-215 NB Ramps	19,929	20,726	13,738	34,464	27,750	1.242	F

Notes: 1 Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020
 ADT = Average Daily Traffic
 V / C = Volume to Capacity
 LOS = Level of Service

FUTURE CONDITIONS WITH PROJECT

Opening Year 2025 Cumulative Plus Project

Project-related traffic for the Northern Gateway Commerce Center project was added to the Opening Year 2025 Cumulative traffic volumes, and the resulting “Plus Project” traffic volumes are shown on **Figure 13**.

Peak Hour Operating Conditions

Intersection Level of Service analysis was conducted for the Opening Year 2025 Cumulative Plus Project condition. The results are shown on **Table 9**. Copies of the intersection analysis worksheets are provided in **Appendix C**. Review of Table 9 indicates that, with the addition of project traffic, the following intersections would operate at an unacceptable Level of Service under Opening Year 2025 Cumulative Plus Project conditions:

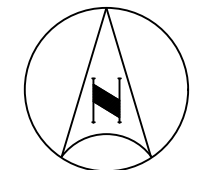
- #2 – Wheat Street at Ethanac Road: AM & PM – LOS F
- #3 – Murrieta Road at Ethanac Road: AM & PM – LOS F
- #4 – Evans Road at Ethanac Road: AM & PM – LOS F
- #6 – I-215 SB Ramps at Ethanac Road: AM & PM – LOS F
- #7 – I-215 NB Ramps at Ethanac Road: AM & PM – LOS F
- #10 – Byers Road at Ethanac Road: AM & PM – LOS F

Recommended improvements for the study intersections where there is a project-related effect are presented in the Recommended Improvements section of this report. Copies of intersection analysis worksheets are provided in **Appendix C**.

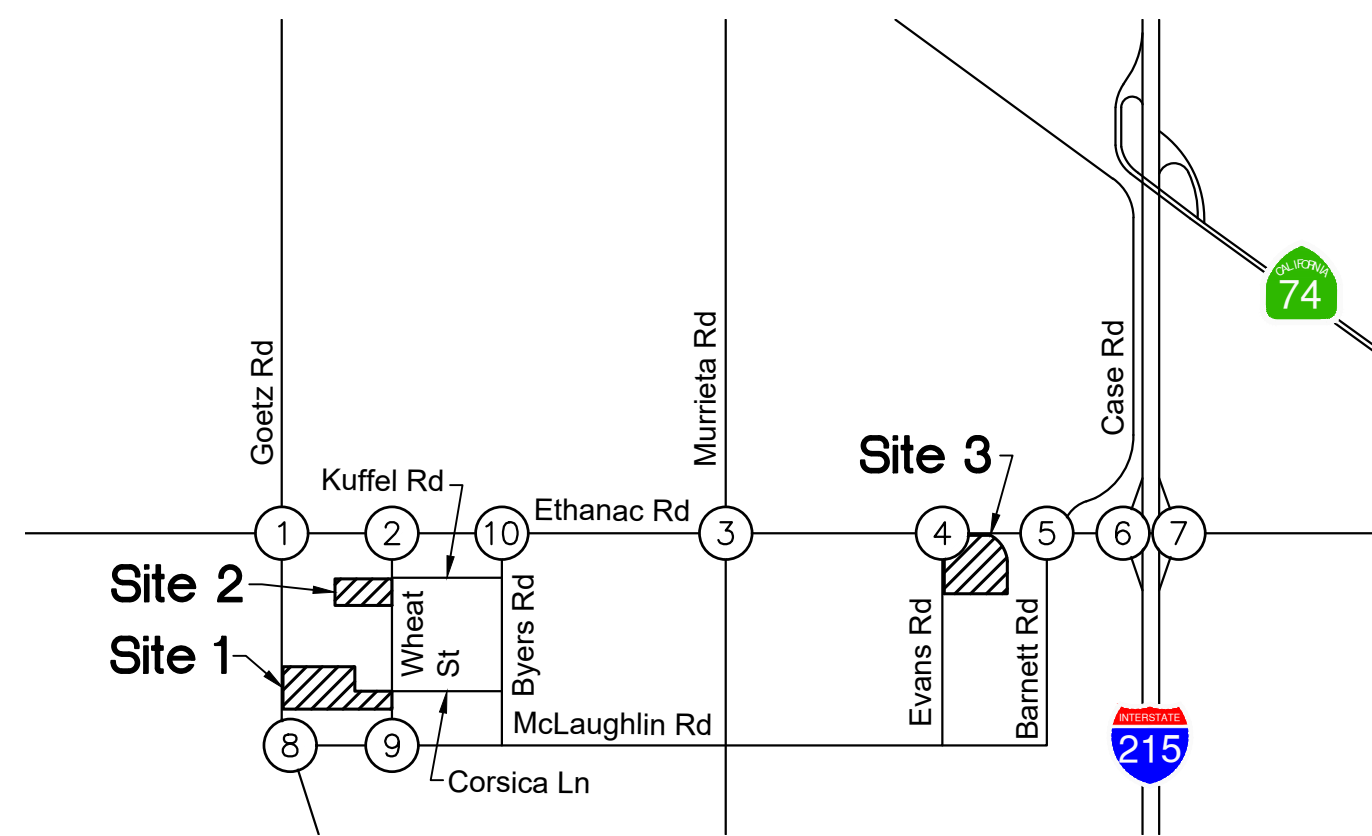
Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Opening Year 2025 Cumulative Plus Project conditions are shown on **Table 10**. Review of this table indicates that the following study roadway segments would operate at an unacceptable Level of Service on a daily basis:

- Ethanac Road: Murrieta Road to Evans Road – LOS E
- Ethanac Road: Evans Road to Case Road – LOS F
- Ethanac Road: Case Road to I-215 SB Ramps – LOS F
- Ethanac Road: I-215 SB Ramps to I-215 NB Ramps – LOS F



NOT TO SCALE



1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd

Note: Volumes reflect PCE adjustments.

LEGEND:

- = Project Site
- = Study Intersection
- xx/yy = AM/PM Volumes

FIGURE 13
OPENING YEAR 2025 CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES



**TABLE 9
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2025 CUMULATIVE PLUS PROJECT**

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Change in Delay	Project-Related Effect?	Without Project		With Project		Change in Delay	Project-Related Effect?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Goetz Road at Ethanac Road	S	47.8	D	48.0	D	0.2	No	43.4	D	43.5	D	0.1	No
2	Wheat Street at Ethanac Road	U	>180	F	>180	F	-	Yes	>180	F	>180	F	-	Yes
3	Murrieta Road at Ethanac Road	S	96.4	F	98.9	F	2.5	Yes	173.9	F	185.5	F	11.6	Yes
4	Evans Road at Ethanac Road	U	>180	F	>180	F	-	Yes	>180	F	>180	F	-	Yes
5	Barnett Road/Case Road at Ethanac Road	S	44.3	D	46.0	D	1.7	No	47.4	D	51.8	D	4.4	No
6	I-215 SB Ramps at Ethanac Road	S	183.9	F	194.2	F	10.3	Yes	345.8	F	389.2	F	43.4	Yes
7	I-215 NB Ramps at Ethanac Road	S	193.2	F	202.6	F	9.4	Yes	370.5	F	383.0	F	12.5	Yes
8	Goetz Road at McLaughlin Road/Goldenrod Avenue	U	18.9	C	22.1	C	3.2	No	15.9	C	16.5	C	0.6	No
9	Wheat Street at McLaughlin Road	U	-	-	9.0	A	-	No	-	-	8.8	A	-	No
10	Byers Road at Ethanac Road	U	>180	F	>180	F	-	Yes	>180	F	>180	F	-	Yes

Notes:

- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
 - Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
 - Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.
- S = Signalized
U = Unsignalized

**TABLE 10
SUMMARY OF ROADWAY SEGMENT ANALYSIS
OPENING YEAR 2025 CUMULATIVE PLUS PROJECT**

Roadway	Segment	Opening Year 2025 Cumulative ADT	Project ADT	Opening Year 2025 Plus Project ADT	LOS E Capacity ¹	V/C	LOS
Goetz Road	Ethanac Road to McLaughlin Road	9,038	205	9,243	27,750	0.333	A
Ethanac Road	Goetz Road to Wheat Street	25,459	189	25,648	37,000	0.693	B
	Wheat Street to Murrieta Road	28,315	548	28,863	37,000	0.780	C
	Murrieta Road to Evans Road	33,485	771	34,256	37,000	0.926	E
	Evans Road to Case Road	36,277	999	37,276	37,000	1.007	F
	Case Road to I-215 SB Ramps	43,837	999	44,836	37,000	1.212	F
	I-215 SB Ramps to I-215 NB Ramps	34,464	529	34,993	27,750	1.261	F
Notes: 1 Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020 ADT = Average Daily Traffic V / C = Volume to Capacity LOS = Level of Service							

TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrant analyses were conducted for the following unsignalized intersections:

- #2 – Wheat Street at Ethanac Road
- #4 – Evans Road at Ethanac Road
- #10 – Byers Road at Ethanac Road

Signal warrants were based on the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD). The warrants were conducted using Warrant 3 (Peak Hour Warrant) for the following conditions:

- Existing Plus Project
- Opening Year 2025 Cumulative
- Opening Year 2025 Cumulative Plus Project

Traffic signal warrant analysis worksheets are provided in **Appendix F**. Based on the signal warrant analysis, Signal Warrant 3 was met under the following conditions:

- Opening Year 2025 Cumulative
 - #2 – Wheat Street at Ethanac Road: AM & PM
 - #4 – Evans Road at Ethanac Road: AM & PM
 - #10 – Byers Road at Ethanac Road: AM & PM
- Opening Year 2025 Cumulative Plus Project
 - #2 – Wheat Street at Ethanac Road: AM & PM
 - #4 – Evans Road at Ethanac Road: AM & PM
 - #10 – Byers Road at Ethanac Road: AM & PM

The CA MUTCD specifically states that, “The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.” The reference document goes on to state a number of other factors to take into account when considering a signal for a specific location, including whether or not a signal would improve the overall safety of the intersection, whether it would benefit or disrupt progressive traffic flow, and consideration of site-specific characteristics such as queuing, signal spacing, and overall delay to the main street through movements. The decision to install a traffic signal should be based on engineering judgement, and not solely upon satisfying a single peak hour warrant.

RECOMMENDED IMPROVEMENTS

Based on the City of Menifee *LOS Traffic Study Guidelines* (October 2020), under Opening Year 2025 Cumulative Plus Project Conditions, the project would cause a project-related effect at the following intersections:

- #2 – Wheat Street at Ethanac Road (Cumulative effect)
- #3 – Murrieta Road at Ethanac Road (Cumulative effect)
- #4 – Evans Road at Ethanac Road (Cumulative effect)
- #6 – I-215 SB Ramps at Ethanac Road (Cumulative effect)
- #7 – I-215 NB Ramps at Ethanac Road (Cumulative effect)
- #10 – Byers Road at Ethanac Road: (Cumulative effect)

Implementation of the following improvements under Opening Year 2025 Cumulative Plus Project conditions are recommended to address the project-related effect at the study intersections:

#2 – Wheat Street at Ethanac Road:

- Modify the existing northbound shared lane to a right-turn only (northbound left-out restricted)

#3 – Murrieta Road at Ethanac Road:

- Add a dedicated northbound right-turn lane
- Add northbound right-turn overlap phasing
- Add eastbound right-turn lane
- Add a dedicated northbound left-turn lane
- Modify the existing southbound shared left/through lane to a dedicated left-turn lane and through lane
- Modify northbound/southbound phasing from split to protected

#4 – Evans Road at Ethanac Road:

- Install traffic signal (City DIF)
- Add protected westbound left-turn phasing
- Modify northbound approach to provide dedicated left-turn and right-turn lanes

#6 – I-215 SB Ramps at Ethanac Road (Regional TUMF):

- Add 2nd eastbound through lane
- Add 2nd westbound left-turn lane
- Modify southbound approach to provide one left-turn, one right-turn, and one shared left/through/right lane
- Add dedicated eastbound right-turn lane

#7 – I-215 NB Ramps at Ethanac Road (Regional TUMF):

- Add 2nd eastbound through lane
- Add 2nd westbound through lane
- Add a dedicated westbound right-turn lane
- Add 2nd eastbound left-turn lane
- Add 2nd northbound left-turn lane

#10 – Byers Road at Ethanac Road:

- Install traffic signal (City DIF)
- Modify the existing northbound shared lane to a right-turn lane
- Add a dedicated northbound left-turn lane
- Add protected westbound left-turn phasing
- Increase the left-turn pocket length to 375 feet

A summary of the intersection operation before and after implementation of the recommended improvements is provided on **Table 11**. A copy of the Regional TUMF Program improvements for the Ethanac Road/I-215 freeway interchange is provided in **Appendix G**.

Based on the City of Menifee *LOS Traffic Study Guidelines* (October 2020), under Opening Year 2025 Cumulative Plus Project Conditions, the project would cause a project-related effect at the following roadway sections:

- Ethanac Road: Murrieta Road to Evans Road (Cumulative effect)
- Ethanac Road: Evans Road to Case Road (Cumulative effect)
- Ethanac Road: Case Road to I-215 SB Ramps (Cumulative effect)
- Ethanac Road: I-215 SB Ramps to I-215 NB Ramps (Cumulative effect)

Roadway improvements are recommended to address deficient roadway segments. A summary of the roadway analysis after implementation of the recommended roadway improvements is provided on **Table 12**.

Recommended improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements, or a combination of these approaches. The project fair share proportion for non-programmed improvements at deficient study intersections and roadway segments under Opening Year 2025 Cumulative Plus Project conditions is shown on **Table 13**. The proposed project will pay fair share for non-programmed improvements at deficient study intersections. For programmed improvements, the developer will pay into the regional transportation fee program.

**TABLE 11
SUMMARY OF INTERSECTION OPERATION
WITH RECOMMENDED IMPROVEMENTS**

Int. #	Intersection	Improvements	Peak Hour	Proposed Traffic Control	OPENING YEAR 2025 CUMULATIVE PLUS PROJECT					
					Without Project		With Project		With Improvements	
					Delay	LOS	Delay	LOS	Delay	LOS
2	Wheat Street at Ethanac Road	•Modify the existing northbound shared lane to a right-turn only (northbound left-out restricted)	AM	U	>180	F	>180	F	17.5	C
			PM	U	>180	F	>180	F	31.1	D
3	Murrieta Road at Ethanac Road	•Add a dedicated northbound right-turn lane •Add northbound right-turn overlap phasing •Add eastbound right-turn lane •Add a dedicated northbound left-turn lane •Modify the existing southbound shared left/through lane to a dedicated left-turn lane and through lane •Modify northbound/southbound phasing from split to protected	AM	S	96.4	F	98.9	F	28.7	C
			PM	S	173.9	F	185.5	F	39.2	D
4	Evans Road at Ethanac Road	•Install traffic signal •Add protected westbound left-turn phasing •Modify northbound approach to provide dedicated left-turn and right-turn lanes	AM	S	>180	F	>180	F	28.5	C
			PM	S	>180	F	>180	F	29.3	C
6	I-215 SB Ramps at Ethanac Road	•Add 2nd eastbound through lane •Add 2nd westbound left-turn lane •Modify southbound approach to provide one left-turn, one right-turn, and one shared left/through/right lane •Add dedicated eastbound right-turn lane	AM	S	183.9	F	194.2	F	27.0	C
			PM	S	345.8	F	389.2	F	50.5	D
7	I-215 NB Ramps at Ethanac Road	•Add 2nd eastbound through lane •Add 2nd westbound through lane •Add a dedicated westbound right-turn lane •Add 2nd eastbound left-turn lane •Add 2nd northbound left-turn lane	AM	S	193.2	F	202.6	F	34.6	C
			PM	S	370.5	F	383.0	F	49.2	D
10	Byers Road at Ethanac Road	•Install traffic signal •Modify the existing northbound shared lane to a right-turn lane •Add a dedicated northbound left-turn lane •Add protected westbound left-turn phasing •Increase the left turn pocket length to 375 feet	AM	U	>180	F	>180	F	14.8	B
			PM	U	>180	F	>180	F	14.6	B

Notes:
- **Bold and Shaded** values indicate intersections operating at an unacceptable Level of Service
- Delay values for signalized intersections represent the sum of average vehicle delay on all intersection approaches.
S = Signalized
U = Unsignalized

TABLE 12
SUMMARY OF ROADWAY SEGMENT ANALYSIS WITH RECOMMENDED IMPROVEMENTS
OPENING YEAR 2025 CUMULATIVE PLUS PROJECT

Roadway	Segment	Existing Configuration	Recommended Configuration	Opening Year 2025 Cumulative ADT	Project ADT	Opening Year 2025 Plus Project ADT	Recommended LOS E Capacity ¹	V/C	LOS
Ethanac Road	Murrieta Road to Evans Road	4-Lane Arterial	6-Lane Urban Arterial	33,485	771	34,256	56,300	0.608	B
	Evans Road to Case Road	4-Lane Arterial	6-Lane Urban Arterial	36,277	999	37,276	56,300	0.662	B
	Case Road to I-215 SB Ramps	4-Lane Arterial	6-Lane Urban Arterial	43,837	999	44,836	56,300	0.796	C
	I-215 SB Ramps to I-215 NB Ramps	3-Lane Arterial	6-Lane Urban Arterial	34,464	529	34,993	56,300	0.622	B

Notes: ¹ Source: City of Menifee Engineering Department, LOS Traffic Study Guidelines, October 2020
² Roadway segment is currently built to ultimate configuration.
ADT = Average Daily Traffic
V / C = Volume to Capacity
LOS = Level of Service

**TABLE 13
SUMMARY OF PROJECT FAIR SHARE - OPENING YEAR 2025 CUMULATIVE**

Int. #	Intersection	AM Peak Hour					PM Peak Hour				
		Total Volume		Total	Project	%age	Total Volume		Total	Project	%age
		2023	2025	Growth	Trips		2023	2025	Growth	Trips	
2	Wheat St at Ethanac Rd	1,321	2,244	923	43	4.7%	1,239	2,500	1,261	66	5.2%
3	Murrieta Rd at Ethanac Rd	1,789	3,477	1,688	75	4.4%	1,818	3,979	2,161	80	3.7%
4	Evans Rd at Ethanac Rd	1,493	3,506	2,013	102	5.1%	1,416	3,958	2,542	108	4.2%
6	I-215 SB Ramps at Ethanac Rd	2,283	4,685	2,402	97	4.0%	2,358	5,382	3,024	102	3.4%
7	I-215 NB Ramps at Ethanac Rd	1,851	3,738	1,887	47	2.5%	1,964	4,388	2,424	59	2.4%
10	Byers Rd at Ethanac Rd	1,266	2,924	1,658	72	4.3%	1,192	3,358	2,166	77	3.6%
Roadway	Segment	Daily Traffic									
		Total Volume		Total	Project	Fair Share					
		2023	2025	Growth	Trips	%age					
Ethanac Road	Murrieta Road to Evans Road	16,595	33,485	16,890	771	4.6%					
	Evans Road to Case Road	16,845	36,277	19,432	999	5.1%					
	Case Road to I-215 SB Ramps	24,114	43,837	19,723	999	5.1%					
	I-215 SB Ramps to I-215 NB Ramps	19,929	34,464	14,535	529	3.6%					

Notes:
- Fair Share percentage is to be applied to non-programmed improvements

SITE ACCESS AND CIRCULATION

The project site plan presented on Figure 2 (previously referenced) indicates that vehicular access provisions for Site 1 (Corsica Lane) would consist of one full-movement truck/auto driveway on Corsica Lane and one full-movement passenger vehicle driveway on Goetz Road. On-site drive aisles would provide two-way circulation on site. Site 1 would include 16 trailer stalls and 260 passenger car stalls.

Vehicular access provisions for Site 2 (Wheat Street) would consist of one full-movement, 40-foot truck driveway on Wheat Street. The other driveway on Wheat Street would be approximately 30-foot wide and would provide access to standard car parking stalls. On-site drive aisles would provide two-way circulation on site. Site 2 would include 112 passenger car stalls.

Vehicular access provisions for Site 3 (Evans Road) would consist of one full-movement, 40-foot truck driveway on Evans Road. The other driveway on Evans Road would be approximately 30-foot wide and would provide access to standard car parking stalls. On-site drive aisles would provide two-way circulation on site. Site 3 would include 154 passenger car stalls.

STORAGE CAPACITY AT LEFT-TURN POCKETS

Queue lengths at the left-turn pockets were assessed at the following locations under Existing, Existing Plus Project, Opening Year 2025 Cumulative, Opening Year 2025 Cumulative Plus Project, and Opening Year 2025 Cumulative Plus Project Plus Recommended Improvements conditions:

- Goetz Road at Ethanac Road (#1)
 - Southbound Left Turn
 - Westbound Left Turn

- Murrieta Road at Ethanac Road (#3)
 - Westbound Left Turn

- Evans Road at Ethanac Road (#4)
 - Northbound Left Turn
 - Westbound Left Turn

- I-215 NB Ramps at Ethanac Road (#7)
 - Eastbound Left Turn

- Byers Road at Ethanac Road (#10)
 - Westbound Left Turn

Results of the left-turning queuing analysis are summarized in **Table 14**. Based on the results of the queuing analysis, it is recommended that the following existing left-turn pockets are extended at the intersections below:

- Goetz Road at Ethanac Road: SBL Turn Pocket extended to 475 feet, and WBL Turn Pocket extended to 425 feet
- Murrieta Road at Ethanac Road: WBL Turn Pocket extended to 625 feet with Recommended Improvements
- Evans Road at Ethanac Road: NBL Turn Pocket extended to 75 feet, and WBL Turn Pocket extended to 425 feet with Recommended Improvements
- I-215 NB Ramps at Ethanac Road: EBL Turn Pocket extended to 525 feet with Recommended Improvements
- Byers Road at Ethanac Road: WBL Turn Pocket extended to 375 feet with Recommended Improvements

The left-turn pocket capacities are provided in the intersection analysis worksheets in **Appendix C** of this report.

SITE ADJACENT ROADWAY IMPROVEMENTS

The project would construct the following site adjacent roadway improvements:

- **Wheat Street**

Construction along the Project frontage to its ultimate half width as a 2-Lane Modified Industrial Collector (74-foot right-of-way).

- **Evans Road**

Construction along the Project frontage to its ultimate half width as a 2-Lane Industrial Collector (78-foot right-of-way). Based on conversation with City of Menifee staff, the intersection of Ethanac Road and Evans Road would be signalized.

- **Ethanac Road**

Construction along the Project frontage to its ultimate half width as an Expressway.

- **Corsica Lane**

Construction along the Project frontage to its ultimate half width (60-foot right-of-way).

**TABLE 14
SUMMARY OF LEFT-TURN POCKET STORAGE CAPACITY**

Intersection	Left-Turn Movement	Storage Capacity (ft/ln)	Peak Hour	Peak Hour Queue Length (ft/ln)									
				Existing		Existing Plus Project		Opening Year 2025 Cumulative		Opening Year 2025 Cumulative Plus Project		Opening Year 2025 Cumulative Plus Project Plus Recommended Improvements	
				50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile	50th Percentile	95th Percentile
Goetz Road at Ethanac Road (#1)	SBL	210	AM	223	345	225	348	292	432	294	434	--	--
			PM	245	374	246	375	306	450	307	451	--	--
	WBL	200	AM	135	230	155	256	165	270	185	296	--	--
			PM	215	335	222	344	267	401	275	412	--	--
Murrieta Road at Ethanac Road (#3)	WBL	195	AM	58	105	59	107	134	230	135	231	118	207
			PM	151	252	153	254	369	526	370	528	438	609
Evans Road at Ethanac Road (#4)	NBL	--	AM	N/A ¹	0	N/A ¹	2	N/A ¹	767	N/A ¹	797	21	39
			PM	N/A ¹	0	N/A ¹	5	N/A ¹	1068	N/A ¹	1169	32	58
	WBL	100	AM	N/A ¹	0	N/A ¹	3	N/A ¹	250	N/A ¹	302	283	421
			PM	N/A ¹	0	N/A ¹	1	N/A ¹	120	N/A ¹	143	212	331
I-215 NB Ramps at Ethanac Road (#7)	EBL	190	AM	191	305	202	319	1115	1693	1154	1758	260	392
			PM	203	319	234	360	1759	2753	1889	2963	348	501
Byers Road at Ethanac Road (#10)	WBL	100	AM	N/A ¹	1	N/A ¹	3	N/A ¹	84	N/A ¹	107	230	354
			PM	N/A ¹	0	N/A ¹	1	N/A ¹	95	N/A ¹	114	233	358

Notes:
¹ 50th percentile queue not reported for unsignalized intersections

FINDINGS AND CONCLUSIONS

- The proposed Compass Northern Gateway project would consist of three separate sites located in the City of Menifee. The project will involve the construction of six warehouse buildings totaling 490,393 square feet with their respective building square footage noted below:
 - Site 1 (Corsica Lane) – 265,821 square feet
 - Building 1 – 154,831 square feet
 - Building 2 – 80,090 square feet
 - Building 3 – 30,900 square feet
 - Site 2 (Wheat Street) – 86,676 square feet
 - Site 3 (Evans Road) – 137,896 square feet

- The project is estimated to generate 1,181 PCE trips daily, with 113 PCE trips in the morning peak hour and 121 PCE trips in the evening peak hour.

- Vehicular access provisions for Site 1 (Corsica Lane) would consist of one driveway on Corsica Lane and one driveway on Goetz Road.

- Vehicular access provisions for Site 2 (Wheat Street) would consist of two driveways (including one truck driveway) on Wheat Street.

- Vehicular access provisions for Site 3 (Evans Road) would consist of two driveways (including one truck driveway) on Evans Road.

- The project opening year is anticipated to be Year 2025. The Opening Year 2025 Cumulative condition includes a 2% ambient annual growth rate. With the addition of ambient growth and Cumulative Projects traffic, the following intersections would operate at an unacceptable Level of Service:
 - #2 – Wheat Street at Ethanac Road
 - #3 – Murrieta Road at Ethanac Road
 - #4 – Evans Road at Ethanac Road
 - #6 – I-215 SB Ramps at Ethanac Road
 - #7 – I-215 NB Ramps at Ethanac Road
 - #10 – Byers Road at Ethanac Road

- Project traffic was added to Opening Year 2025 traffic volumes to establish the conditions for Opening Year 2025 Cumulative Plus Project condition. Under this condition, the following intersections continue to operate at an unacceptable Level of Service:
 - #2 – Wheat Street at Ethanac Road
 - #3 – Murrieta Road at Ethanac Road
 - #4 – Evans Road at Ethanac Road
 - #6 – I-215 SB Ramps at Ethanac Road
 - #7 – I-215 NB Ramps at Ethanac Road
 - #10 – Byers Road at Ethanac Road

- Based on the City of Menifee *LOS Traffic Study Guidelines* (October 2020), under Opening Year 2025 Cumulative Plus Project Conditions, the project-would cause a project-related effect at the following intersections:
 - #2 – Wheat Street at Ethanac Road (Cumulative effect)
 - #3 – Murrieta Road at Ethanac Road (Cumulative effect)
 - #4 – Evans Road at Ethanac Road (Cumulative effect)
 - #6 – I-215 SB Ramps at Ethanac Road (Cumulative effect)
 - #7 – I-215 NB Ramps at Ethanac Road (Cumulative effect)
 - #10 – Byers Road at Ethanac Road (Cumulative effect)

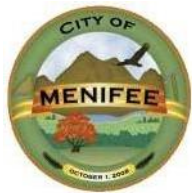
- Under Opening Year 2025 Cumulative Plus Project conditions, the following study roadway segments would operate at an unacceptable Level of Service on a daily basis:
 - Ethanac Road: Murrieta Road to Evans Road
 - Ethanac Road: Evans Road to Case Road
 - Ethanac Road: Case Road to I-215 SB Ramps
 - Ethanac Road: I-215 SB Ramps to I-215 NB Ramps

- Recommended improvements under applicable Opening Year 2025 Cumulative Plus Project condition were provided to address the project’s effect at study intersections and roadway segments.

- Recommended improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements, or a combination of these approaches.

APPENDIX A

APPROVED SCOPING AGREEMENT



**CITY OF MENIFEE
ENGINEERING DEPARTMENT**

FOR USE BY STAFF
Permit#: _____
Received Date: _____

TRAFFIC SCOPING/STUDY

APPLICATION

SUBMITTAL REQUIREMENTS

THIS FORM MUST BE SUBMITTED WITH FIRST PLAN CHECK:

Project No: Compass Northern Gateway Project Schedule: _____(if applicable)

Project Description: Site 1 (Corsica Lane): 265,821 SF Warehouse, Site 2 (Wheat Street): 86,676 SF Warehouse, Site 3 (Evans Road): 137,896 SF Warehouse

Name of Owner: _____

Signature: _____ Phone #: _____

Mailing Address: _____ FAX number: _____

_____ Email Address: _____

Name of Applicant: CDRE Holdings 20 LLC Contact: Vicky Valenzuela

Authorized Signature: _____ Phone #: (213) 929-5049

Mailing Address: _____ FAX number: _____

523 Main St. El Segundo, CA 90245 Email Address: _____

Submittal Requirements

- 1. _____ 2 Sets Site Plan
- 2. _____ 2 Sets Traffic/Scoping Study
- 3. _____ 1 \$1,000.00 – Deposit

FIRST SUBMITTAL REQUIRMENTS

- A. The City reserves the right to reject the submitted plan package without performing any plan checks if any of the required plans or information items are missing.

I, the undersigned engineer, do verify that all the items necessary for this project and checked above are attached.



Signature

1-31-2023

Date

Civil Engineer's Stamp

Trevor Briggs, P.E.

Printed Name

Kimley-Horn and Associates, Inc

Firm Name

3880 Lemon Street, Suite 420, Riverside, CA 92501

Address

714-786-6117

Phone Number

Fax

trevor.briggs@kimley-horn.com

Email Address



SCOPING AGREEMENT FOR TRAFFIC IMPACT ANALYSIS

This letter acknowledges the City Menifee Engineering Department requirements for the traffic impact analysis of the following project. The analysis must follow the latest City Traffic Impact Analysis Guidelines dated January 2019

Case No.
 Related Cases -
 SP No.
 EIR No.
 GPA No.
 CZ No.
 Project Name: Compass Northern Gateway Project
 Project Location: 3 Warehouse Sites located within the EDC **See Attachment A**
 Project Description: Site 1 (Corsica Lane): 265,821 SF Warehouse, Site 2 (Wheat Street): 86,676 SF Warehouse, Site 3 (Evans Road): 137,896 SF Warehouse

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>Kimley-Horn and Associates, Inc.</u>	<u>CDRE Holdings 20 LLC</u>
Address:	<u>3880 Lemon St Suite 420, Riverside, CA 92501</u>	<u>523 Main St. El Segundo, CA 90245</u>
Telephone:	<u>714-786-6117</u>	<u>(213) 929-5049</u>

A. Trip Generation Source: ITE Trip Generation Manual, most recent edition (11th Edition)

	<u>Vacant</u>		<u>Warehouse/Industrial</u>
Existing Land Use	<u>EDC</u>	Proposed Land Use	<u>EDC</u>
Existing Zoning		Proposed Zoning	
Total Daily Trips	<u>- N/A</u>		<u>1181 Daily PCE trips</u>

	In	Out	Total	
AM Trips	<u>89</u>	<u>24</u>	<u>113</u>	See Attachment B
PM Trips	<u>32</u>	<u>89</u>	<u>121</u>	

Internal Trip Allowance Yes No (_____ % Trip Discount)
 Pass-By Trip Allowance Yes No (_____ % Trip Discount)

(Attach additional sheet if this is a multi-use site with a breakdown of trips generated)

B. Trip Geographic Distribution: PC N 44 % S 45 % E 10 % W 1 %
 (See attached exhibit for detailed assignment) Truck 60% 40% 0% 0%

See Attachment C

C. Background Traffic

Project Completion Year: 2025 Annual Ambient Growth Rate: 2 %
 Other area projects to be included:

Please contact the Engineering Department or use the most recently provided data

Model/Forecast methodology if required Existing + Ambient Growth + Cumulative Projects + Project

D. Horizon Year Analysis: Does this project require a Horizon Year Analysis?

Yes No

E. Study intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

- 1. - **See Attachment C**
- 2. -
- 3. -
- 4. -

- 5. -
- 6. -
- 7. -
- 8. _____

F. Study Roadway Segments: **See Attachment C**

- 1. -
- 2. -
- 3. -
- 4. -

- 5. -
- 6. -
- 7. -
- 8. _____

G. Other Jurisdictional Impacts

Is this project within any other Agency's Sphere of Influence or one-mile radius of boundaries? Yes No

If so, name of Jurisdiction: Perris

H. Site Plan (please attach a legible 11'X17' copy) **See Attachment A**

I. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Engineering Department)

Analyze all project driveways for required intersection geometry and lane configurations, storage for truck queuing, traffic control, sight distance, and operations. Will include site access and internal circulation, including truck turning movements, turning radius, roadway widths, and parking. VMT Analysis study will be performed. Additional coordination will be required for truck routes due to Ethanac Road no longer being a truck route in the eastbound direction.

Recommended by:

Trevor Briggs, P.E.
Consultant's Representative

1-31-2023
Date

Scoping Agreement Submitted on

1-31-2023
Date

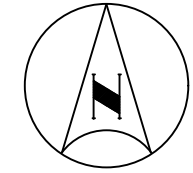
Scoping Agreement Resubmitted on

Date

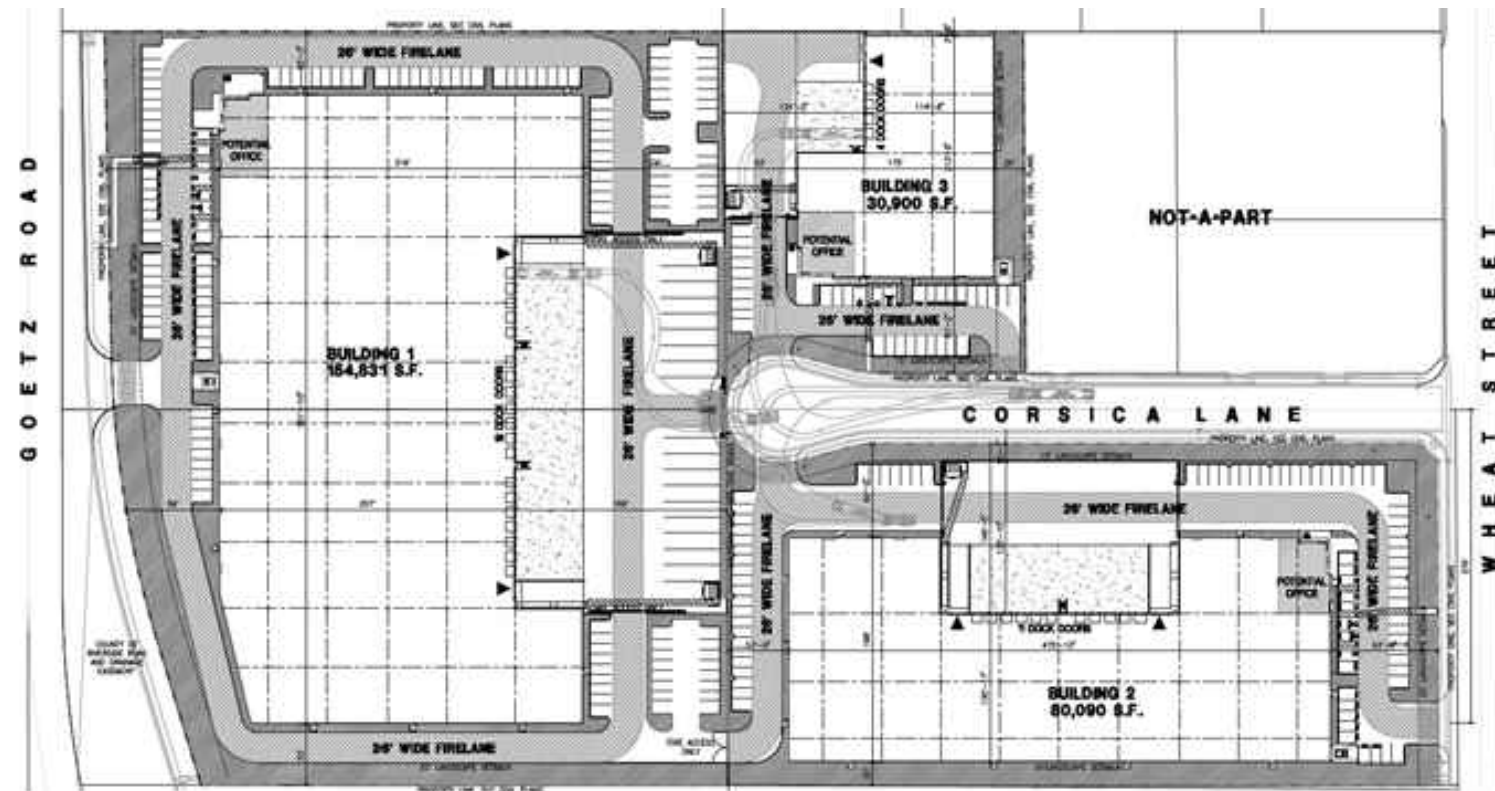
Approved Scoping Agreement:

Rob Blough, PE, TE
City of Menifee
Engineering Department

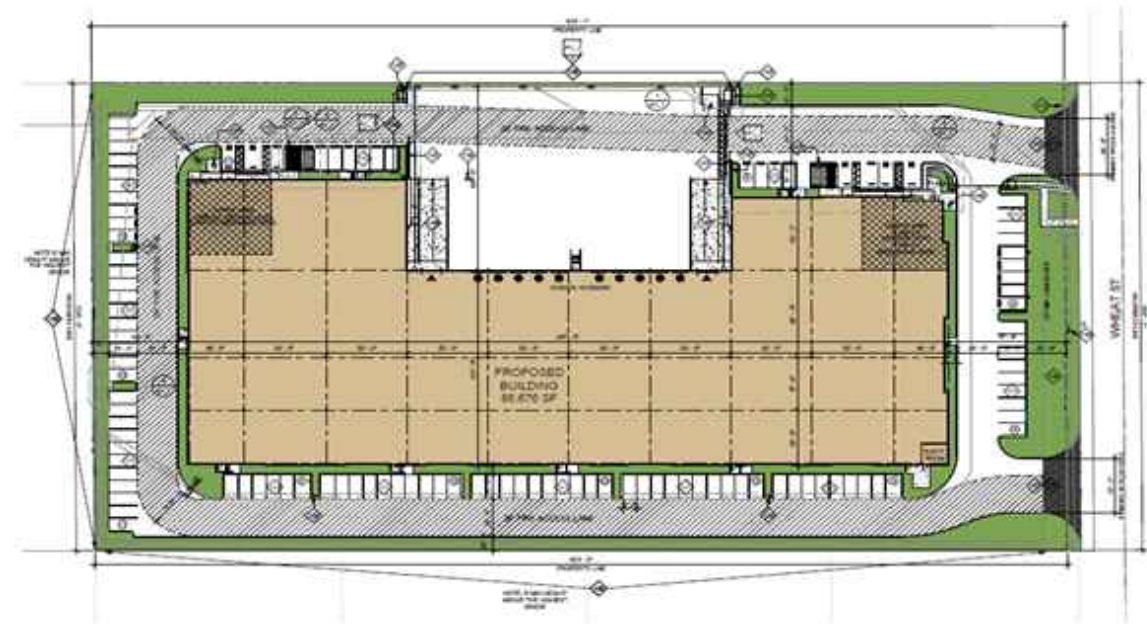
2-2-2023
Date



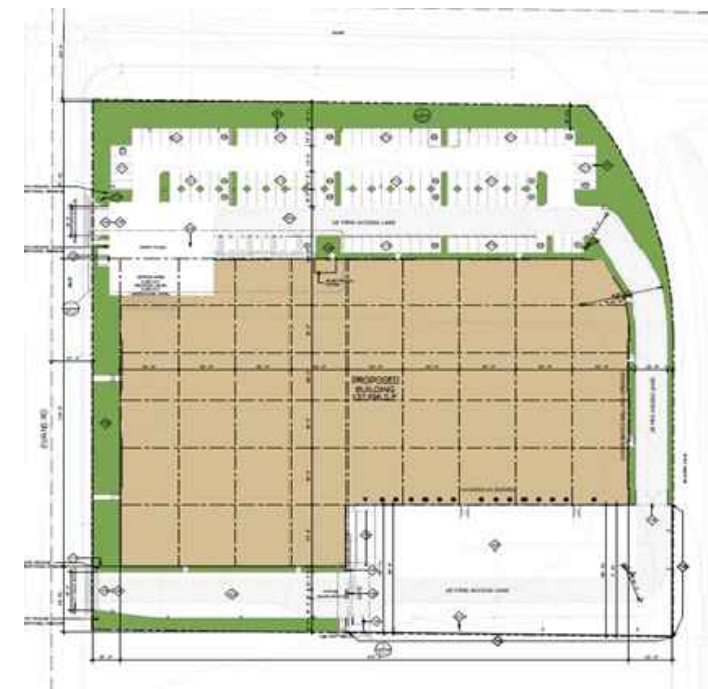
NOT TO SCALE



SITE 1 (CORSICA LANE)



SITE 2 (WHEAT STREET)



SITE 3 (EVANS ROAD)

ATTACHMENT A
SITE PLAN

**ATTACHMENT B
SUMMARY OF PROJECT TRIP GENERATION
COMPASS NORTHERN GATEWAY PROJECT**

TRIP GENERATION RATES ¹

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	150	KSF	1.71	0.131	0.039	0.170	0.050	0.130	0.180

PROJECT TRIP GENERATION

SITE 1 (Corsica Lane)

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	265.821	KSF	455	35	10	45	13	35	48
Passenger Vehicles	73.00%		332	26	7	33	9	26	35
Trucks	27.00%		123	9	3	12	4	9	13

SITE 1 (Corsica Lane) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	332	1.0	332	26	7	33	9	26	35
2-Axle Trucks	4.57%	21	1.5	32	2	1	3	1	2	3
3-Axle Trucks	6.13%	28	2.0	56	4	1	5	2	4	6
4+ Axle Trucks	16.30%	74	3.0	222	17	5	22	6	17	23
Total Site 1 (Corsica Lane) Truck PCE Trips				310	23	7	30	9	23	32
Total Site 1 (Corsica Lane) PCE Trips				642	49	14	63	18	49	67

SITE 2 (Wheat Street)

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	86.676	KSF	148	11	3	14	4	11	15
Passenger Vehicles	73.00%		108	26	7	33	9	26	35
Trucks	27.00%		40	9	3	12	4	9	13

SITE 2 (Wheat Street) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	108	1.0	108	8	2	10	3	8	11
2-Axle Trucks	4.57%	7	1.5	10	1	0	1	0	1	1
3-Axle Trucks	6.13%	9	2.0	18	1	0	1	0	1	1
4+ Axle Trucks	16.30%	24	3.0	72	5	1	6	2	5	7
Total Site 2 (Wheat Street) Truck PCE Trips				100	7	1	8	2	7	9
Total Site 2 (Wheat Street) PCE Trips				208	15	3	18	5	15	20

SITE 3 (Evans Road)

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	137.896	KSF	236	18	5	23	7	18	25
Passenger Vehicles	73.00%		172	13	4	17	5	13	18
Trucks	27.00%		64	5	1	6	2	5	7

SITE 3 (Evans Road) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	172	1.0	172	13	4	17	5	13	18
2-Axle Trucks	4.57%	11	1.5	17	1	0	1	0	1	1
3-Axle Trucks	6.13%	14	2.0	28	2	1	3	1	2	3
4+ Axle Trucks	16.30%	38	3.0	114	9	2	11	3	9	12
Total Site 3 (Evans Road) Truck PCE Trips				159	12	3	15	4	12	16
Total Site 3 (Evans Road) PCE Trips				331	25	7	32	9	25	34
Total Proposed Project Passenger Vehicle Trips				612	47	13	60	17	47	64
Total Proposed Project Truck PCE Trips				569	42	11	53	15	42	57
Total Proposed Project PCE Trips				1,181	89	24	113	32	89	121

¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

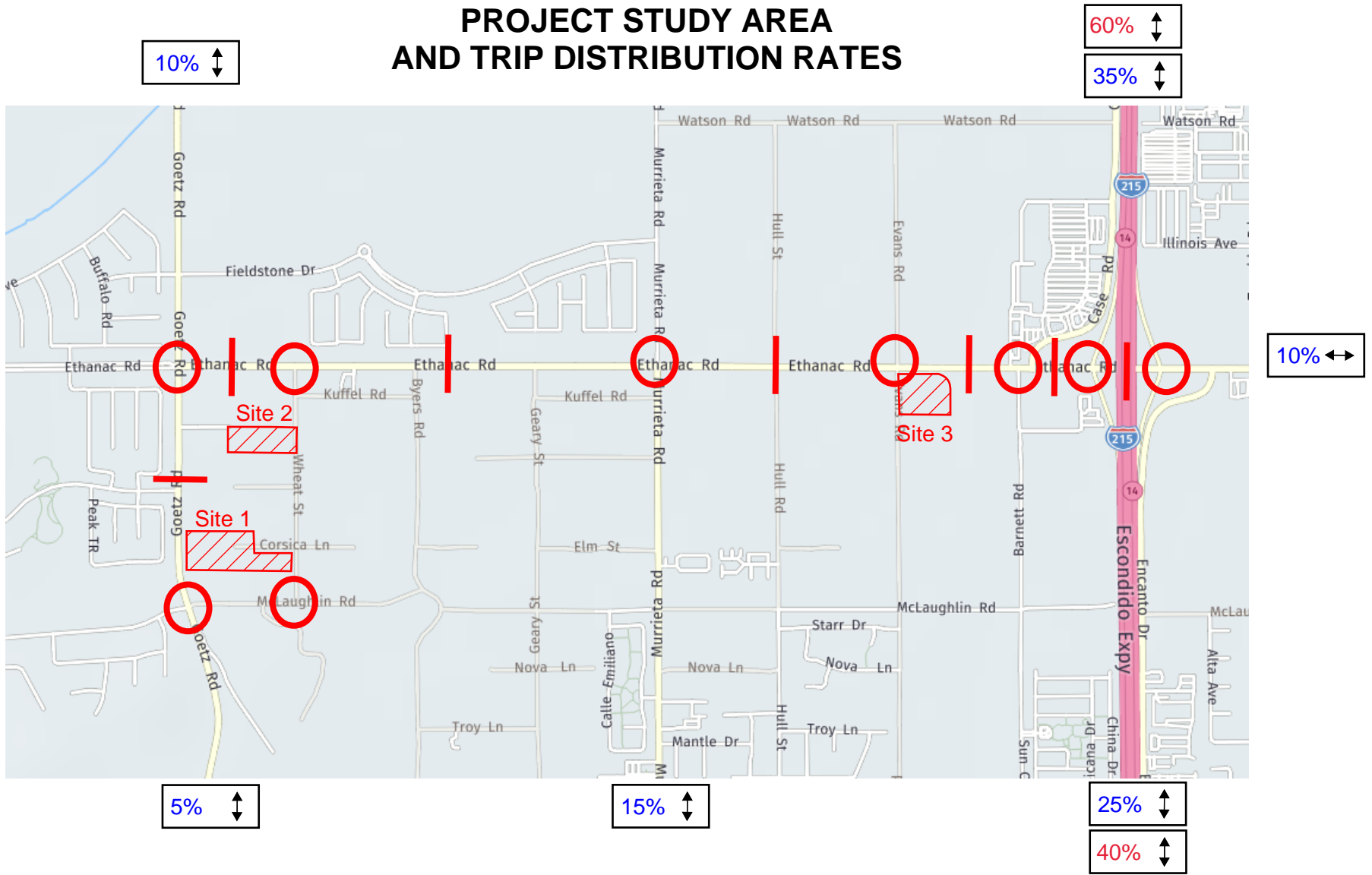
² Passenger Vehicles and Truck splits taken from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition Supplement.

³ Truck mix percentages were calculated based on a ratio between the ITE truck splits and the Truck Trip Generation Study - City of Fontana, August 2003

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

ATTACHMENT C PROJECT STUDY AREA AND TRIP DISTRIBUTION RATES



 PROJECT SITE

 STUDY INTERSECTION

 XX% PASSENGER CAR TRIP DISTRIBUTION

 XX% TRUCK TRIP DISTRIBUTION

ATTACHMENT C PROJECT STUDY AREA

Study Intersections

1. Goetz Road at Ethanac Road
2. Wheat Street at Ethanac Road
3. Murrieta Road at Ethanac Road
4. Evans Road at Ethanac Road
5. Barnet Road/Case Road at Ethanac Road
6. I-215 SB Ramps at Ethanac Road
7. I-215 NB Ramps at Ethanac Road
8. Goetz Road at McLaughlin Road
9. Wheat Street at McLaughlin Road

Study Roadway Segments

1. Goetz Road: Ethanac Road to McLaughlin Road
2. Ethanac Road: Goetz Road to Wheat Street
3. Ethanac Road: Wheat Street to Murrieta Road
4. Ethanac Road: Murrieta Road to Evans Road
5. Ethanac Road: Evans Road to Case Road
6. Ethanac Road: Case Road to I-215 SB Ramps
7. Ethanac Road: I-215 SB Ramps to I-215 NB Ramps

**ATTACHMENT D:
ROADWAY SEGMENT CAPACITY THRESHOLDS**

Roadway Classification	Number of Lanes	Maximum Two-Way Average Daily Traffic (ADT) Volume		
		LOS C	LOS D	LOS E
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial	4	29,600	33,400	37,000
Mountain Arterial	2	12,900	14,500	16,100
Mountain Arterial	4	25,500	28,700	31,900
Urban Arterial	6	45,000	50,600	56,300
Urban Arterial	8	69,000	78,000	87,000
Expressway	4	53,000	58,000	64,000
Expressway	6	79,000	87,000	95,000
Expressway	8	106,000	119,000	132,000
Freeway	4	80,000	91,000	100,000
Freeway	6	102,000	123,000	132,000
Freeway	8	136,000	164,000	176,000
Freeway	10	169,000	205,000	220,000
Ramp ⁽¹⁾	1	16,000	18,000	20,000

Footnotes:

1. Ramp Capacity is given as a one-way traffic volume.

Source: Riverside County Transportation Department

ATTACHMENT E

Truck Trip Generation Study



**City of Fontana
County of San Bernardino
State of California**

August 2003

6. VEHICLE MIX AND ENTER/EXIT SPLITS BY LAND USE CATEGORY





VEHICLE MIX AND ENTER/EXIT SPLITS BY LAND USE CATEGORY (Cont'd)

Classification: Heavy Warehouse

Recommended Large Truck Mix (%)								
		Lge 2 Ax	3 Axle	4+ Axle	Total			
		16.95	22.71	60.34	100			
		Pass Veh	Lge 2 Ax	3 Axle	4+ Axle	Total		
		79.57	3.46	4.64	12.33	100		
Site Entering & Exiting								
a.m.					p.m.			
Split	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
	85.66	14.34	46.38	53.62	46.01	53.99	56.58	43.42
Street Entering & Exiting								
a.m.					p.m.			
Split	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit	Total Enter	Total Exit	Large Truck Enter	Large Truck Exit
	50.94	49.06	45.00	55.00	30.72	69.28	45.76	54.24

C | Appendix: Truck Trips as Percent of Total Vehicle Trips

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

Truck Trips as Percentage of Total Vehicle Trips

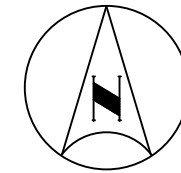
Land Use Code, Land Use Name, and Time Period	# Sites	Wtd Avg	Lowest	Highest	Std Dev
150 Warehousing					
Weekday	12	27%	0%	65%	21%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	21	13%	0%	71%	22%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.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

Truck Trips as Percentage of Total Vehicle Trips

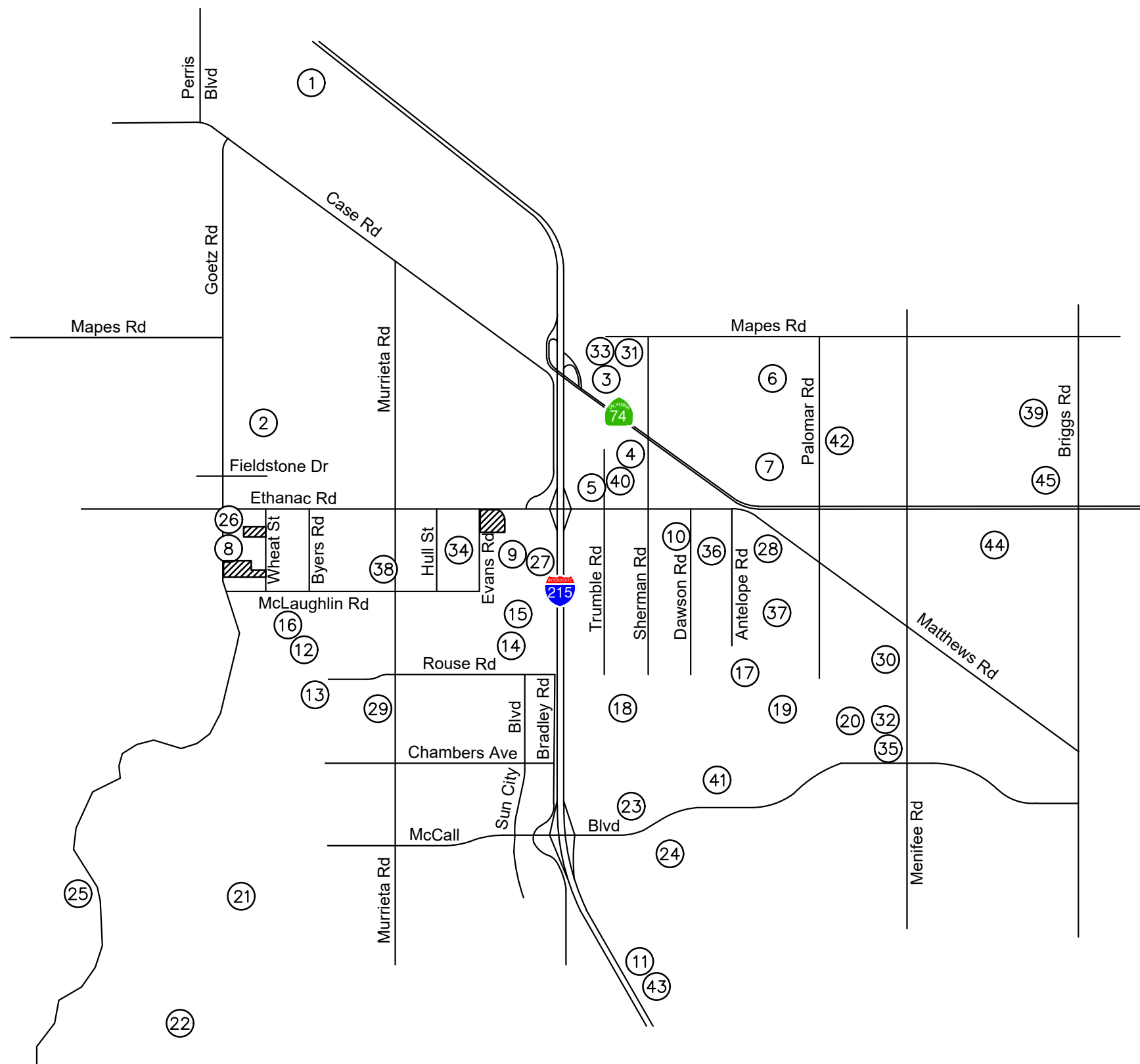
Land Use Code, Land Use Name, and Time Period	# Sites	Wtd Avg	Lowest	Highest	Std Dev
155 High-Cube Fulfillment Center Warehouse (Sort)					
Weekday	1	3%	—	—	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	2	2%	1%	2%	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	2	2%	1%	6%	N.A.
156 High-Cube Parcel Hub Warehouse					
Weekday	1	9%	—	—	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	1	5%	—	—	N.A.
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	1	1%	—	—	N.A.
157 High-Cube Cold Storage Warehouse					
Weekday	4	35%	32%	39%	3%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	5	27%	18%	46%	13%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	5	23%	0%	45%	16%
170 Utility					
Weekday	13	2%	0%	17%	5%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	12	0%	0%	0%	0%
Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	12	1%	0%	2%	1%
Weekday, AM Peak Hour of Generator	13	1%	0%	22%	6%
Weekday, PM Peak Hour of Generator	13	2%	0%	50%	16%

ATTACHMENT F SUMMARY OF CUMULATIVE PROJECTS												
Proj #	Location	Land Use	Quantity	Units	Trip Generation Estimates							
					AM Peak Hour			PM Peak Hour				
					Daily	In	Out	Total	In	Out	Total	
1	Industrial Warehouse Building	Warehousing	2,300.000	KSF	3,933	301	90	391	115	299	414	
2	Green Valley	Single-Family Detached Housing	623	DU	5,881	115	346	461	389	228	617	
		Multifamily Housing (Mid-Rise)	842	DU	4,580	79	224	303	226	145	371	
3	On-Deck	Convenience Market w/ Gasoline Pumps	6	Fueling Position	1,935	62	62	124	69	69	138	
		Pass-by Trips (AM: 63%, PM:66%)										
		Hotel	108	Room	903	30	21	51	33	32	65	
		Quality Restaurant	5,500	KSF	461	3	1	4	29	14	43	
		Pass-by Trips (PM:44%)										
		Fast-Food Restaurant w/o Drive-thru	3,000	KSF	1,039	45	30	75	43	43	86	
		Automated Car Wash	4,500	KSF	734	26	15	41	32	32	64	
		Sub Total				5,072	127	90	217	148	138	286
4	Paragon Framing	High-Cube Short-Term Storage	5,000	KSF	7	0	0	0	0	0	0	
		General Office Building	5,454	KSF	53	5	1	6	1	5	6	
5	Perris Travel Center	Gasoline Station w/ Convenience Market	16	Fueling Position	3,286	102	98	200	114	110	224	
6	MR-27 LLC (Rancon)	Single-Family Detached Housing	172	DU	1,624	32	95	127	107	63	170	
		Shopping Center	4,888	KSF	185	3	2	5	9	10	19	
7	Motte Country Plaza	Pass-by Trips (PM:34%)										
		Sub Total				185	3	2	5	6	7	13
8	Capstone Warehouse	Warehousing	700.037	KSF	1,197	92	27	119	35	91	126	
9	Ethanac Square	Automated Car Wash	2,080	KSF	339	12	7	19	15	15	30	
		Convenience Market w/ Gasoline Pumps	4	Fueling Position	1,290	42	42	84	46	46	92	
10	Menifee Commerce Center	Warehousing	1,640.130	KSF	9,474	964	249	1,213	633	999	1,632	
11	Village Villas	Multifamily Housing (Low-Rise)	24	DU	176	3	8	11	8	5	13	
12	Cimarron Ridge	Single-Family Detached Housing	756	DU	7,137	140	420	560	472	277	749	
13	Valley Blvd Tract Map	Single-Family Detached Housing	68	DU	642	13	38	51	42	25	67	
14	Sagewood (DR Horton)	Single-Family Detached Housing	174	DU	1,643	32	97	129	109	64	173	
15	McLaughlin Village	Single-Family Detached Housing	126	DU	1,189	23	70	93	79	46	125	
16	TTM 38128	Single-Family Detached Housing	96	DU	906	18	53	71	60	35	95	
17	Talavera (KB Homes)	Single-Family Detached Housing	173	DU	1,633	32	96	128	108	63	171	
18	Legado	Single-Family Detached Housing	1,022	DU	9,648	189	567	756	638	374	1,012	
19	Underwood (KB Homes)	Single-Family Detached Housing	543	DU	5,126	100	301	401	339	199	538	
20	Remington/McCall Mesa	Single-Family Detached Housing	264	DU	2,492	49	147	196	165	97	262	
21	Stonegate (Enclave)	Single-Family Detached Housing	177	DU	1,671	33	98	131	110	65	175	
22	Skyview (Woodside Homes)	Single-Family Detached Housing	246	DU	2,322	46	137	183	154	90	244	
23	McCall-Encanto Gas Station	Gasoline Station w/ Convenience Market	12	Fueling Position	2,464	76	73	149	86	82	168	
24	McCall Plaza	Convenience Market w/ Gasoline Pumps	2	Fueling Position	645	21	21	42	23	23	46	
		Pass-by Trips (AM: 63%, PM:66%)										
		Shopping Center	1	KSF	38	1	0	1	2	2	4	
		Quality Restaurant	3,100	KSF	260	2	0	2	16	8	24	
		Pass-by Trips (PM:44%)										
		Fast-Food Restaurant w/o Drive-thru	3.2	KSF	1,108	48	32	80	45	45	90	
		Automated Car Wash	2,080	KSF	339	12	7	19	15	15	30	
		Sub Total				2,390	71	47	118	79	74	153
25	Quail Hills	Single-Family Detached Housing	152	DU	1,435	28	84	112	95	56	151	
26	Goetz/Ethanac Commercial	Convenience Market w/ Gasoline Pumps	8	Fueling Position	2,580	83	83	166	92	92	184	
		Pass-by Trips (AM: 63%, PM:66%)										
		Discount Home Furnishing Superstore	3	KSF	58	1	1	2	2	2	4	
		Shopping Center	7,040	KSF	266	4	3	7	13	14	27	
		Pass-by Trips (PM:34%) Retail Only										
Sub Total				2,904	36	35	70	42	43	84		
27	Barnett Warehouse	Warehousing	251.780	KSF	431	33	10	43	13	33	46	
28	Nova Battery Storage	Warehousing	1,139.478	KSF	1,949	149	44	193	57	148	205	
29	Vista Ridge Apartments	Multifamily Housing (Mid-Rise)	30	DU	163	3	8	11	8	5	13	
30	LDW TTM 38346	Multifamily Housing (Mid-Rise)	162	DU	881	15	43	58	43	28	71	
31	Mapes and Sherman Warehouse	Warehousing	277.578	KSF	475	36	11	47	14	36	50	
32	The Village at Junipero	Multifamily Housing (Mid-Rise)	240	DU	1,306	23	64	87	64	41	105	
33	United Carpports Warehouse	Warehousing	58.643	KSF	100	8	2	10	3	8	11	
34	Northern Gateway Commerce Center	#N/A	2,487.625	#N/A	11,113	1,105	272	1,377	668	1,155	1,823	
35	McCall Square	Shopping Center	84.200	KSF	3,179	49	30	79	154	167	321	
		Mini-Warehouse	150.541	KSF	218	8	6	14	11	12	23	
36	Motte Business Center	Warehousing	1,138.638	KSF	1,947	149	44	193	57	148	205	
37	McLaughlin San Jacinto Warehouses	Warehousing	491.467	KSF	840	64	19	83	25	64	89	
38	Ares Warehouse on Murrieta	Warehousing	551.685	KSF	943	72	22	94	28	72	100	
39	TR 38133	Single-Family Detached Housing	145	DU	1,369	27	80	107	90	53	143	
40	Trumble and Watson Warehouse	Warehousing	327.631	KSF	560	43	13	56	16	43	59	
41	Cypress and Sands Apartments	Multifamily Housing (Mid-Rise)	136	DU	740	13	36	49	36	23	59	
42	TR 38132	Multifamily Housing (Mid-Rise)	173	DU	941	16	46	62	46	30	76	
43	Kensington Apartments	Multifamily Housing (Mid-Rise)	221	DU	1,202	21	59	80	59	38	97	
44	Menifee Valley SP (Brookfield)	Multifamily Housing (Mid-Rise)	1,711	DU	9,308	161	455	616	459	294	753	
45	Harvest Glen Marketplace	Convenience Market w/ Gasoline Pumps	16	Fueling Position	5,160	166	166	332	184	184	368	
		Pass-by Trips (AM: 63%, PM:66%)										
		Fast-Food Restaurant w/ Drive-thru	1.102	KSF	519	23	22	45	19	17	36	
		Fast-Food Restaurant w/o Drive-thru	3.268	KSF	1,131	49	33	82	46	46	92	
		Automated Car Wash	3,000	KSF	489	17	10	27	21	21	42	
		Sub Total				7,299	150	126	277	149	147	295
Total Project Trips					125,663	4,908	4,932	9,840	6,420	6,285	12,705	



DU = Dwelling Unit, KSF = 1,000 square feet, FP = Fueling Position



NOT TO SCALE



LEGEND:

-  = Project Site
-  = Cumulative Project

ATTACHMENT G LOCATION OF CUMULATIVE PROJECTS



APPENDIX B

TRAFFIC COUNT DATA SHEETS

APPENDIX B-1

**TRAFFIC COUNT DATA
SHEETS-
INTERSECTION COUNTS**

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

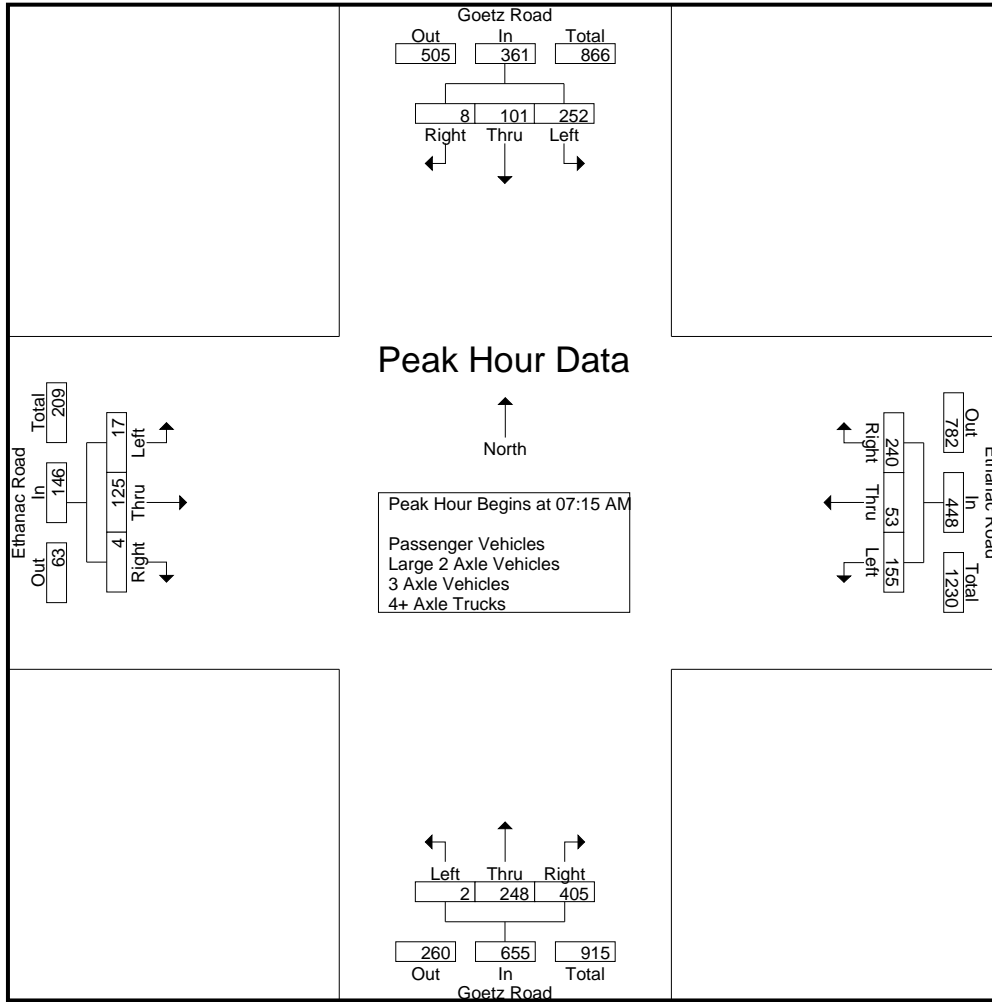
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	52	18	3	73	20	0	65	85	0	69	76	145	4	20	0	24	327
07:15 AM	61	13	1	75	25	2	67	94	0	66	99	165	10	52	0	62	396
07:30 AM	59	20	1	80	31	4	54	89	0	84	116	200	3	41	0	44	413
07:45 AM	60	28	3	91	30	13	78	121	0	56	120	176	3	16	1	20	408
Total	232	79	8	319	106	19	264	389	0	275	411	686	20	129	1	150	1544
08:00 AM	72	40	3	115	69	34	41	144	2	42	70	114	1	16	3	20	393
08:15 AM	41	28	5	74	59	14	54	127	0	36	64	100	1	13	3	17	318
08:30 AM	42	20	2	64	45	11	35	91	0	28	46	74	1	10	4	15	244
08:45 AM	35	24	2	61	41	8	34	83	0	27	60	87	1	7	0	8	239
Total	190	112	12	314	214	67	164	445	2	133	240	375	4	46	10	60	1194
Grand Total	422	191	20	633	320	86	428	834	2	408	651	1061	24	175	11	210	2738
Apprch %	66.7	30.2	3.2		38.4	10.3	51.3		0.2	38.5	61.4		11.4	83.3	5.2		
Total %	15.4	7	0.7	23.1	11.7	3.1	15.6	30.5	0.1	14.9	23.8	38.8	0.9	6.4	0.4	7.7	
Passenger Vehicles	389	177	19	585	297	86	405	788	2	394	625	1021	24	173	10	207	2601
% Passenger Vehicles	92.2	92.7	95	92.4	92.8	100	94.6	94.5	100	96.6	96	96.2	100	98.9	90.9	98.6	95
Large 2 Axle Vehicles	17	9	1	27	9	0	14	23	0	9	13	22	0	1	1	2	74
% Large 2 Axle Vehicles	4	4.7	5	4.3	2.8	0	3.3	2.8	0	2.2	2	2.1	0	0.6	9.1	1	2.7
3 Axle Vehicles	9	5	0	14	4	0	6	10	0	5	2	7	0	0	0	0	31
% 3 Axle Vehicles	2.1	2.6	0	2.2	1.2	0	1.4	1.2	0	1.2	0.3	0.7	0	0	0	0	1.1
4+ Axle Trucks	7	0	0	7	10	0	3	13	0	0	11	11	0	1	0	1	32
% 4+ Axle Trucks	1.7	0	0	1.1	3.1	0	0.7	1.6	0	0	1.7	1	0	0.6	0	0.5	1.2

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	61	13	1	75	25	2	67	94	0	66	99	165	10	52	0	62	396
07:30 AM	59	20	1	80	31	4	54	89	0	84	116	200	3	41	0	44	413
07:45 AM	60	28	3	91	30	13	78	121	0	56	120	176	3	16	1	20	408
08:00 AM	72	40	3	115	69	34	41	144	2	42	70	114	1	16	3	20	393
Total Volume	252	101	8	361	155	53	240	448	2	248	405	655	17	125	4	146	1610
% App. Total	69.8	28	2.2		34.6	11.8	53.6		0.3	37.9	61.8		11.6	85.6	2.7		
PHF	.875	.631	.667	.785	.562	.390	.769	.778	.250	.738	.844	.819	.425	.601	.333	.589	.975

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:00 AM				07:00 AM			
+0 mins.	61	13	1	75	30	13	78	121	0	69	76	145	4	20	0	24
+15 mins.	59	20	1	80	69	34	41	144	0	66	99	165	10	52	0	62
+30 mins.	60	28	3	91	59	14	54	127	0	84	116	200	3	41	0	44
+45 mins.	72	40	3	115	45	11	35	91	0	56	120	176	3	16	1	20
Total Volume	252	101	8	361	203	72	208	483	0	275	411	686	20	129	1	150
% App. Total	69.8	28	2.2		42	14.9	43.1		0	40.1	59.9		13.3	86	0.7	
PHF	.875	.631	.667	.785	.736	.529	.667	.839	.000	.818	.856	.858	.500	.620	.250	.605

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
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Groups Printed- Passenger Vehicles

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	49	16	3	68	17	0	64	81	0	67	73	140	4	20	0	24	313
07:15 AM	56	13	1	70	23	2	60	85	0	65	93	158	10	52	0	62	375
07:30 AM	52	18	1	71	24	4	51	79	0	83	115	198	3	41	0	44	392
07:45 AM	56	26	2	84	30	13	74	117	0	53	113	166	3	15	0	18	385
Total	213	73	7	293	94	19	249	362	0	268	394	662	20	128	0	148	1465
08:00 AM	70	38	3	111	67	34	41	142	2	40	69	111	1	16	3	20	384
08:15 AM	37	25	5	67	56	14	49	119	0	34	62	96	1	12	3	16	298
08:30 AM	38	19	2	59	43	11	34	88	0	28	42	70	1	10	4	15	232
08:45 AM	31	22	2	55	37	8	32	77	0	24	58	82	1	7	0	8	222
Total	176	104	12	292	203	67	156	426	2	126	231	359	4	45	10	59	1136
Grand Total	389	177	19	585	297	86	405	788	2	394	625	1021	24	173	10	207	2601
Apprch %	66.5	30.3	3.2		37.7	10.9	51.4		0.2	38.6	61.2		11.6	83.6	4.8		
Total %	15	6.8	0.7	22.5	11.4	3.3	15.6	30.3	0.1	15.1	24	39.3	0.9	6.7	0.4	8	

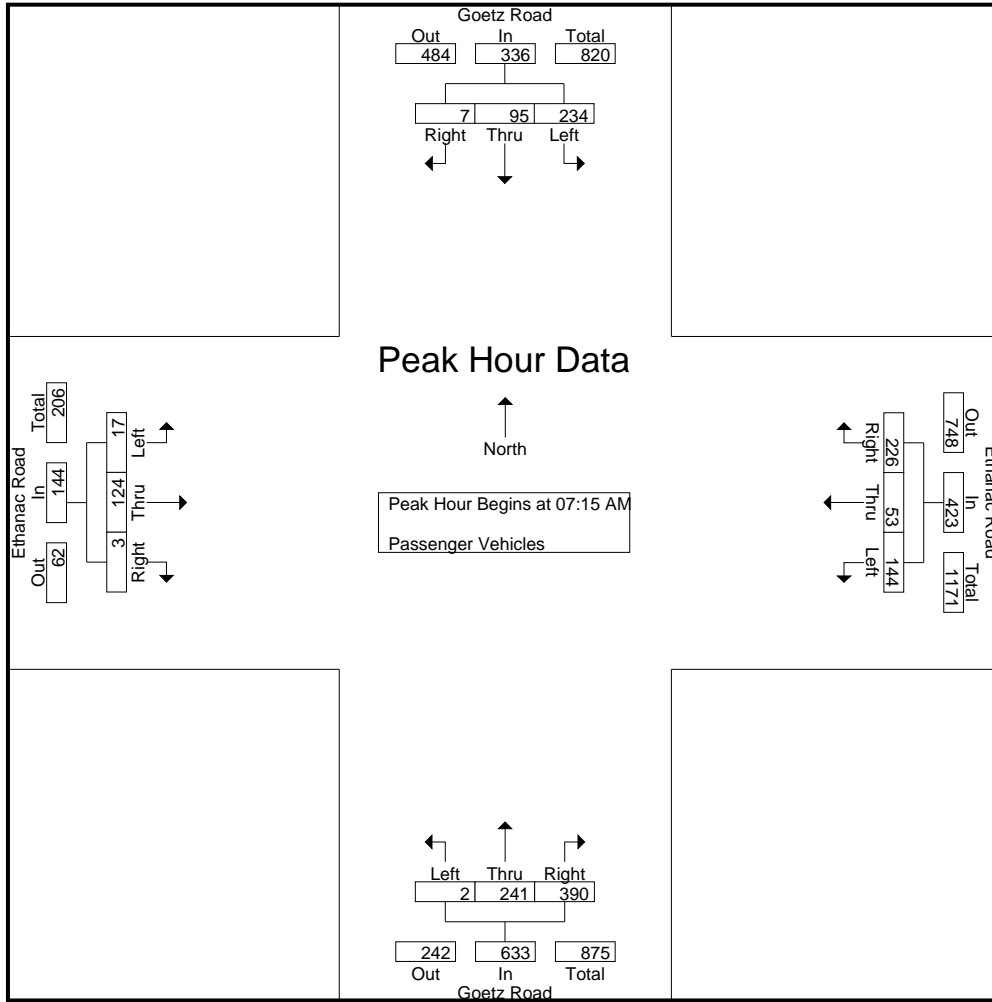
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	56	13	1	70	23	2	60	85	0	65	93	158	10	52	0	62	375
07:30 AM	52	18	1	71	24	4	51	79	0	83	115	198	3	41	0	44	392
07:45 AM	56	26	2	84	30	13	74	117	0	53	113	166	3	15	0	18	385
08:00 AM	70	38	3	111	67	34	41	142	2	40	69	111	1	16	3	20	384
Total Volume	234	95	7	336	144	53	226	423	2	241	390	633	17	124	3	144	1536
% App. Total	69.6	28.3	2.1		34	12.5	53.4		0.3	38.1	61.6		11.8	86.1	2.1		
PHF	.836	.625	.583	.757	.537	.390	.764	.745	.250	.726	.848	.799	.425	.596	.250	.581	.980

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	56	13	1	70	23	2	60	85	0	65	93	158	10	52	0	62
+15 mins.	52	18	1	71	24	4	51	79	0	83	115	198	3	41	0	44
+30 mins.	56	26	2	84	30	13	74	117	0	53	113	166	3	15	0	18
+45 mins.	70	38	3	111	67	34	41	142	2	40	69	111	1	16	3	20
Total Volume	234	95	7	336	144	53	226	423	2	241	390	633	17	124	3	144
% App. Total	69.6	28.3	2.1		34	12.5	53.4		0.3	38.1	61.6		11.8	86.1	2.1	
PHF	.836	.625	.583	.757	.537	.390	.764	.745	.250	.726	.848	.799	.425	.596	.250	.581

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	2	0	5	0	0	0	0	0	2	1	3	0	0	0	0	8
07:15 AM	2	0	0	2	1	0	4	5	0	1	2	3	0	0	0	0	10
07:30 AM	3	2	0	5	4	0	1	5	0	1	0	1	0	0	0	0	11
07:45 AM	2	0	1	3	0	0	4	4	0	1	5	6	0	1	1	2	15
Total	10	4	1	15	5	0	9	14	0	5	8	13	0	1	1	2	44
08:00 AM	2	2	0	4	2	0	0	2	0	2	0	2	0	0	0	0	8
08:15 AM	1	2	0	3	1	0	3	4	0	0	2	2	0	0	0	0	9
08:30 AM	2	1	0	3	0	0	1	1	0	0	2	2	0	0	0	0	6
08:45 AM	2	0	0	2	1	0	1	2	0	2	1	3	0	0	0	0	7
Total	7	5	0	12	4	0	5	9	0	4	5	9	0	0	0	0	30
Grand Total	17	9	1	27	9	0	14	23	0	9	13	22	0	1	1	2	74
Apprch %	63	33.3	3.7		39.1	0	60.9		0	40.9	59.1		0	50	50		
Total %	23	12.2	1.4	36.5	12.2	0	18.9	31.1	0	12.2	17.6	29.7	0	1.4	1.4	2.7	

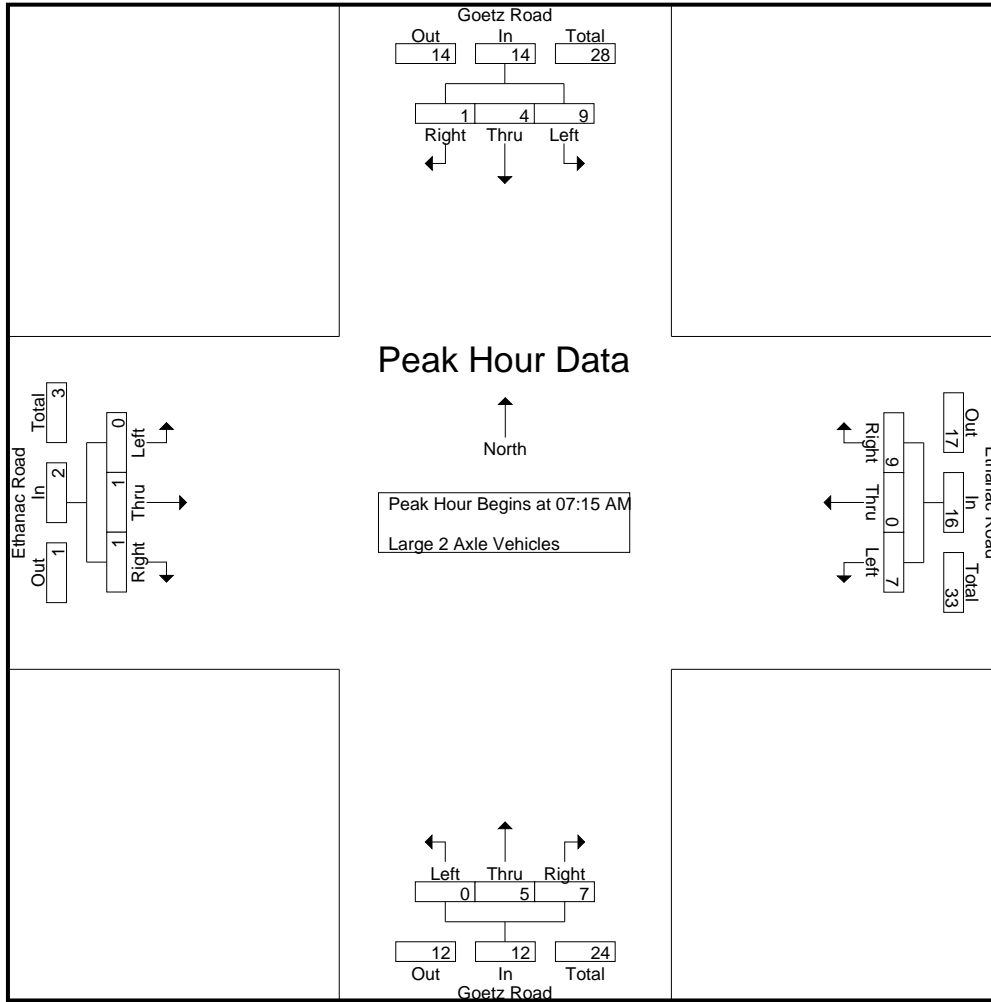
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	2	0	0	2	1	0	4	5	0	1	2	3	0	0	0	0	10
07:30 AM	3	2	0	5	4	0	1	5	0	1	0	1	0	0	0	0	11
07:45 AM	2	0	1	3	0	0	4	4	0	1	5	6	0	1	1	2	15
08:00 AM	2	2	0	4	2	0	0	2	0	2	0	2	0	0	0	0	8
Total Volume	9	4	1	14	7	0	9	16	0	5	7	12	0	1	1	2	44
% App. Total	64.3	28.6	7.1		43.8	0	56.2		0	41.7	58.3		0	50	50		
PHF	.750	.500	.250	.700	.438	.000	.563	.800	.000	.625	.350	.500	.000	.250	.250	.250	.733

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	0	0	2	1	0	4	5	0	1	2	3	0	0	0	0
+15 mins.	3	2	0	5	4	0	1	5	0	1	0	1	0	0	0	0
+30 mins.	2	0	1	3	0	0	4	4	0	1	5	6	0	1	1	2
+45 mins.	2	2	0	4	2	0	0	2	0	2	0	2	0	0	0	0
Total Volume	9	4	1	14	7	0	9	16	0	5	7	12	0	1	1	2
% App. Total	64.3	28.6	7.1		43.8	0	56.2		0	41.7	58.3		0	50	50	
PHF	.750	.500	.250	.700	.438	.000	.563	.800	.000	.625	.350	.500	.000	.250	.250	.250

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	2
07:15 AM	2	0	0	2	0	0	3	3	0	0	0	0	0	0	0	0	0	5
07:30 AM	3	0	0	3	2	0	1	3	0	0	0	0	0	0	0	0	0	6
07:45 AM	2	2	0	4	0	0	0	0	0	2	2	4	0	0	0	0	0	8
Total	7	2	0	9	3	0	5	8	0	2	2	4	0	0	0	0	0	21
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	1	1	0	2	1	0	1	2	0	2	0	2	0	0	0	0	0	6
08:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	3
Total	2	3	0	5	1	0	1	2	0	3	0	3	0	0	0	0	0	10
Grand Total	9	5	0	14	4	0	6	10	0	5	2	7	0	0	0	0	0	31
Apprch %	64.3	35.7	0		40	0	60		0	71.4	28.6		0	0	0			
Total %	29	16.1	0	45.2	12.9	0	19.4	32.3	0	16.1	6.5	22.6	0	0	0	0	0	

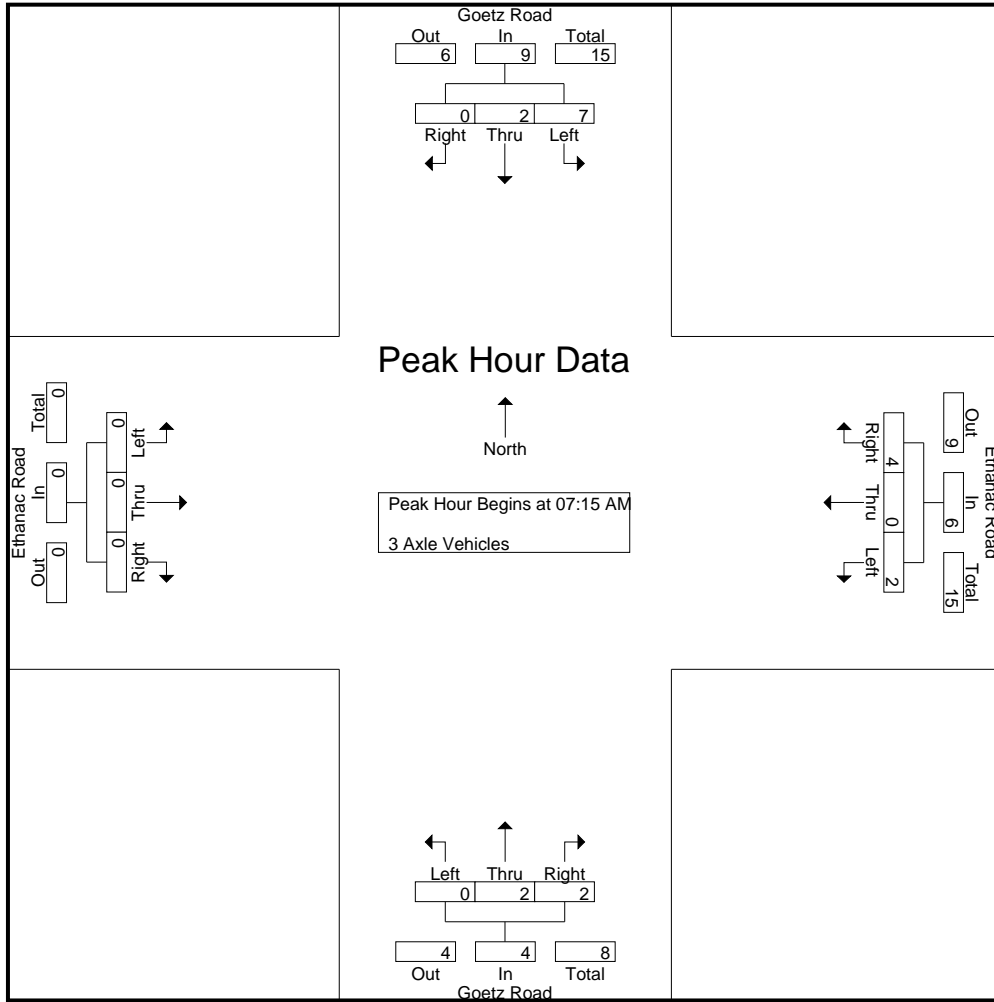
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:15 AM	2	0	0	2	0	0	3	3	0	0	0	0	0	0	0	0	0	5
07:30 AM	3	0	0	3	2	0	1	3	0	0	0	0	0	0	0	0	0	6
07:45 AM	2	2	0	4	0	0	0	0	0	2	2	4	0	0	0	0	0	8
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	7	2	0	9	2	0	4	6	0	2	2	4	0	0	0	0	0	19
% App. Total	77.8	22.2	0		33.3	0	66.7		0	50	50		0	0	0			
PHF	.583	.250	.000	.563	.250	.000	.333	.500	.000	.250	.250	.250	.000	.000	.000	.000	.000	.594

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	0	0	2	0	0	3	3	0	0	0	0	0	0	0	0
+15 mins.	3	0	0	3	2	0	1	3	0	0	0	0	0	0	0	0
+30 mins.	2	2	0	4	0	0	0	0	0	2	2	4	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	7	2	0	9	2	0	4	6	0	2	2	4	0	0	0	0
% App. Total	77.8	22.2	0		33.3	0	66.7		0	50	50		0	0	0	
PHF	.583	.250	.000	.563	.250	.000	.333	.500	.000	.250	.250	.250	.000	.000	.000	.000

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	2	0	0	2	0	0	2	2	0	0	0	0	4
07:15 AM	1	0	0	1	1	0	0	1	0	0	4	4	0	0	0	0	6
07:30 AM	1	0	0	1	1	0	1	2	0	0	1	1	0	0	0	0	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2	4	0	1	5	0	0	7	7	0	0	0	0	14
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:15 AM	2	0	0	2	1	0	1	2	0	0	0	0	0	1	0	1	5
08:30 AM	1	0	0	1	2	0	0	2	0	0	2	2	0	0	0	0	5
08:45 AM	2	0	0	2	3	0	1	4	0	0	1	1	0	0	0	0	7
Total	5	0	0	5	6	0	2	8	0	0	4	4	0	1	0	1	18
Grand Total	7	0	0	7	10	0	3	13	0	0	11	11	0	1	0	1	32
Apprch %	100	0	0		76.9	0	23.1		0	0	100		0	100	0		
Total %	21.9	0	0	21.9	31.2	0	9.4	40.6	0	0	34.4	34.4	0	3.1	0	3.1	

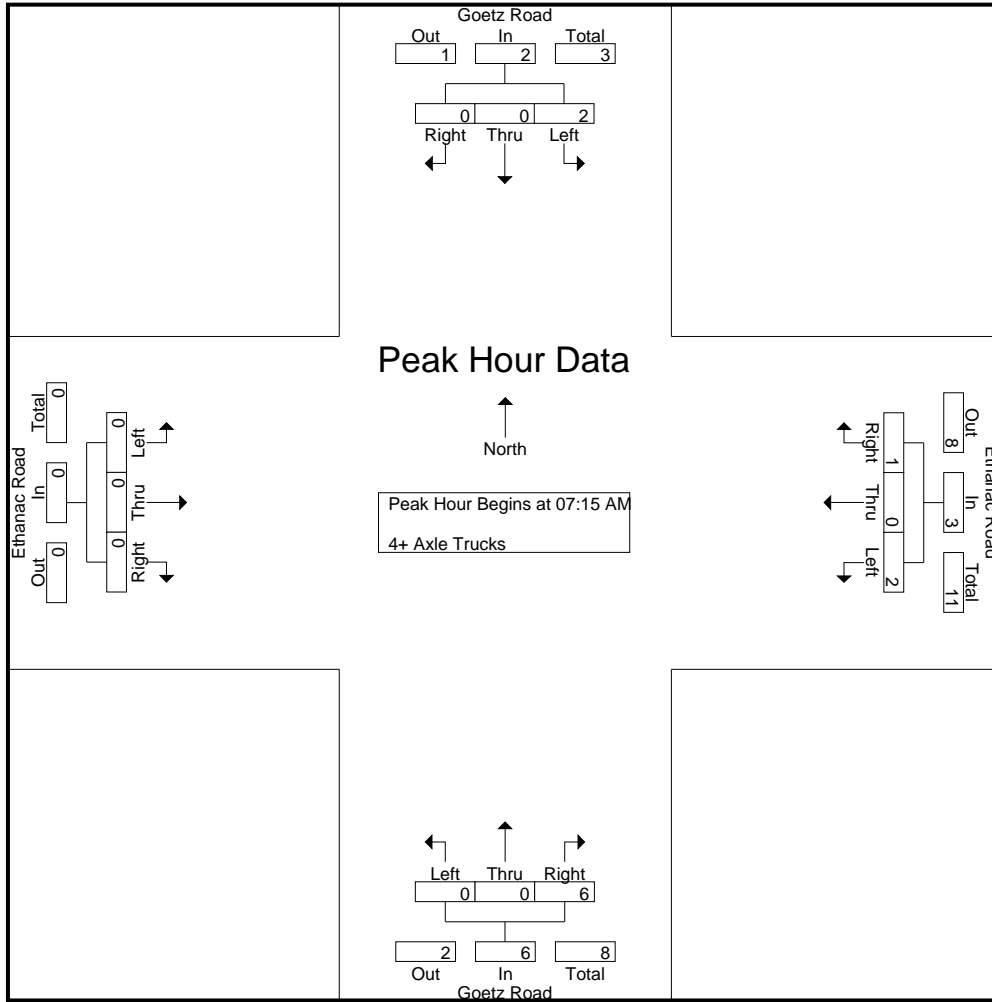
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	1	0	0	1	1	0	0	1	0	0	4	4	0	0	0	0	6
07:30 AM	1	0	0	1	1	0	1	2	0	0	1	1	0	0	0	0	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Volume	2	0	0	2	2	0	1	3	0	0	6	6	0	0	0	0	11
% App. Total	100	0	0		66.7	0	33.3		0	0	100		0	0	0		
PHF	.500	.000	.000	.500	.500	.000	.250	.375	.000	.000	.375	.375	.000	.000	.000	.000	.458

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	1	0	0	1	0	0	4	4	0	0	0	0
+15 mins.	1	0	0	1	1	0	1	2	0	0	1	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	2	0	0	2	2	0	1	3	0	0	6	6	0	0	0	0
% App. Total	100	0	0	66.7	66.7	0	33.3	100	0	0	100	100	0	0	0	0
PHF	.500	.000	.000	.500	.500	.000	.250	.375	.000	.000	.375	.375	.000	.000	.000	.000

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

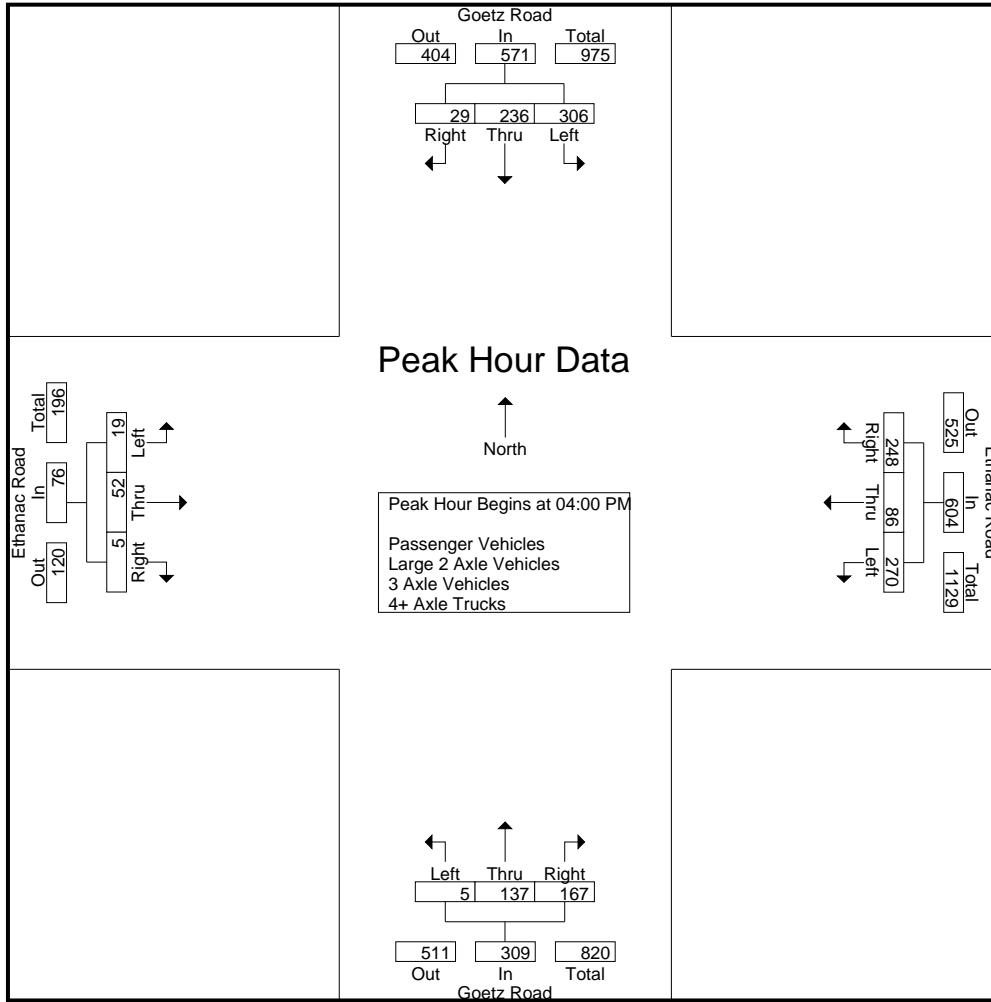
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	85	63	7	155	64	15	60	139	2	29	47	78	4	12	0	16	388
04:15 PM	69	60	8	137	78	25	70	173	2	35	33	70	3	12	1	16	396
04:30 PM	80	59	9	148	61	19	62	142	1	34	40	75	5	11	3	19	384
04:45 PM	72	54	5	131	67	27	56	150	0	39	47	86	7	17	1	25	392
Total	306	236	29	571	270	86	248	604	5	137	167	309	19	52	5	76	1560
05:00 PM	86	65	6	157	69	22	44	135	2	31	41	74	6	16	0	22	388
05:15 PM	61	66	8	135	82	16	60	158	1	24	49	74	3	10	0	13	380
05:30 PM	63	67	7	137	62	14	54	130	1	29	57	87	3	15	1	19	373
05:45 PM	57	53	7	117	67	27	39	133	1	21	36	58	3	15	1	19	327
Total	267	251	28	546	280	79	197	556	5	105	183	293	15	56	2	73	1468
Grand Total	573	487	57	1117	550	165	445	1160	10	242	350	602	34	108	7	149	3028
Apprch %	51.3	43.6	5.1		47.4	14.2	38.4		1.7	40.2	58.1		22.8	72.5	4.7		
Total %	18.9	16.1	1.9	36.9	18.2	5.4	14.7	38.3	0.3	8	11.6	19.9	1.1	3.6	0.2	4.9	
Passenger Vehicles	554	480	56	1090	543	159	405	1107	10	233	337	580	33	108	7	148	2925
% Passenger Vehicles	96.7	98.6	98.2	97.6	98.7	96.4	91	95.4	100	96.3	96.3	96.3	97.1	100	100	99.3	96.6
Large 2 Axle Vehicles	14	7	1	22	7	5	8	20	0	6	12	18	1	0	0	1	61
% Large 2 Axle Vehicles	2.4	1.4	1.8	2	1.3	3	1.8	1.7	0	2.5	3.4	3	2.9	0	0	0.7	2
3 Axle Vehicles	1	0	0	1	0	1	30	31	0	2	1	3	0	0	0	0	35
% 3 Axle Vehicles	0.2	0	0	0.1	0	0.6	6.7	2.7	0	0.8	0.3	0.5	0	0	0	0	1.2
4+ Axle Trucks	4	0	0	4	0	0	2	2	0	1	0	1	0	0	0	0	7
% 4+ Axle Trucks	0.7	0	0	0.4	0	0	0.4	0.2	0	0.4	0	0.2	0	0	0	0	0.2

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	85	63	7	155	64	15	60	139	2	29	47	78	4	12	0	16	388
04:15 PM	69	60	8	137	78	25	70	173	2	35	33	70	3	12	1	16	396
04:30 PM	80	59	9	148	61	19	62	142	1	34	40	75	5	11	3	19	384
04:45 PM	72	54	5	131	67	27	56	150	0	39	47	86	7	17	1	25	392
Total Volume	306	236	29	571	270	86	248	604	5	137	167	309	19	52	5	76	1560
% App. Total	53.6	41.3	5.1		44.7	14.2	41.1		1.6	44.3	54		25	68.4	6.6		
PHF	.900	.937	.806	.921	.865	.796	.886	.873	.625	.878	.888	.898	.679	.765	.417	.760	.985

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:45 PM				04:15 PM			
+0 mins.	69	60	8	137	64	15	60	139	0	39	47	86	3	12	1	16
+15 mins.	80	59	9	148	78	25	70	173	2	31	41	74	5	11	3	19
+30 mins.	72	54	5	131	61	19	62	142	1	24	49	74	7	17	1	25
+45 mins.	86	65	6	157	67	27	56	150	1	29	57	87	6	16	0	22
Total Volume	307	238	28	573	270	86	248	604	4	123	194	321	21	56	5	82
% App. Total	53.6	41.5	4.9		44.7	14.2	41.1		1.2	38.3	60.4		25.6	68.3	6.1	
PHF	.892	.915	.778	.912	.865	.796	.886	.873	.500	.788	.851	.922	.750	.824	.417	.820

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	81	63	7	151	63	13	55	131	2	29	43	74	4	12	0	16	372
04:15 PM	67	60	8	135	77	25	59	161	2	33	33	68	3	12	1	16	380
04:30 PM	78	59	9	146	60	19	60	139	1	32	40	73	5	11	3	19	377
04:45 PM	70	53	5	128	64	26	54	144	0	37	46	83	7	17	1	25	380
Total	296	235	29	560	264	83	228	575	5	131	162	298	19	52	5	76	1509
05:00 PM	83	64	6	153	69	20	40	129	2	31	39	72	5	16	0	21	375
05:15 PM	60	64	7	131	82	15	49	146	1	23	45	69	3	10	0	13	359
05:30 PM	62	66	7	135	61	14	50	125	1	27	56	84	3	15	1	19	363
05:45 PM	53	51	7	111	67	27	38	132	1	21	35	57	3	15	1	19	319
Total	258	245	27	530	279	76	177	532	5	102	175	282	14	56	2	72	1416
Grand Total	554	480	56	1090	543	159	405	1107	10	233	337	580	33	108	7	148	2925
Apprch %	50.8	44	5.1		49.1	14.4	36.6		1.7	40.2	58.1		22.3	73	4.7		
Total %	18.9	16.4	1.9	37.3	18.6	5.4	13.8	37.8	0.3	8	11.5	19.8	1.1	3.7	0.2	5.1	

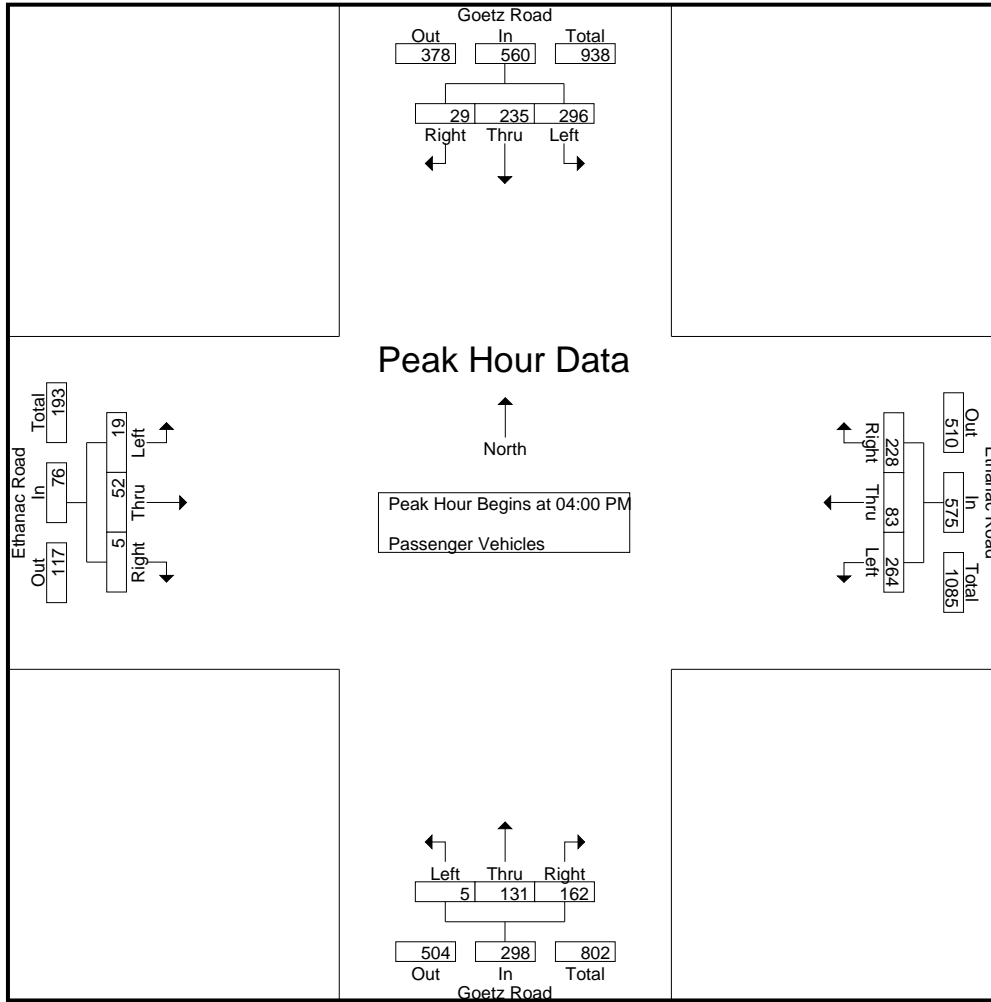
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	81	63	7	151	63	13	55	131	2	29	43	74	4	12	0	16	372
04:15 PM	67	60	8	135	77	25	59	161	2	33	33	68	3	12	1	16	380
04:30 PM	78	59	9	146	60	19	60	139	1	32	40	73	5	11	3	19	377
04:45 PM	70	53	5	128	64	26	54	144	0	37	46	83	7	17	1	25	380
Total Volume	296	235	29	560	264	83	228	575	5	131	162	298	19	52	5	76	1509
% App. Total	52.9	42	5.2		45.9	14.4	39.7		1.7	44	54.4		25	68.4	6.6		
PHF	.914	.933	.806	.927	.857	.798	.950	.893	.625	.885	.880	.898	.679	.765	.417	.760	.993

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	81	63	7	151	63	13	55	131	2	29	43	74	4	12	0	16
+15 mins.	67	60	8	135	77	25	59	161	2	33	33	68	3	12	1	16
+30 mins.	78	59	9	146	60	19	60	139	1	32	40	73	5	11	3	19
+45 mins.	70	53	5	128	64	26	54	144	0	37	46	83	7	17	1	25
Total Volume	296	235	29	560	264	83	228	575	5	131	162	298	19	52	5	76
% App. Total	52.9	42	5.2		45.9	14.4	39.7		1.7	44	54.4		25	68.4	6.6	
PHF	.914	.933	.806	.927	.857	.798	.950	.893	.625	.885	.880	.898	.679	.765	.417	.760

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	0	0	3	1	2	2	5	0	0	4	4	0	0	0	0	12
04:15 PM	2	0	0	2	1	0	1	2	0	2	0	2	0	0	0	0	6
04:30 PM	1	0	0	1	1	0	1	2	0	2	0	2	0	0	0	0	5
04:45 PM	1	1	0	2	3	1	1	5	0	0	1	1	0	0	0	0	8
Total	7	1	0	8	6	3	5	14	0	4	5	9	0	0	0	0	31
05:00 PM	2	1	0	3	0	2	0	2	0	0	2	2	1	0	0	1	8
05:15 PM	1	2	1	4	0	0	1	1	0	0	3	3	0	0	0	0	8
05:30 PM	0	1	0	1	1	0	1	2	0	2	1	3	0	0	0	0	6
05:45 PM	4	2	0	6	0	0	1	1	0	0	1	1	0	0	0	0	8
Total	7	6	1	14	1	2	3	6	0	2	7	9	1	0	0	1	30
Grand Total	14	7	1	22	7	5	8	20	0	6	12	18	1	0	0	1	61
Apprch %	63.6	31.8	4.5		35	25	40		0	33.3	66.7		100	0	0		
Total %	23	11.5	1.6	36.1	11.5	8.2	13.1	32.8	0	9.8	19.7	29.5	1.6	0	0	1.6	

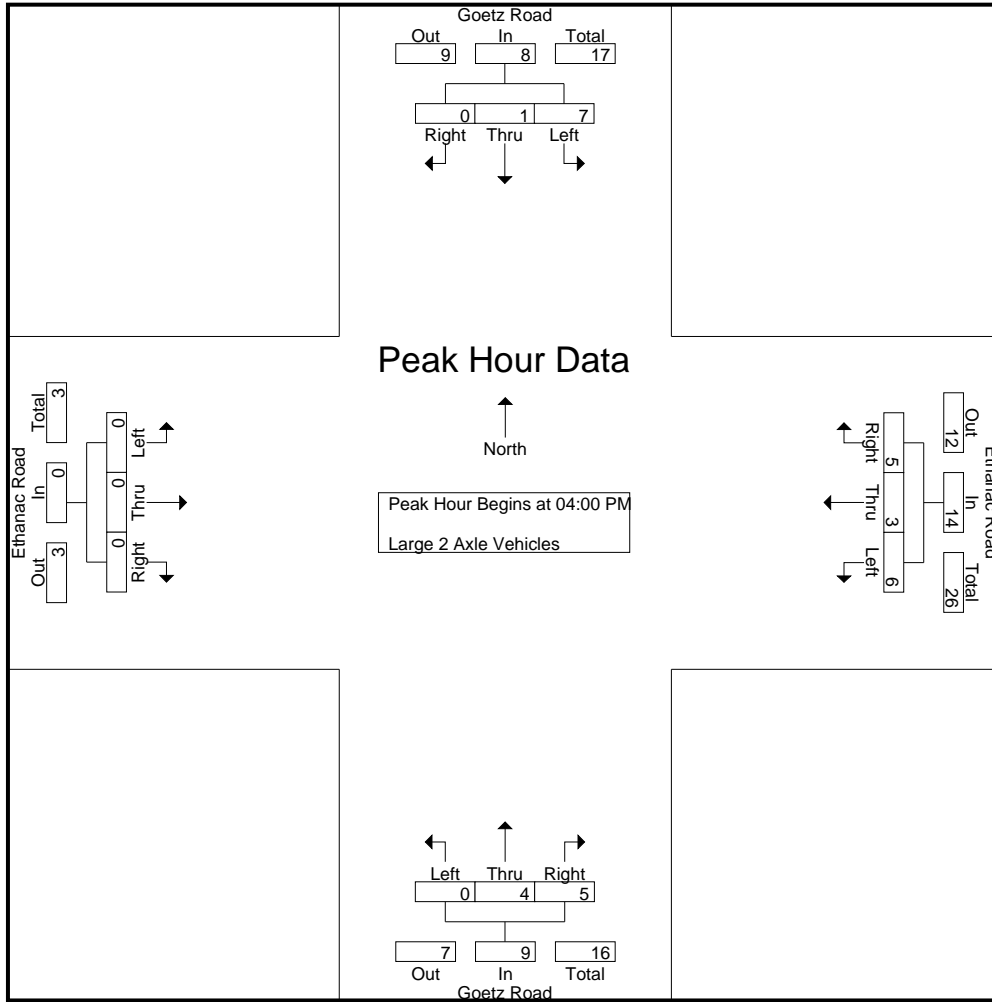
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	0	0	3	1	2	2	5	0	0	4	4	0	0	0	0	12
04:15 PM	2	0	0	2	1	0	1	2	0	2	0	2	0	0	0	0	6
04:30 PM	1	0	0	1	1	0	1	2	0	2	0	2	0	0	0	0	5
04:45 PM	1	1	0	2	3	1	1	5	0	0	1	1	0	0	0	0	8
Total Volume	7	1	0	8	6	3	5	14	0	4	5	9	0	0	0	0	31
% App. Total	87.5	12.5	0		42.9	21.4	35.7		0	44.4	55.6		0	0	0		
PHF	.583	.250	.000	.667	.500	.375	.625	.700	.000	.500	.313	.563	.000	.000	.000	.000	.646

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM							
+0 mins.	3	0	0	3	1	2	2	5	0	0	4	4	0	0	0	0	0	0	0	0
+15 mins.	2	0	0	2	1	0	1	2	0	2	0	2	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	1	0	1	2	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	1	1	0	2	3	1	1	5	0	0	1	1	0	0	0	0	0	0	0	0
Total Volume	7	1	0	8	6	3	5	14	0	4	5	9	0	0	0	0	0	0	0	0
% App. Total	87.5	12.5	0		42.9	21.4	35.7		0	44.4	55.6		0	0	0		0	0	0	
PHF	.583	.250	.000	.667	.500	.375	.625	.700	.000	.500	.313	.563	.000	.000	.000	.000	.000	.000	.000	.000

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	9
04:30 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	2
Total	1	0	0	1	0	0	13	13	0	1	0	1	0	0	0	0	0	15
05:00 PM	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	4
05:15 PM	0	0	0	0	0	1	10	11	0	1	1	2	0	0	0	0	0	13
05:30 PM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	17	18	0	1	1	2	0	0	0	0	0	20
Grand Total	1	0	0	1	0	1	30	31	0	2	1	3	0	0	0	0	0	35
Apprch %	100	0	0		0	3.2	96.8		0	66.7	33.3		0	0	0			
Total %	2.9	0	0	2.9	0	2.9	85.7	88.6	0	5.7	2.9	8.6	0	0	0	0	0	

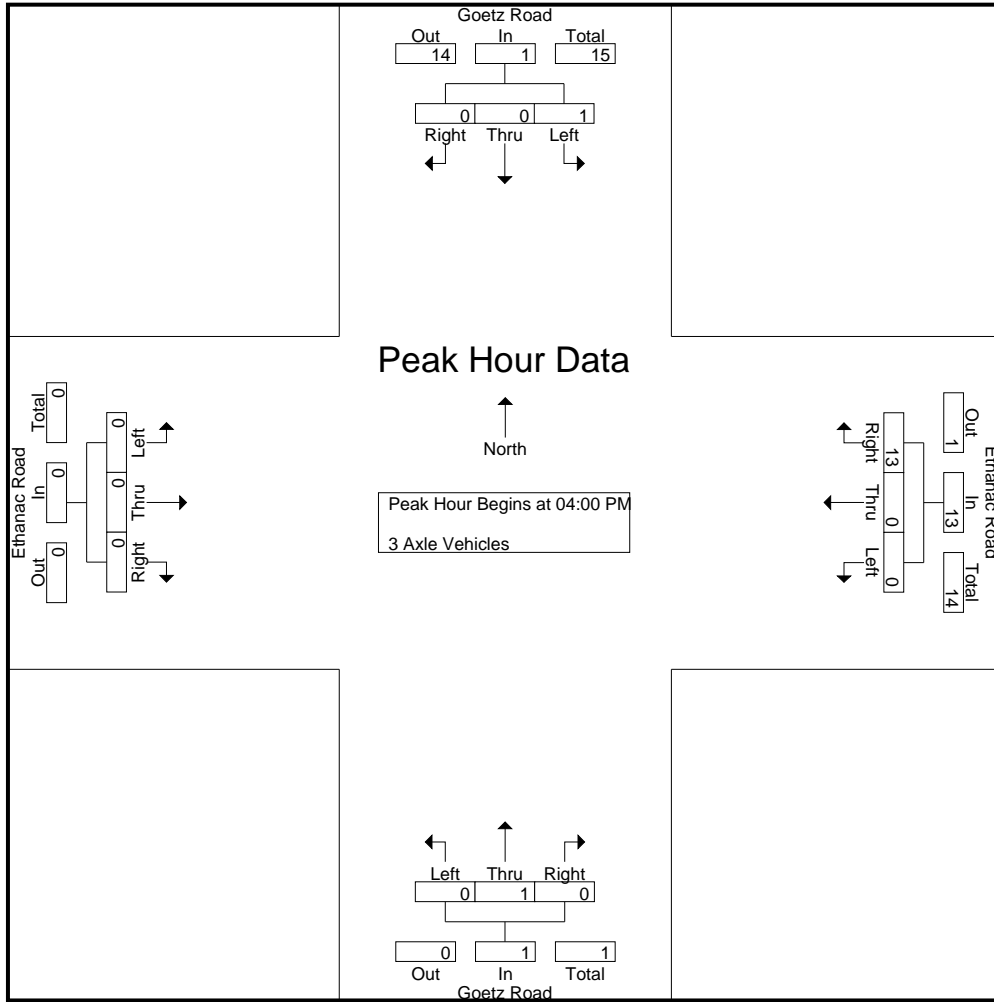
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	9
04:30 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	2
Total Volume	1	0	0	1	0	0	13	13	0	1	0	1	0	0	0	0	0	15
% App. Total	100	0	0		0	0	100		0	100	0		0	0	0			
PHF	.250	.000	.000	.250	.000	.000	.361	.361	.000	.250	.000	.250	.000	.000	.000	.000	.000	.417

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0
Total Volume	1	0	0	1	0	0	13	13	0	1	0	1	0	0	0	0
% App. Total	100	0	0	0	0	0	100	100	0	100	0	0	0	0	0	0
PHF	.250	.000	.000	.250	.000	.000	.361	.361	.000	.250	.000	.250	.000	.000	.000	.000

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

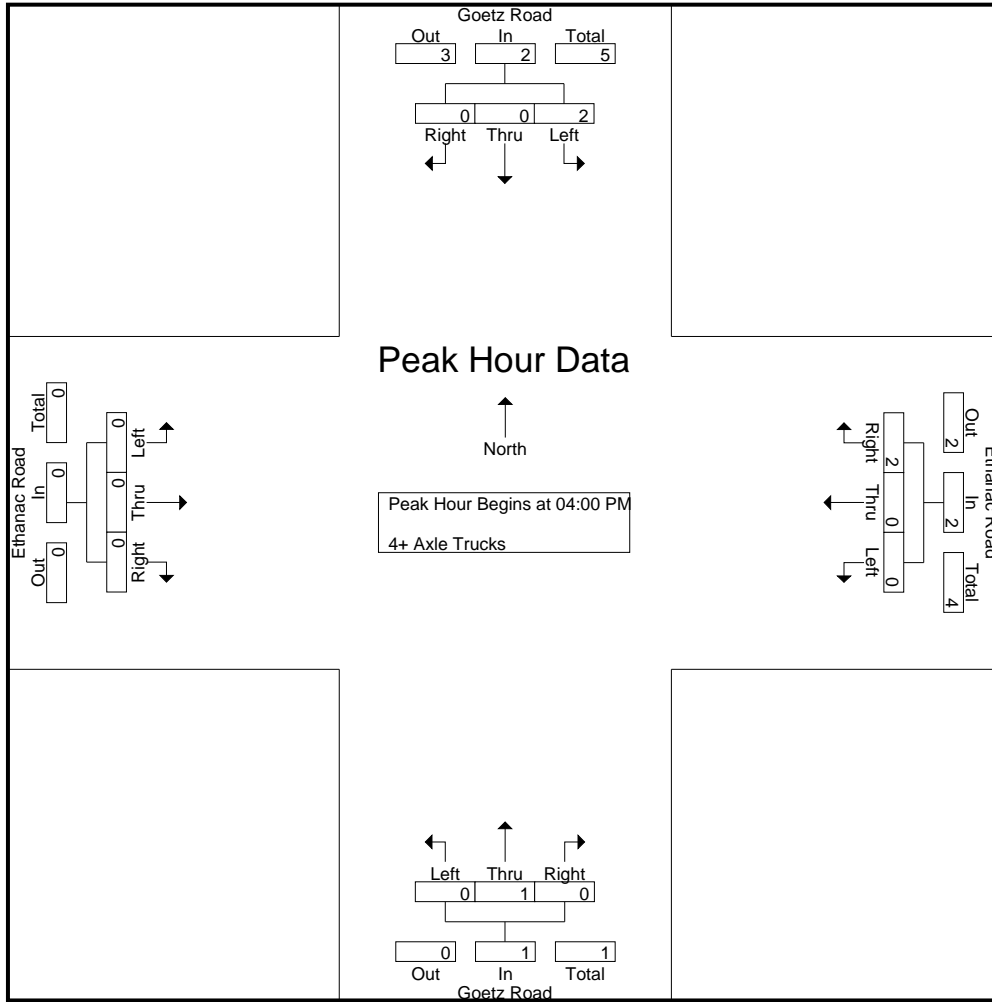
Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	1	1	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
04:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Total	2	0	0	2	0	0	2	2	0	1	0	1	0	0	0	0	0	5
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	4	0	0	4	0	0	2	2	0	1	0	1	0	0	0	0	0	7
Apprch %	100	0	0		0	0	100		0	100	0		0	0	0			
Total %	57.1	0	0	57.1	0	0	28.6	28.6	0	14.3	0	14.3	0	0	0	0		

Start Time	Goetz Road Southbound				Ethanac Road Westbound				Goetz Road Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	1	1	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
04:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Total Volume	2	0	0	2	0	0	2	2	0	1	0	1	0	0	0	0	0	5
% App. Total	100	0	0		0	0	100		0	100	0		0	0	0			
PHF	.500	.000	.000	.500	.000	.000	.500	.500	.000	.250	.000	.250	.000	.000	.000	.000	.000	.625

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Goetz Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 01_MEN_Goetz_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	2	0	0	2	0	0	2	2	0	1	0	1	0	0	0	0
% App. Total	100	0	0	100	0	0	100	100	0	100	0	100	0	0	0	0
PHF	.500	.000	.000	.500	.000	.000	.500	.500	.000	.250	.000	.250	.000	.000	.000	.000

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

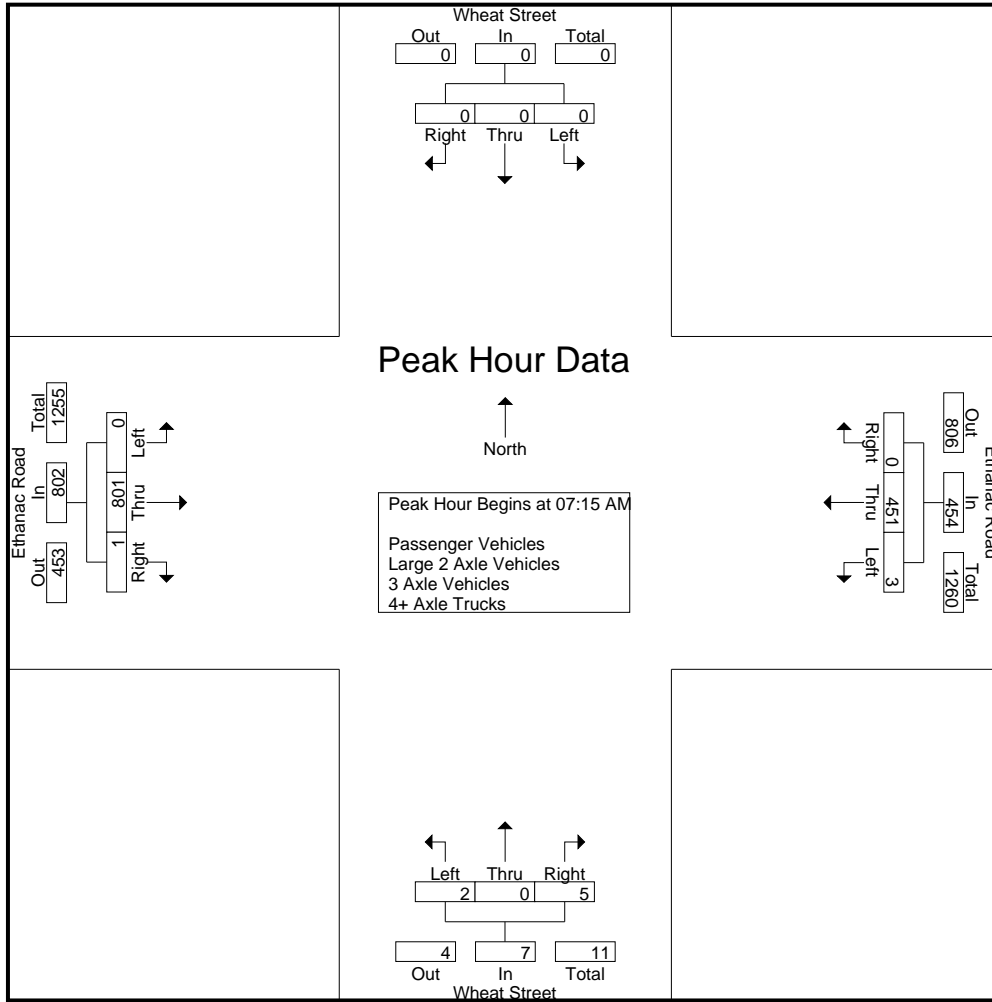
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	87	0	87	0	0	2	2	0	151	0	151	240
07:15 AM	0	0	0	0	0	96	0	96	0	0	0	0	0	211	0	211	307
07:30 AM	0	0	0	0	0	85	0	85	1	0	4	5	0	231	0	231	321
07:45 AM	0	0	0	0	0	133	0	133	1	0	1	2	0	202	0	202	337
Total	0	0	0	0	0	401	0	401	2	0	7	9	0	795	0	795	1205
08:00 AM	0	0	0	0	3	137	0	140	0	0	0	0	0	157	1	158	298
08:15 AM	0	0	0	0	0	117	0	117	2	0	0	2	0	117	0	117	236
08:30 AM	0	0	0	0	1	92	0	93	0	0	0	0	0	100	0	100	193
08:45 AM	0	0	0	0	1	85	0	86	0	0	2	2	0	107	0	107	195
Total	0	0	0	0	5	431	0	436	2	0	2	4	0	481	1	482	922
Grand Total	0	0	0	0	5	832	0	837	4	0	9	13	0	1276	1	1277	2127
Apprch %	0	0	0		0.6	99.4	0		30.8	0	69.2		0	99.9	0.1		
Total %	0	0	0	0	0.2	39.1	0	39.4	0.2	0	0.4	0.6	0	60	0	60	
Passenger Vehicles	0	0	0	0	5	777	0	782	4	0	9	13	0	1207	1	1208	2003
% Passenger Vehicles	0	0	0	0	100	93.4	0	93.4	100	0	100	100	0	94.6	100	94.6	94.2
Large 2 Axle Vehicles	0	0	0	0	0	32	0	32	0	0	0	0	0	40	0	40	72
% Large 2 Axle Vehicles	0	0	0	0	0	3.8	0	3.8	0	0	0	0	0	3.1	0	3.1	3.4
3 Axle Vehicles	0	0	0	0	0	12	0	12	0	0	0	0	0	11	0	11	23
% 3 Axle Vehicles	0	0	0	0	0	1.4	0	1.4	0	0	0	0	0	0.9	0	0.9	1.1
4+ Axle Trucks	0	0	0	0	0	11	0	11	0	0	0	0	0	18	0	18	29
% 4+ Axle Trucks	0	0	0	0	0	1.3	0	1.3	0	0	0	0	0	1.4	0	1.4	1.4

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	96	0	96	0	0	0	0	0	211	0	211	307
07:30 AM	0	0	0	0	0	85	0	85	1	0	4	5	0	231	0	231	321
07:45 AM	0	0	0	0	0	133	0	133	1	0	1	2	0	202	0	202	337
08:00 AM	0	0	0	0	3	137	0	140	0	0	0	0	0	157	1	158	298
Total Volume	0	0	0	0	3	451	0	454	2	0	5	7	0	801	1	802	1263
% App. Total	0	0	0	0	0.7	99.3	0		28.6	0	71.4		0	99.9	0.1		
PHF	.000	.000	.000	.000	.250	.823	.000	.811	.500	.000	.313	.350	.000	.867	.250	.868	.937

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:00 AM				07:15 AM			
+0 mins.	0	0	0	0	0	133	0	133	0	0	2	2	0	211	0	211
+15 mins.	0	0	0	0	3	137	0	140	0	0	0	0	0	231	0	231
+30 mins.	0	0	0	0	0	117	0	117	1	0	4	5	0	202	0	202
+45 mins.	0	0	0	0	1	92	0	93	1	0	1	2	0	157	1	158
Total Volume	0	0	0	0	4	479	0	483	2	0	7	9	0	801	1	802
% App. Total	0	0	0	0	0.8	99.2	0		22.2	0	77.8		0	99.9	0.1	
PHF	.000	.000	.000	.000	.333	.874	.000	.863	.500	.000	.438	.450	.000	.867	.250	.868

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	82	0	82	0	0	2	2	0	144	0	144	228
07:15 AM	0	0	0	0	0	87	0	87	0	0	0	0	0	199	0	199	286
07:30 AM	0	0	0	0	0	74	0	74	1	0	4	5	0	222	0	222	301
07:45 AM	0	0	0	0	0	128	0	128	1	0	1	2	0	188	0	188	318
Total	0	0	0	0	0	371	0	371	2	0	7	9	0	753	0	753	1133
08:00 AM	0	0	0	0	3	133	0	136	0	0	0	0	0	154	1	155	291
08:15 AM	0	0	0	0	0	105	0	105	2	0	0	2	0	111	0	111	218
08:30 AM	0	0	0	0	1	90	0	91	0	0	0	0	0	92	0	92	183
08:45 AM	0	0	0	0	1	78	0	79	0	0	2	2	0	97	0	97	178
Total	0	0	0	0	5	406	0	411	2	0	2	4	0	454	1	455	870
Grand Total	0	0	0	0	5	777	0	782	4	0	9	13	0	1207	1	1208	2003
Apprch %	0	0	0	0	0.6	99.4	0	99.4	30.8	0	69.2	69.2	0	99.9	0.1	99.9	
Total %	0	0	0	0	0.2	38.8	0	38.8	0.2	0	0.4	0.6	0	60.3	0	60.3	

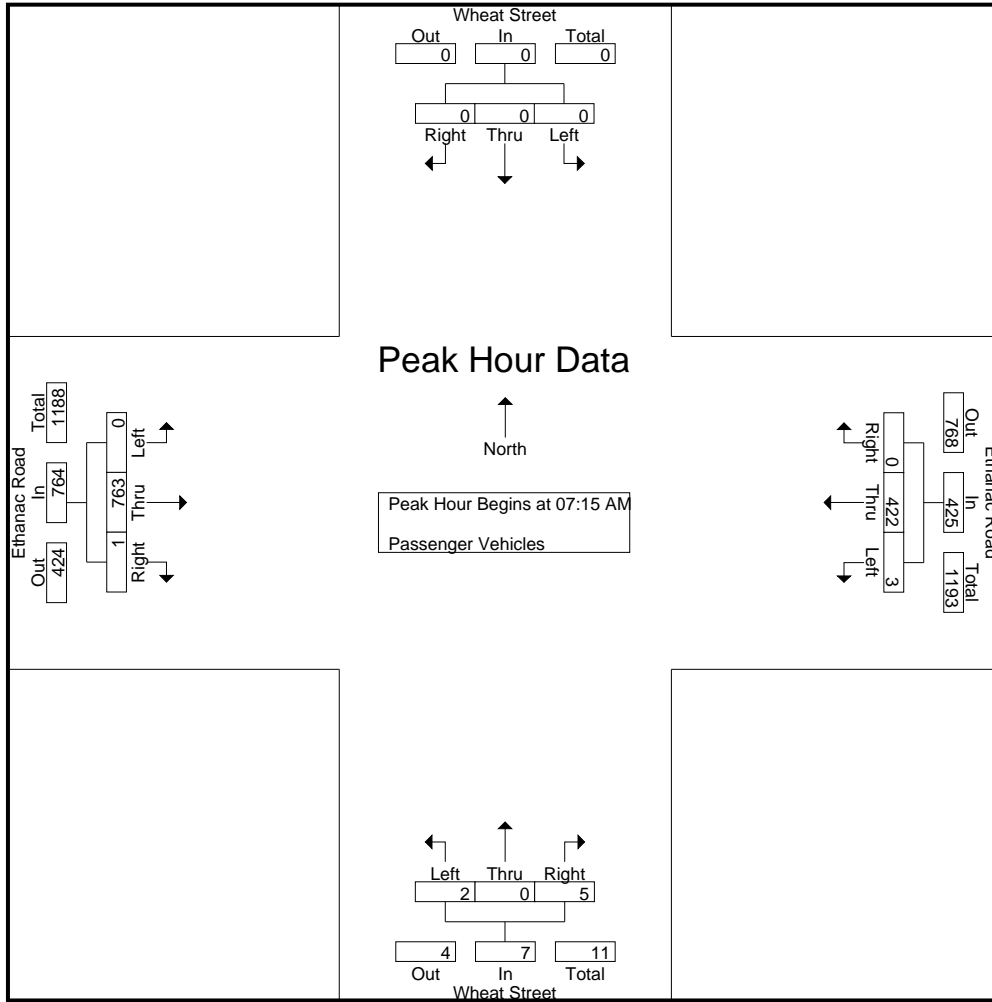
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	87	0	87	0	0	0	0	0	199	0	199	286
07:30 AM	0	0	0	0	0	74	0	74	1	0	4	5	0	222	0	222	301
07:45 AM	0	0	0	0	0	128	0	128	1	0	1	2	0	188	0	188	318
08:00 AM	0	0	0	0	3	133	0	136	0	0	0	0	0	154	1	155	291
Total Volume	0	0	0	0	3	422	0	425	2	0	5	7	0	763	1	764	1196
% App. Total	0	0	0	0	0.7	99.3	0	99.3	28.6	0	71.4	71.4	0	99.9	0.1	99.9	
PHF	.000	.000	.000	.000	.250	.793	.000	.781	.500	.000	.313	.350	.000	.859	.250	.860	.940

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	87	0	87	0	0	0	0	0	199	0	199
+15 mins.	0	0	0	0	0	74	0	74	1	0	4	5	0	222	0	222
+30 mins.	0	0	0	0	0	128	0	128	1	0	1	2	0	188	0	188
+45 mins.	0	0	0	0	3	133	0	136	0	0	0	0	0	154	1	155
Total Volume	0	0	0	0	3	422	0	425	2	0	5	7	0	763	1	764
% App. Total	0	0	0	0	0.7	99.3	0		28.6	0	71.4		0	99.9	0.1	
PHF	.000	.000	.000	.000	.250	.793	.000	.781	.500	.000	.313	.350	.000	.859	.250	.860

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	10
07:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	4	0	4	10
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	10	0	10	15
Total	0	0	0	0	0	17	0	17	0	0	0	0	0	24	0	24	41
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	2	0	2	10
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	7	0	7	10
Total	0	0	0	0	0	15	0	15	0	0	0	0	0	16	0	16	31
Grand Total	0	0	0	0	0	32	0	32	0	0	0	0	0	40	0	40	72
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	44.4	0	44.4	0	0	0		0	55.6	0	55.6	

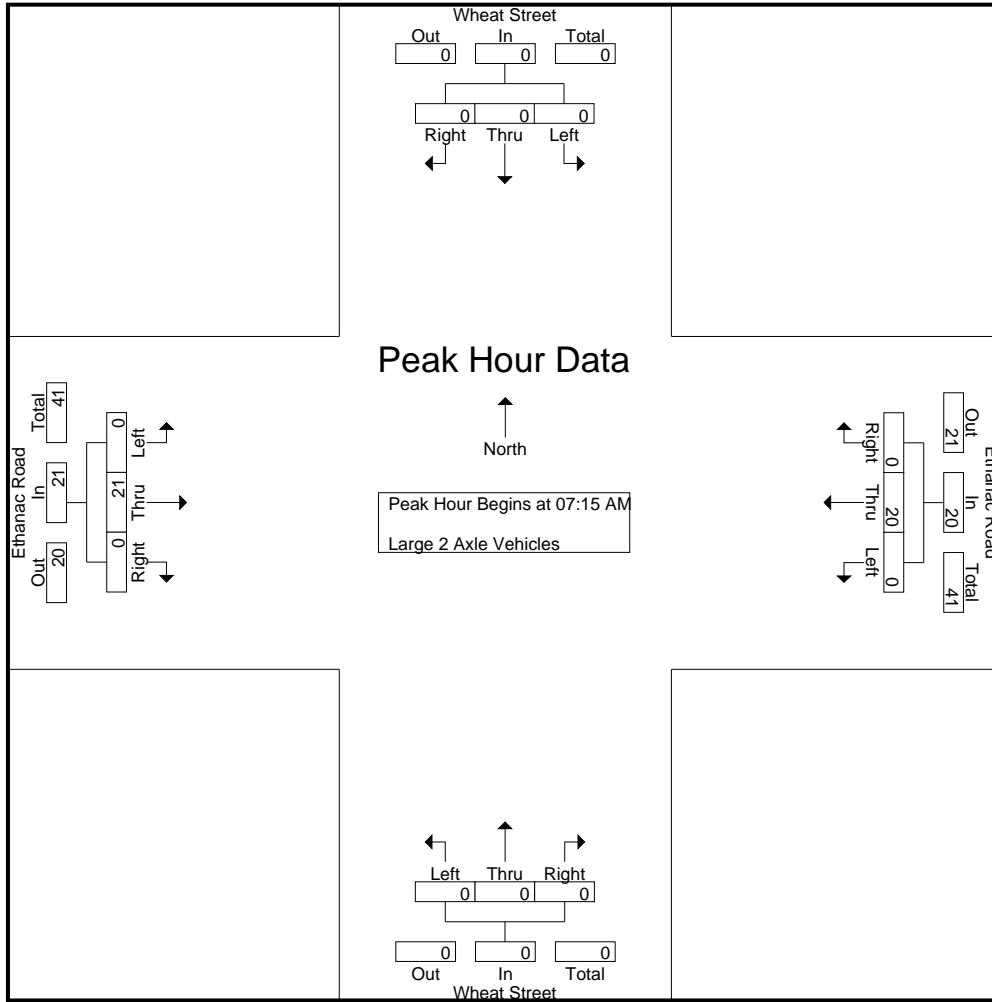
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	10
07:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	4	0	4	10
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	10	0	10	15
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
Total Volume	0	0	0	0	0	20	0	20	0	0	0	0	0	21	0	21	41
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.833	.000	.833	.000	.000	.000	.000	.000	.525	.000	.525	.683

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5
+15 mins.	0	0	0	0	0	6	0	6	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	10	0	10
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	20	0	20	0	0	0	0	0	21	0	21
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.833	.000	.833	.000	.000	.000	.000	.000	.525	.000	.525

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
Total	0	0	0	0	0	8	0	8	0	0	0	0	0	9	0	9	17
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
Grand Total	0	0	0	0	0	12	0	12	0	0	0	0	0	11	0	11	23
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	52.2	0	52.2	0	0	0	0	0	47.8	0	47.8	

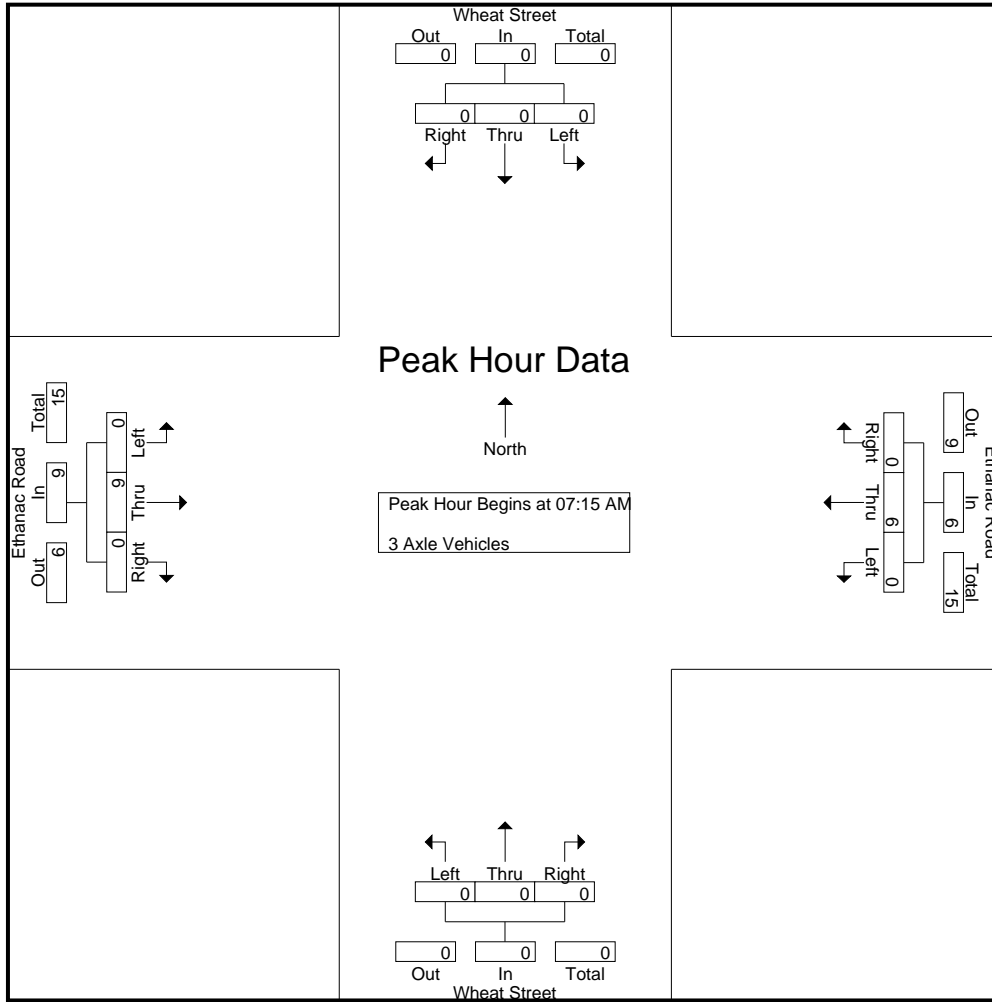
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	9	0	9	15
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.563	.000	.563	.625

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	9	0	9
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.563	.000	.563

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	9	0	9	14
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	9	0	9	15
Grand Total	0	0	0	0	0	11	0	11	0	0	0	0	0	18	0	18	29
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	37.9	0	37.9	0	0	0	0	0	62.1	0	62.1	

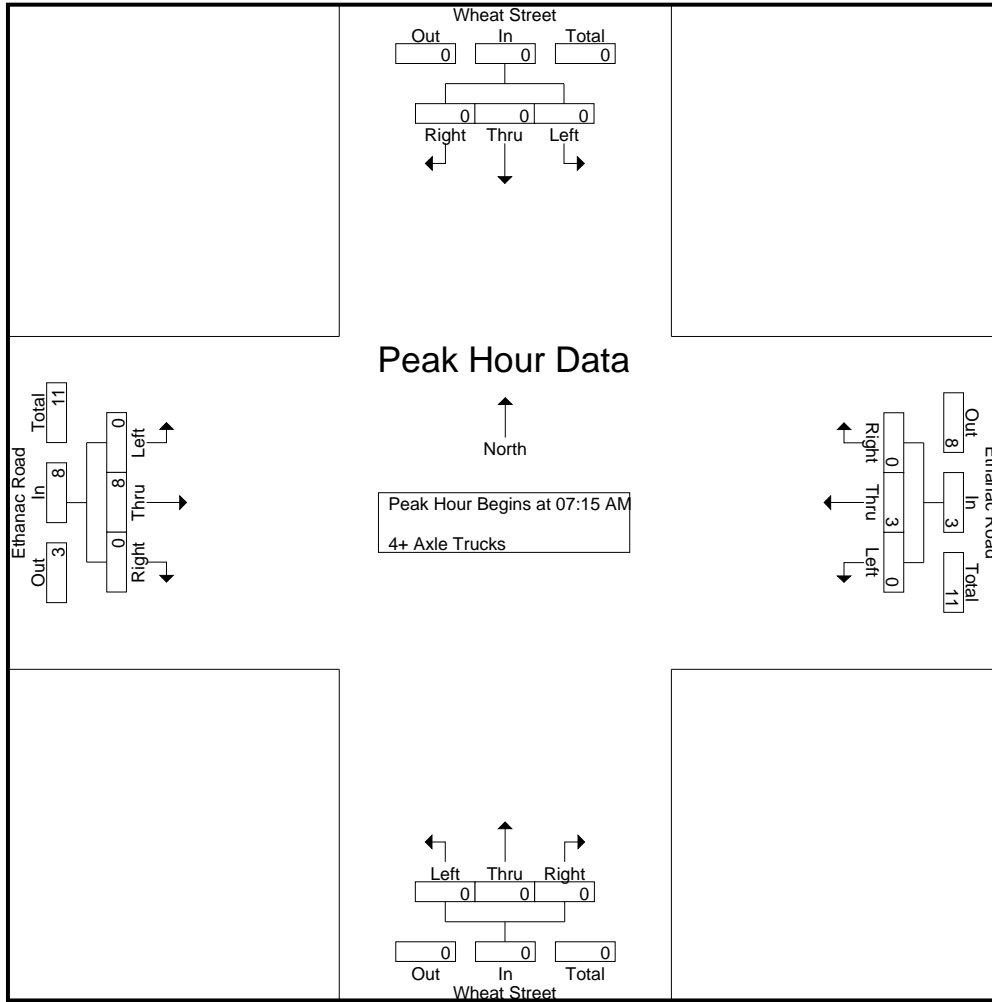
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	8	0	8	11
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.400	.000	.400	.458

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	8	0	8
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.400	.000	.400

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

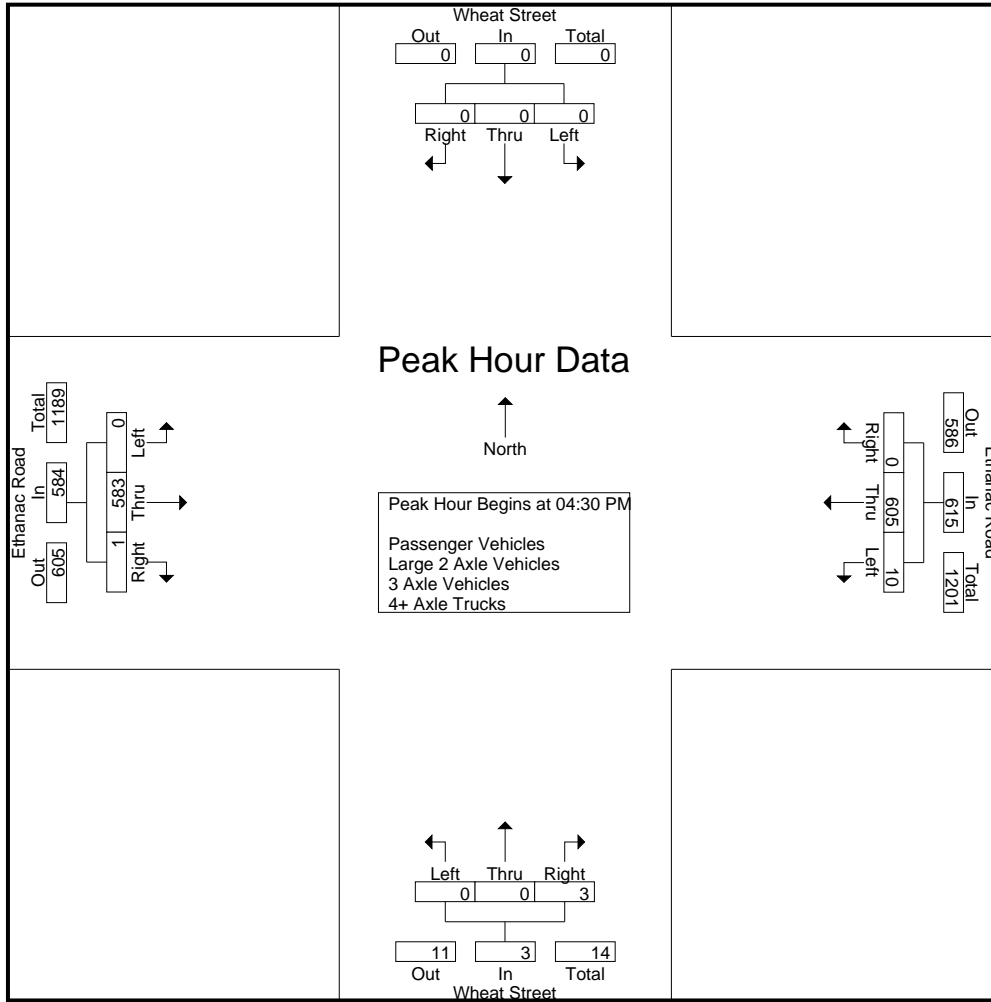
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	146	0	147	1	0	2	3	0	156	0	156	306
04:15 PM	0	0	0	0	0	168	0	168	0	0	0	0	0	108	0	108	276
04:30 PM	0	0	0	0	3	151	0	154	0	0	1	1	0	146	0	146	301
04:45 PM	0	0	0	0	1	142	0	143	0	0	0	0	0	139	0	139	282
Total	0	0	0	0	5	607	0	612	1	0	3	4	0	549	0	549	1165
05:00 PM	0	0	0	0	4	150	0	154	0	0	0	0	0	146	0	146	300
05:15 PM	0	0	0	0	2	162	0	164	0	0	2	2	0	152	1	153	319
05:30 PM	0	0	0	0	3	129	0	132	0	0	1	1	0	143	0	143	276
05:45 PM	0	0	0	0	1	134	0	135	0	0	3	3	0	112	0	112	250
Total	0	0	0	0	10	575	0	585	0	0	6	6	0	553	1	554	1145
Grand Total	0	0	0	0	15	1182	0	1197	1	0	9	10	0	1102	1	1103	2310
Apprch %	0	0	0		1.3	98.7	0		10	0	90		0	99.9	0.1		
Total %	0	0	0		0.6	51.2	0	51.8	0	0	0.4	0.4	0	47.7	0	47.7	
Passenger Vehicles	0	0	0	0	15	1124	0	1139	1	0	9	10	0	1063	1	1064	2213
% Passenger Vehicles	0	0	0	0	100	95.1	0	95.2	100	0	100	100	0	96.5	100	96.5	95.8
Large 2 Axle Vehicles	0	0	0	0	0	24	0	24	0	0	0	0	0	33	0	33	57
% Large 2 Axle Vehicles	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	2.5
3 Axle Vehicles	0	0	0	0	0	33	0	33	0	0	0	0	0	2	0	2	35
% 3 Axle Vehicles	0	0	0	0	0	2.8	0	2.8	0	0	0	0	0	0.2	0	0.2	1.5
4+ Axle Trucks	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
% 4+ Axle Trucks	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.4	0	0.4	0.2

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	0	0	0	0	3	151	0	154	0	0	1	1	0	146	0	146	301
04:45 PM	0	0	0	0	1	142	0	143	0	0	0	0	0	139	0	139	282
05:00 PM	0	0	0	0	4	150	0	154	0	0	0	0	0	146	0	146	300
05:15 PM	0	0	0	0	2	162	0	164	0	0	2	2	0	152	1	153	319
Total Volume	0	0	0	0	10	605	0	615	0	0	3	3	0	583	1	584	1202
% App. Total	0	0	0		1.6	98.4	0		0	0	100		0	99.8	0.2		
PHF	.000	.000	.000	.000	.625	.934	.000	.938	.000	.000	.375	.375	.000	.959	.250	.954	.942

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				05:00 PM				04:30 PM			
+0 mins.	0	0	0	0	0	168	0	168	0	0	0	0	0	146	0	146
+15 mins.	0	0	0	0	3	151	0	154	0	0	2	2	0	139	0	139
+30 mins.	0	0	0	0	1	142	0	143	0	0	1	1	0	146	0	146
+45 mins.	0	0	0	0	4	150	0	154	0	0	3	3	0	152	1	153
Total Volume	0	0	0	0	8	611	0	619	0	0	6	6	0	583	1	584
% App. Total	0	0	0	0	1.3	98.7	0		0	0	100		0	99.8	0.2	
PHF	.000	.000	.000	.000	.500	.909	.000	.921	.000	.000	.500	.500	.000	.959	.250	.954

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

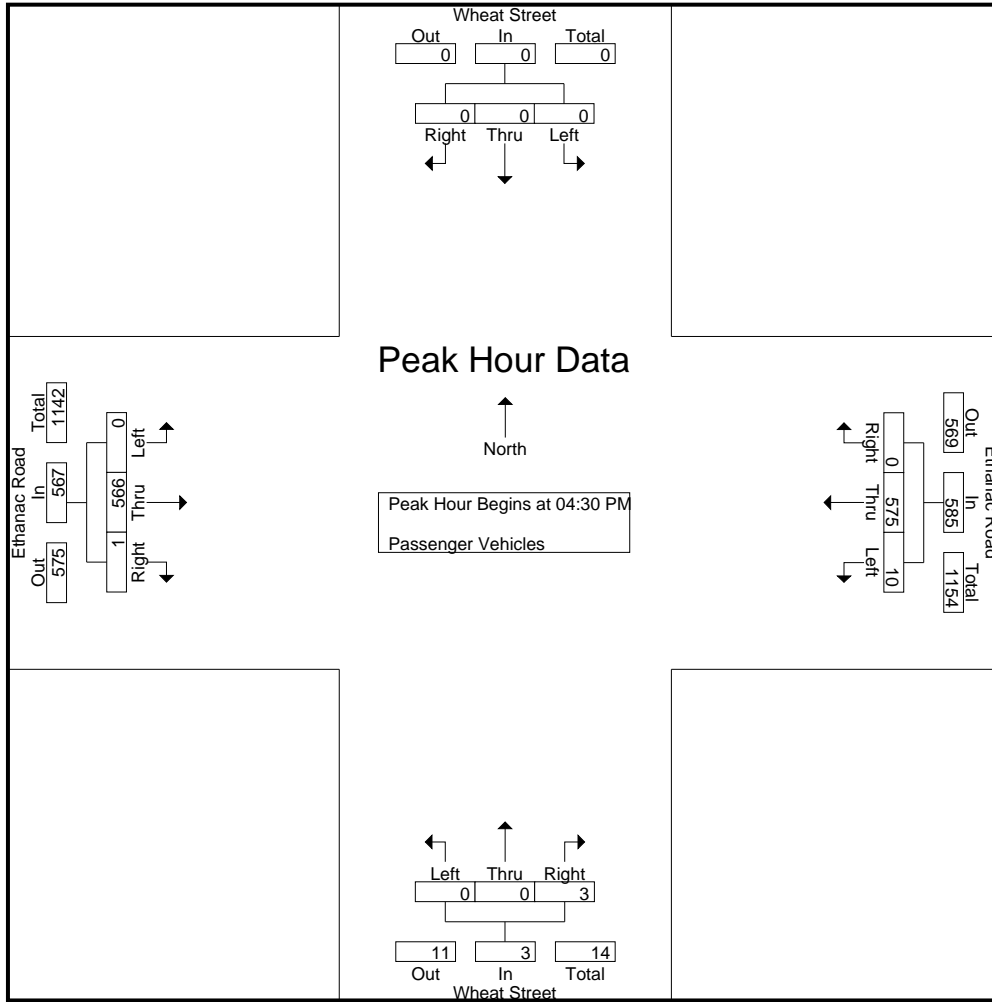
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	136	0	137	1	0	2	3	0	143	0	143	283
04:15 PM	0	0	0	0	0	156	0	156	0	0	0	0	0	107	0	107	263
04:30 PM	0	0	0	0	3	148	0	151	0	0	1	1	0	143	0	143	295
04:45 PM	0	0	0	0	1	136	0	137	0	0	0	0	0	135	0	135	272
Total	0	0	0	0	5	576	0	581	1	0	3	4	0	528	0	528	1113
05:00 PM	0	0	0	0	4	142	0	146	0	0	0	0	0	141	0	141	287
05:15 PM	0	0	0	0	2	149	0	151	0	0	2	2	0	147	1	148	301
05:30 PM	0	0	0	0	3	124	0	127	0	0	1	1	0	140	0	140	268
05:45 PM	0	0	0	0	1	133	0	134	0	0	3	3	0	107	0	107	244
Total	0	0	0	0	10	548	0	558	0	0	6	6	0	535	1	536	1100
Grand Total	0	0	0	0	15	1124	0	1139	1	0	9	10	0	1063	1	1064	2213
Apprch %	0	0	0	0	1.3	98.7	0		10	0	90		0	99.9	0.1		
Total %	0	0	0	0	0.7	50.8	0	51.5	0	0	0.4	0.5	0	48	0	48.1	

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	3	148	0	151	0	0	1	1	0	143	0	143	295
04:45 PM	0	0	0	0	1	136	0	137	0	0	0	0	0	135	0	135	272
05:00 PM	0	0	0	0	4	142	0	146	0	0	0	0	0	141	0	141	287
05:15 PM	0	0	0	0	2	149	0	151	0	0	2	2	0	147	1	148	301
Total Volume	0	0	0	0	10	575	0	585	0	0	3	3	0	566	1	567	1155
% App. Total	0	0	0	0	1.7	98.3	0		0	0	100		0	99.8	0.2		
PHF	.000	.000	.000	.000	.625	.965	.000	.969	.000	.000	.375	.375	.000	.963	.250	.958	.959

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	3	148	0	151	0	0	1	1	0	143	0	143
+15 mins.	0	0	0	0	1	136	0	137	0	0	0	0	0	135	0	135
+30 mins.	0	0	0	0	4	142	0	146	0	0	0	0	0	141	0	141
+45 mins.	0	0	0	0	2	149	0	151	0	0	2	2	0	147	1	148
Total Volume	0	0	0	0	10	575	0	585	0	0	3	3	0	566	1	567
% App. Total	0	0	0	0	1.7	98.3	0		0	0	100		0	99.8	0.2	
PHF	.000	.000	.000	.000	.625	.965	.000	.969	.000	.000	.375	.375	.000	.963	.250	.958

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	12	0	12	19
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
Total	0	0	0	0	0	15	0	15	0	0	0	0	0	18	0	18	33
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
Total	0	0	0	0	0	9	0	9	0	0	0	0	0	15	0	15	24
Grand Total	0	0	0	0	0	24	0	24	0	0	0	0	0	33	0	33	57
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	42.1	0	42.1	0	0	0		0	57.9	0	57.9	

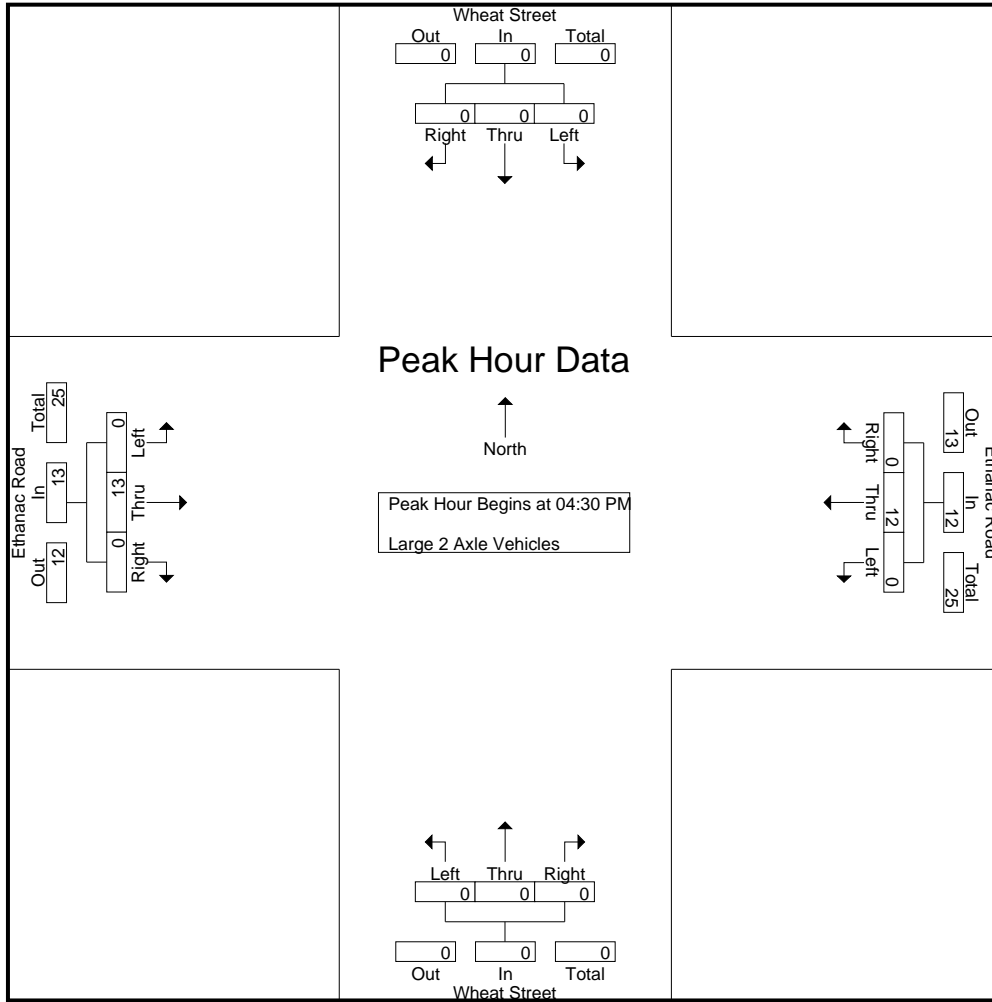
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	0	13	0	13	25
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.650	.000	.650	.781

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	0	13	0	13
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.650	.000	.650

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	10	0	10	0	0	0	0	0	0	0	0	10
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	15	0	15	0	0	0	0	0	1	0	1	16
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
05:15 PM	0	0	0	0	0	10	0	10	0	0	0	0	0	1	0	1	11
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	18	0	18	0	0	0	0	0	1	0	1	19
Grand Total	0	0	0	0	0	33	0	33	0	0	0	0	0	2	0	2	35
Apprch %	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
Total %	0	0	0	0	0	94.3	0	94.3	0	0	0	0	0	5.7	0	5.7	

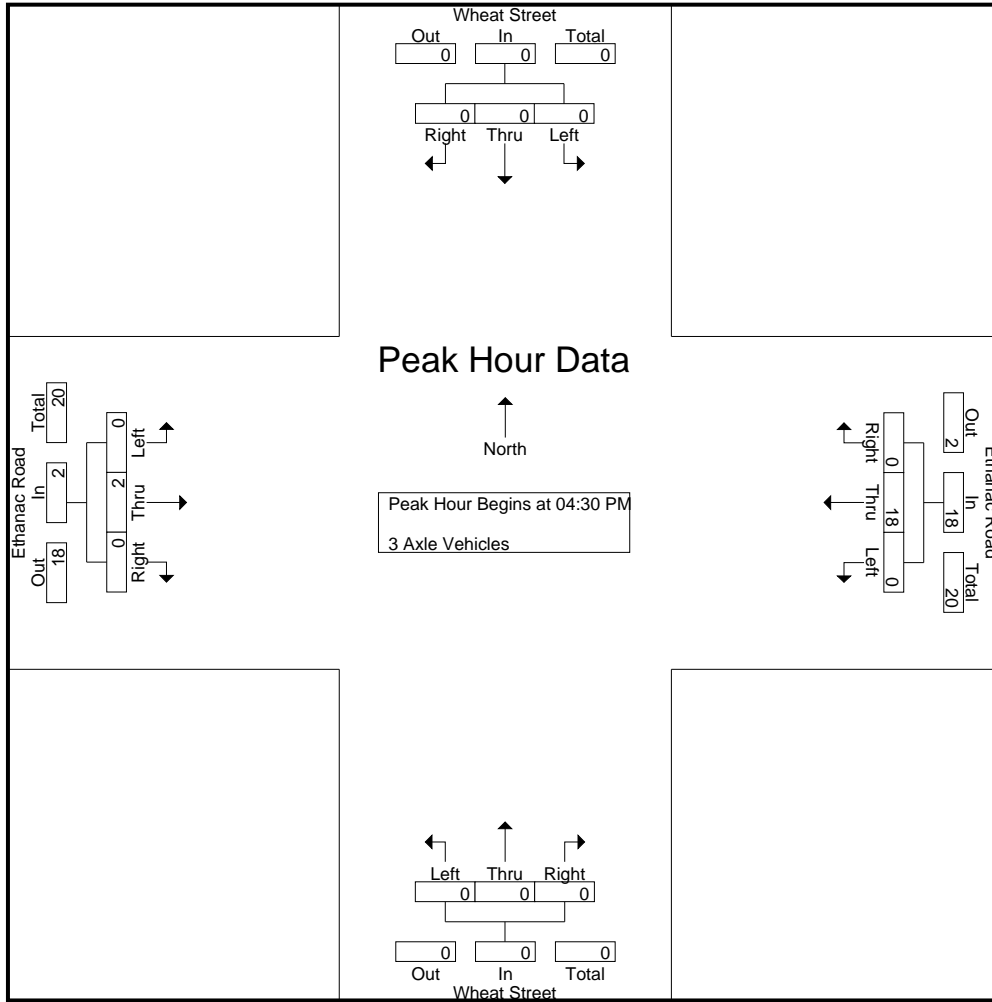
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
05:15 PM	0	0	0	0	0	10	0	10	0	0	0	0	0	1	0	1	11
Total Volume	0	0	0	0	0	18	0	18	0	0	0	0	0	2	0	2	20
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.450	.000	.450	.000	.000	.000	.000	.000	.500	.000	.500	.455

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	10	0	10	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	18	0	18	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.450	.000	.450	.000	.000	.000	.000	.000	.500	.000	.500

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

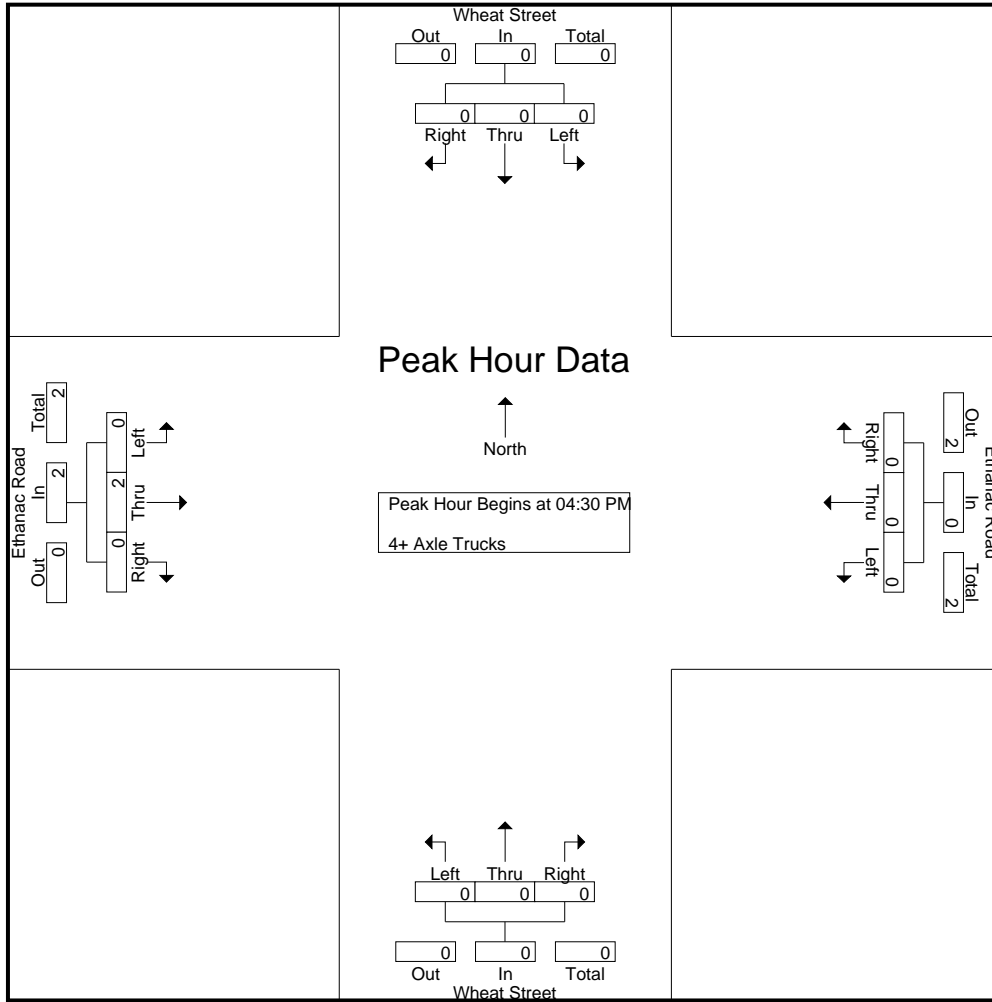
Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	20	0	20	0	0	0		0	80	0	80	

Start Time	Wheat Street Southbound				Ethanac Road Westbound				Wheat Street Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.500

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Wheat Street
 E/W: Ethanac Road
 Weather: Clear

File Name : 02_MEN_Wheat_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

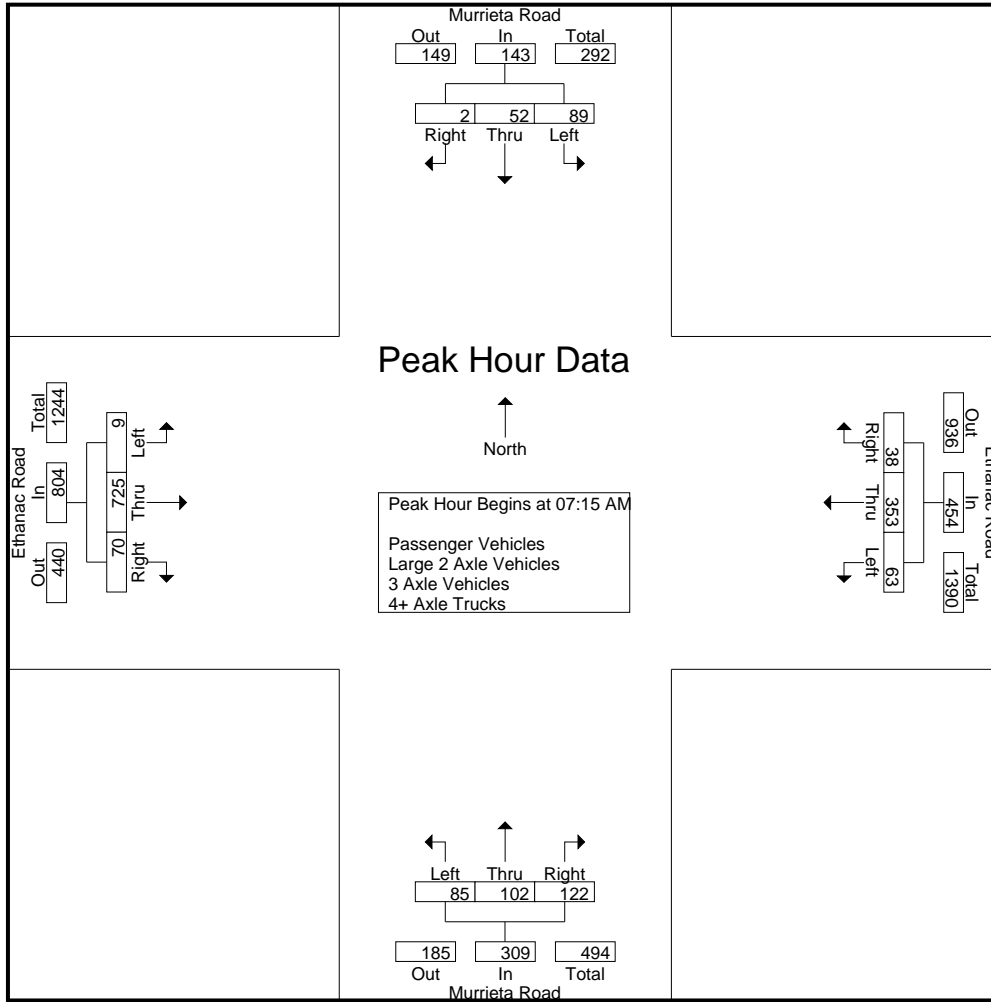
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	10	5	2	17	10	76	4	90	21	12	28	61	0	140	22	162	330
07:15 AM	28	12	1	41	10	61	6	77	24	37	31	92	0	172	16	188	398
07:30 AM	29	6	0	35	13	77	4	94	16	22	23	61	4	231	17	252	442
07:45 AM	19	22	1	42	18	91	17	126	24	21	30	75	4	168	24	196	439
Total	86	45	4	135	51	305	31	387	85	92	112	289	8	711	79	798	1609
08:00 AM	13	12	0	25	22	124	11	157	21	22	38	81	1	154	13	168	431
08:15 AM	5	12	2	19	17	101	14	132	21	24	36	81	0	113	12	125	357
08:30 AM	8	23	2	33	21	65	7	93	13	25	36	74	0	85	10	95	295
08:45 AM	9	12	2	23	19	71	10	100	17	22	36	75	2	83	19	104	302
Total	35	59	6	100	79	361	42	482	72	93	146	311	3	435	54	492	1385
Grand Total	121	104	10	235	130	666	73	869	157	185	258	600	11	1146	133	1290	2994
Apprch %	51.5	44.3	4.3		15	76.6	8.4		26.2	30.8	43		0.9	88.8	10.3		
Total %	4	3.5	0.3	7.8	4.3	22.2	2.4	29	5.2	6.2	8.6	20	0.4	38.3	4.4	43.1	
Passenger Vehicles	118	102	10	230	120	624	70	814	152	177	246	575	11	1086	128	1225	2844
% Passenger Vehicles	97.5	98.1	100	97.9	92.3	93.7	95.9	93.7	96.8	95.7	95.3	95.8	100	94.8	96.2	95	95
Large 2 Axle Vehicles	3	2	0	5	7	19	2	28	5	8	10	23	0	25	5	30	86
% Large 2 Axle Vehicles	2.5	1.9	0	2.1	5.4	2.9	2.7	3.2	3.2	4.3	3.9	3.8	0	2.2	3.8	2.3	2.9
3 Axle Vehicles	0	0	0	0	1	9	0	10	0	0	1	1	0	12	0	12	23
% 3 Axle Vehicles	0	0	0	0	0.8	1.4	0	1.2	0	0	0.4	0.2	0	1	0	0.9	0.8
4+ Axle Trucks	0	0	0	0	2	14	1	17	0	0	1	1	0	23	0	23	41
% 4+ Axle Trucks	0	0	0	0	1.5	2.1	1.4	2	0	0	0.4	0.2	0	2	0	1.8	1.4

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	28	12	1	41	10	61	6	77	24	37	31	92	0	172	16	188	398
07:30 AM	29	6	0	35	13	77	4	94	16	22	23	61	4	231	17	252	442
07:45 AM	19	22	1	42	18	91	17	126	24	21	30	75	4	168	24	196	439
08:00 AM	13	12	0	25	22	124	11	157	21	22	38	81	1	154	13	168	431
Total Volume	89	52	2	143	63	353	38	454	85	102	122	309	9	725	70	804	1710
% App. Total	62.2	36.4	1.4		13.9	77.8	8.4		27.5	33	39.5		1.1	90.2	8.7		
PHF	.767	.591	.500	.851	.716	.712	.559	.723	.885	.689	.803	.840	.563	.785	.729	.798	.967

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:45 AM				07:15 AM			
+0 mins.	28	12	1	41	13	77	4	94	24	21	30	75	0	172	16	188
+15 mins.	29	6	0	35	18	91	17	126	21	22	38	81	4	231	17	252
+30 mins.	19	22	1	42	22	124	11	157	21	24	36	81	4	168	24	196
+45 mins.	13	12	0	25	17	101	14	132	13	25	36	74	1	154	13	168
Total Volume	89	52	2	143	70	393	46	509	79	92	140	311	9	725	70	804
% App. Total	62.2	36.4	1.4		13.8	77.2	9		25.4	29.6	45		1.1	90.2	8.7	
PHF	.767	.591	.500	.851	.795	.792	.676	.811	.823	.920	.921	.960	.563	.785	.729	.798

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	5	2	16	10	71	3	84	21	10	27	58	0	135	21	156	314
07:15 AM	28	11	1	40	9	54	6	69	21	33	29	83	0	162	15	177	369
07:30 AM	28	6	0	34	11	67	4	82	16	21	21	58	4	222	15	241	415
07:45 AM	19	22	1	42	17	89	16	122	24	21	27	72	4	158	24	186	422
Total	84	44	4	132	47	281	29	357	82	85	104	271	8	677	75	760	1520
08:00 AM	13	11	0	24	19	121	11	151	21	22	38	81	1	149	13	163	419
08:15 AM	5	12	2	19	17	95	13	125	19	24	35	78	0	107	11	118	340
08:30 AM	8	23	2	33	20	62	7	89	13	24	35	72	0	78	10	88	282
08:45 AM	8	12	2	22	17	65	10	92	17	22	34	73	2	75	19	96	283
Total	34	58	6	98	73	343	41	457	70	92	142	304	3	409	53	465	1324
Grand Total	118	102	10	230	120	624	70	814	152	177	246	575	11	1086	128	1225	2844
Apprch %	51.3	44.3	4.3		14.7	76.7	8.6		26.4	30.8	42.8		0.9	88.7	10.4		
Total %	4.1	3.6	0.4	8.1	4.2	21.9	2.5	28.6	5.3	6.2	8.6	20.2	0.4	38.2	4.5	43.1	

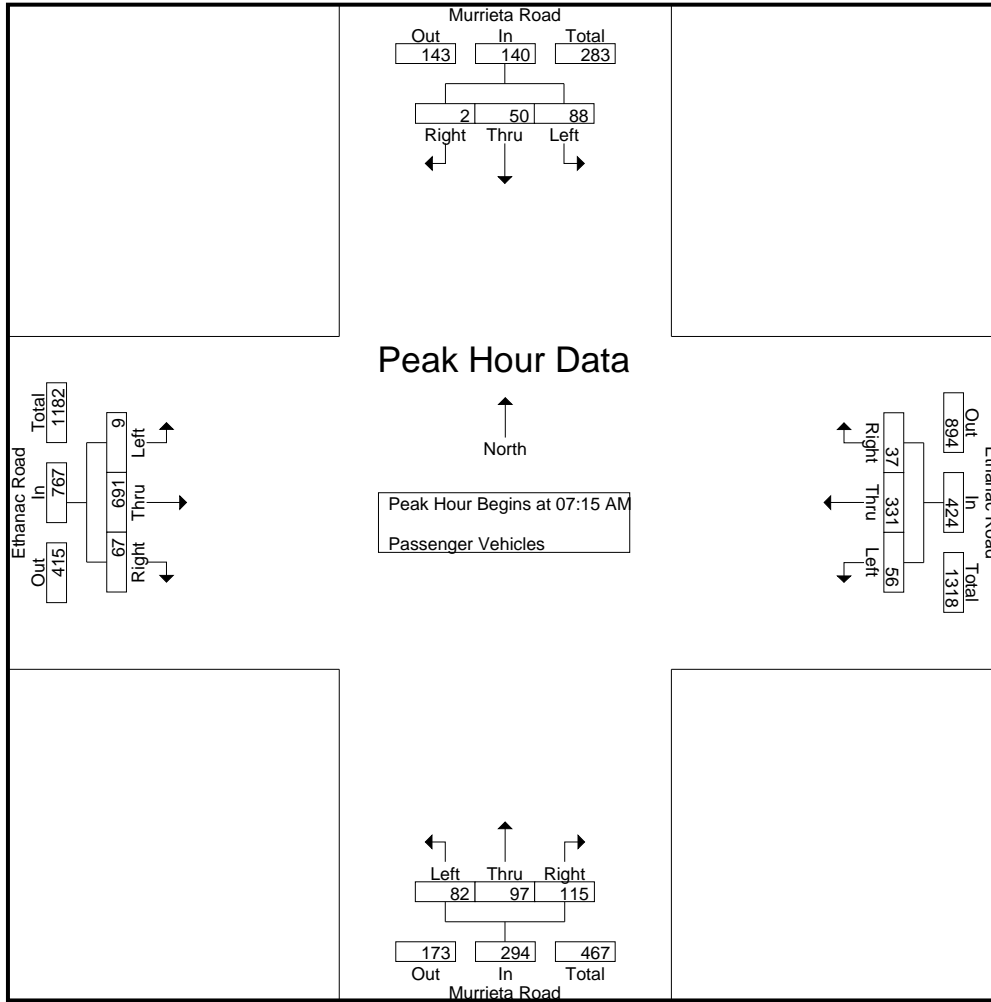
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	28	11	1	40	9	54	6	69	21	33	29	83	0	162	15	177	369
07:30 AM	28	6	0	34	11	67	4	82	16	21	21	58	4	222	15	241	415
07:45 AM	19	22	1	42	17	89	16	122	24	21	27	72	4	158	24	186	422
08:00 AM	13	11	0	24	19	121	11	151	21	22	38	81	1	149	13	163	419
Total Volume	88	50	2	140	56	331	37	424	82	97	115	294	9	691	67	767	1625
% App. Total	62.9	35.7	1.4		13.2	78.1	8.7		27.9	33	39.1		1.2	90.1	8.7		
PHF	.786	.568	.500	.833	.737	.684	.578	.702	.854	.735	.757	.886	.563	.778	.698	.796	.963

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	28	11	1	40	9	54	6	69	21	33	29	83	0	162	15	177
+15 mins.	28	6	0	34	11	67	4	82	16	21	21	58	4	222	15	241
+30 mins.	19	22	1	42	17	89	16	122	24	21	27	72	4	158	24	186
+45 mins.	13	11	0	24	19	121	11	151	21	22	38	81	1	149	13	163
Total Volume	88	50	2	140	56	331	37	424	82	97	115	294	9	691	67	767
% App. Total	62.9	35.7	1.4		13.2	78.1	8.7		27.9	33	39.1		1.2	90.1	8.7	
PHF	.786	.568	.500	.833	.737	.684	.578	.702	.854	.735	.757	.886	.563	.778	.698	.796

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	0	1	0	1	1	2	0	2	1	3	0	2	1	3	9
07:15 AM	0	1	0	1	0	2	0	2	3	4	2	9	0	3	1	4	16
07:30 AM	1	0	0	1	2	5	0	7	0	1	2	3	0	2	2	4	15
07:45 AM	0	0	0	0	1	2	1	4	0	0	2	2	0	8	0	8	14
Total	2	1	0	3	3	10	2	15	3	7	7	17	0	15	4	19	54
08:00 AM	0	1	0	1	2	3	0	5	0	0	0	0	0	2	0	2	8
08:15 AM	0	0	0	0	0	2	0	2	2	0	1	3	0	1	1	2	7
08:30 AM	0	0	0	0	1	2	0	3	0	1	1	2	0	4	0	4	9
08:45 AM	1	0	0	1	1	2	0	3	0	0	1	1	0	3	0	3	8
Total	1	1	0	2	4	9	0	13	2	1	3	6	0	10	1	11	32
Grand Total	3	2	0	5	7	19	2	28	5	8	10	23	0	25	5	30	86
Apprch %	60	40	0		25	67.9	7.1		21.7	34.8	43.5		0	83.3	16.7		
Total %	3.5	2.3	0	5.8	8.1	22.1	2.3	32.6	5.8	9.3	11.6	26.7	0	29.1	5.8	34.9	

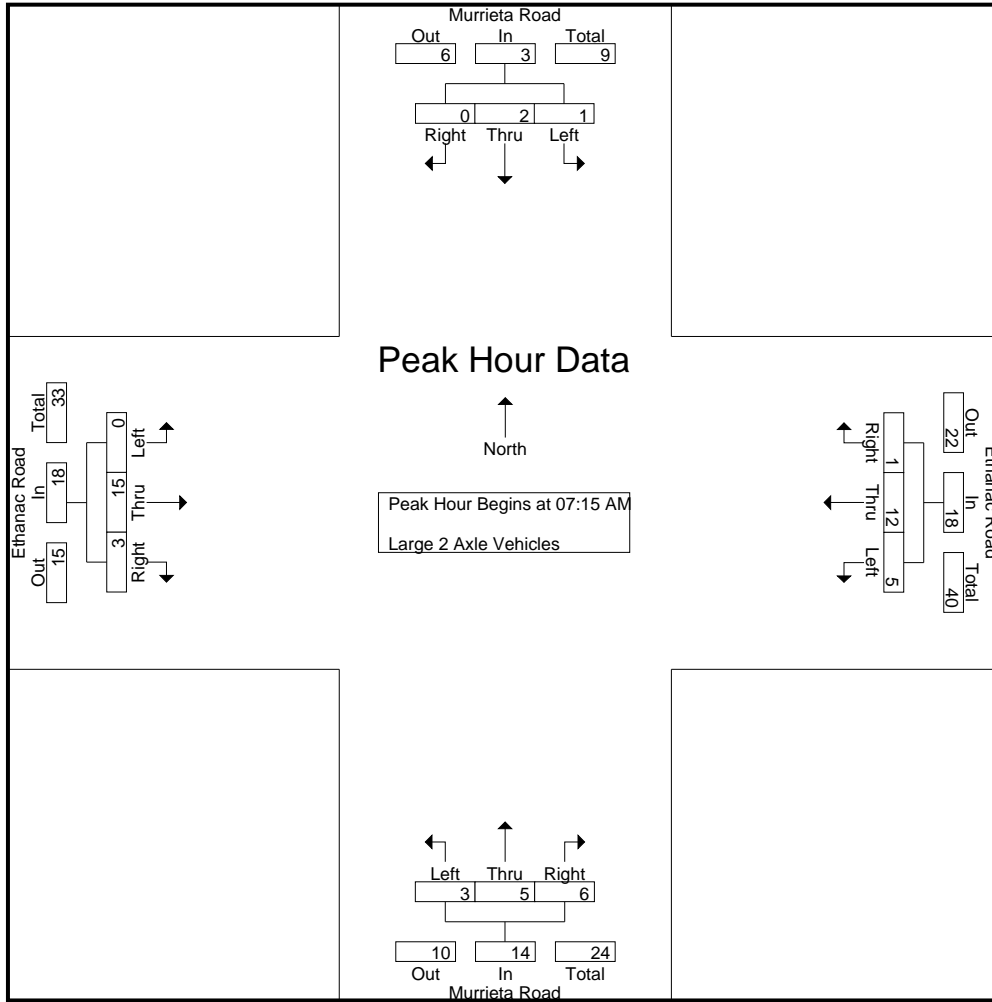
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	1	0	1	0	2	0	2	3	4	2	9	0	3	1	4	16
07:30 AM	1	0	0	1	2	5	0	7	0	1	2	3	0	2	2	4	15
07:45 AM	0	0	0	0	1	2	1	4	0	0	2	2	0	8	0	8	14
08:00 AM	0	1	0	1	2	3	0	5	0	0	0	0	0	2	0	2	8
Total Volume	1	2	0	3	5	12	1	18	3	5	6	14	0	15	3	18	53
% App. Total	33.3	66.7	0		27.8	66.7	5.6		21.4	35.7	42.9		0	83.3	16.7		
PHF	.250	.500	.000	.750	.625	.600	.250	.643	.250	.313	.750	.389	.000	.469	.375	.563	.828

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	1	0	1	0	2	0	2	3	4	2	9	0	3	1	4
+15 mins.	1	0	0	1	2	5	0	7	0	1	2	3	0	2	2	4
+30 mins.	0	0	0	0	1	2	1	4	0	0	2	2	0	8	0	8
+45 mins.	0	1	0	1	2	3	0	5	0	0	0	0	0	2	0	2
Total Volume	1	2	0	3	5	12	1	18	3	5	6	14	0	15	3	18
% App. Total	33.3	66.7	0		27.8	66.7	5.6		21.4	35.7	42.9		0	83.3	16.7	
PHF	.250	.500	.000	.750	.625	.600	.250	.643	.250	.313	.750	.389	.000	.469	.375	.563

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:15 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	2	0	2	6
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	1	7	0	8	0	0	0	0	0	8	0	8	16
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	1	1	0	4	0	4	7
Grand Total	0	0	0	0	1	9	0	10	0	0	1	1	0	12	0	12	23
Apprch %	0	0	0		10	90	0		0	0	100		0	100	0		
Total %	0	0	0	0	4.3	39.1	0	43.5	0	0	4.3	4.3	0	52.2	0	52.2	

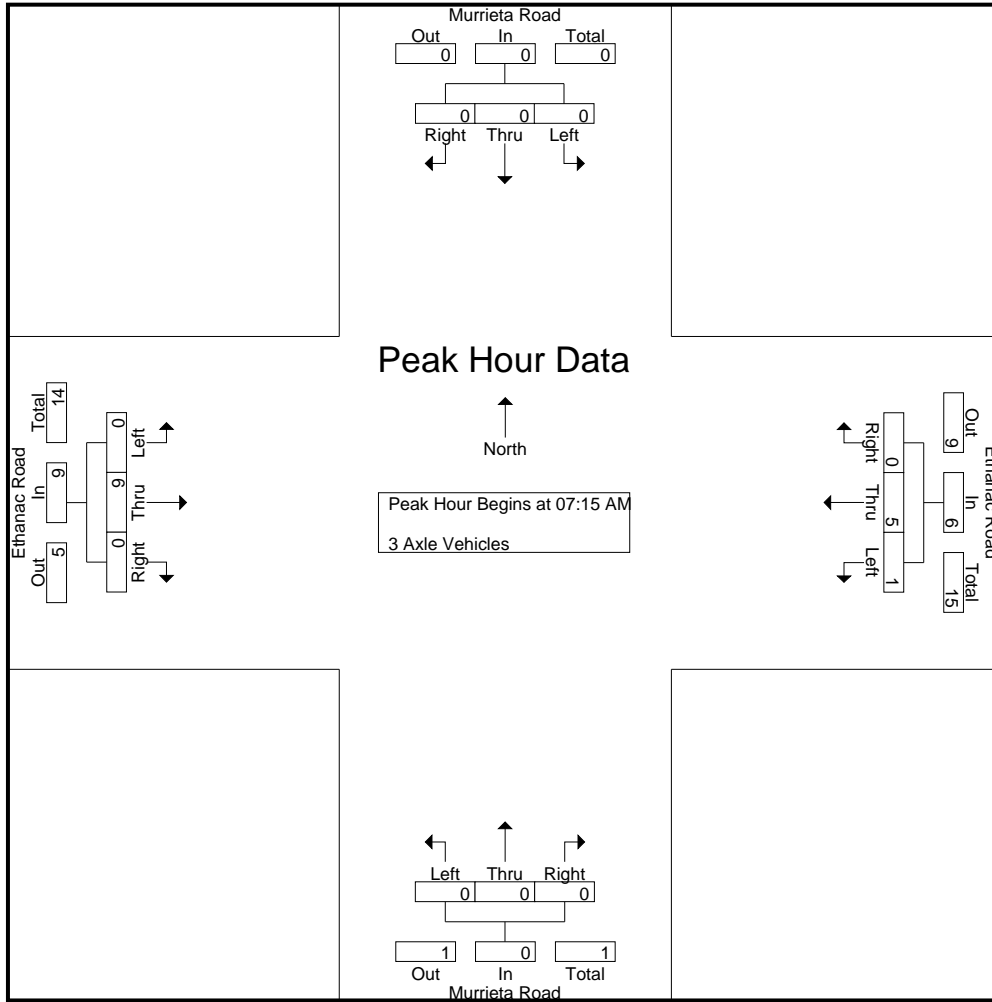
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	2	0	2	6
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	1	5	0	6	0	0	0	0	0	9	0	9	15
% App. Total	0	0	0		16.7	83.3	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.417	.000	.375	.000	.000	.000	.000	.000	.750	.000	.750	.625

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	1	3	0	4	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	1	5	0	6	0	0	0	0	0	9	0	9
% App. Total	0	0	0	0	16.7	83.3	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.250	.417	.000	.375	.000	.000	.000	.000	.000	.750	.000	.750

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	0	7	0	7	0	0	1	1	0	11	0	11	19
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	4	0	4	7
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:45 AM	0	0	0	0	1	4	0	5	0	0	0	0	0	5	0	5	10
Total	0	0	0	0	2	7	1	10	0	0	0	0	0	12	0	12	22
Grand Total	0	0	0	0	2	14	1	17	0	0	1	1	0	23	0	23	41
Apprch %	0	0	0		11.8	82.4	5.9		0	0	100		0	100	0		
Total %	0	0	0		4.9	34.1	2.4	41.5	0	0	2.4	2.4	0	56.1	0	56.1	

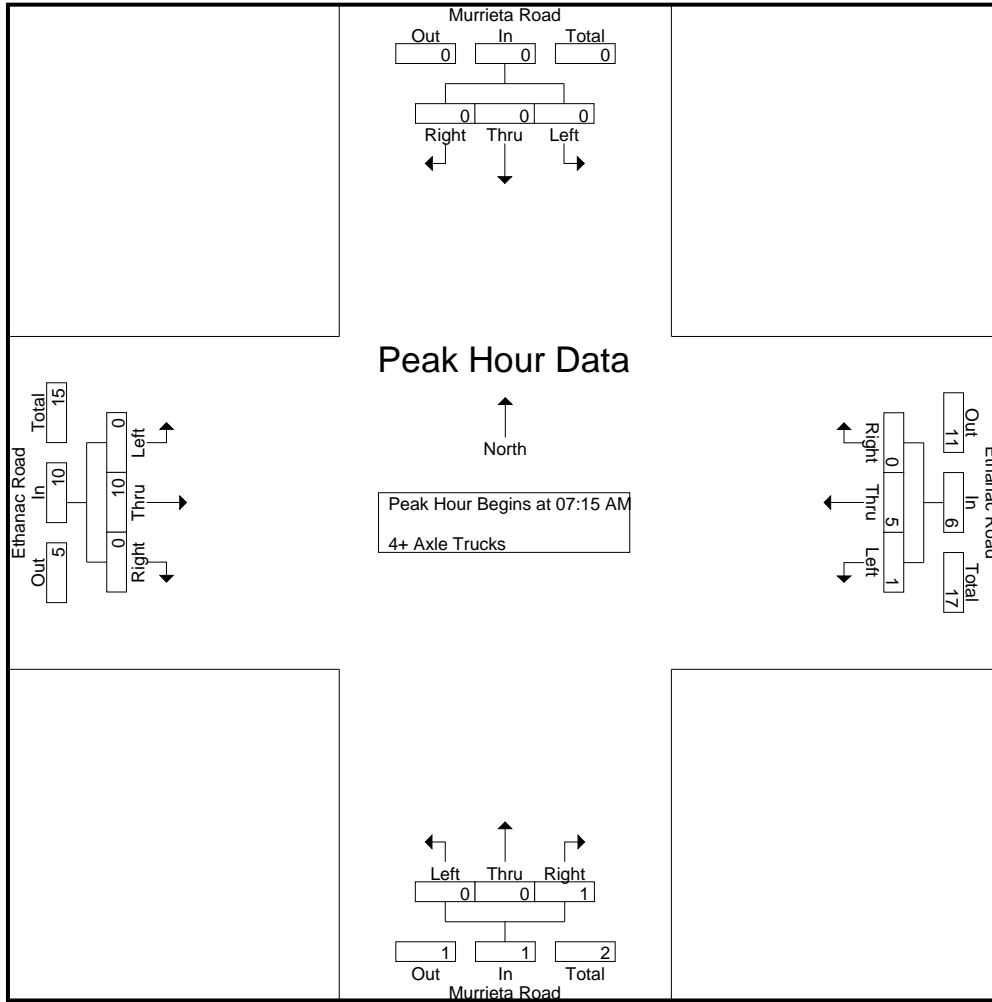
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	1	5	0	6	0	0	1	1	0	10	0	10	17
% App. Total	0	0	0		16.7	83.3	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.250	.417	.000	.500	.000	.000	.250	.250	.000	.500	.000	.500	.607

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	1	5	0	6	0	0	1	1	0	10	0	10
% App. Total	0	0	0	0	16.7	83.3	0	0	0	0	100	0	0	100	0	0
PHF	.000	.000	.000	.000	.250	.417	.000	.500	.000	.000	.250	.250	.000	.500	.000	.500

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

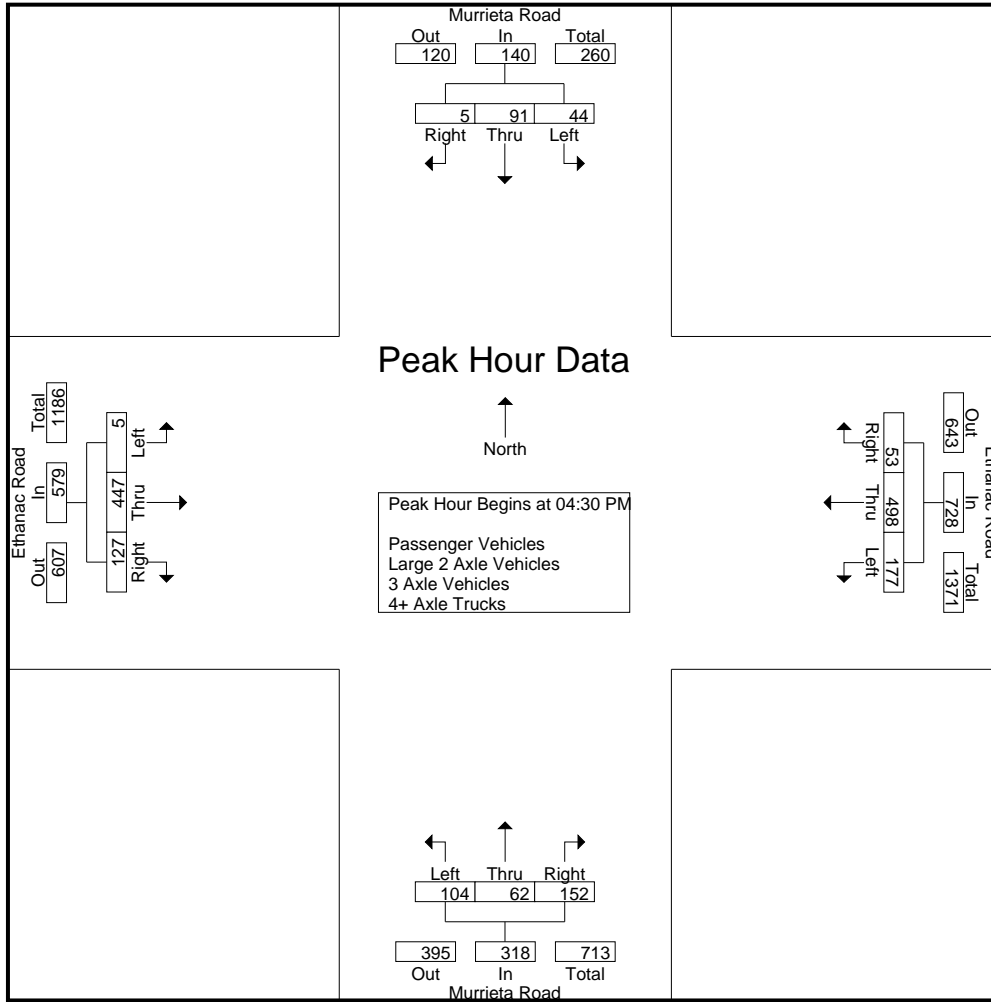
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	11	20	5	36	34	110	12	156	19	27	32	78	1	130	17	148	418
04:15 PM	11	25	1	37	56	147	12	215	28	22	23	73	0	96	29	125	450
04:30 PM	13	24	2	39	43	122	7	172	29	18	36	83	1	110	32	143	437
04:45 PM	10	18	0	28	42	109	16	167	29	15	52	96	0	100	24	124	415
Total	45	87	8	140	175	488	47	710	105	82	143	330	2	436	102	540	1720
05:00 PM	13	28	1	42	41	130	8	179	21	12	34	67	1	113	43	157	445
05:15 PM	8	21	2	31	51	137	22	210	25	17	30	72	3	124	28	155	468
05:30 PM	14	17	3	34	22	95	24	141	25	24	26	75	0	108	19	127	377
05:45 PM	8	19	2	29	31	115	17	163	16	11	43	70	2	118	21	141	403
Total	43	85	8	136	145	477	71	693	87	64	133	284	6	463	111	580	1693
Grand Total	88	172	16	276	320	965	118	1403	192	146	276	614	8	899	213	1120	3413
Apprch %	31.9	62.3	5.8		22.8	68.8	8.4		31.3	23.8	45		0.7	80.3	19		
Total %	2.6	5	0.5	8.1	9.4	28.3	3.5	41.1	5.6	4.3	8.1	18	0.2	26.3	6.2	32.8	
Passenger Vehicles	88	171	16	275	311	918	117	1346	188	141	266	595	8	862	207	1077	3293
% Passenger Vehicles	100	99.4	100	99.6	97.2	95.1	99.2	95.9	97.9	96.6	96.4	96.9	100	95.9	97.2	96.2	96.5
Large 2 Axle Vehicles	0	1	0	1	8	14	0	22	2	5	6	13	0	29	4	33	69
% Large 2 Axle Vehicles	0	0.6	0	0.4	2.5	1.5	0	1.6	1	3.4	2.2	2.1	0	3.2	1.9	2.9	2
3 Axle Vehicles	0	0	0	0	0	29	1	30	2	0	2	4	0	0	2	2	36
% 3 Axle Vehicles	0	0	0	0	0	3	0.8	2.1	1	0	0.7	0.7	0	0	0.9	0.2	1.1
4+ Axle Trucks	0	0	0	0	1	4	0	5	0	0	2	2	0	8	0	8	15
% 4+ Axle Trucks	0	0	0	0	0.3	0.4	0	0.4	0	0	0.7	0.3	0	0.9	0	0.7	0.4

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	13	24	2	39	43	122	7	172	29	18	36	83	1	110	32	143	437
04:45 PM	10	18	0	28	42	109	16	167	29	15	52	96	0	100	24	124	415
05:00 PM	13	28	1	42	41	130	8	179	21	12	34	67	1	113	43	157	445
05:15 PM	8	21	2	31	51	137	22	210	25	17	30	72	3	124	28	155	468
Total Volume	44	91	5	140	177	498	53	728	104	62	152	318	5	447	127	579	1765
% App. Total	31.4	65	3.6		24.3	68.4	7.3		32.7	19.5	47.8		0.9	77.2	21.9		
PHF	.846	.813	.625	.833	.868	.909	.602	.867	.897	.861	.731	.828	.417	.901	.738	.922	.943

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	11	25	1	37	56	147	12	215	19	27	32	78	1	113	43	157
+15 mins.	13	24	2	39	43	122	7	172	28	22	23	73	3	124	28	155
+30 mins.	10	18	0	28	42	109	16	167	29	18	36	83	0	108	19	127
+45 mins.	13	28	1	42	41	130	8	179	29	15	52	96	2	118	21	141
Total Volume	47	95	4	146	182	508	43	733	105	82	143	330	6	463	111	580
% App. Total	32.2	65.1	2.7		24.8	69.3	5.9		31.8	24.8	43.3		1	79.8	19.1	
PHF	.904	.848	.500	.869	.813	.864	.672	.852	.905	.759	.688	.859	.500	.933	.645	.924

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

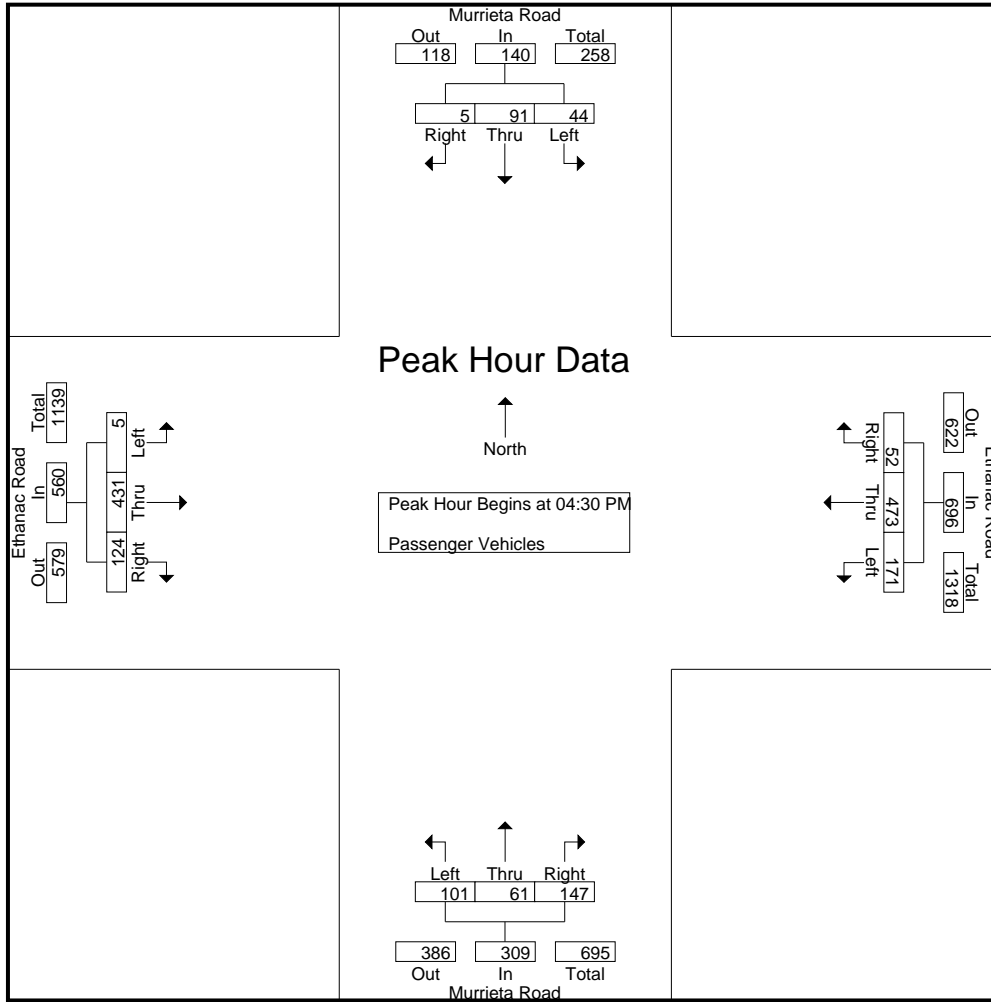
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	11	20	5	36	34	103	12	149	19	25	29	73	1	121	16	138	396
04:15 PM	11	25	1	37	55	135	12	202	28	21	22	71	0	91	29	120	430
04:30 PM	13	24	2	39	40	119	7	166	28	18	35	81	1	108	31	140	426
04:45 PM	10	18	0	28	42	105	16	163	28	14	50	92	0	97	24	121	404
Total	45	87	8	140	171	462	47	680	103	78	136	317	2	417	100	519	1656
05:00 PM	13	28	1	42	40	122	7	169	21	12	33	66	1	106	43	150	427
05:15 PM	8	21	2	31	49	127	22	198	24	17	29	70	3	120	26	149	448
05:30 PM	14	17	3	34	21	93	24	138	24	23	26	73	0	105	18	123	368
05:45 PM	8	18	2	28	30	114	17	161	16	11	42	69	2	114	20	136	394
Total	43	84	8	135	140	456	70	666	85	63	130	278	6	445	107	558	1637
Grand Total	88	171	16	275	311	918	117	1346	188	141	266	595	8	862	207	1077	3293
Apprch %	32	62.2	5.8		23.1	68.2	8.7		31.6	23.7	44.7		0.7	80	19.2		
Total %	2.7	5.2	0.5	8.4	9.4	27.9	3.6	40.9	5.7	4.3	8.1	18.1	0.2	26.2	6.3	32.7	

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	13	24	2	39	40	119	7	166	28	18	35	81	1	108	31	140	426
04:45 PM	10	18	0	28	42	105	16	163	28	14	50	92	0	97	24	121	404
05:00 PM	13	28	1	42	40	122	7	169	21	12	33	66	1	106	43	150	427
05:15 PM	8	21	2	31	49	127	22	198	24	17	29	70	3	120	26	149	448
Total Volume	44	91	5	140	171	473	52	696	101	61	147	309	5	431	124	560	1705
% App. Total	31.4	65	3.6		24.6	68	7.5		32.7	19.7	47.6		0.9	77	22.1		
PHF	.846	.813	.625	.833	.872	.931	.591	.879	.902	.847	.735	.840	.417	.898	.721	.933	.951

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	13	24	2	39	40	119	7	166	28	18	35	81	1	108	31	140
+15 mins.	10	18	0	28	42	105	16	163	28	14	50	92	0	97	24	121
+30 mins.	13	28	1	42	40	122	7	169	21	12	33	66	1	106	43	150
+45 mins.	8	21	2	31	49	127	22	198	24	17	29	70	3	120	26	149
Total Volume	44	91	5	140	171	473	52	696	101	61	147	309	5	431	124	560
% App. Total	31.4	65	3.6		24.6	68	7.5		32.7	19.7	47.6		0.9	77	22.1	
PHF	.846	.813	.625	.833	.872	.931	.591	.879	.902	.847	.735	.840	.417	.898	.721	.933

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	4	0	4	0	2	2	4	0	6	1	7	15
04:15 PM	0	0	0	0	1	1	0	2	0	1	0	1	0	5	0	5	8
04:30 PM	0	0	0	0	2	2	0	4	1	0	0	1	0	2	0	2	7
04:45 PM	0	0	0	0	0	3	0	3	1	1	2	4	0	3	0	3	10
Total	0	0	0	0	3	10	0	13	2	4	4	10	0	16	1	17	40
05:00 PM	0	0	0	0	1	1	0	2	0	0	1	1	0	4	0	4	7
05:15 PM	0	0	0	0	2	1	0	3	0	0	1	1	0	3	1	4	8
05:30 PM	0	0	0	0	1	1	0	2	0	1	0	1	0	2	1	3	6
05:45 PM	0	1	0	1	1	1	0	2	0	0	0	0	0	4	1	5	8
Total	0	1	0	1	5	4	0	9	0	1	2	3	0	13	3	16	29
Grand Total	0	1	0	1	8	14	0	22	2	5	6	13	0	29	4	33	69
Apprch %	0	100	0		36.4	63.6	0		15.4	38.5	46.2		0	87.9	12.1		
Total %	0	1.4	0	1.4	11.6	20.3	0	31.9	2.9	7.2	8.7	18.8	0	42	5.8	47.8	

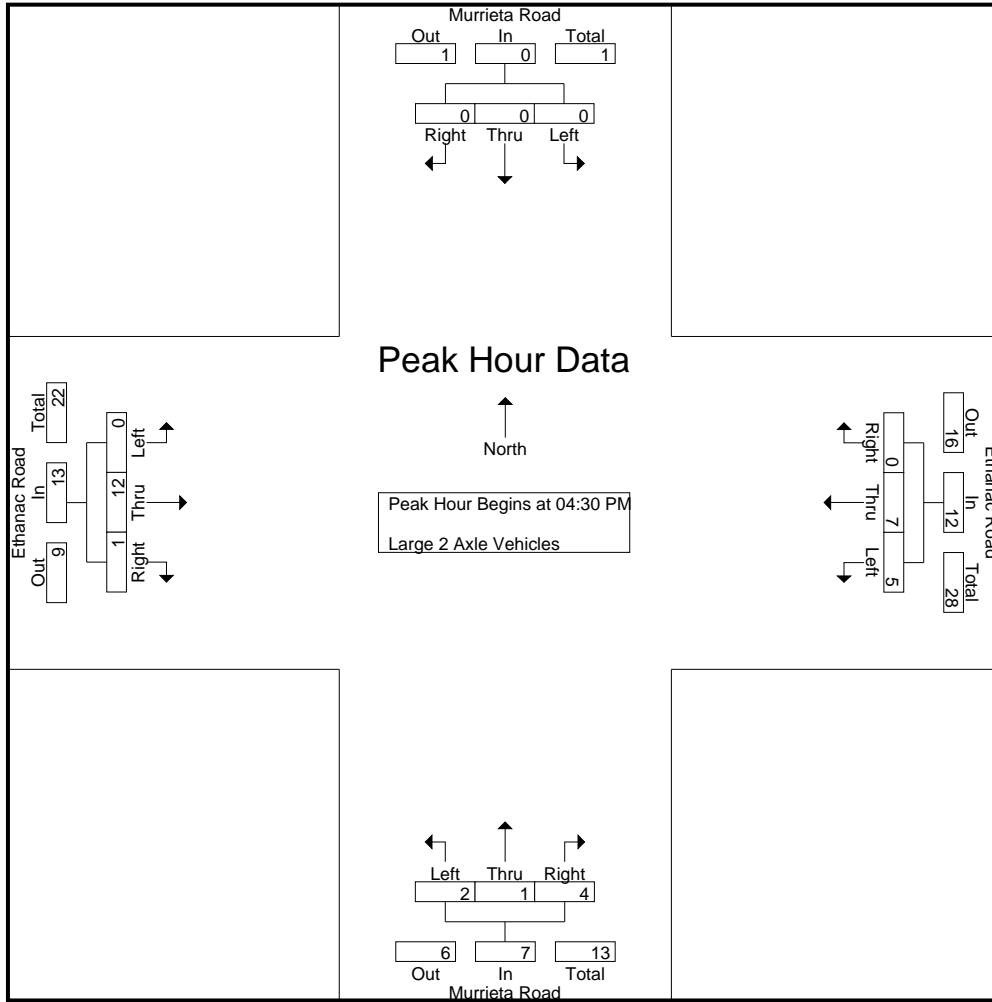
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	2	2	0	4	1	0	0	1	0	2	0	2	7
04:45 PM	0	0	0	0	0	3	0	3	1	1	2	4	0	3	0	3	10
05:00 PM	0	0	0	0	1	1	0	2	0	0	1	1	0	4	0	4	7
05:15 PM	0	0	0	0	2	1	0	3	0	0	1	1	0	3	1	4	8
Total Volume	0	0	0	0	5	7	0	12	2	1	4	7	0	12	1	13	32
% App. Total	0	0	0		41.7	58.3	0		28.6	14.3	57.1		0	92.3	7.7		
PHF	.000	.000	.000	.000	.625	.583	.000	.750	.500	.250	.500	.438	.000	.750	.250	.813	.800

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	2	2	0	4	1	0	0	1	0	2	0	2
+15 mins.	0	0	0	0	0	3	0	3	1	1	2	4	0	3	0	3
+30 mins.	0	0	0	0	1	1	0	2	0	0	1	1	0	4	0	4
+45 mins.	0	0	0	0	2	1	0	3	0	0	1	1	0	3	1	4
Total Volume	0	0	0	0	5	7	0	12	2	1	4	7	0	12	1	13
% App. Total	0	0	0	0	41.7	58.3	0		28.6	14.3	57.1		0	92.3	7.7	
PHF	.000	.000	.000	.000	.625	.583	.000	.750	.500	.250	.500	.438	.000	.750	.250	.813

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	3
04:15 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	0	0	0	9
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	13	0	13	0	0	1	1	0	0	1	1	15
05:00 PM	0	0	0	0	0	6	1	7	0	0	0	0	0	0	0	0	7
05:15 PM	0	0	0	0	0	9	0	9	1	0	0	1	0	0	1	1	11
05:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	0	16	1	17	2	0	1	3	0	0	1	1	21
Grand Total	0	0	0	0	0	29	1	30	2	0	2	4	0	0	2	2	36
Apprch %	0	0	0		0	96.7	3.3		50	0	50		0	0	100		
Total %	0	0	0		0	80.6	2.8	83.3	5.6	0	5.6	11.1	0	0	5.6	5.6	

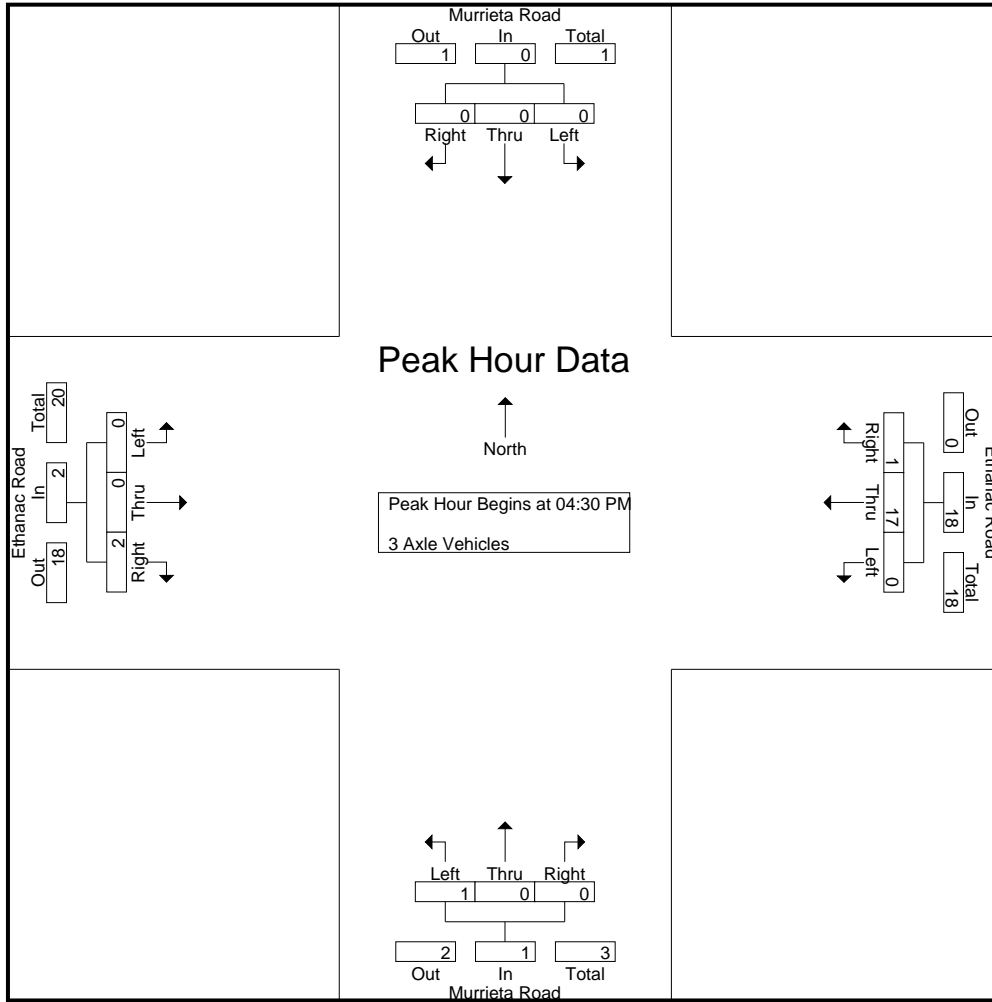
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	6	1	7	0	0	0	0	0	0	0	0	7
05:15 PM	0	0	0	0	0	9	0	9	1	0	0	1	0	0	1	1	11
Total Volume	0	0	0	0	0	17	1	18	1	0	0	1	0	0	2	2	21
% App. Total	0	0	0		0	94.4	5.6		100	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.472	.250	.500	.250	.000	.000	.250	.000	.000	.500	.500	.477

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	6	1	7	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	9	0	9	1	0	0	1	0	0	1	1
Total Volume	0	0	0	0	0	17	1	18	1	0	0	1	0	0	2	2
% App. Total	0	0	0	0	0	94.4	5.6	100	100	0	0	0	0	0	100	0
PHF	.000	.000	.000	.000	.000	.472	.250	.500	.250	.000	.000	.250	.000	.000	.500	.500

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
04:15 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	3
04:30 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	3	0	4	0	0	2	2	0	3	0	3	9
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
Grand Total	0	0	0	0	1	4	0	5	0	0	2	2	0	8	0	8	15
Apprch %	0	0	0		20	80	0		0	0	100		0	100	0		
Total %	0	0	0	0	6.7	26.7	0	33.3	0	0	13.3	13.3	0	53.3	0	53.3	

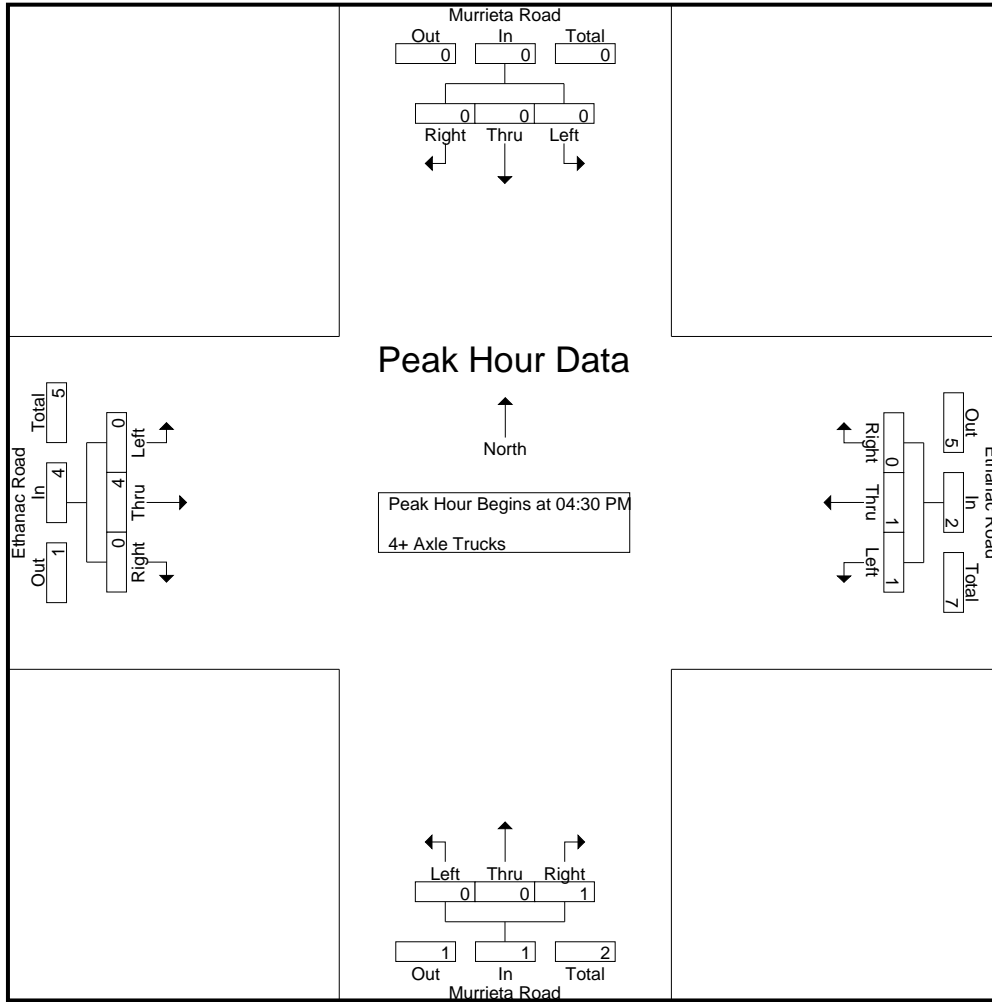
Start Time	Murrieta Road Southbound				Ethanac Road Westbound				Murrieta Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	4	0	4	7
% App. Total	0	0	0		50	50	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.000	.333	.000	.333	.438

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 03_MEN_Murr_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	4	0	4
% App. Total	0	0	0	0	50	50	0	100	0	0	100	100	0	100	0	100
PHF	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.000	.333	.000	.333

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

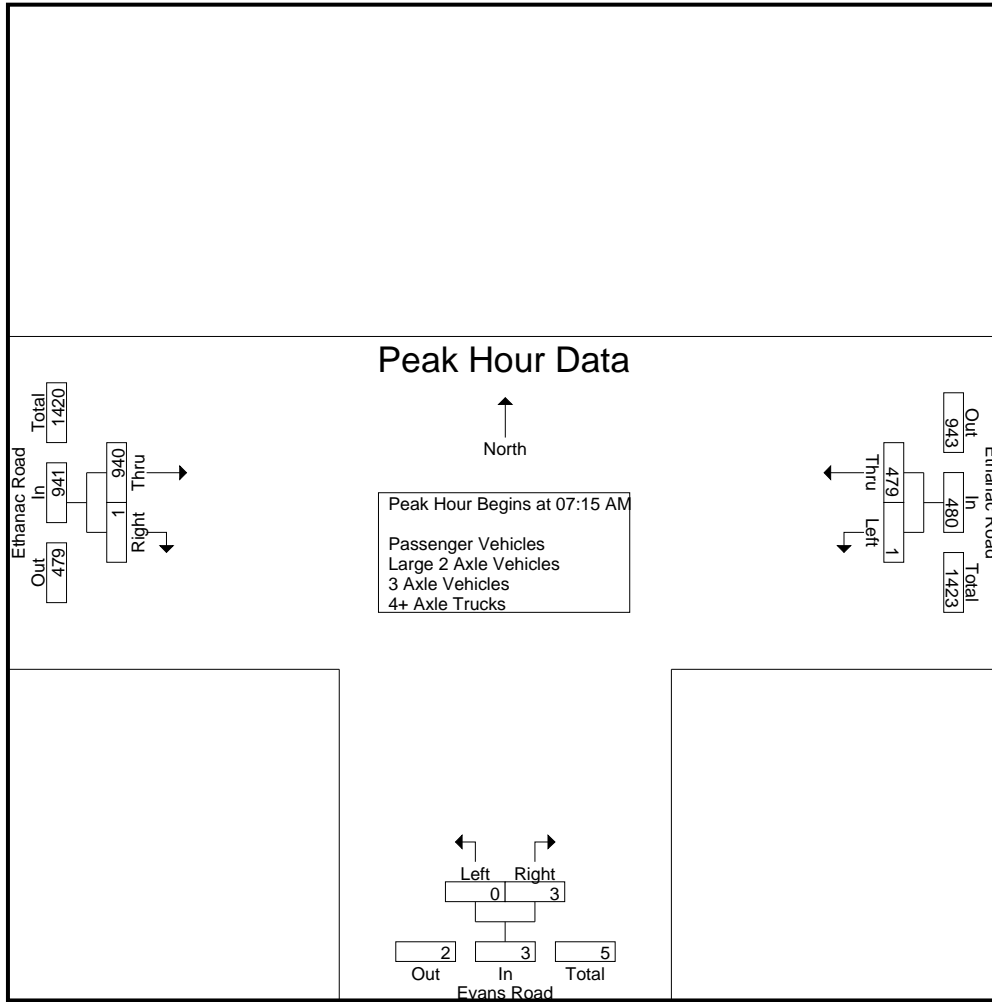
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	88	90	0	0	0	179	1	180	270
07:15 AM	0	92	92	0	3	3	229	0	229	324
07:30 AM	0	92	92	0	0	0	290	1	291	383
07:45 AM	1	142	143	0	0	0	218	0	218	361
Total	3	414	417	0	3	3	916	2	918	1338
08:00 AM	0	153	153	0	0	0	203	0	203	356
08:15 AM	1	121	122	0	0	0	157	0	157	279
08:30 AM	2	96	98	0	1	1	131	1	132	231
08:45 AM	0	100	100	0	1	1	134	0	134	235
Total	3	470	473	0	2	2	625	1	626	1101
Grand Total	6	884	890	0	5	5	1541	3	1544	2439
Apprch %	0.7	99.3		0	100		99.8	0.2		
Total %	0.2	36.2	36.5	0	0.2	0.2	63.2	0.1	63.3	
Passenger Vehicles	4	813	817	0	4	4	1455	2	1457	2278
% Passenger Vehicles	66.7	92	91.8	0	80	80	94.4	66.7	94.4	93.4
Large 2 Axle Vehicles	2	47	49	0	1	1	55	1	56	106
% Large 2 Axle Vehicles	33.3	5.3	5.5	0	20	20	3.6	33.3	3.6	4.3
3 Axle Vehicles	0	13	13	0	0	0	13	0	13	26
% 3 Axle Vehicles	0	1.5	1.5	0	0	0	0.8	0	0.8	1.1
4+ Axle Trucks	0	11	11	0	0	0	18	0	18	29
% 4+ Axle Trucks	0	1.2	1.2	0	0	0	1.2	0	1.2	1.2

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	92	92	0	3	3	229	0	229	324
07:30 AM	0	92	92	0	0	0	290	1	291	383
07:45 AM	1	142	143	0	0	0	218	0	218	361
08:00 AM	0	153	153	0	0	0	203	0	203	356
Total Volume	1	479	480	0	3	3	940	1	941	1424
% App. Total	0.2	99.8		0	100		99.9	0.1		
PHF	.250	.783	.784	.000	.250	.250	.810	.250	.808	.930

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:00 AM			07:15 AM		
+0 mins.	1	142	143	0	0	0	229	0	229
+15 mins.	0	153	153	0	3	3	290	1	291
+30 mins.	1	121	122	0	0	0	218	0	218
+45 mins.	2	96	98	0	0	0	203	0	203
Total Volume	4	512	516	0	3	3	940	1	941
% App. Total	0.8	99.2		0	100		99.9	0.1	
PHF	.500	.837	.843	.000	.250	.250	.810	.250	.808

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

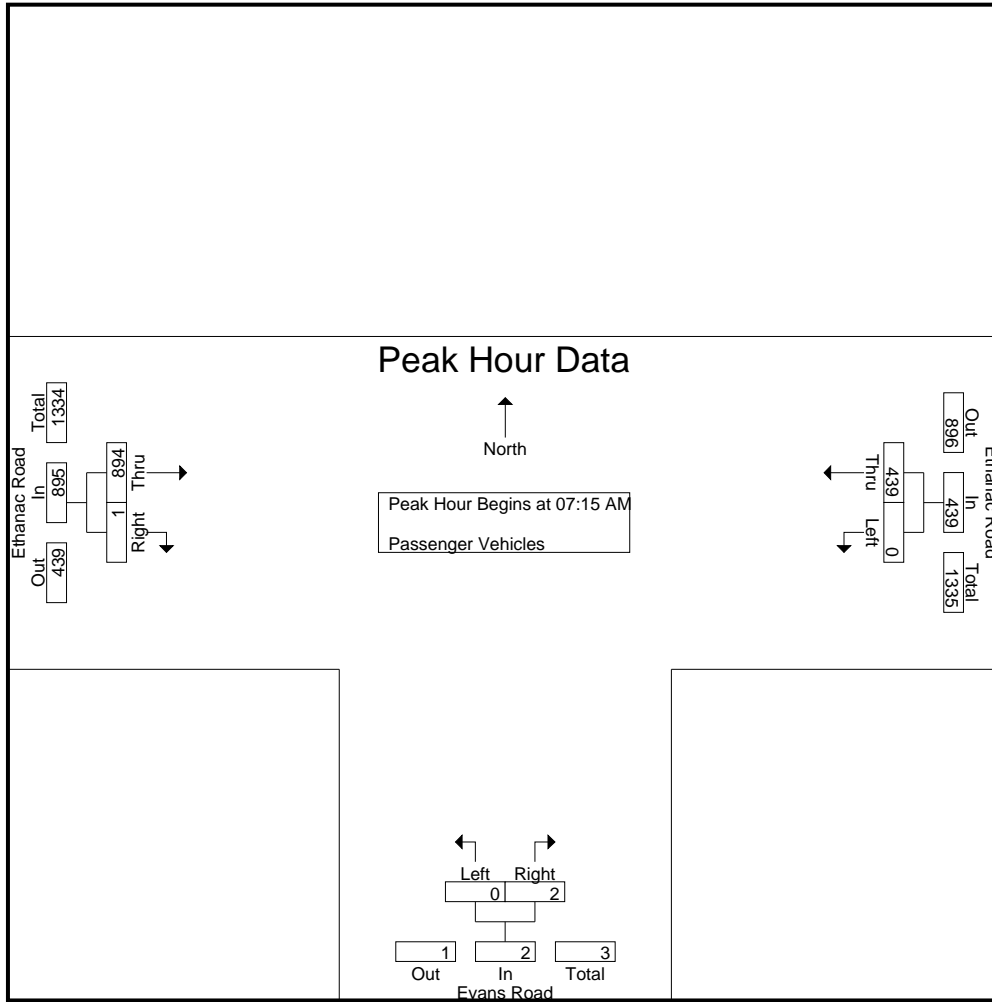
Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	82	84	0	0	0	169	0	169	253
07:15 AM	0	77	77	0	2	2	216	0	216	295
07:30 AM	0	79	79	0	0	0	277	1	278	357
07:45 AM	0	137	137	0	0	0	203	0	203	340
Total	2	375	377	0	2	2	865	1	866	1245
08:00 AM	0	146	146	0	0	0	198	0	198	344
08:15 AM	0	113	113	0	0	0	150	0	150	263
08:30 AM	2	91	93	0	1	1	123	1	124	218
08:45 AM	0	88	88	0	1	1	119	0	119	208
Total	2	438	440	0	2	2	590	1	591	1033
Grand Total	4	813	817	0	4	4	1455	2	1457	2278
Apprch %	0.5	99.5		0	100		99.9	0.1		
Total %	0.2	35.7	35.9	0	0.2	0.2	63.9	0.1	64	

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:15 AM	0	77	77	0	2	2	216	0	216	295
07:30 AM	0	79	79	0	0	0	277	1	278	357
07:45 AM	0	137	137	0	0	0	203	0	203	340
08:00 AM	0	146	146	0	0	0	198	0	198	344
Total Volume	0	439	439	0	2	2	894	1	895	1336
% App. Total	0	100		0	100		99.9	0.1		
PHF	.000	.752	.752	.000	.250	.250	.807	.250	.805	.936

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	77	77	0	2	2	216	0	216
+15 mins.	0	79	79	0	0	0	277	1	278
+30 mins.	0	137	137	0	0	0	203	0	203
+45 mins.	0	146	146	0	0	0	198	0	198
Total Volume	0	439	439	0	2	2	894	1	895
% App. Total	0	100		0	100		99.9	0.1	
PHF	.000	.752	.752	.000	.250	.250	.807	.250	.805

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

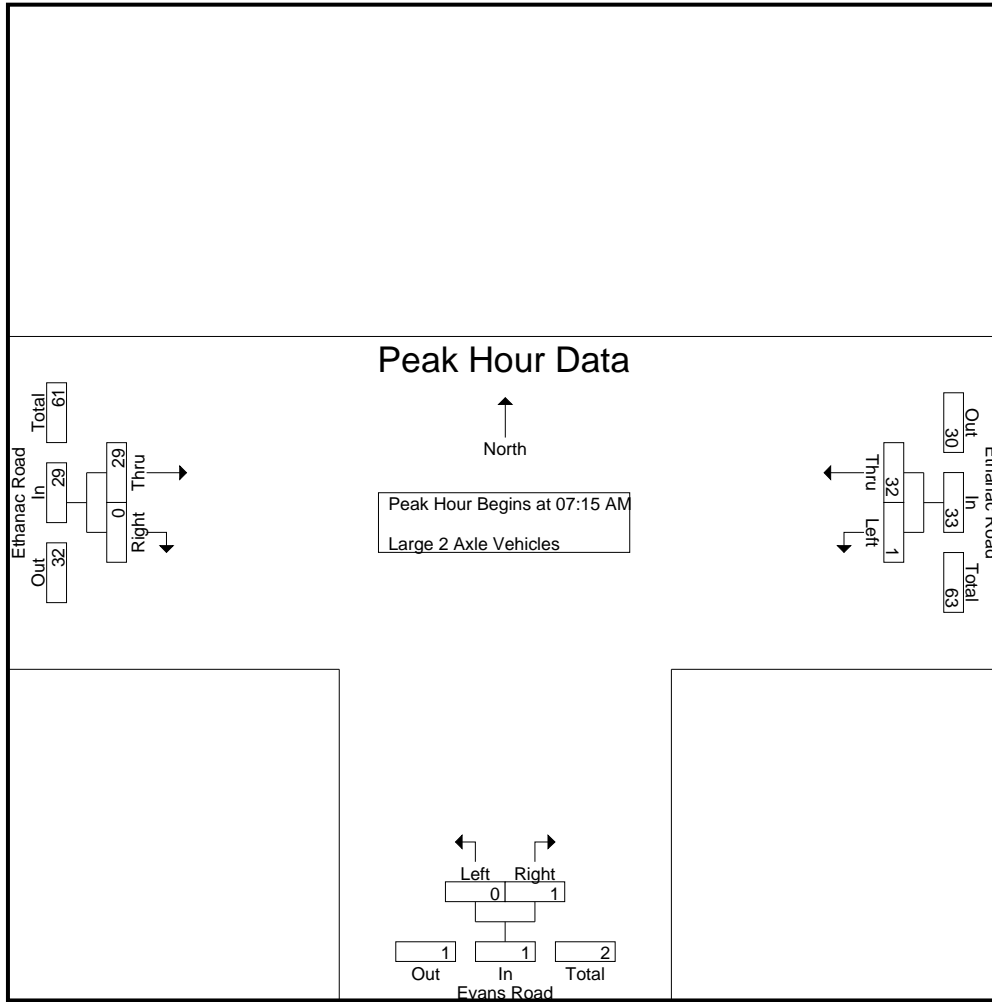
Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	7	1	8	10
07:15 AM	0	7	7	0	1	1	7	0	7	15
07:30 AM	0	13	13	0	0	0	7	0	7	20
07:45 AM	1	5	6	0	0	0	13	0	13	19
Total	1	27	28	0	1	1	34	1	35	64
08:00 AM	0	7	7	0	0	0	2	0	2	9
08:15 AM	1	3	4	0	0	0	3	0	3	7
08:30 AM	0	3	3	0	0	0	5	0	5	8
08:45 AM	0	7	7	0	0	0	11	0	11	18
Total	1	20	21	0	0	0	21	0	21	42
Grand Total	2	47	49	0	1	1	55	1	56	106
Apprch %	4.1	95.9		0	100		98.2	1.8		
Total %	1.9	44.3	46.2	0	0.9	0.9	51.9	0.9	52.8	

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:15 AM	0	7	7	0	1	1	7	0	7	15
07:30 AM	0	13	13	0	0	0	7	0	7	20
07:45 AM	1	5	6	0	0	0	13	0	13	19
08:00 AM	0	7	7	0	0	0	2	0	2	9
Total Volume	1	32	33	0	1	1	29	0	29	63
% App. Total	3	97		0	100		100	0		
PHF	.250	.615	.635	.000	.250	.250	.558	.000	.558	.788

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	7	7	0	1	1	7	0	7
+15 mins.	0	13	13	0	0	0	7	0	7
+30 mins.	1	5	6	0	0	0	13	0	13
+45 mins.	0	7	7	0	0	0	2	0	2
Total Volume	1	32	33	0	1	1	29	0	29
% App. Total	3	97		0	100		100	0	
PHF	.250	.615	.635	.000	.250	.250	.558	.000	.558

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	3	3	0	0	0	1	0	1	4
07:15 AM	0	5	5	0	0	0	2	0	2	7
07:30 AM	0	0	0	0	0	0	3	0	3	3
07:45 AM	0	0	0	0	0	0	2	0	2	2
Total	0	8	8	0	0	0	8	0	8	16
08:00 AM	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	2	2	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	3	3	0	0	0	1	0	1	4
Total	0	5	5	0	0	0	5	0	5	10
Grand Total	0	13	13	0	0	0	13	0	13	26
Apprch %	0	100		0	0		100	0		
Total %	0	50	50	0	0	0	50	0	50	

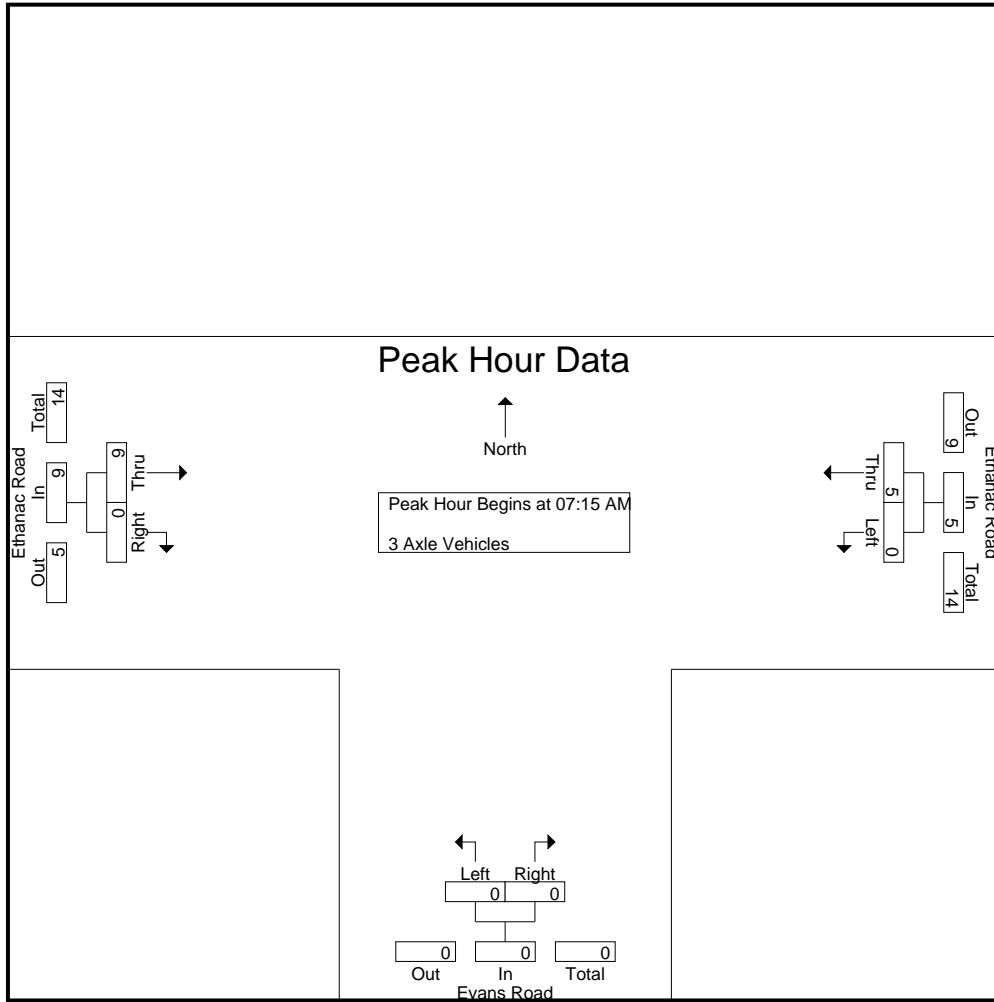
Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:15 AM	0	5	5	0	0	0	2	0	2	7
07:30 AM	0	0	0	0	0	0	3	0	3	3
07:45 AM	0	0	0	0	0	0	2	0	2	2
08:00 AM	0	0	0	0	0	0	2	0	2	2
Total Volume	0	5	5	0	0	0	9	0	9	14
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.750	.000	.750	.500

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	5	5	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	0	2	0	2
Total Volume	0	5	5	0	0	0	9	0	9
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.750	.000	.750

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	1	1	0	0	0	2	0	2	3
07:15 AM	0	3	3	0	0	0	4	0	4	7
07:30 AM	0	0	0	0	0	0	3	0	3	3
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	4	4	0	0	0	9	0	9	13
08:00 AM	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	3	3	0	0	0	3	0	3	6
08:30 AM	0	2	2	0	0	0	2	0	2	4
08:45 AM	0	2	2	0	0	0	3	0	3	5
Total	0	7	7	0	0	0	9	0	9	16
Grand Total	0	11	11	0	0	0	18	0	18	29
Apprch %	0	100		0	0		100	0		
Total %	0	37.9	37.9	0	0	0	62.1	0	62.1	

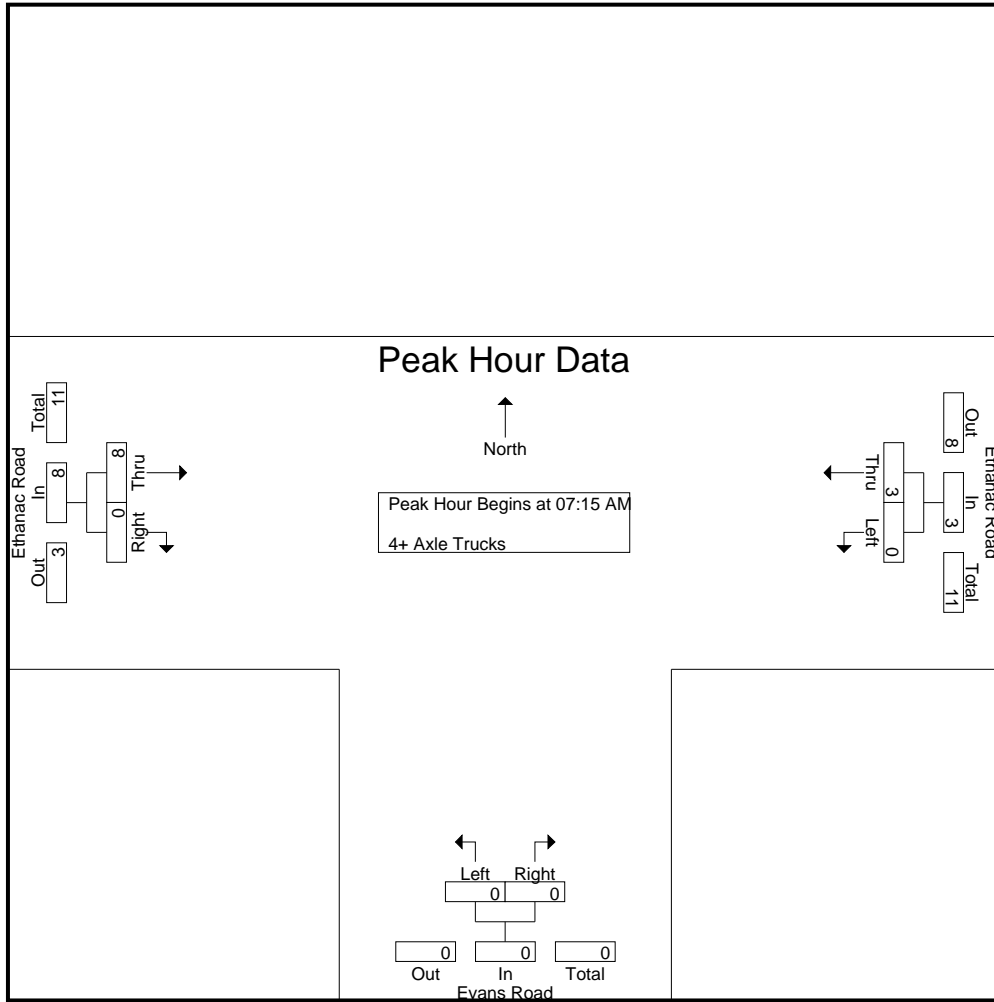
Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:15 AM	0	3	3	0	0	0	4	0	4	7
07:30 AM	0	0	0	0	0	0	3	0	3	3
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	3	3	0	0	0	8	0	8	11
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.393

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	3	3	0	0	0	4	0	4
+15 mins.	0	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	3	3	0	0	0	8	0	8
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

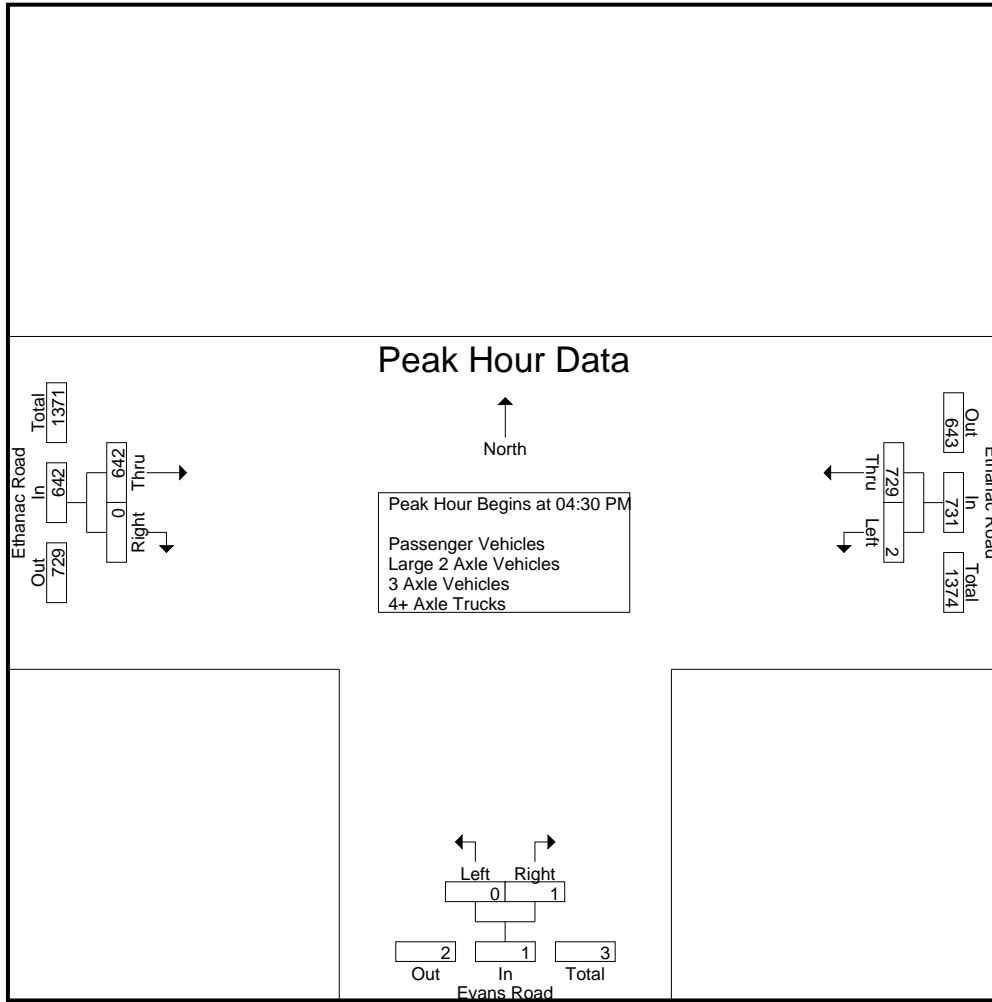
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	175	175	0	0	0	172	0	172	347
04:15 PM	1	202	203	0	1	1	133	0	133	337
04:30 PM	0	179	179	0	1	1	164	0	164	344
04:45 PM	1	168	169	0	0	0	167	0	167	336
Total	2	724	726	0	2	2	636	0	636	1364
05:00 PM	1	177	178	0	0	0	149	0	149	327
05:15 PM	0	205	205	0	0	0	162	0	162	367
05:30 PM	2	158	160	0	0	0	151	0	151	311
05:45 PM	0	148	148	0	1	1	167	0	167	316
Total	3	688	691	0	1	1	629	0	629	1321
Grand Total	5	1412	1417	0	3	3	1265	0	1265	2685
Apprch %	0.4	99.6		0	100		100	0		
Total %	0.2	52.6	52.8	0	0.1	0.1	47.1	0	47.1	
Passenger Vehicles	5	1340	1345	0	3	3	1222	0	1222	2570
% Passenger Vehicles	100	94.9	94.9	0	100	100	96.6	0	96.6	95.7
Large 2 Axle Vehicles	0	39	39	0	0	0	38	0	38	77
% Large 2 Axle Vehicles	0	2.8	2.8	0	0	0	3	0	3	2.9
3 Axle Vehicles	0	31	31	0	0	0	1	0	1	32
% 3 Axle Vehicles	0	2.2	2.2	0	0	0	0.1	0	0.1	1.2
4+ Axle Trucks	0	2	2	0	0	0	4	0	4	6
% 4+ Axle Trucks	0	0.1	0.1	0	0	0	0.3	0	0.3	0.2

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. 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	0	179	179	0	1	1	164	0	164	344
04:45 PM	1	168	169	0	0	0	167	0	167	336
05:00 PM	1	177	178	0	0	0	149	0	149	327
05:15 PM	0	205	205	0	0	0	162	0	162	367
Total Volume	2	729	731	0	1	1	642	0	642	1374
% App. Total	0.3	99.7		0	100		100	0		
PHF	.500	.889	.891	.000	.250	.250	.961	.000	.961	.936

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM			04:00 PM			04:30 PM		
+0 mins.	0	179	179	0	0	0	164	0	164
+15 mins.	1	168	169	0	1	1	167	0	167
+30 mins.	1	177	178	0	1	1	149	0	149
+45 mins.	0	205	205	0	0	0	162	0	162
Total Volume	2	729	731	0	2	2	642	0	642
% App. Total	0.3	99.7		0	100		100	0	
PHF	.500	.889	.891	.000	.500	.500	.961	.000	.961

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

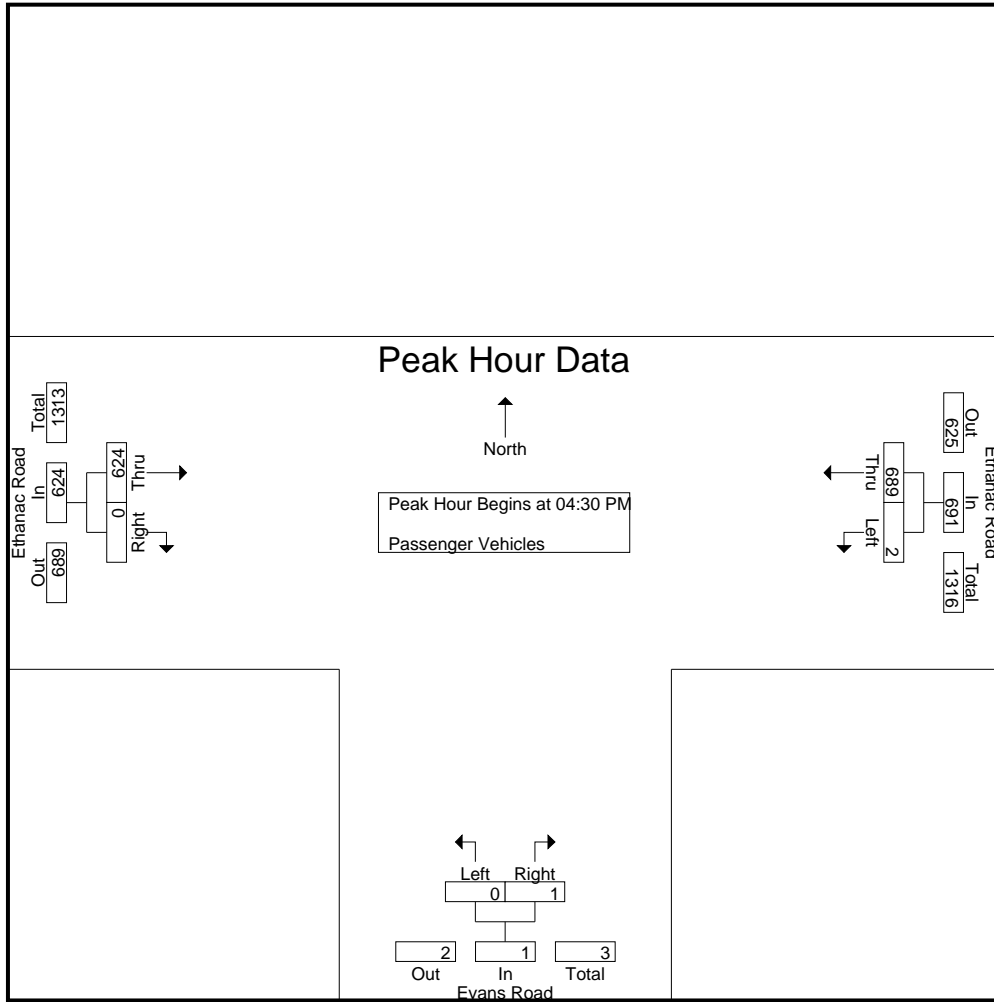
Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	163	163	0	0	0	161	0	161	324
04:15 PM	1	187	188	0	1	1	127	0	127	316
04:30 PM	0	172	172	0	1	1	162	0	162	335
04:45 PM	1	159	160	0	0	0	163	0	163	323
Total	2	681	683	0	2	2	613	0	613	1298
05:00 PM	1	166	167	0	0	0	142	0	142	309
05:15 PM	0	192	192	0	0	0	157	0	157	349
05:30 PM	2	154	156	0	0	0	148	0	148	304
05:45 PM	0	147	147	0	1	1	162	0	162	310
Total	3	659	662	0	1	1	609	0	609	1272
Grand Total	5	1340	1345	0	3	3	1222	0	1222	2570
Apprch %	0.4	99.6		0	100		100	0		
Total %	0.2	52.1	52.3	0	0.1	0.1	47.5	0	47.5	

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	0	172	172	0	1	1	162	0	162	335
04:45 PM	1	159	160	0	0	0	163	0	163	323
05:00 PM	1	166	167	0	0	0	142	0	142	309
05:15 PM	0	192	192	0	0	0	157	0	157	349
Total Volume	2	689	691	0	1	1	624	0	624	1316
% App. Total	0.3	99.7		0	100		100	0		
PHF	.500	.897	.900	.000	.250	.250	.957	.000	.957	.943

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	172	172	0	1	1	162	0	162
+15 mins.	1	159	160	0	0	0	163	0	163
+30 mins.	1	166	167	0	0	0	142	0	142
+45 mins.	0	192	192	0	0	0	157	0	157
Total Volume	2	689	691	0	1	1	624	0	624
% App. Total	0.3	99.7		0	100		100	0	
PHF	.500	.897	.900	.000	.250	.250	.957	.000	.957

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

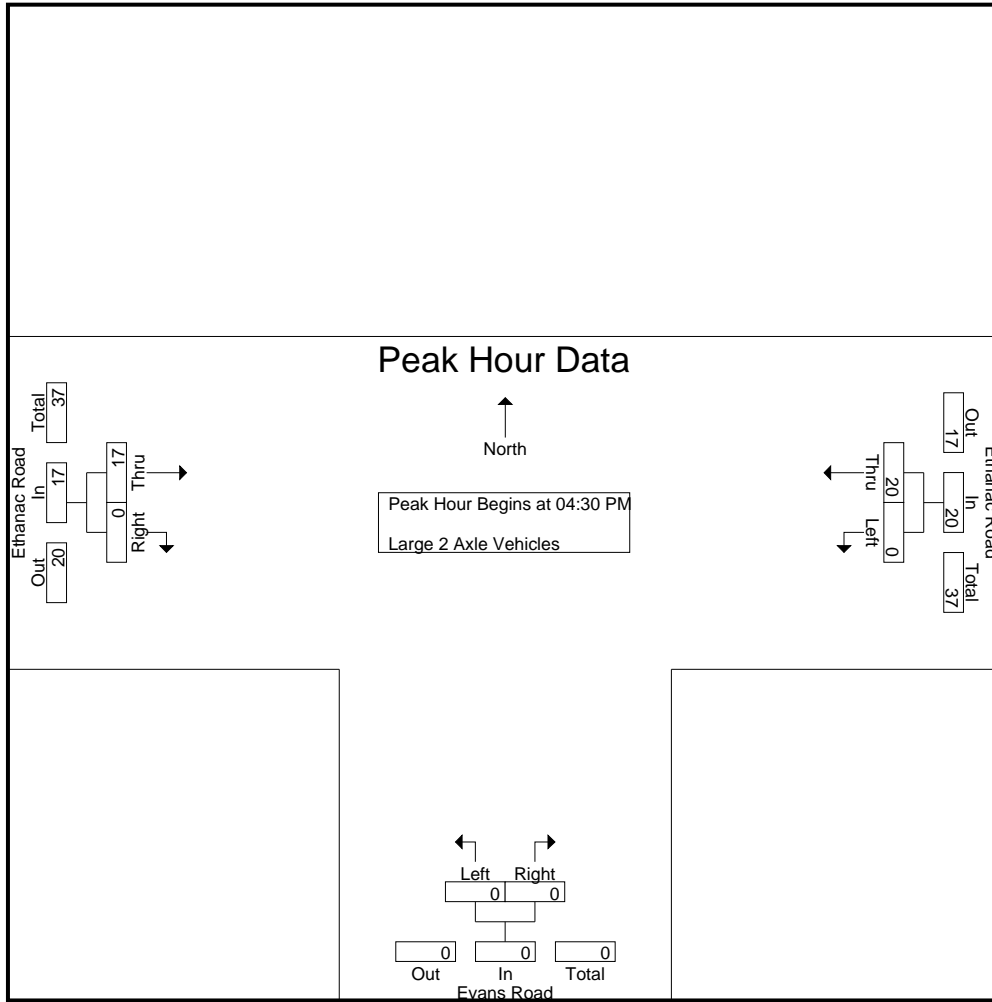
Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	10	10	0	0	0	9	0	9	19
04:15 PM	0	4	4	0	0	0	6	0	6	10
04:30 PM	0	6	6	0	0	0	2	0	2	8
04:45 PM	0	5	5	0	0	0	4	0	4	9
Total	0	25	25	0	0	0	21	0	21	46
05:00 PM	0	3	3	0	0	0	7	0	7	10
05:15 PM	0	6	6	0	0	0	4	0	4	10
05:30 PM	0	4	4	0	0	0	2	0	2	6
05:45 PM	0	1	1	0	0	0	4	0	4	5
Total	0	14	14	0	0	0	17	0	17	31
Grand Total	0	39	39	0	0	0	38	0	38	77
Apprch %	0	100		0	0		100	0		
Total %	0	50.6	50.6	0	0	0	49.4	0	49.4	

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	0	6	6	0	0	0	2	0	2	8
04:45 PM	0	5	5	0	0	0	4	0	4	9
05:00 PM	0	3	3	0	0	0	7	0	7	10
05:15 PM	0	6	6	0	0	0	4	0	4	10
Total Volume	0	20	20	0	0	0	17	0	17	37
% App. Total	0	100		0	0		100	0		
PHF	.000	.833	.833	.000	.000	.000	.607	.000	.607	.925

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	6	6	0	0	0	2	0	2
+15 mins.	0	5	5	0	0	0	4	0	4
+30 mins.	0	3	3	0	0	0	7	0	7
+45 mins.	0	6	6	0	0	0	4	0	4
Total Volume	0	20	20	0	0	0	17	0	17
% App. Total	0	100		0	0		100	0	
PHF	.000	.833	.833	.000	.000	.000	.607	.000	.607

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	2	2	0	0	0	1	0	1	3
04:15 PM	0	10	10	0	0	0	0	0	0	10
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	3	3	0	0	0	0	0	0	3
Total	0	16	16	0	0	0	1	0	1	17
05:00 PM	0	8	8	0	0	0	0	0	0	8
05:15 PM	0	7	7	0	0	0	0	0	0	7
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	15	15	0	0	0	0	0	0	15
Grand Total	0	31	31	0	0	0	1	0	1	32
Apprch %	0	100		0	0		100	0		
Total %	0	96.9	96.9	0	0	0	3.1	0	3.1	

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	3	3	0	0	0	0	0	0	3
05:00 PM	0	8	8	0	0	0	0	0	0	8
05:15 PM	0	7	7	0	0	0	0	0	0	7
Total Volume	0	19	19	0	0	0	0	0	0	19
% App. Total	0	100		0	0		0	0		
PHF	.000	.594	.594	.000	.000	.000	.000	.000	.000	.594

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	1	1	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	2	2	0	0	0	1	0	1	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	3	0	3	3
Grand Total	0	2	2	0	0	0	4	0	4	6
Apprch %	0	100		0	0		100	0		
Total %	0	33.3	33.3	0	0	0	66.7	0	66.7	

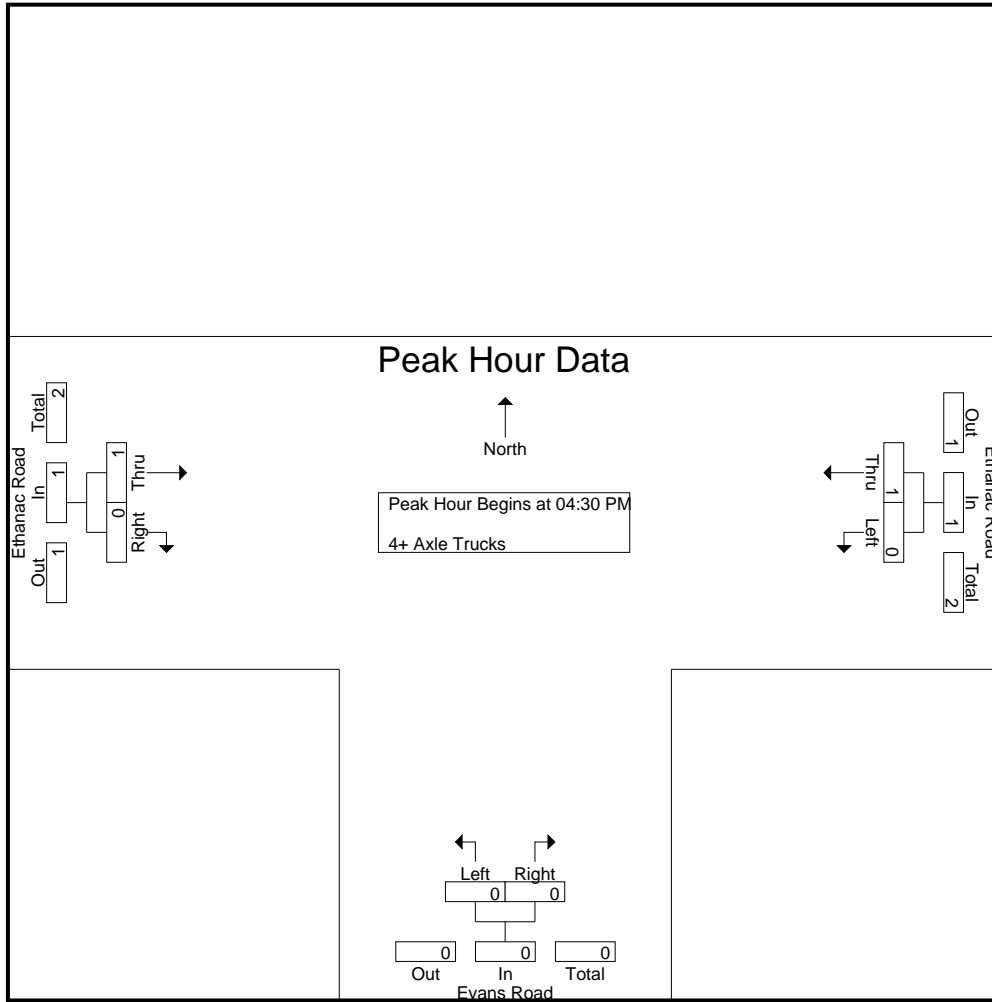
Start Time	Ethanac Road Westbound			Evans Road Northbound			Ethanac Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	1	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	1	1	0	0	0	1	0	1	2
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250	.500

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Evans Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 04_MEN_Evans_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	1	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	1	1	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

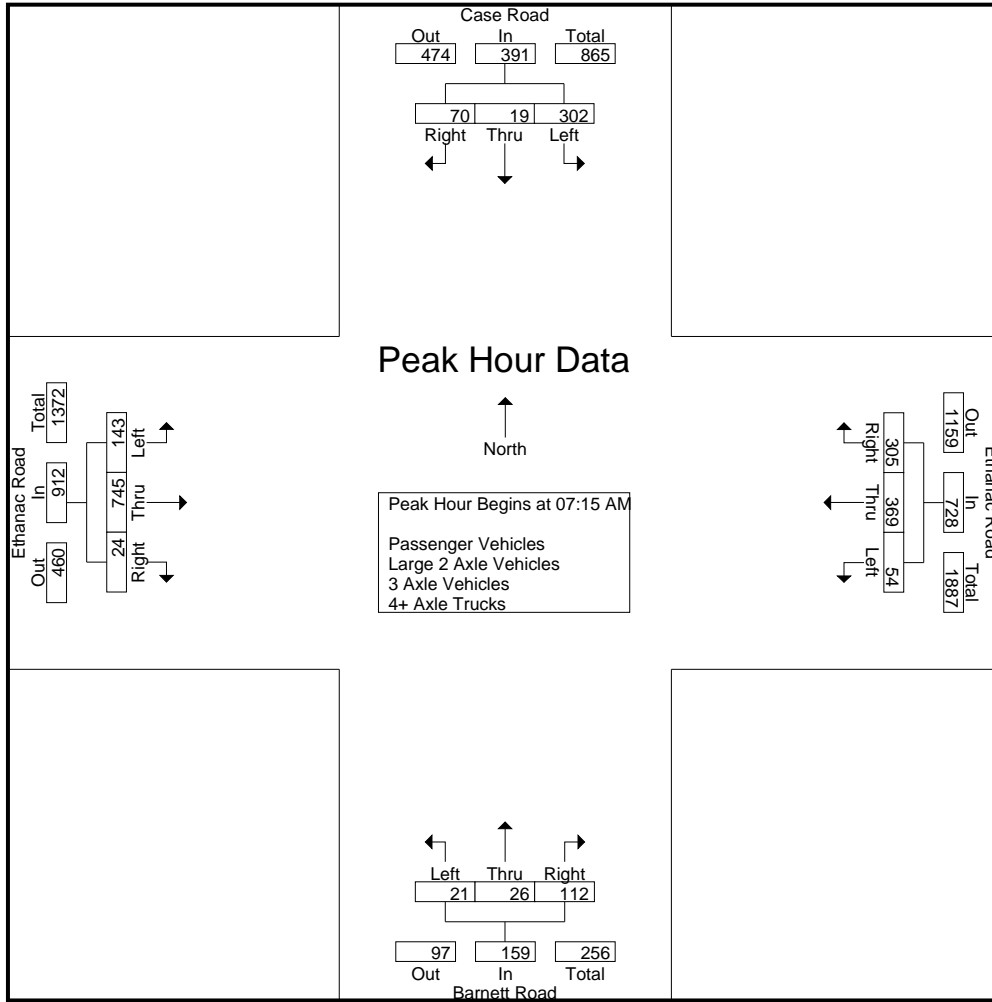
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	49	2	11	62	22	88	45	155	4	2	21	27	30	134	4	168	412
07:15 AM	59	0	13	72	22	69	60	151	5	2	35	42	28	170	10	208	473
07:30 AM	78	3	18	99	8	67	68	143	10	10	32	52	32	236	2	270	564
07:45 AM	80	6	19	105	13	107	91	211	3	4	14	21	36	191	10	237	574
Total	266	11	61	338	65	331	264	660	22	18	102	142	126	731	26	883	2023
08:00 AM	85	10	20	115	11	126	86	223	3	10	31	44	47	148	2	197	579
08:15 AM	68	12	17	97	14	102	81	197	4	5	10	19	32	121	5	158	471
08:30 AM	74	9	12	95	6	84	63	153	4	8	23	35	30	97	5	132	415
08:45 AM	88	9	25	122	5	78	78	161	2	2	13	17	33	87	6	126	426
Total	315	40	74	429	36	390	308	734	13	25	77	115	142	453	18	613	1891
Grand Total	581	51	135	767	101	721	572	1394	35	43	179	257	268	1184	44	1496	3914
Apprch %	75.7	6.6	17.6		7.2	51.7	41		13.6	16.7	69.6		17.9	79.1	2.9		
Total %	14.8	1.3	3.4	19.6	2.6	18.4	14.6	35.6	0.9	1.1	4.6	6.6	6.8	30.3	1.1	38.2	
Passenger Vehicles	538	50	133	721	62	659	553	1274	25	41	134	200	261	1124	40	1425	3620
% Passenger Vehicles	92.6	98	98.5	94	61.4	91.4	96.7	91.4	71.4	95.3	74.9	77.8	97.4	94.9	90.9	95.3	92.5
Large 2 Axle Vehicles	32	0	2	34	30	34	16	80	8	2	33	43	7	31	3	41	198
% Large 2 Axle Vehicles	5.5	0	1.5	4.4	29.7	4.7	2.8	5.7	22.9	4.7	18.4	16.7	2.6	2.6	6.8	2.7	5.1
3 Axle Vehicles	2	0	0	2	2	14	0	16	1	0	3	4	0	12	0	12	34
% 3 Axle Vehicles	0.3	0	0	0.3	2	1.9	0	1.1	2.9	0	1.7	1.6	0	1	0	0.8	0.9
4+ Axle Trucks	9	1	0	10	7	14	3	24	1	0	9	10	0	17	1	18	62
% 4+ Axle Trucks	1.5	2	0	1.3	6.9	1.9	0.5	1.7	2.9	0	5	3.9	0	1.4	2.3	1.2	1.6

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	59	0	13	72	22	69	60	151	5	2	35	42	28	170	10	208	473
07:30 AM	78	3	18	99	8	67	68	143	10	10	32	52	32	236	2	270	564
07:45 AM	80	6	19	105	13	107	91	211	3	4	14	21	36	191	10	237	574
08:00 AM	85	10	20	115	11	126	86	223	3	10	31	44	47	148	2	197	579
Total Volume	302	19	70	391	54	369	305	728	21	26	112	159	143	745	24	912	2190
% App. Total	77.2	4.9	17.9		7.4	50.7	41.9		13.2	16.4	70.4		15.7	81.7	2.6		
PHF	.888	.475	.875	.850	.614	.732	.838	.816	.525	.650	.800	.764	.761	.789	.600	.844	.946

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:15 AM				07:15 AM			
+0 mins.	85	10	20	115	13	107	91	211	5	2	35	42	28	170	10	208
+15 mins.	68	12	17	97	11	126	86	223	10	10	32	52	32	236	2	270
+30 mins.	74	9	12	95	14	102	81	197	3	4	14	21	36	191	10	237
+45 mins.	88	9	25	122	6	84	63	153	3	10	31	44	47	148	2	197
Total Volume	315	40	74	429	44	419	321	784	21	26	112	159	143	745	24	912
% App. Total	73.4	9.3	17.2		5.6	53.4	40.9		13.2	16.4	70.4		15.7	81.7	2.6	
PHF	.895	.833	.740	.879	.786	.831	.882	.879	.525	.650	.800	.764	.761	.789	.600	.844

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

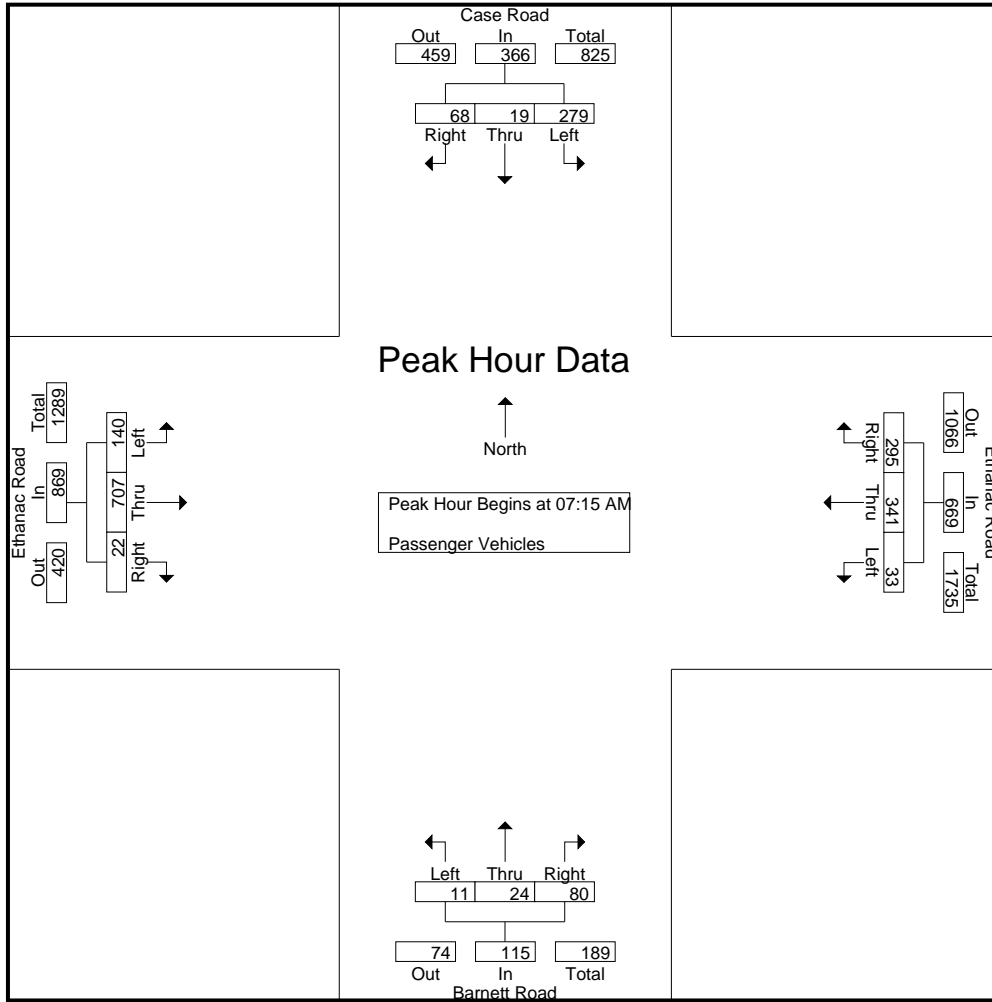
Groups Printed- Passenger Vehicles

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	43	2	11	56	8	80	43	131	4	2	16	22	30	130	4	164	373
07:15 AM	56	0	13	69	9	57	57	123	3	2	21	26	27	162	8	197	415
07:30 AM	72	3	18	93	4	58	67	129	3	8	24	35	32	225	2	259	516
07:45 AM	73	6	18	97	10	103	87	200	2	4	10	16	35	177	10	222	535
Total	244	11	60	315	31	298	254	583	12	16	71	99	124	694	24	842	1839
08:00 AM	78	10	19	107	10	123	84	217	3	10	25	38	46	143	2	191	553
08:15 AM	62	12	17	91	13	91	79	183	4	5	9	18	30	117	4	151	443
08:30 AM	70	8	12	90	3	79	60	142	4	8	16	28	29	91	4	124	384
08:45 AM	84	9	25	118	5	68	76	149	2	2	13	17	32	79	6	117	401
Total	294	39	73	406	31	361	299	691	13	25	63	101	137	430	16	583	1781
Grand Total	538	50	133	721	62	659	553	1274	25	41	134	200	261	1124	40	1425	3620
Apprch %	74.6	6.9	18.4		4.9	51.7	43.4		12.5	20.5	67		18.3	78.9	2.8		
Total %	14.9	1.4	3.7	19.9	1.7	18.2	15.3	35.2	0.7	1.1	3.7	5.5	7.2	31	1.1	39.4	

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	56	0	13	69	9	57	57	123	3	2	21	26	27	162	8	197	415
07:30 AM	72	3	18	93	4	58	67	129	3	8	24	35	32	225	2	259	516
07:45 AM	73	6	18	97	10	103	87	200	2	4	10	16	35	177	10	222	535
08:00 AM	78	10	19	107	10	123	84	217	3	10	25	38	46	143	2	191	553
Total Volume	279	19	68	366	33	341	295	669	11	24	80	115	140	707	22	869	2019
% App. Total	76.2	5.2	18.6		4.9	51	44.1		9.6	20.9	69.6		16.1	81.4	2.5		
PHF	.894	.475	.895	.855	.825	.693	.848	.771	.917	.600	.800	.757	.761	.786	.550	.839	.913

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	56	0	13	69	9	57	57	123	3	2	21	26	27	162	8	197
+15 mins.	72	3	18	93	4	58	67	129	3	8	24	35	32	225	2	259
+30 mins.	73	6	18	97	10	103	87	200	2	4	10	16	35	177	10	222
+45 mins.	78	10	19	107	10	123	84	217	3	10	25	38	46	143	2	191
Total Volume	279	19	68	366	33	341	295	669	11	24	80	115	140	707	22	869
% App. Total	76.2	5.2	18.6		4.9	51	44.1		9.6	20.9	69.6		16.1	81.4	2.5	
PHF	.894	.475	.895	.855	.825	.693	.848	.771	.917	.600	.800	.757	.761	.786	.550	.839

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

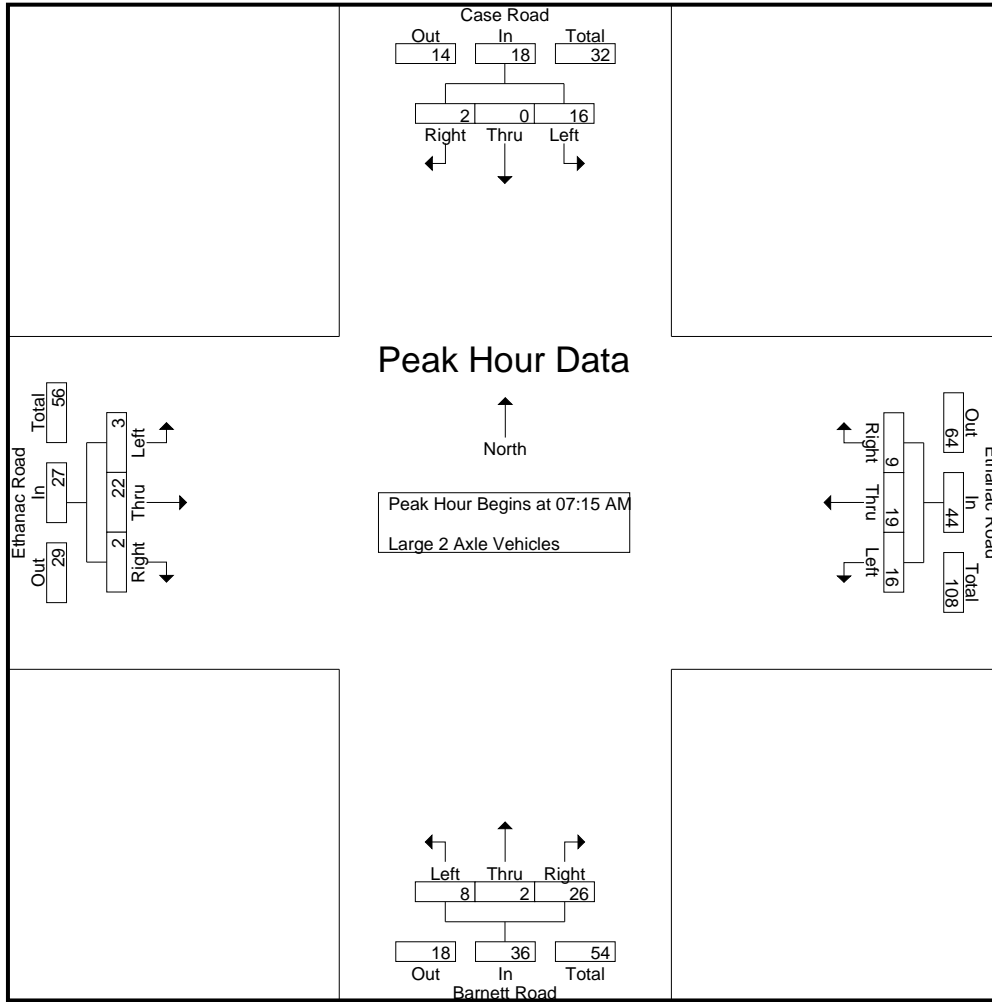
Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	0	0	4	11	3	1	15	0	0	4	4	0	2	0	2	25
07:15 AM	1	0	0	1	10	4	3	17	1	0	12	13	1	4	2	7	38
07:30 AM	4	0	0	4	3	8	1	12	6	2	7	15	0	5	0	5	36
07:45 AM	5	0	1	6	3	4	3	10	1	0	3	4	1	10	0	11	31
Total	14	0	1	15	27	19	8	54	8	2	26	36	2	21	2	25	130
08:00 AM	6	0	1	7	0	3	2	5	0	0	4	4	1	3	0	4	20
08:15 AM	5	0	0	5	0	5	2	7	0	0	0	0	2	0	0	2	14
08:30 AM	4	0	0	4	3	4	3	10	0	0	3	3	1	4	1	6	23
08:45 AM	3	0	0	3	0	3	1	4	0	0	0	0	1	3	0	4	11
Total	18	0	1	19	3	15	8	26	0	0	7	7	5	10	1	16	68
Grand Total	32	0	2	34	30	34	16	80	8	2	33	43	7	31	3	41	198
Apprch %	94.1	0	5.9		37.5	42.5	20		18.6	4.7	76.7		17.1	75.6	7.3		
Total %	16.2	0	1	17.2	15.2	17.2	8.1	40.4	4	1	16.7	21.7	3.5	15.7	1.5	20.7	

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	1	0	0	1	10	4	3	17	1	0	12	13	1	4	2	7	38
07:30 AM	4	0	0	4	3	8	1	12	6	2	7	15	0	5	0	5	36
07:45 AM	5	0	1	6	3	4	3	10	1	0	3	4	1	10	0	11	31
08:00 AM	6	0	1	7	0	3	2	5	0	0	4	4	1	3	0	4	20
Total Volume	16	0	2	18	16	19	9	44	8	2	26	36	3	22	2	27	125
% App. Total	88.9	0	11.1		36.4	43.2	20.5		22.2	5.6	72.2		11.1	81.5	7.4		
PHF	.667	.000	.500	.643	.400	.594	.750	.647	.333	.250	.542	.600	.750	.550	.250	.614	.822

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	10	4	3	17	1	0	12	13	1	4	2	7
+15 mins.	4	0	0	4	3	8	1	12	6	2	7	15	0	5	0	5
+30 mins.	5	0	1	6	3	4	3	10	1	0	3	4	1	10	0	11
+45 mins.	6	0	1	7	0	3	2	5	0	0	4	4	1	3	0	4
Total Volume	16	0	2	18	16	19	9	44	8	2	26	36	3	22	2	27
% App. Total	88.9	0	11.1		36.4	43.2	20.5		22.2	5.6	72.2		11.1	81.5	7.4	
PHF	.667	.000	.500	.643	.400	.594	.750	.647	.333	.250	.542	.600	.750	.550	.250	.614

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

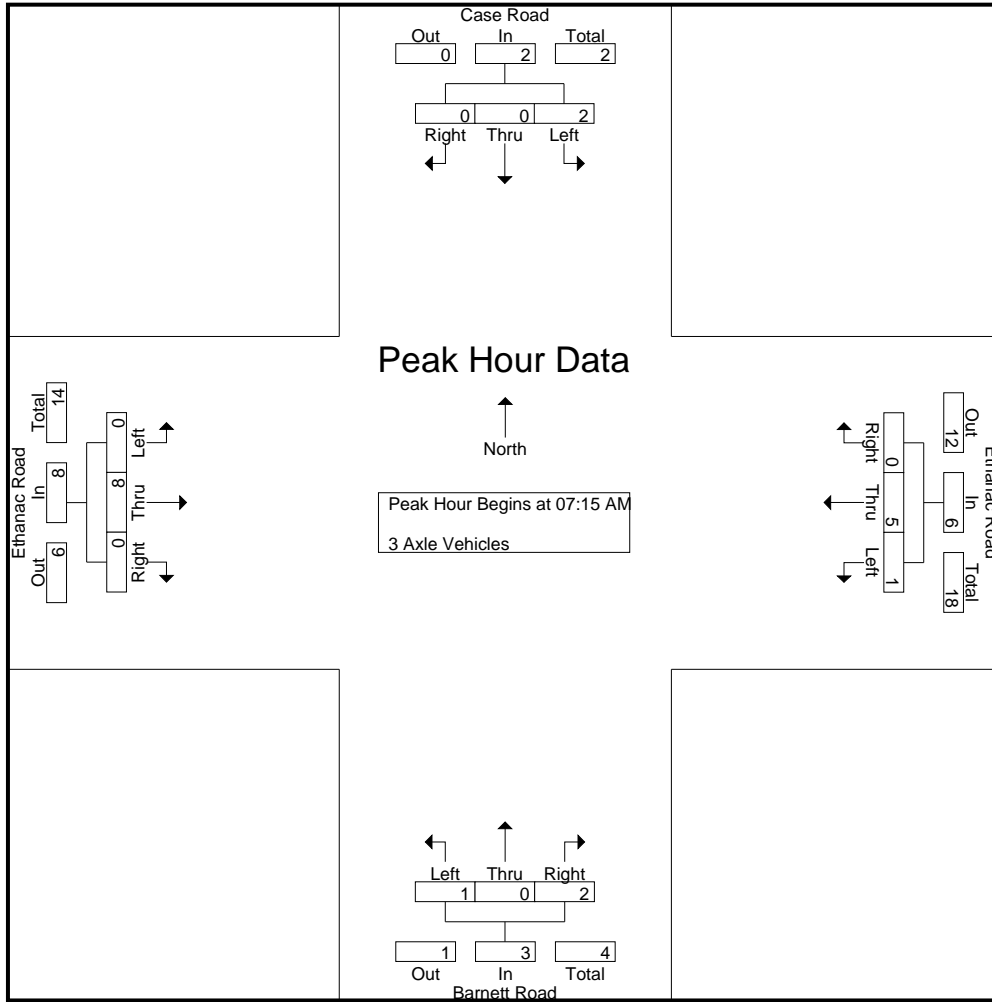
Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	3	0	4	0	0	1	1	0	1	0	1	6
07:15 AM	1	0	0	1	1	5	0	6	0	0	1	1	0	0	0	0	8
07:30 AM	0	0	0	0	0	0	0	0	1	0	1	2	0	2	0	2	4
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	4	0	4	5
Total	2	0	0	2	2	8	0	10	1	0	3	4	0	7	0	7	23
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	5	0	5	11
Grand Total	2	0	0	2	2	14	0	16	1	0	3	4	0	12	0	12	34
Apprch %	100	0	0		12.5	87.5	0		25	0	75		0	100	0		
Total %	5.9	0	0	5.9	5.9	41.2	0	47.1	2.9	0	8.8	11.8	0	35.3	0	35.3	

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	1	0	0	1	1	5	0	6	0	0	1	1	0	0	0	0	8
07:30 AM	0	0	0	0	0	0	0	0	1	0	1	2	0	2	0	2	4
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	4	0	4	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	2	0	0	2	1	5	0	6	1	0	2	3	0	8	0	8	19
% App. Total	100	0	0		16.7	83.3	0		33.3	0	66.7		0	100	0		
PHF	.500	.000	.000	.500	.250	.250	.000	.250	.250	.000	.500	.375	.000	.500	.000	.500	.594

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	1	5	0	6	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	1	0	1	2	0	2	0	2
+30 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	4	0	4
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	2	0	0	2	1	5	0	6	1	0	2	3	0	8	0	8
% App. Total	100	0	0		16.7	83.3	0		33.3	0	66.7		0	100	0	
PHF	.500	.000	.000	.500	.250	.250	.000	.250	.250	.000	.500	.375	.000	.500	.000	.500

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

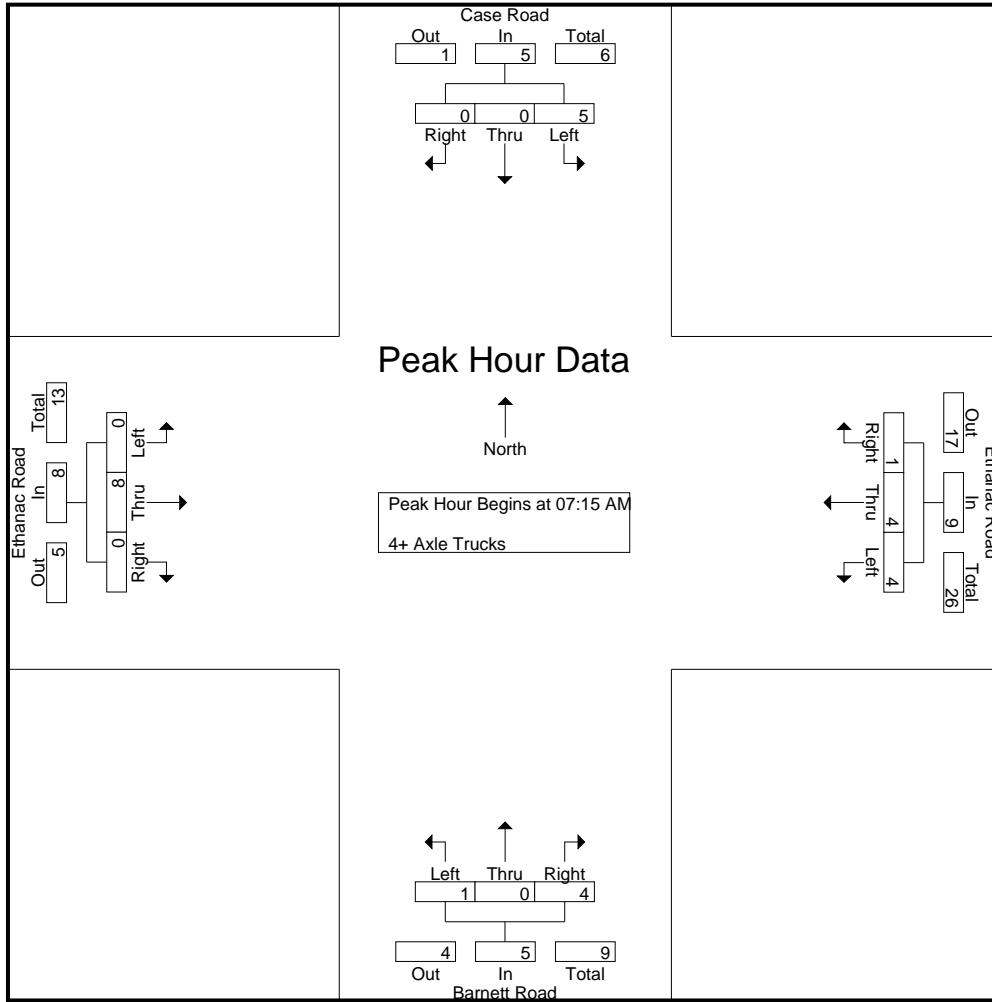
Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	0	0	2	2	2	1	5	0	0	0	0	0	1	0	1	8
07:15 AM	1	0	0	1	2	3	0	5	1	0	1	2	0	4	0	4	12
07:30 AM	2	0	0	2	1	1	0	2	0	0	0	0	0	4	0	4	8
07:45 AM	1	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0	3
Total	6	0	0	6	5	6	2	13	1	0	2	3	0	9	0	9	31
08:00 AM	1	0	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
08:15 AM	1	0	0	1	1	4	0	5	0	0	1	1	0	3	1	4	11
08:30 AM	0	1	0	1	0	1	0	1	0	0	4	4	0	1	0	1	7
08:45 AM	1	0	0	1	0	3	1	4	0	0	0	0	0	4	0	4	9
Total	3	1	0	4	2	8	1	11	0	0	7	7	0	8	1	9	31
Grand Total	9	1	0	10	7	14	3	24	1	0	9	10	0	17	1	18	62
Apprch %	90	10	0		29.2	58.3	12.5		10	0	90		0	94.4	5.6		
Total %	14.5	1.6	0	16.1	11.3	22.6	4.8	38.7	1.6	0	14.5	16.1	0	27.4	1.6	29	

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	1	0	0	1	2	3	0	5	1	0	1	2	0	4	0	4	12
07:30 AM	2	0	0	2	1	1	0	2	0	0	0	0	0	4	0	4	8
07:45 AM	1	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0	3
08:00 AM	1	0	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
Total Volume	5	0	0	5	4	4	1	9	1	0	4	5	0	8	0	8	27
% App. Total	100	0	0		44.4	44.4	11.1		20	0	80		0	100	0		
PHF	.625	.000	.000	.625	.500	.333	.250	.450	.250	.000	.500	.625	.000	.500	.000	.500	.563

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth AM
 Site Code : 10823147
 Start Date : 2/15/2023
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	2	3	0	5	1	0	1	2	0	4	0	4
+15 mins.	2	0	0	2	1	1	0	2	0	0	0	0	0	4	0	4
+30 mins.	1	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0
+45 mins.	1	0	0	1	1	0	0	1	0	0	2	2	0	0	0	0
Total Volume	5	0	0	5	4	4	1	9	1	0	4	5	0	8	0	8
% App. Total	100	0	0		44.4	44.4	11.1		20	0	80		0	100	0	
PHF	.625	.000	.000	.625	.500	.333	.250	.450	.250	.000	.500	.625	.000	.500	.000	.500

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

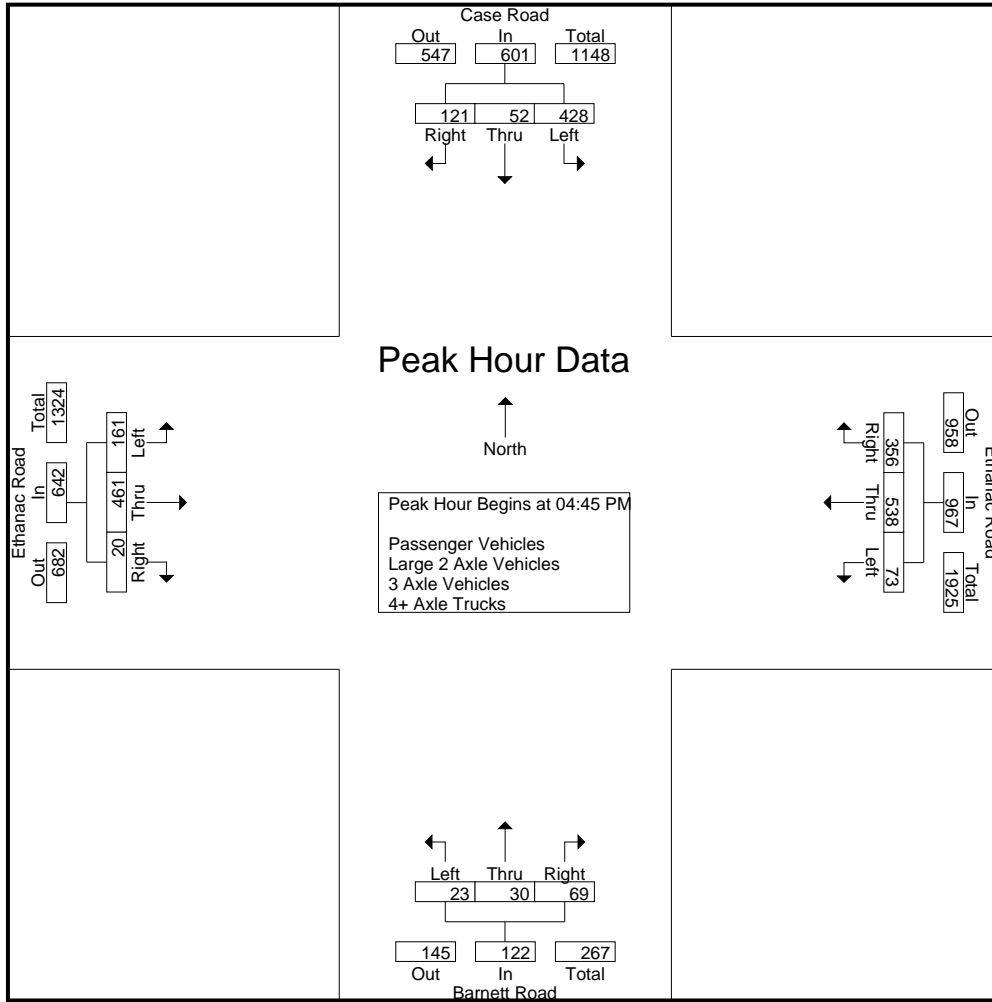
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	91	13	22	126	15	129	90	234	6	12	15	33	40	131	7	178	571
04:15 PM	115	16	33	164	14	150	79	243	11	7	10	28	43	90	5	138	573
04:30 PM	93	15	28	136	18	133	92	243	7	4	16	27	38	117	6	161	567
04:45 PM	109	19	23	151	13	113	84	210	3	11	19	33	61	103	5	169	563
Total	408	63	106	577	60	525	345	930	27	34	60	121	182	441	23	646	2274
05:00 PM	105	14	37	156	27	155	90	272	6	5	26	37	38	99	4	141	606
05:15 PM	97	13	33	143	11	152	80	243	9	9	17	35	33	133	6	172	593
05:30 PM	117	6	28	151	22	118	102	242	5	5	7	17	29	126	5	160	570
05:45 PM	96	8	30	134	13	100	81	194	7	4	11	22	41	109	3	153	503
Total	415	41	128	584	73	525	353	951	27	23	61	111	141	467	18	626	2272
Grand Total	823	104	234	1161	133	1050	698	1881	54	57	121	232	323	908	41	1272	4546
Apprch %	70.9	9	20.2		7.1	55.8	37.1		23.3	24.6	52.2		25.4	71.4	3.2		
Total %	18.1	2.3	5.1	25.5	2.9	23.1	15.4	41.4	1.2	1.3	2.7	5.1	7.1	20	0.9	28	
Passenger Vehicles	813	103	230	1146	121	998	695	1814	52	56	102	210	320	878	37	1235	4405
% Passenger Vehicles	98.8	99	98.3	98.7	91	95	99.6	96.4	96.3	98.2	84.3	90.5	99.1	96.7	90.2	97.1	96.9
Large 2 Axle Vehicles	7	0	3	10	3	22	2	27	0	1	7	8	3	26	2	31	76
% Large 2 Axle Vehicles	0.9	0	1.3	0.9	2.3	2.1	0.3	1.4	0	1.8	5.8	3.4	0.9	2.9	4.9	2.4	1.7
3 Axle Vehicles	1	0	1	2	3	29	1	33	1	0	4	5	0	2	0	2	42
% 3 Axle Vehicles	0.1	0	0.4	0.2	2.3	2.8	0.1	1.8	1.9	0	3.3	2.2	0	0.2	0	0.2	0.9
4+ Axle Trucks	2	1	0	3	6	1	0	7	1	0	8	9	0	2	2	4	23
% 4+ Axle Trucks	0.2	1	0	0.3	4.5	0.1	0	0.4	1.9	0	6.6	3.9	0	0.2	4.9	0.3	0.5

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	109	19	23	151	13	113	84	210	3	11	19	33	61	103	5	169	563
05:00 PM	105	14	37	156	27	155	90	272	6	5	26	37	38	99	4	141	606
05:15 PM	97	13	33	143	11	152	80	243	9	9	17	35	33	133	6	172	593
05:30 PM	117	6	28	151	22	118	102	242	5	5	7	17	29	126	5	160	570
Total Volume	428	52	121	601	73	538	356	967	23	30	69	122	161	461	20	642	2332
% App. Total	71.2	8.7	20.1		7.5	55.6	36.8		18.9	24.6	56.6		25.1	71.8	3.1		
PHF	.915	.684	.818	.963	.676	.868	.873	.889	.639	.682	.663	.824	.660	.867	.833	.933	.962

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	115	16	33	164	14	150	79	243	7	4	16	27	40	131	7	178
+15 mins.	93	15	28	136	18	133	92	243	3	11	19	33	43	90	5	138
+30 mins.	109	19	23	151	13	113	84	210	6	5	26	37	38	117	6	161
+45 mins.	105	14	37	156	27	155	90	272	9	9	17	35	61	103	5	169
Total Volume	422	64	121	607	72	551	345	968	25	29	78	132	182	441	23	646
% App. Total	69.5	10.5	19.9		7.4	56.9	35.6		18.9	22	59.1		28.2	68.3	3.6	
PHF	.917	.842	.818	.925	.667	.889	.938	.890	.694	.659	.750	.892	.746	.842	.821	.907

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	90	13	22	125	14	122	90	226	6	11	10	27	40	124	7	171	549
04:15 PM	113	16	31	160	12	140	78	230	10	7	9	26	42	86	4	132	548
04:30 PM	92	15	28	135	15	128	92	235	7	4	13	24	37	117	6	160	554
04:45 PM	109	19	23	151	11	109	84	204	3	11	17	31	60	99	5	164	550
Total	404	63	104	571	52	499	344	895	26	33	49	108	179	426	22	627	2201
05:00 PM	104	14	36	154	26	144	90	260	5	5	22	32	38	94	3	135	581
05:15 PM	95	13	33	141	8	140	79	227	9	9	15	33	33	128	6	167	568
05:30 PM	117	5	27	149	22	117	102	241	5	5	6	16	29	124	4	157	563
05:45 PM	93	8	30	131	13	98	80	191	7	4	10	21	41	106	2	149	492
Total	409	40	126	575	69	499	351	919	26	23	53	102	141	452	15	608	2204
Grand Total	813	103	230	1146	121	998	695	1814	52	56	102	210	320	878	37	1235	4405
Apprch %	70.9	9	20.1		6.7	55	38.3		24.8	26.7	48.6		25.9	71.1	3		
Total %	18.5	2.3	5.2	26	2.7	22.7	15.8	41.2	1.2	1.3	2.3	4.8	7.3	19.9	0.8	28	

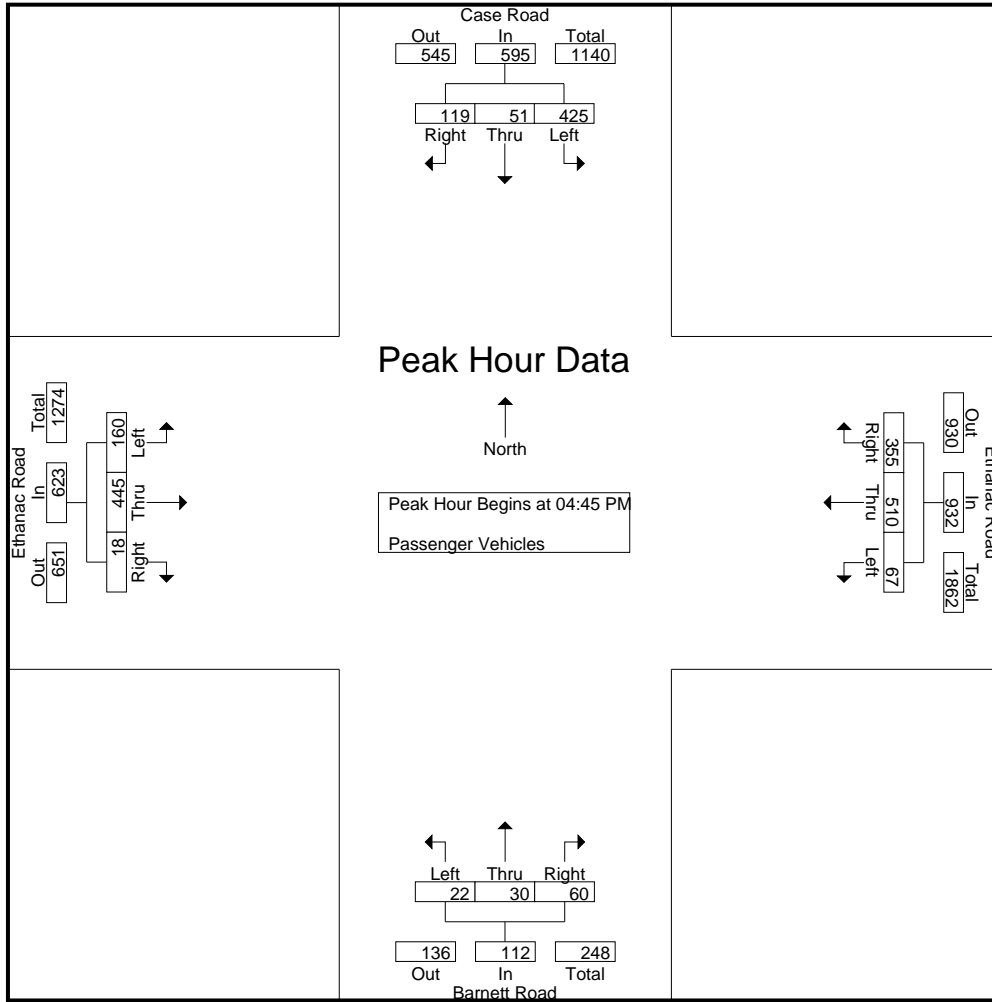
Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	109	19	23	151	11	109	84	204	3	11	17	31	60	99	5	164	550
05:00 PM	104	14	36	154	26	144	90	260	5	5	22	32	38	94	3	135	581
05:15 PM	95	13	33	141	8	140	79	227	9	9	15	33	33	128	6	167	568
05:30 PM	117	5	27	149	22	117	102	241	5	5	6	16	29	124	4	157	563
Total Volume	425	51	119	595	67	510	355	932	22	30	60	112	160	445	18	623	2262
% App. Total	71.4	8.6	20		7.2	54.7	38.1		19.6	26.8	53.6		25.7	71.4	2.9		
PHF	.908	.671	.826	.966	.644	.885	.870	.896	.611	.682	.682	.848	.667	.869	.750	.933	.973

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	109	19	23	151	11	109	84	204	3	11	17	31	60	99	5	164
+15 mins.	104	14	36	154	26	144	90	260	5	5	22	32	38	94	3	135
+30 mins.	95	13	33	141	8	140	79	227	9	9	15	33	33	128	6	167
+45 mins.	117	5	27	149	22	117	102	241	5	5	6	16	29	124	4	157
Total Volume	425	51	119	595	67	510	355	932	22	30	60	112	160	445	18	623
% App. Total	71.4	8.6	20		7.2	54.7	38.1		19.6	26.8	53.6		25.7	71.4	2.9	
PHF	.908	.671	.826	.966	.644	.885	.870	.896	.611	.682	.682	.848	.667	.869	.750	.933

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	0	0	1	0	5	0	5	0	1	2	3	0	5	0	5	14
04:15 PM	1	0	2	3	2	1	0	3	0	0	0	0	1	4	1	6	12
04:30 PM	0	0	0	0	0	5	0	5	0	0	2	2	1	0	0	1	8
04:45 PM	0	0	0	0	0	2	0	2	0	0	1	1	1	4	0	5	8
Total	2	0	2	4	2	13	0	15	0	1	5	6	3	13	1	17	42
05:00 PM	0	0	0	0	0	3	0	3	0	0	2	2	0	5	0	5	10
05:15 PM	2	0	0	2	1	4	1	6	0	0	0	0	0	4	0	4	12
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
05:45 PM	3	0	0	3	0	1	1	2	0	0	0	0	0	2	1	3	8
Total	5	0	1	6	1	9	2	12	0	0	2	2	0	13	1	14	34
Grand Total	7	0	3	10	3	22	2	27	0	1	7	8	3	26	2	31	76
Apprch %	70	0	30		11.1	81.5	7.4		0	12.5	87.5		9.7	83.9	6.5		
Total %	9.2	0	3.9	13.2	3.9	28.9	2.6	35.5	0	1.3	9.2	10.5	3.9	34.2	2.6	40.8	

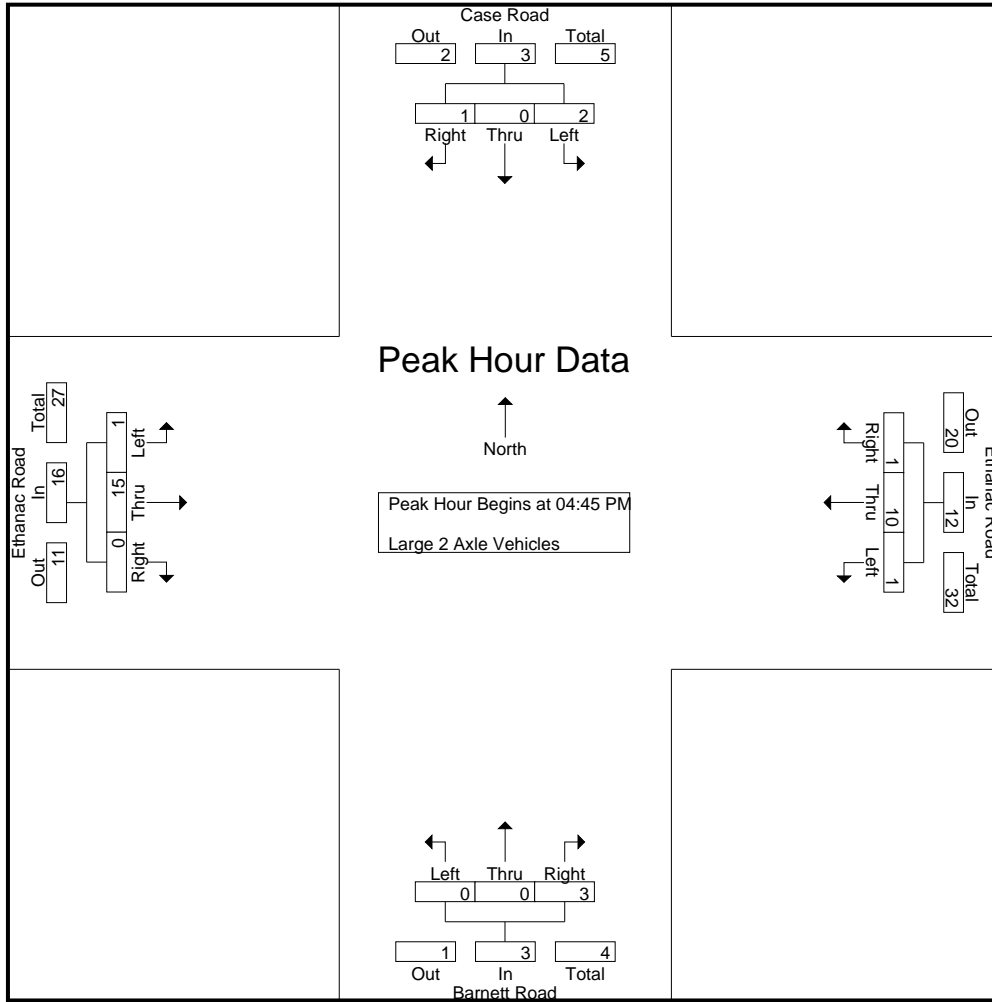
Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	2	0	2	0	0	1	1	1	4	0	5	8
05:00 PM	0	0	0	0	0	3	0	3	0	0	2	2	0	5	0	5	10
05:15 PM	2	0	0	2	1	4	1	6	0	0	0	0	0	4	0	4	12
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total Volume	2	0	1	3	1	10	1	12	0	0	3	3	1	15	0	16	34
% App. Total	66.7	0	33.3		8.3	83.3	8.3		0	0	100		6.2	93.8	0		
PHF	.250	.000	.250	.375	.250	.625	.250	.500	.000	.000	.375	.375	.250	.750	.000	.800	.708

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	1	1	1	4	0	5
+15 mins.	0	0	0	0	0	3	0	3	0	0	2	2	0	5	0	5
+30 mins.	2	0	0	2	1	4	1	6	0	0	0	0	0	4	0	4
+45 mins.	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2
Total Volume	2	0	1	3	1	10	1	12	0	0	3	3	1	15	0	16
% App. Total	66.7	0	33.3		8.3	83.3	8.3		0	0	100		6.2	93.8	0	
PHF	.250	.000	.250	.375	.250	.625	.250	.500	.000	.000	.375	.375	.250	.750	.000	.800

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

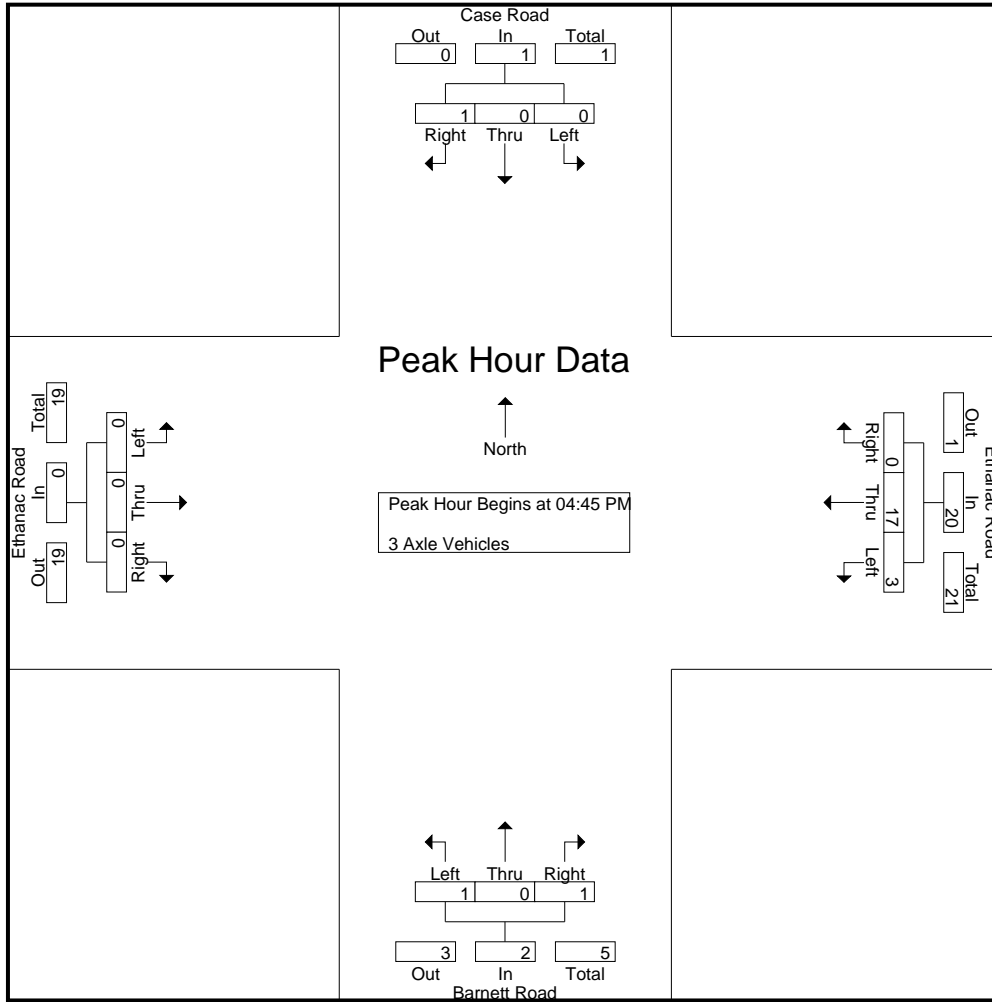
Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	2	2	0	1	0	1	5
04:15 PM	0	0	0	0	0	9	1	10	0	0	0	0	0	0	0	0	10
04:30 PM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:45 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
Total	1	0	0	1	1	12	1	14	0	0	3	3	0	1	0	1	19
05:00 PM	0	0	1	1	0	8	0	8	1	0	0	1	0	0	0	0	10
05:15 PM	0	0	0	0	2	8	0	10	0	0	0	0	0	0	0	0	10
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	1	1	2	17	0	19	1	0	1	2	0	1	0	1	23
Grand Total	1	0	1	2	3	29	1	33	1	0	4	5	0	2	0	2	42
Apprch %	50	0	50		9.1	87.9	3		20	0	80		0	100	0		
Total %	2.4	0	2.4	4.8	7.1	69	2.4	78.6	2.4	0	9.5	11.9	0	4.8	0	4.8	

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	1	1	0	8	0	8	1	0	0	1	0	0	0	0	10
05:15 PM	0	0	0	0	2	8	0	10	0	0	0	0	0	0	0	0	10
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Volume	0	0	1	1	3	17	0	20	1	0	1	2	0	0	0	0	23
% App. Total	0	0	100		15	85	0		50	0	50		0	0	0		
PHF	.000	.000	.250	.250	.375	.531	.000	.500	.250	.000	.250	.500	.000	.000	.000	.000	.575

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	1	1	0	8	0	8	1	0	0	1	0	0	0	0
+30 mins.	0	0	0	0	2	8	0	10	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	0	1	1	3	17	0	20	1	0	1	2	0	0	0	0
% App. Total	0	0	100		15	85	0		50	0	50		0	0	0	
PHF	.000	.000	.250	.250	.375	.531	.000	.500	.250	.000	.250	.500	.000	.000	.000	.000

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	1	0	1	3
04:15 PM	1	0	0	1	0	0	0	0	1	0	1	2	0	0	0	0	3
04:30 PM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0	3
Total	1	0	0	1	5	1	0	6	1	0	3	4	0	1	0	1	12
05:00 PM	1	0	0	1	1	0	0	1	0	0	2	2	0	0	1	1	5
05:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	1	0	1	3
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	1	1	0	2	1	0	0	1	0	0	5	5	0	1	2	3	11
Grand Total	2	1	0	3	6	1	0	7	1	0	8	9	0	2	2	4	23
Apprch %	66.7	33.3	0		85.7	14.3	0		11.1	0	88.9		0	50	50		
Total %	8.7	4.3	0	13	26.1	4.3	0	30.4	4.3	0	34.8	39.1	0	8.7	8.7	17.4	

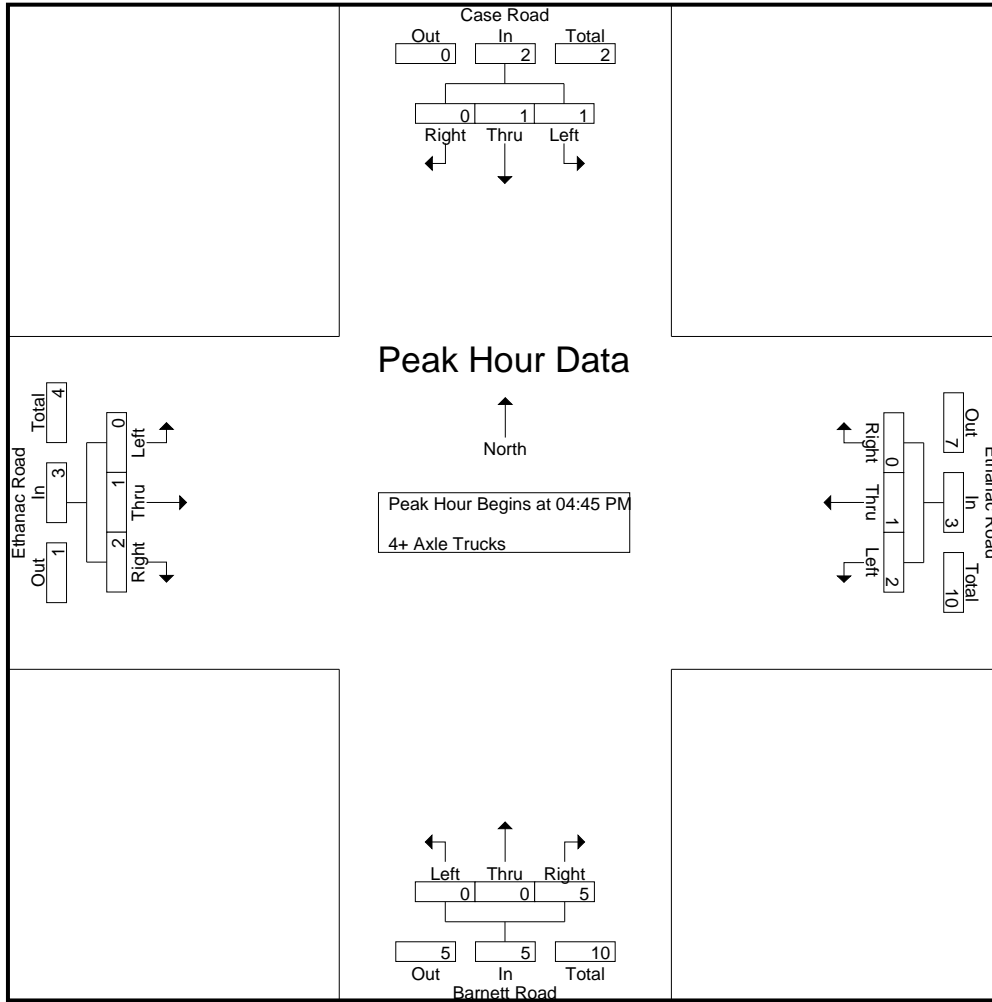
Start Time	Case Road Southbound				Ethanac Road Westbound				Barnett Road Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0	3
05:00 PM	1	0	0	1	1	0	0	1	0	0	2	2	0	0	1	1	5
05:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	1	0	1	3
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Total Volume	1	1	0	2	2	1	0	3	0	0	5	5	0	1	2	3	13
% App. Total	50	50	0		66.7	33.3	0		0	0	100		0	33.3	66.7		
PHF	.250	.250	.000	.500	.500	.250	.000	.375	.000	.000	.625	.625	.000	.250	.500	.750	.650

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

City of Menifee
 N/S: Case Road/Barnett Road
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_Bar_Eth PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0
+15 mins.	1	0	0	1	1	0	0	1	0	0	2	2	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	2	2	0	1	0	1
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Total Volume	1	1	0	2	2	1	0	3	0	0	5	5	0	1	2	3
% App. Total	50	50	0		66.7	33.3	0		0	0	100		0	33.3	66.7	
PHF	.250	.250	.000	.500	.500	.250	.000	.375	.000	.000	.625	.625	.000	.250	.500	.750

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

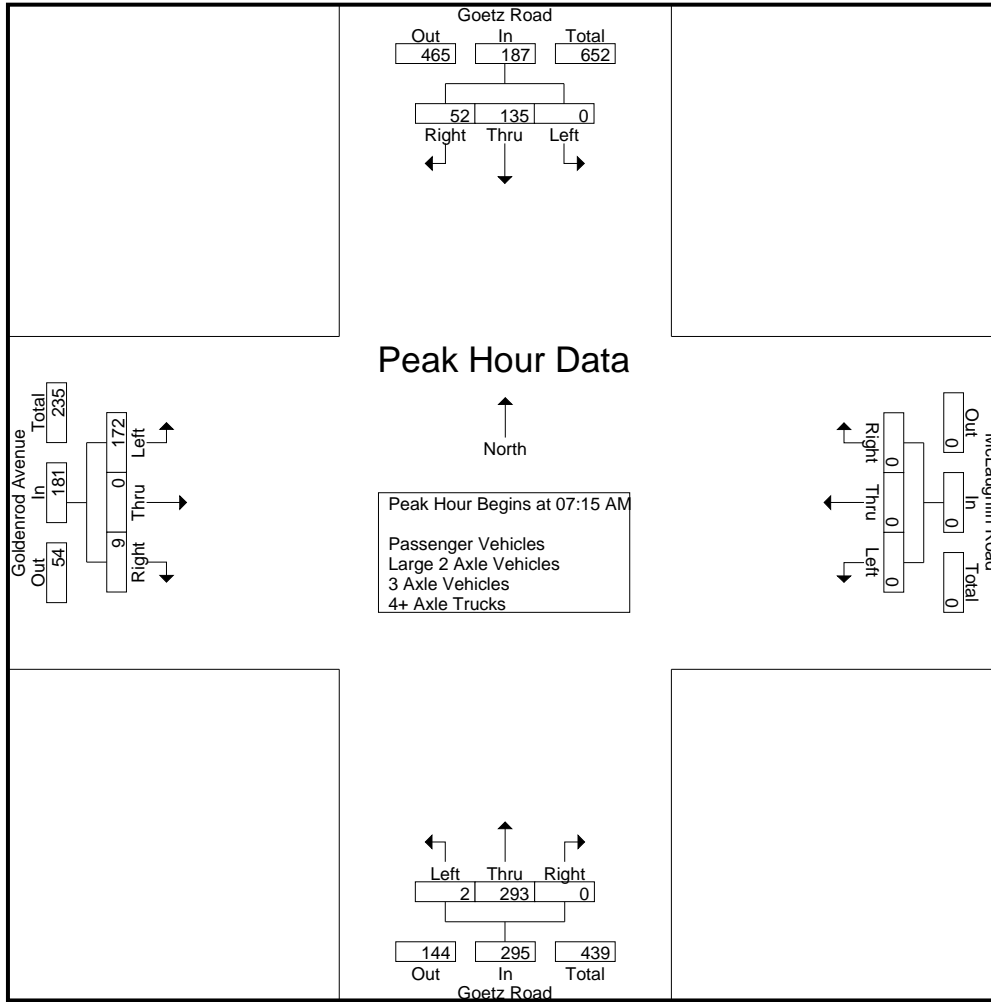
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	23	4	27	0	0	0	0	3	73	0	76	29	0	2	31	134
07:15 AM	0	30	3	33	0	0	0	0	0	72	0	72	51	0	2	53	158
07:30 AM	0	37	7	44	0	0	0	0	0	64	0	64	58	0	3	61	169
07:45 AM	0	30	13	43	0	0	0	0	1	92	0	93	37	0	2	39	175
Total	0	120	27	147	0	0	0	0	4	301	0	305	175	0	9	184	636
08:00 AM	0	38	29	67	0	0	0	0	1	65	0	66	26	0	2	28	161
08:15 AM	0	40	21	61	0	0	0	0	1	58	0	59	7	0	2	9	129
08:30 AM	0	31	11	42	0	0	0	0	2	51	0	53	13	0	0	13	108
08:45 AM	0	26	13	39	0	0	0	0	0	45	0	45	15	0	3	18	102
Total	0	135	74	209	0	0	0	0	4	219	0	223	61	0	7	68	500
Grand Total	0	255	101	356	0	0	0	0	8	520	0	528	236	0	16	252	1136
Apprch %	0	71.6	28.4		0	0	0		1.5	98.5	0		93.7	0	6.3		
Total %	0	22.4	8.9	31.3	0	0	0	0	0.7	45.8	0	46.5	20.8	0	1.4	22.2	
Passenger Vehicles	0	221	98	319	0	0	0	0	7	484	0	491	233	0	15	248	1058
% Passenger Vehicles	0	86.7	97	89.6	0	0	0	0	87.5	93.1	0	93	98.7	0	93.8	98.4	93.1
Large 2 Axle Vehicles	0	18	2	20	0	0	0	0	1	19	0	20	3	0	0	3	43
% Large 2 Axle Vehicles	0	7.1	2	5.6	0	0	0	0	12.5	3.7	0	3.8	1.3	0	0	1.2	3.8
3 Axle Vehicles	0	8	1	9	0	0	0	0	0	6	0	6	0	0	1	1	16
% 3 Axle Vehicles	0	3.1	1	2.5	0	0	0	0	0	1.2	0	1.1	0	0	6.2	0.4	1.4
4+ Axle Trucks	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0	19
% 4+ Axle Trucks	0	3.1	0	2.2	0	0	0	0	0	2.1	0	2.1	0	0	0	0	1.7

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	30	3	33	0	0	0	0	0	72	0	72	51	0	2	53	158
07:30 AM	0	37	7	44	0	0	0	0	0	64	0	64	58	0	3	61	169
07:45 AM	0	30	13	43	0	0	0	0	1	92	0	93	37	0	2	39	175
08:00 AM	0	38	29	67	0	0	0	0	1	65	0	66	26	0	2	28	161
Total Volume	0	135	52	187	0	0	0	0	2	293	0	295	172	0	9	181	663
% App. Total	0	72.2	27.8		0	0	0		0.7	99.3	0		95	0	5		
PHF	.000	.888	.448	.698	.000	.000	.000	.000	.500	.796	.000	.793	.741	.000	.750	.742	.947

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	37	7	44	0	0	0	0	3	73	0	76	29	0	2	31
+15 mins.	0	30	13	43	0	0	0	0	0	72	0	72	51	0	2	53
+30 mins.	0	38	29	67	0	0	0	0	0	64	0	64	58	0	3	61
+45 mins.	0	40	21	61	0	0	0	0	1	92	0	93	37	0	2	39
Total Volume	0	145	70	215	0	0	0	0	4	301	0	305	175	0	9	184
% App. Total	0	67.4	32.6		0	0	0		1.3	98.7	0		95.1	0	4.9	
PHF	.000	.906	.603	.802	.000	.000	.000	.000	.333	.818	.000	.820	.754	.000	.750	.754

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

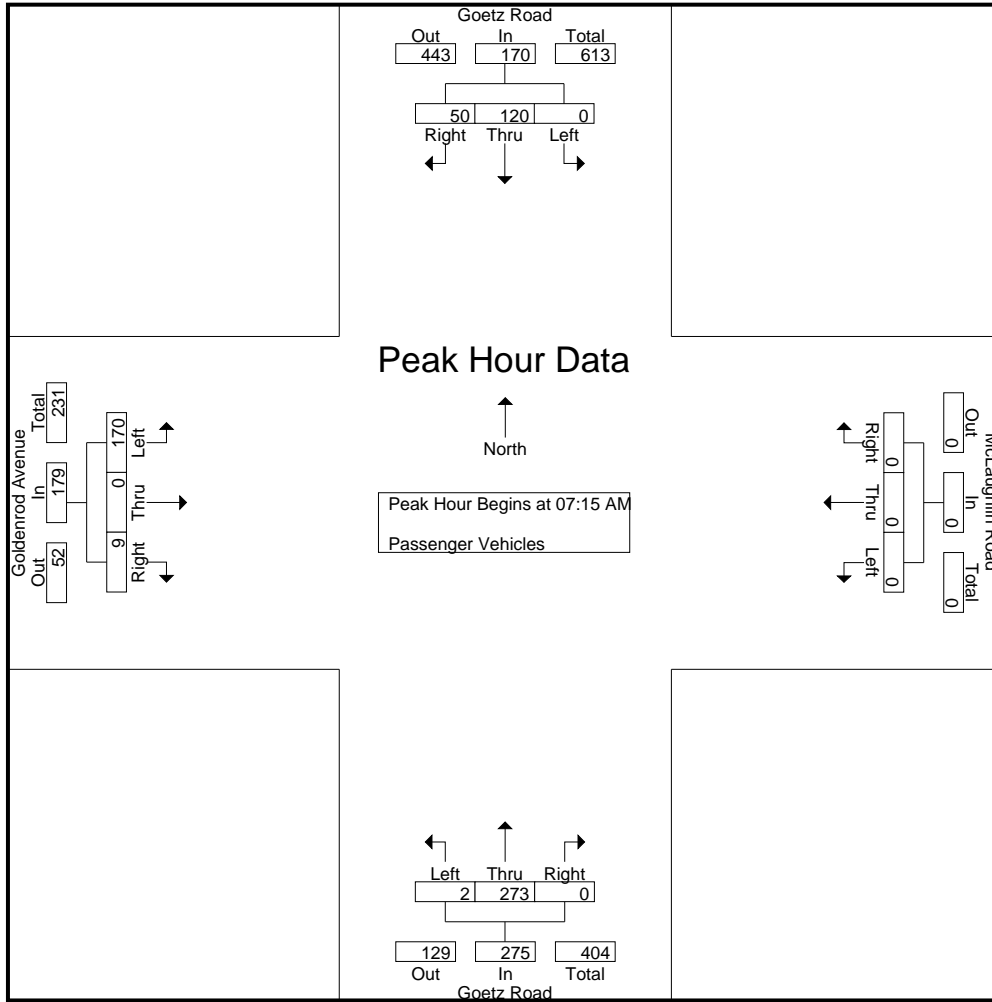
Groups Printed- Passenger Vehicles

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	19	4	23	0	0	0	0	2	69	0	71	28	0	2	30	124
07:15 AM	0	28	3	31	0	0	0	0	0	64	0	64	51	0	2	53	148
07:30 AM	0	29	6	35	0	0	0	0	0	61	0	61	58	0	3	61	157
07:45 AM	0	28	12	40	0	0	0	0	1	86	0	87	35	0	2	37	164
Total	0	104	25	129	0	0	0	0	3	280	0	283	172	0	9	181	593
08:00 AM	0	35	29	64	0	0	0	0	1	62	0	63	26	0	2	28	155
08:15 AM	0	35	20	55	0	0	0	0	1	56	0	57	7	0	1	8	120
08:30 AM	0	27	11	38	0	0	0	0	2	46	0	48	13	0	0	13	99
08:45 AM	0	20	13	33	0	0	0	0	0	40	0	40	15	0	3	18	91
Total	0	117	73	190	0	0	0	0	4	204	0	208	61	0	6	67	465
Grand Total	0	221	98	319	0	0	0	0	7	484	0	491	233	0	15	248	1058
Apprch %	0	69.3	30.7		0	0	0		1.4	98.6	0		94	0	6		
Total %	0	20.9	9.3	30.2	0	0	0	0	0.7	45.7	0	46.4	22	0	1.4	23.4	

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	28	3	31	0	0	0	0	0	64	0	64	51	0	2	53	148
07:30 AM	0	29	6	35	0	0	0	0	0	61	0	61	58	0	3	61	157
07:45 AM	0	28	12	40	0	0	0	0	1	86	0	87	35	0	2	37	164
08:00 AM	0	35	29	64	0	0	0	0	1	62	0	63	26	0	2	28	155
Total Volume	0	120	50	170	0	0	0	0	2	273	0	275	170	0	9	179	624
% App. Total	0	70.6	29.4		0	0	0		0.7	99.3	0		95	0	5		
PHF	.000	.857	.431	.664	.000	.000	.000	.000	.500	.794	.000	.790	.733	.000	.750	.734	.951

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	28	3	31	0	0	0	0	0	64	0	64	51	0	2	53
+15 mins.	0	29	6	35	0	0	0	0	0	61	0	61	58	0	3	61
+30 mins.	0	28	12	40	0	0	0	0	1	86	0	87	35	0	2	37
+45 mins.	0	35	29	64	0	0	0	0	1	62	0	63	26	0	2	28
Total Volume	0	120	50	170	0	0	0	0	2	273	0	275	170	0	9	179
% App. Total	0	70.6	29.4		0	0	0		0.7	99.3	0		95	0	5	
PHF	.000	.857	.431	.664	.000	.000	.000	.000	.500	.794	.000	.790	.733	.000	.750	.734

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

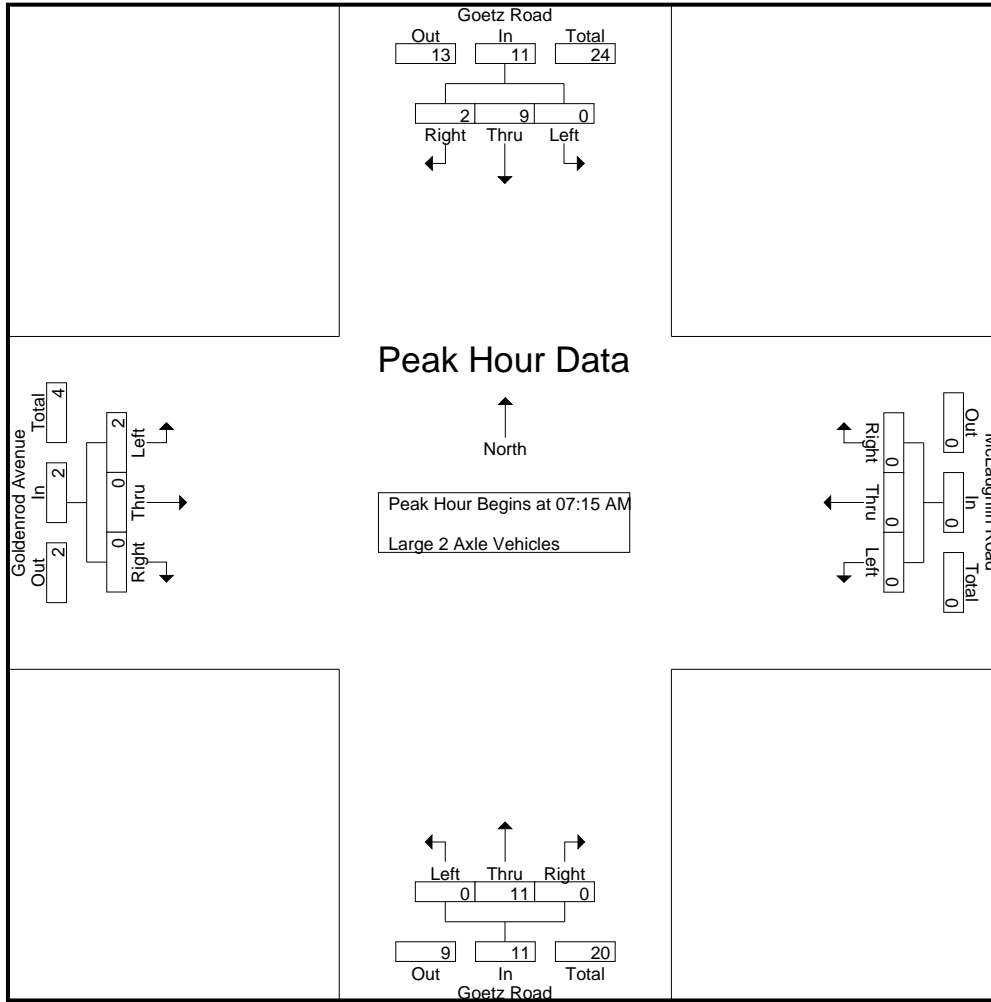
Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	2	0	2	0	0	0	0	1	2	0	3	1	0	0	1	6
07:15 AM	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
07:30 AM	0	5	1	6	0	0	0	0	0	2	0	2	0	0	0	0	8
07:45 AM	0	0	1	1	0	0	0	0	0	3	0	3	2	0	0	2	6
Total	0	8	2	10	0	0	0	0	1	11	0	12	3	0	0	3	25
08:00 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
08:15 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
08:30 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
08:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
Total	0	10	0	10	0	0	0	0	0	8	0	8	0	0	0	0	18
Grand Total	0	18	2	20	0	0	0	0	1	19	0	20	3	0	0	3	43
Apprch %	0	90	10		0	0	0		5	95	0		100	0	0		
Total %	0	41.9	4.7	46.5	0	0	0	0	2.3	44.2	0	46.5	7	0	0	7	

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
07:30 AM	0	5	1	6	0	0	0	0	0	2	0	2	0	0	0	0	8
07:45 AM	0	0	1	1	0	0	0	0	0	3	0	3	2	0	0	2	6
08:00 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Total Volume	0	9	2	11	0	0	0	0	0	11	0	11	2	0	0	2	24
% App. Total	0	81.8	18.2		0	0	0		0	100	0		100	0	0		
PHF	.000	.450	.500	.458	.000	.000	.000	.000	.000	.688	.000	.688	.250	.000	.000	.250	.750

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0
+15 mins.	0	5	1	6	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	3	0	3	2	0	0	2
+45 mins.	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	9	2	11	0	0	0	0	0	11	0	11	2	0	0	2
% App. Total	0	81.8	18.2		0	0	0		0	100	0		100	0	0	
PHF	.000	.450	.500	.458	.000	.000	.000	.000	.000	.688	.000	.688	.250	.000	.000	.250

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	0	5
Total	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	0	7
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	2	0	0	0	0	0	2	0	2	0	0	1	1	1	5
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	0	4
Total	0	4	1	5	0	0	0	0	0	3	0	3	0	0	1	1	1	9
Grand Total	0	8	1	9	0	0	0	0	0	6	0	6	0	0	1	1	1	16
Apprch %	0	88.9	11.1		0	0	0		0	100	0		0	0	100			
Total %	0	50	6.2	56.2	0	0	0		0	37.5	0	37.5	0	0	6.2	6.2		

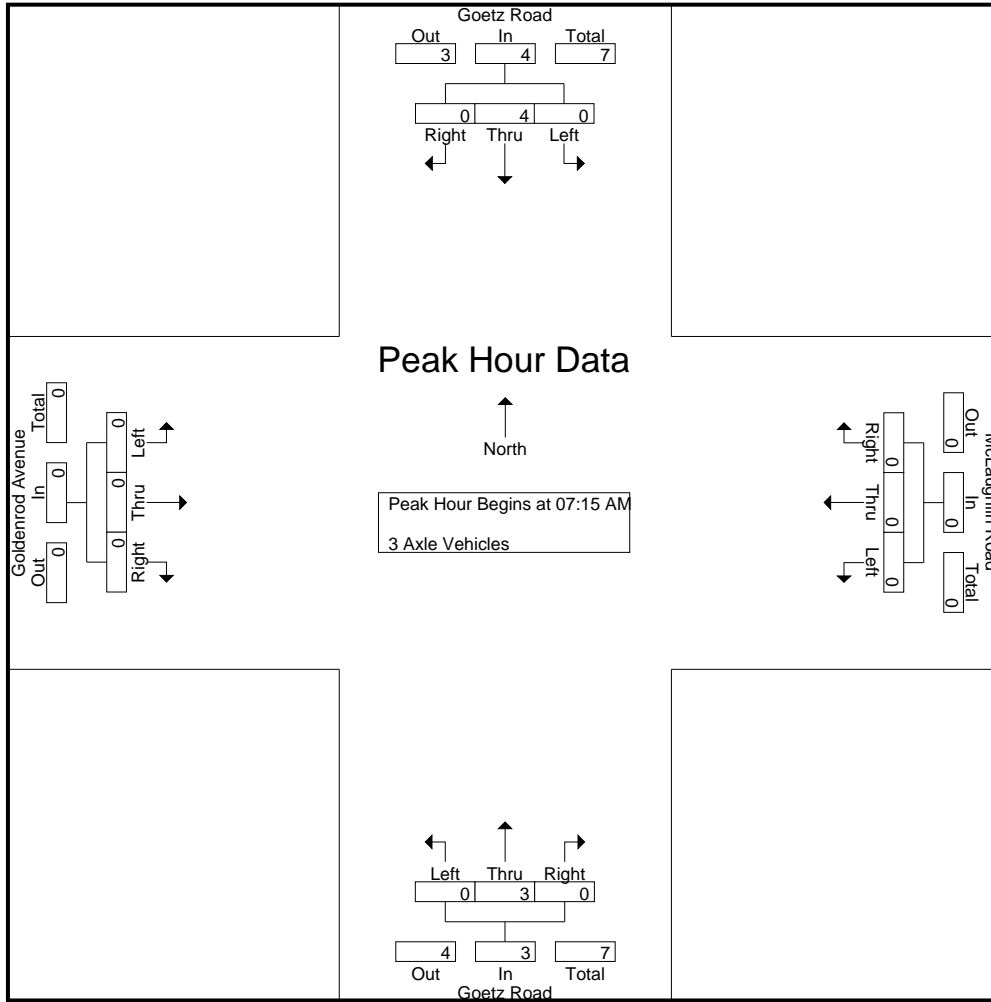
Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	0	7
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0			
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.350

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
07:15 AM	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	4	0	0	0	0	0	7	0	7	0	0	0	0	11
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	8
Grand Total	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0	19
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	42.1	0	42.1	0	0	0	0	0	57.9	0	57.9	0	0	0	0	

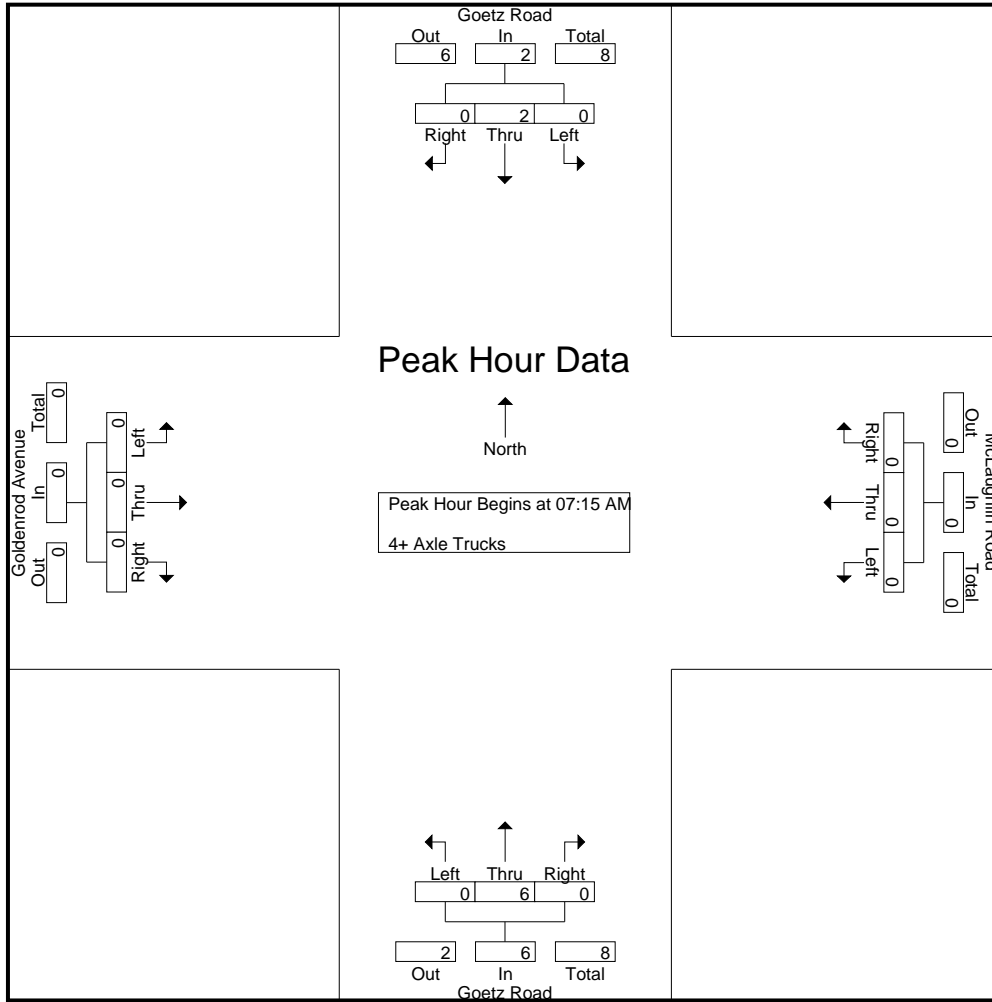
Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	6	0	6	0	0	0	0	8
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.400

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL AM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	6	0	6	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

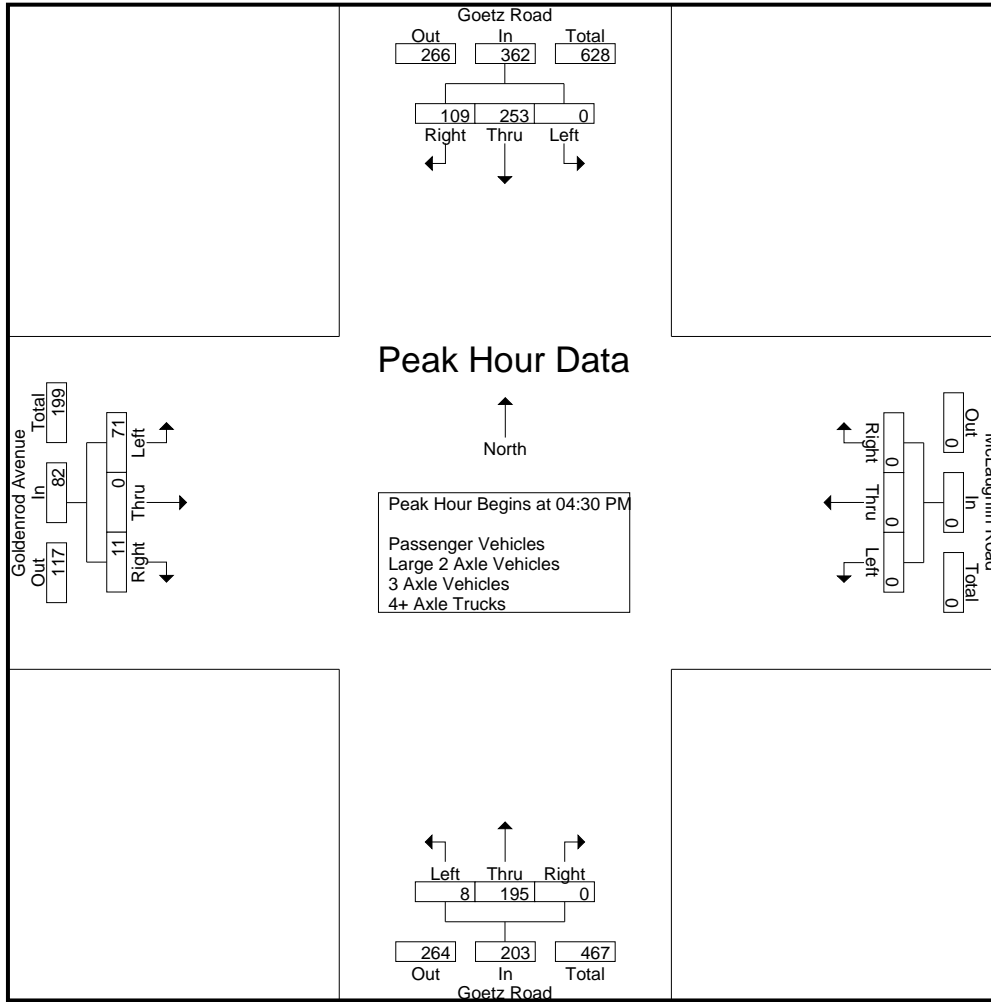
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	67	23	90	0	0	0	0	3	39	0	42	17	0	2	19	151
04:15 PM	0	55	38	93	0	0	0	0	1	48	0	49	11	0	1	12	154
04:30 PM	0	68	26	94	0	0	0	0	0	50	0	50	15	0	3	18	162
04:45 PM	0	48	30	78	0	0	0	0	4	45	0	49	20	0	4	24	151
Total	0	238	117	355	0	0	0	0	8	182	0	190	63	0	10	73	618
05:00 PM	0	56	29	85	0	0	0	0	2	44	0	46	18	0	3	21	152
05:15 PM	0	81	24	105	0	0	0	0	2	56	0	58	18	0	1	19	182
05:30 PM	0	76	20	96	0	0	0	0	3	44	0	47	17	0	1	18	161
05:45 PM	0	60	26	86	0	0	0	0	2	31	0	33	11	0	1	12	131
Total	0	273	99	372	0	0	0	0	9	175	0	184	64	0	6	70	626
Grand Total	0	511	216	727	0	0	0	0	17	357	0	374	127	0	16	143	1244
Apprch %	0	70.3	29.7		0	0	0		4.5	95.5	0		88.8	0	11.2		
Total %	0	41.1	17.4	58.4	0	0	0	0	1.4	28.7	0	30.1	10.2	0	1.3	11.5	
Passenger Vehicles	0	494	213	707	0	0	0	0	16	337	0	353	123	0	15	138	1198
% Passenger Vehicles	0	96.7	98.6	97.2	0	0	0	0	94.1	94.4	0	94.4	96.9	0	93.8	96.5	96.3
Large 2 Axle Vehicles	0	17	3	20	0	0	0	0	1	15	0	16	4	0	1	5	41
% Large 2 Axle Vehicles	0	3.3	1.4	2.8	0	0	0	0	5.9	4.2	0	4.3	3.1	0	6.2	3.5	3.3
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	1.1	0	1.1	0	0	0	0	0.3
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0.1

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	0	68	26	94	0	0	0	0	0	50	0	50	15	0	3	18	162
04:45 PM	0	48	30	78	0	0	0	0	4	45	0	49	20	0	4	24	151
05:00 PM	0	56	29	85	0	0	0	0	2	44	0	46	18	0	3	21	152
05:15 PM	0	81	24	105	0	0	0	0	2	56	0	58	18	0	1	19	182
Total Volume	0	253	109	362	0	0	0	0	8	195	0	203	71	0	11	82	647
% App. Total	0	69.9	30.1		0	0	0		3.9	96.1	0		86.6	0	13.4		
PHF	.000	.781	.908	.862	.000	.000	.000	.000	.500	.871	.000	.875	.888	.000	.688	.854	.889

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	0	56	29	85	0	0	0	0	0	50	0	50	15	0	3	18
+15 mins.	0	81	24	105	0	0	0	0	4	45	0	49	20	0	4	24
+30 mins.	0	76	20	96	0	0	0	0	2	44	0	46	18	0	3	21
+45 mins.	0	60	26	86	0	0	0	0	2	56	0	58	18	0	1	19
Total Volume	0	273	99	372	0	0	0	0	8	195	0	203	71	0	11	82
% App. Total	0	73.4	26.6		0	0	0		3.9	96.1	0		86.6	0	13.4	
PHF	.000	.843	.853	.886	.000	.000	.000	.000	.500	.871	.000	.875	.888	.000	.688	.854

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	65	23	88	0	0	0	0	2	34	0	36	17	0	2	19	143
04:15 PM	0	54	38	92	0	0	0	0	1	47	0	48	10	0	1	11	151
04:30 PM	0	67	25	92	0	0	0	0	0	47	0	47	15	0	3	18	157
04:45 PM	0	46	29	75	0	0	0	0	4	42	0	46	20	0	3	23	144
Total	0	232	115	347	0	0	0	0	7	170	0	177	62	0	9	71	595
05:00 PM	0	52	28	80	0	0	0	0	2	42	0	44	18	0	3	21	145
05:15 PM	0	79	24	103	0	0	0	0	2	53	0	55	15	0	1	16	174
05:30 PM	0	74	20	94	0	0	0	0	3	43	0	46	17	0	1	18	158
05:45 PM	0	57	26	83	0	0	0	0	2	29	0	31	11	0	1	12	126
Total	0	262	98	360	0	0	0	0	9	167	0	176	61	0	6	67	603
Grand Total	0	494	213	707	0	0	0	0	16	337	0	353	123	0	15	138	1198
Apprch %	0	69.9	30.1		0	0	0		4.5	95.5	0		89.1	0	10.9		
Total %	0	41.2	17.8	59	0	0	0	0	1.3	28.1	0	29.5	10.3	0	1.3	11.5	

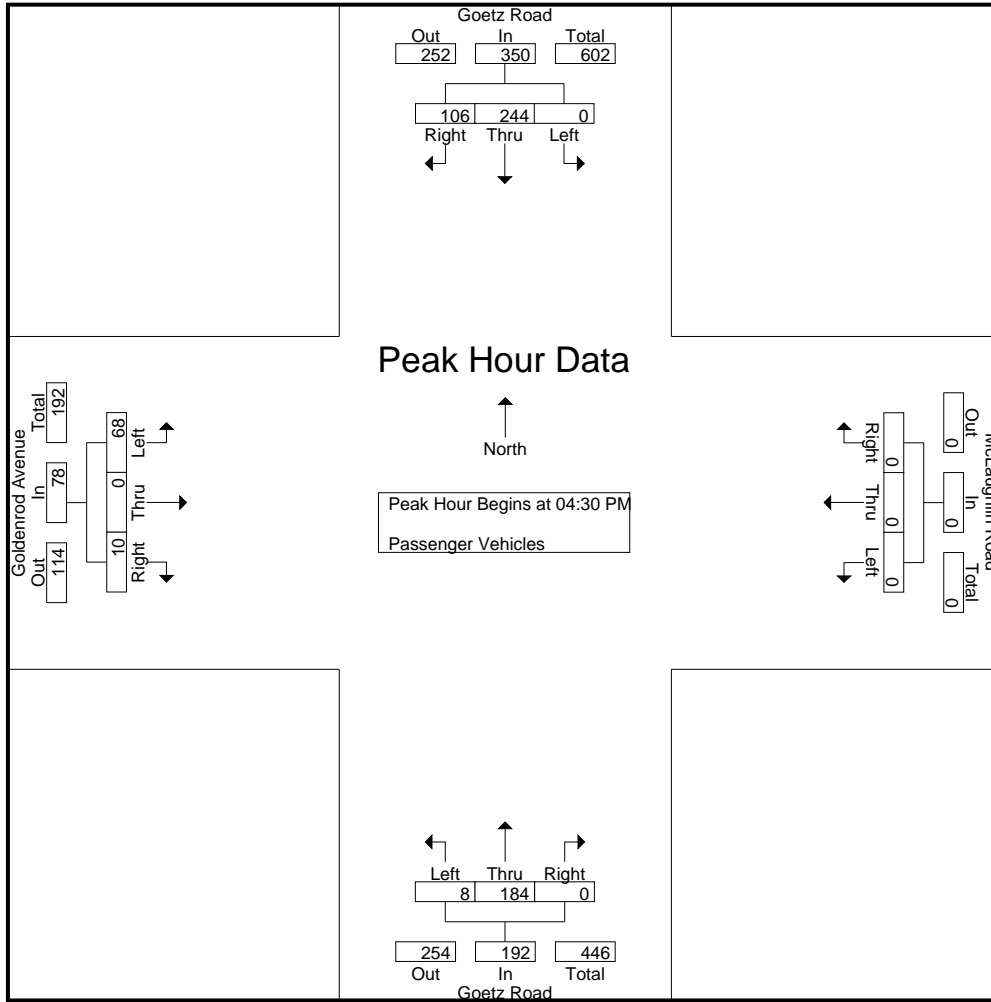
Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	67	25	92	0	0	0	0	0	47	0	47	15	0	3	18	157
04:45 PM	0	46	29	75	0	0	0	0	4	42	0	46	20	0	3	23	144
05:00 PM	0	52	28	80	0	0	0	0	2	42	0	44	18	0	3	21	145
05:15 PM	0	79	24	103	0	0	0	0	2	53	0	55	15	0	1	16	174
Total Volume	0	244	106	350	0	0	0	0	8	184	0	192	68	0	10	78	620
% App. Total	0	69.7	30.3		0	0	0		4.2	95.8	0		87.2	0	12.8		
PHF	.000	.772	.914	.850	.000	.000	.000	.000	.500	.868	.000	.873	.850	.000	.833	.848	.891

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	67	25	92	0	0	0	0	0	47	0	47	15	0	3	18
+15 mins.	0	46	29	75	0	0	0	0	4	42	0	46	20	0	3	23
+30 mins.	0	52	28	80	0	0	0	0	2	42	0	44	18	0	3	21
+45 mins.	0	79	24	103	0	0	0	0	2	53	0	55	15	0	1	16
Total Volume	0	244	106	350	0	0	0	0	8	184	0	192	68	0	10	78
% App. Total	0	69.7	30.3		0	0	0		4.2	95.8	0		87.2	0	12.8	
PHF	.000	.772	.914	.850	.000	.000	.000	.000	.500	.868	.000	.873	.850	.000	.833	.848

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	2	0	2	0	0	0	0	1	5	0	6	0	0	0	0	8
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	1	3
04:30 PM	0	1	1	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:45 PM	0	2	1	3	0	0	0	0	0	1	0	1	0	0	1	1	5
Total	0	6	2	8	0	0	0	0	1	9	0	10	1	0	1	2	20
05:00 PM	0	4	1	5	0	0	0	0	0	2	0	2	0	0	0	0	7
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	3	0	0	3	6
05:30 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:45 PM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Total	0	11	1	12	0	0	0	0	0	6	0	6	3	0	0	3	21
Grand Total	0	17	3	20	0	0	0	0	1	15	0	16	4	0	1	5	41
Apprch %	0	85	15		0	0	0		6.2	93.8	0		80	0	20		
Total %	0	41.5	7.3	48.8	0	0	0		2.4	36.6	0	39	9.8	0	2.4	12.2	

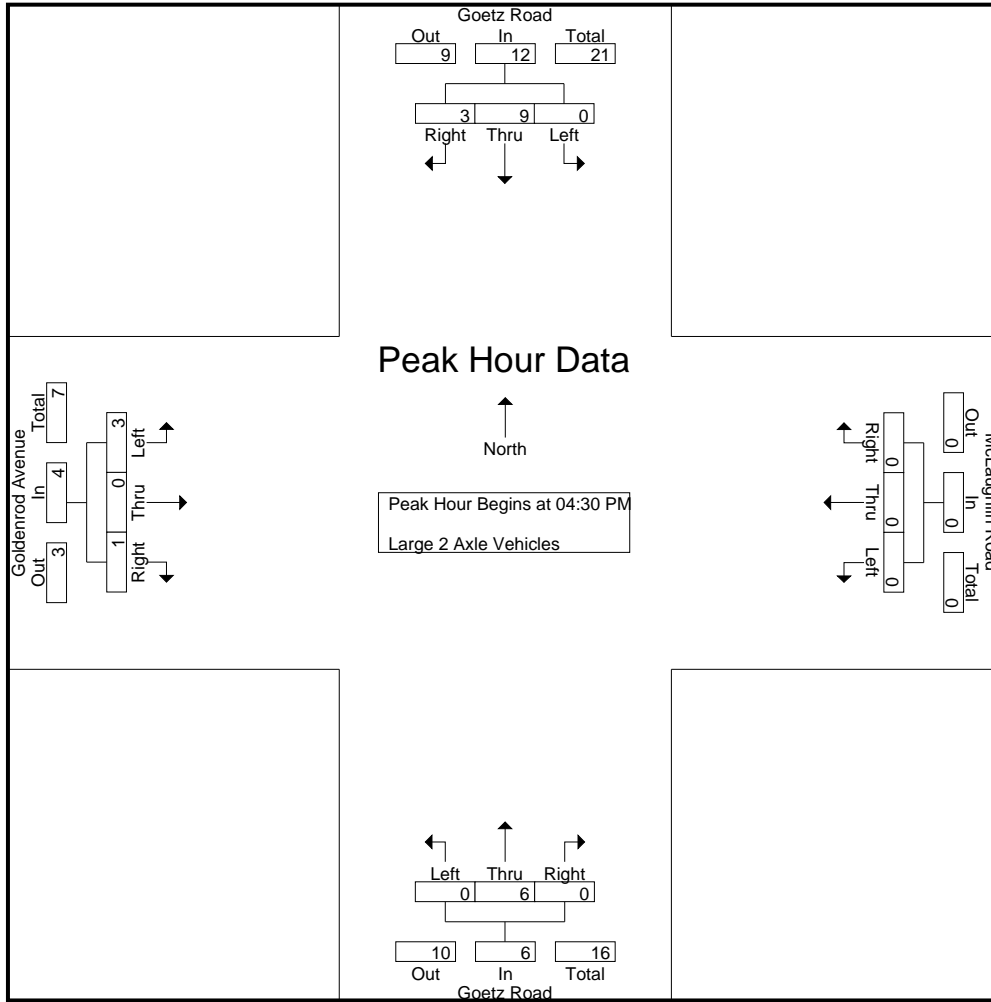
Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	1	1	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:45 PM	0	2	1	3	0	0	0	0	0	1	0	1	0	0	1	1	5
05:00 PM	0	4	1	5	0	0	0	0	0	2	0	2	0	0	0	0	7
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	3	0	0	3	6
Total Volume	0	9	3	12	0	0	0	0	0	6	0	6	3	0	1	4	22
% App. Total	0	75	25		0	0	0		0	100	0		75	0	25		
PHF	.000	.563	.750	.600	.000	.000	.000	.000	.000	.750	.000	.750	.250	.000	.250	.333	.786

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	1	1	2	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	2	1	3	0	0	0	0	0	1	0	1	0	0	0	1
+30 mins.	0	4	1	5	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	1	0	1	3	0	0	3
Total Volume	0	9	3	12	0	0	0	0	0	6	0	6	3	0	1	4
% App. Total	0	75	25		0	0	0		0	100	0		75	0	25	
PHF	.000	.563	.750	.600	.000	.000	.000	.000	.000	.750	.000	.750	.250	.000	.250	.333

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0		0	0	0		0	100	0	100	0	0	0		

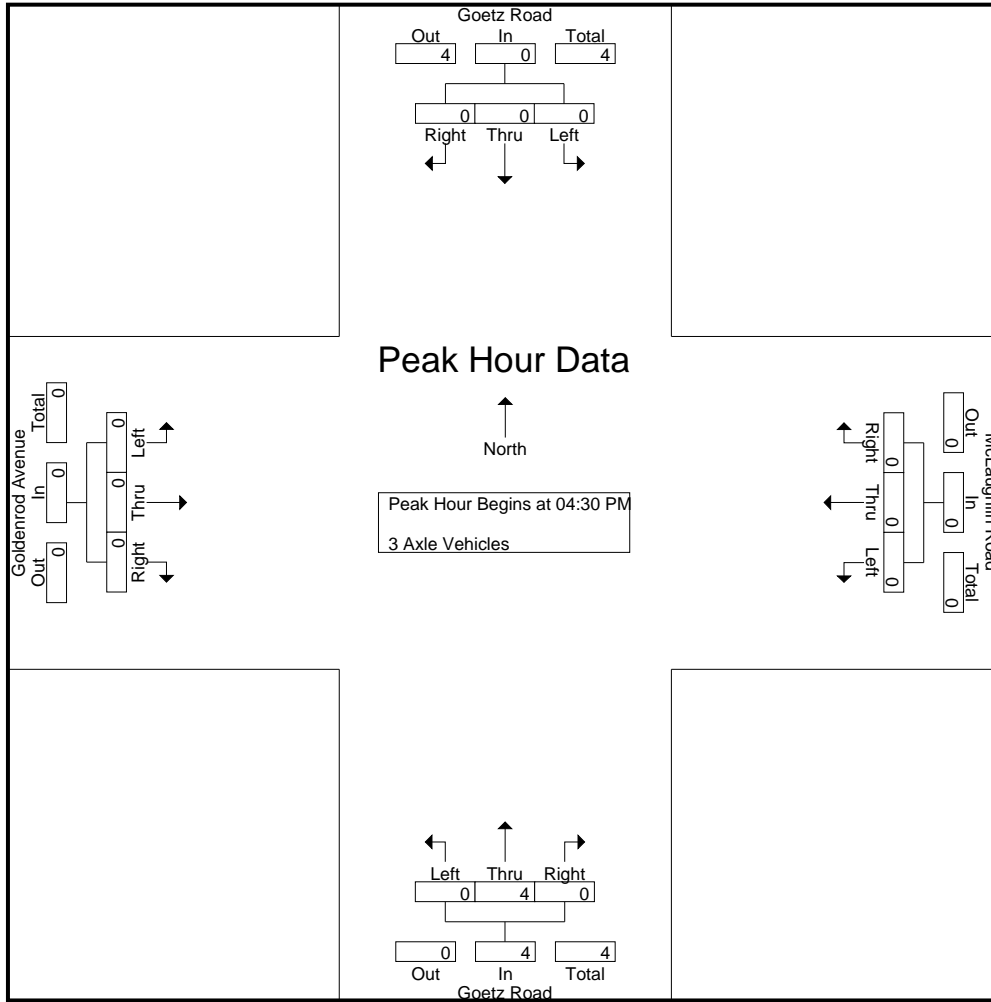
Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.500

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 1

Groups Printed- 4+ Axle Trucks

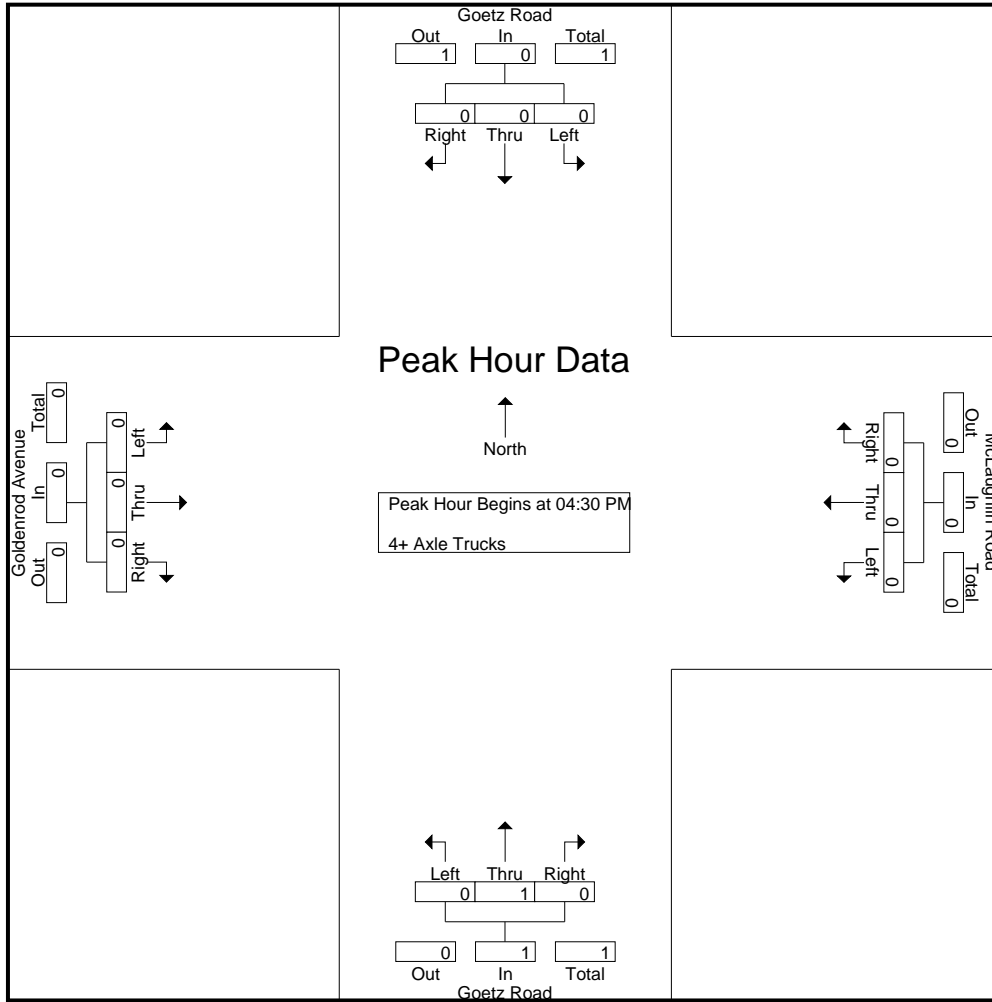
Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0		0	0	0		0	100	0	100	0	0	0		

Start Time	Goetz Road Southbound				McLaughlin Road Westbound				Goetz Road Northbound				Goldenrod Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Goetz Road
 E/W: Goldenrod Avenue/Mclaughlin Road
 Weather: Clear

File Name : 06_MEN_Goetz_McL PM
 Site Code : 10823147
 Start Date : 2/15/2023
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

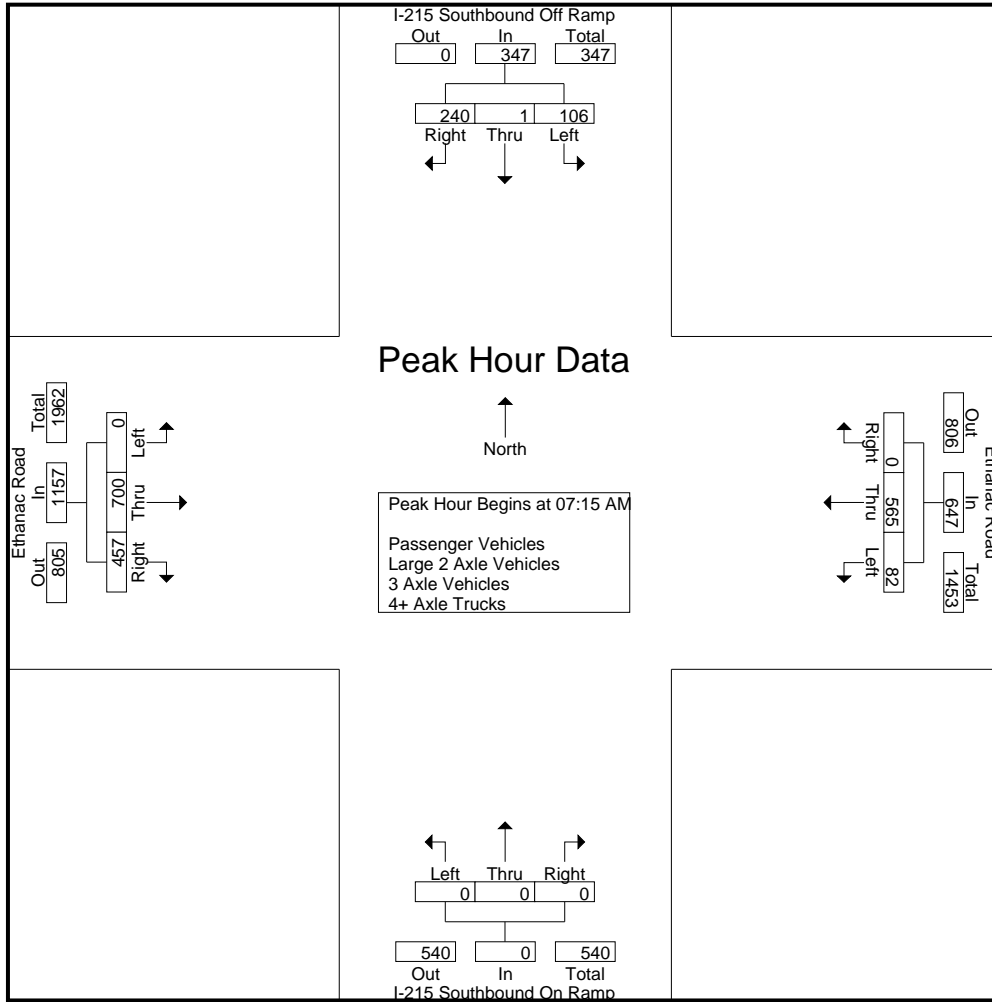
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	28	1	48	77	18	89	0	107	0	0	0	0	0	124	72	196	380
07:15 AM	21	0	66	87	25	88	0	113	0	0	0	0	0	174	111	285	485
07:30 AM	29	0	55	84	20	116	0	136	0	0	0	0	0	197	150	347	567
07:45 AM	29	1	63	93	15	175	0	190	0	0	0	0	0	176	105	281	564
Total	107	2	232	341	78	468	0	546	0	0	0	0	0	671	438	1109	1996
08:00 AM	27	0	56	83	22	186	0	208	0	0	0	0	0	153	91	244	535
08:15 AM	18	1	65	84	20	146	0	166	0	0	0	0	0	150	69	219	469
08:30 AM	17	1	72	90	28	136	0	164	0	0	0	0	0	112	99	211	465
08:45 AM	25	0	61	86	25	102	0	127	0	0	0	0	0	100	61	161	374
Total	87	2	254	343	95	570	0	665	0	0	0	0	0	515	320	835	1843
Grand Total	194	4	486	684	173	1038	0	1211	0	0	0	0	0	1186	758	1944	3839
Apprch %	28.4	0.6	71.1		14.3	85.7	0		0	0	0	0	0	61	39		
Total %	5.1	0.1	12.7	17.8	4.5	27	0	31.5	0	0	0	0	0	30.9	19.7	50.6	
Passenger Vehicles	175	3	426	604	122	990	0	1112	0	0	0	0	0	1119	692	1811	3527
% Passenger Vehicles	90.2	75	87.7	88.3	70.5	95.4	0	91.8	0	0	0	0	0	94.4	91.3	93.2	91.9
Large 2 Axle Vehicles	11	0	43	54	26	27	0	53	0	0	0	0	0	50	45	95	202
% Large 2 Axle Vehicles	5.7	0	8.8	7.9	15	2.6	0	4.4	0	0	0	0	0	4.2	5.9	4.9	5.3
3 Axle Vehicles	4	1	6	11	21	11	0	32	0	0	0	0	0	9	14	23	66
% 3 Axle Vehicles	2.1	25	1.2	1.6	12.1	1.1	0	2.6	0	0	0	0	0	0.8	1.8	1.2	1.7
4+ Axle Trucks	4	0	11	15	4	10	0	14	0	0	0	0	0	8	7	15	44
% 4+ Axle Trucks	2.1	0	2.3	2.2	2.3	1	0	1.2	0	0	0	0	0	0.7	0.9	0.8	1.1

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	21	0	66	87	25	88	0	113	0	0	0	0	0	174	111	285	485
07:30 AM	29	0	55	84	20	116	0	136	0	0	0	0	0	197	150	347	567
07:45 AM	29	1	63	93	15	175	0	190	0	0	0	0	0	176	105	281	564
08:00 AM	27	0	56	83	22	186	0	208	0	0	0	0	0	153	91	244	535
Total Volume	106	1	240	347	82	565	0	647	0	0	0	0	0	700	457	1157	2151
% App. Total	30.5	0.3	69.2		12.7	87.3	0		0	0	0	0	0	60.5	39.5		
PHF	.914	.250	.909	.933	.820	.759	.000	.778	.000	.000	.000	.000	.000	.888	.762	.834	.948

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:00 AM				07:15 AM			
+0 mins.	29	1	63	93	15	175	0	190	0	0	0	0	0	174	111	285
+15 mins.	27	0	56	83	22	186	0	208	0	0	0	0	0	197	150	347
+30 mins.	18	1	65	84	20	146	0	166	0	0	0	0	0	176	105	281
+45 mins.	17	1	72	90	28	136	0	164	0	0	0	0	0	153	91	244
Total Volume	91	3	256	350	85	643	0	728	0	0	0	0	0	700	457	1157
% App. Total	26	0.9	73.1		11.7	88.3	0		0	0	0	0	0	60.5	39.5	
PHF	.784	.750	.889	.941	.759	.864	.000	.875	.000	.000	.000	.000	.000	.888	.762	.834

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	23	1	37	61	13	86	0	99	0	0	0	0	0	119	66	185	345
07:15 AM	19	0	51	70	12	83	0	95	0	0	0	0	0	159	103	262	427
07:30 AM	27	0	52	79	13	108	0	121	0	0	0	0	0	190	135	325	525
07:45 AM	26	1	56	83	10	167	0	177	0	0	0	0	0	166	96	262	522
Total	95	2	196	293	48	444	0	492	0	0	0	0	0	634	400	1034	1819
08:00 AM	26	0	51	77	16	178	0	194	0	0	0	0	0	144	84	228	499
08:15 AM	16	1	58	75	15	142	0	157	0	0	0	0	0	141	62	203	435
08:30 AM	15	0	69	84	24	130	0	154	0	0	0	0	0	104	89	193	431
08:45 AM	23	0	52	75	19	96	0	115	0	0	0	0	0	96	57	153	343
Total	80	1	230	311	74	546	0	620	0	0	0	0	0	485	292	777	1708
Grand Total	175	3	426	604	122	990	0	1112	0	0	0	0	0	1119	692	1811	3527
Apprch %	29	0.5	70.5		11	89	0		0	0	0	0	0	61.8	38.2		
Total %	5	0.1	12.1	17.1	3.5	28.1	0	31.5	0	0	0	0	0	31.7	19.6	51.3	

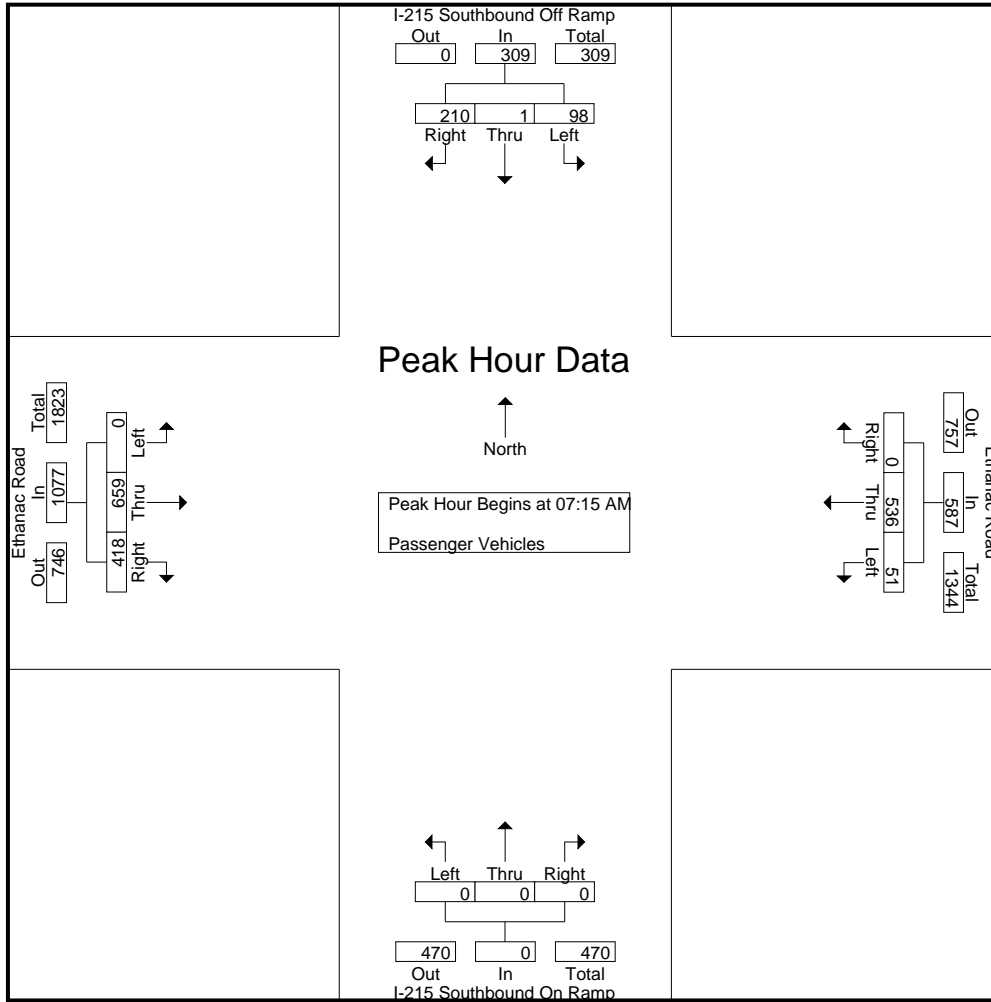
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	19	0	51	70	12	83	0	95	0	0	0	0	0	159	103	262	427
07:30 AM	27	0	52	79	13	108	0	121	0	0	0	0	0	190	135	325	525
07:45 AM	26	1	56	83	10	167	0	177	0	0	0	0	0	166	96	262	522
08:00 AM	26	0	51	77	16	178	0	194	0	0	0	0	0	144	84	228	499
Total Volume	98	1	210	309	51	536	0	587	0	0	0	0	0	659	418	1077	1973
% App. Total	31.7	0.3	68		8.7	91.3	0		0	0	0	0	0	61.2	38.8		
PHF	.907	.250	.938	.931	.797	.753	.000	.756	.000	.000	.000	.000	.000	.867	.774	.828	.940

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	19	0	51	70	12	83	0	95	0	0	0	0	0	159	103	262
+15 mins.	27	0	52	79	13	108	0	121	0	0	0	0	0	190	135	325
+30 mins.	26	1	56	83	10	167	0	177	0	0	0	0	0	166	96	262
+45 mins.	26	0	51	77	16	178	0	194	0	0	0	0	0	144	84	228
Total Volume	98	1	210	309	51	536	0	587	0	0	0	0	0	659	418	1077
% App. Total	31.7	0.3	68		8.7	91.3	0		0	0	0		0	61.2	38.8	
PHF	.907	.250	.938	.931	.797	.753	.000	.756	.000	.000	.000	.000	.000	.867	.774	.828

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

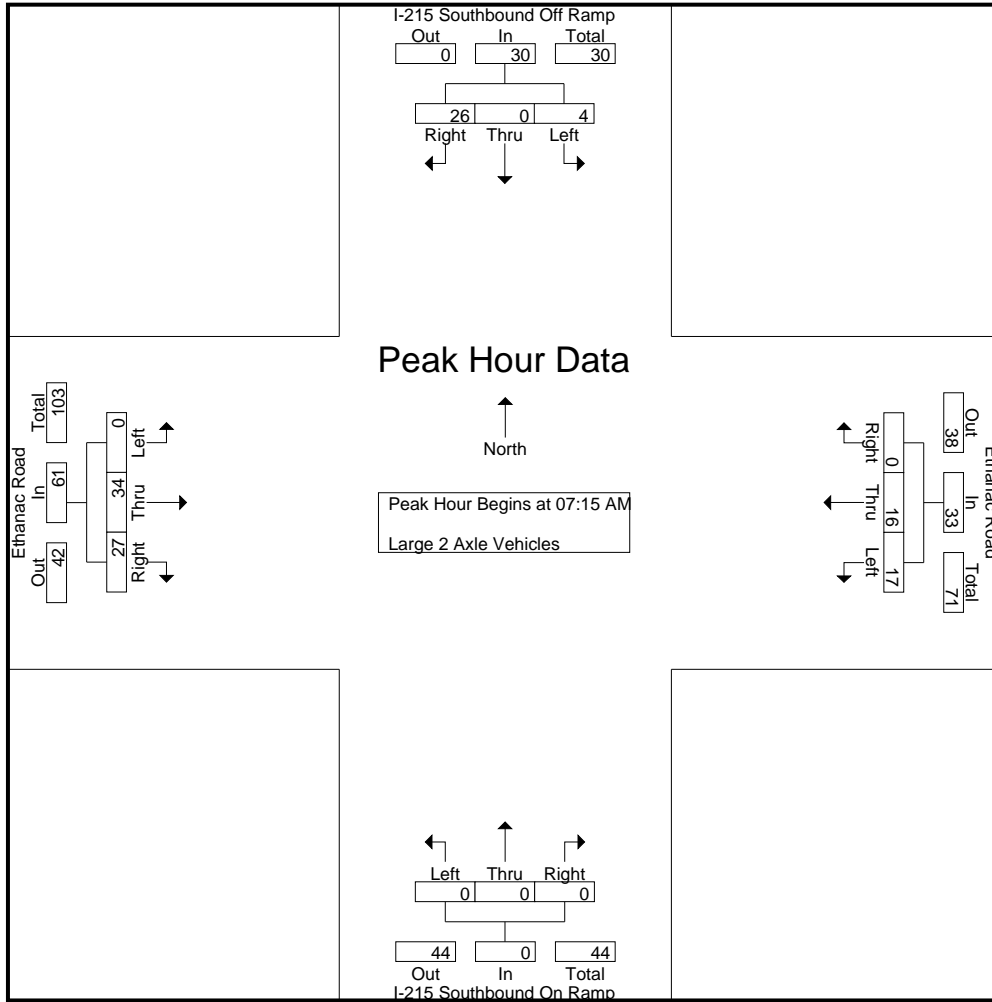
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	0	8	11	2	2	0	4	0	0	0	0	0	4	3	7	22
07:15 AM	1	0	15	16	5	2	0	7	0	0	0	0	0	13	5	18	41
07:30 AM	0	0	2	2	5	5	0	10	0	0	0	0	0	6	11	17	29
07:45 AM	2	0	5	7	3	5	0	8	0	0	0	0	0	7	7	14	29
Total	6	0	30	36	15	14	0	29	0	0	0	0	0	30	26	56	121
08:00 AM	1	0	4	5	4	4	0	8	0	0	0	0	0	8	4	12	25
08:15 AM	1	0	3	4	2	1	0	3	0	0	0	0	0	6	6	12	19
08:30 AM	2	0	1	3	3	5	0	8	0	0	0	0	0	3	7	10	21
08:45 AM	1	0	5	6	2	3	0	5	0	0	0	0	0	3	2	5	16
Total	5	0	13	18	11	13	0	24	0	0	0	0	0	20	19	39	81
Grand Total	11	0	43	54	26	27	0	53	0	0	0	0	0	50	45	95	202
Apprch %	20.4	0	79.6		49.1	50.9	0		0	0	0	0	0	52.6	47.4		
Total %	5.4	0	21.3	26.7	12.9	13.4	0	26.2	0	0	0	0	0	24.8	22.3	47	

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	1	0	15	16	5	2	0	7	0	0	0	0	0	13	5	18	41
07:30 AM	0	0	2	2	5	5	0	10	0	0	0	0	0	6	11	17	29
07:45 AM	2	0	5	7	3	5	0	8	0	0	0	0	0	7	7	14	29
08:00 AM	1	0	4	5	4	4	0	8	0	0	0	0	0	8	4	12	25
Total Volume	4	0	26	30	17	16	0	33	0	0	0	0	0	34	27	61	124
% App. Total	13.3	0	86.7		51.5	48.5	0		0	0	0	0	0	55.7	44.3		
PHF	.500	.000	.433	.469	.850	.800	.000	.825	.000	.000	.000	.000	.000	.654	.614	.847	.756

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	15	16	5	2	0	7	0	0	0	0	0	13	5	18
+15 mins.	0	0	2	2	5	5	0	10	0	0	0	0	0	6	11	17
+30 mins.	2	0	5	7	3	5	0	8	0	0	0	0	0	7	7	14
+45 mins.	1	0	4	5	4	4	0	8	0	0	0	0	0	8	4	12
Total Volume	4	0	26	30	17	16	0	33	0	0	0	0	0	34	27	61
% App. Total	13.3	0	86.7		51.5	48.5	0		0	0	0		0	55.7	44.3	
PHF	.500	.000	.433	.469	.850	.800	.000	.825	.000	.000	.000	.000	.000	.654	.614	.847

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- 3 Axle Vehicles

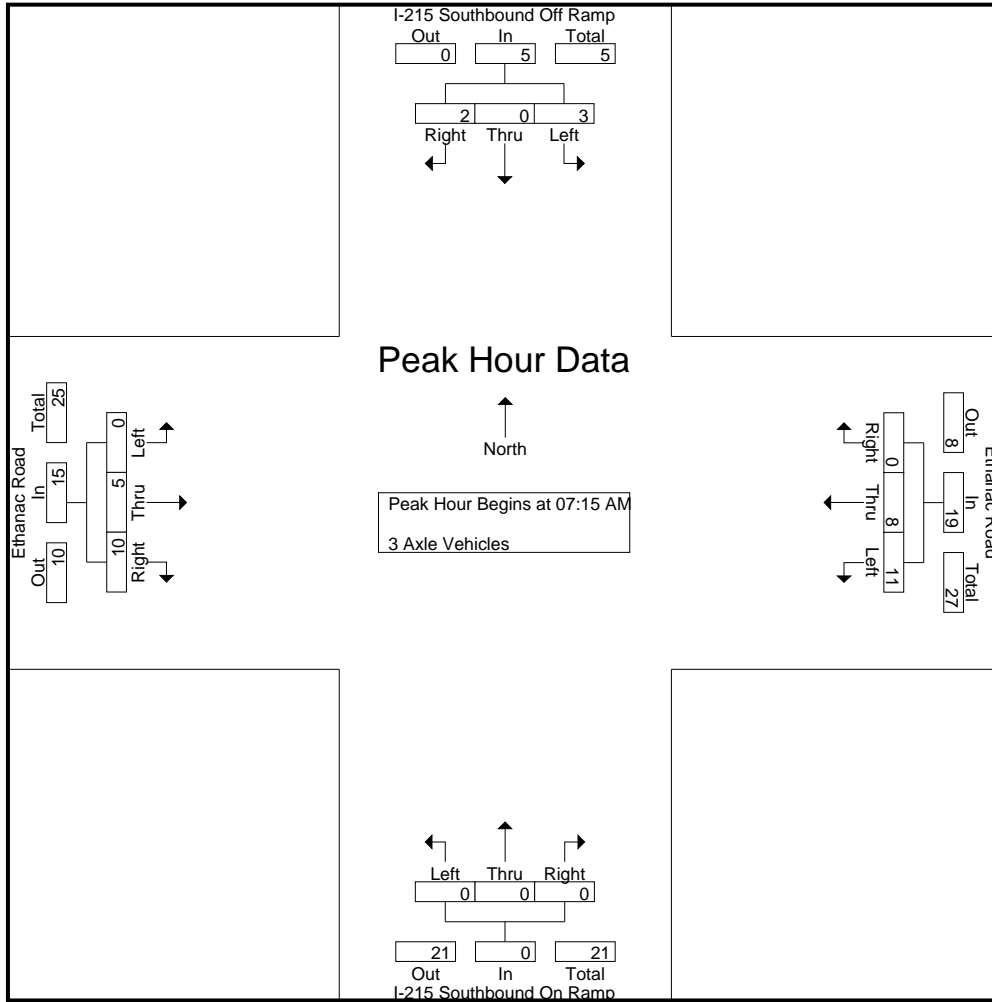
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	0	1	3	1	0	4	0	0	0	0	0	0	1	1	6
07:15 AM	0	0	0	0	7	2	0	9	0	0	0	0	0	1	3	4	13
07:30 AM	2	0	0	2	1	3	0	4	0	0	0	0	0	0	4	4	10
07:45 AM	1	0	2	3	2	2	0	4	0	0	0	0	0	3	1	4	11
Total	4	0	2	6	13	8	0	21	0	0	0	0	0	4	9	13	40
08:00 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	1	2	3	5
08:15 AM	0	0	1	1	3	0	0	3	0	0	0	0	0	2	0	2	6
08:30 AM	0	1	1	2	1	1	0	2	0	0	0	0	0	2	3	5	9
08:45 AM	0	0	2	2	3	1	0	4	0	0	0	0	0	0	0	0	6
Total	0	1	4	5	8	3	0	11	0	0	0	0	0	5	5	10	26
Grand Total	4	1	6	11	21	11	0	32	0	0	0	0	0	9	14	23	66
Apprch %	36.4	9.1	54.5		65.6	34.4	0		0	0	0		0	39.1	60.9		
Total %	6.1	1.5	9.1	16.7	31.8	16.7	0	48.5	0	0	0	0	0	13.6	21.2	34.8	

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	7	2	0	9	0	0	0	0	0	1	3	4	13
07:30 AM	2	0	0	2	1	3	0	4	0	0	0	0	0	0	4	4	10
07:45 AM	1	0	2	3	2	2	0	4	0	0	0	0	0	3	1	4	11
08:00 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	1	2	3	5
Total Volume	3	0	2	5	11	8	0	19	0	0	0	0	0	5	10	15	39
% App. Total	60	0	40		57.9	42.1	0		0	0	0		0	33.3	66.7		
PHF	.375	.000	.250	.417	.393	.667	.000	.528	.000	.000	.000	.000	.000	.417	.625	.938	.750

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	7	2	0	9	0	0	0	0	0	1	3	4
+15 mins.	2	0	0	2	1	3	0	4	0	0	0	0	0	0	4	4
+30 mins.	1	0	2	3	2	2	0	4	0	0	0	0	0	3	1	4
+45 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	1	2	3
Total Volume	3	0	2	5	11	8	0	19	0	0	0	0	0	5	10	15
% App. Total	60	0	40		57.9	42.1	0		0	0	0		0	33.3	66.7	
PHF	.375	.000	.250	.417	.393	.667	.000	.528	.000	.000	.000	.000	.000	.417	.625	.938

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	3	4	0	0	0	0	0	0	0	0	0	1	2	3	7
07:15 AM	1	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1	4
07:30 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
Total	2	0	4	6	2	2	0	4	0	0	0	0	0	3	3	6	16
08:00 AM	0	0	1	1	1	3	0	4	0	0	0	0	0	0	1	1	6
08:15 AM	1	0	3	4	0	3	0	3	0	0	0	0	0	1	1	2	9
08:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0	3	4
08:45 AM	1	0	2	3	1	2	0	3	0	0	0	0	0	1	2	3	9
Total	2	0	7	9	2	8	0	10	0	0	0	0	0	5	4	9	28
Grand Total	4	0	11	15	4	10	0	14	0	0	0	0	0	8	7	15	44
Apprch %	26.7	0	73.3		28.6	71.4	0		0	0	0		0	53.3	46.7		
Total %	9.1	0	25	34.1	9.1	22.7	0	31.8	0	0	0		0	18.2	15.9	34.1	

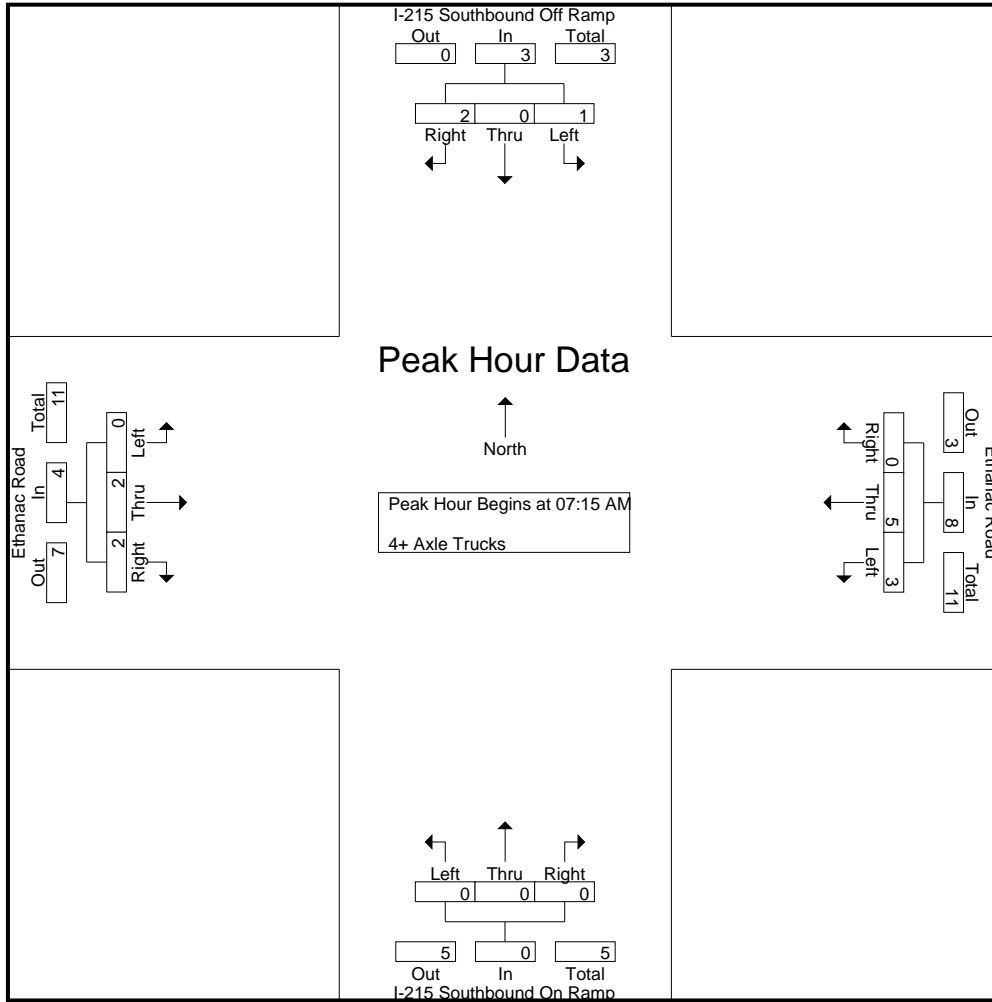
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	1	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1	4
07:30 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
08:00 AM	0	0	1	1	1	3	0	4	0	0	0	0	0	0	1	1	6
Total Volume	1	0	2	3	3	5	0	8	0	0	0	0	0	2	2	4	15
% App. Total	33.3	0	66.7		37.5	62.5	0		0	0	0		0	50	50		
PHF	.250	.000	.500	.750	.750	.417	.000	.500	.000	.000	.000	.000	.000	.500	.500	1.00	.625

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1
+15 mins.	0	0	1	1	1	0	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1
+45 mins.	0	0	1	1	1	3	0	4	0	0	0	0	0	0	1	1
Total Volume	1	0	2	3	3	5	0	8	0	0	0	0	0	2	2	4
% App. Total	33.3	0	66.7		37.5	62.5	0		0	0	0		0	50	50	
PHF	.250	.000	.500	.750	.750	.417	.000	.500	.000	.000	.000	.000	.000	.500	.500	1.000

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

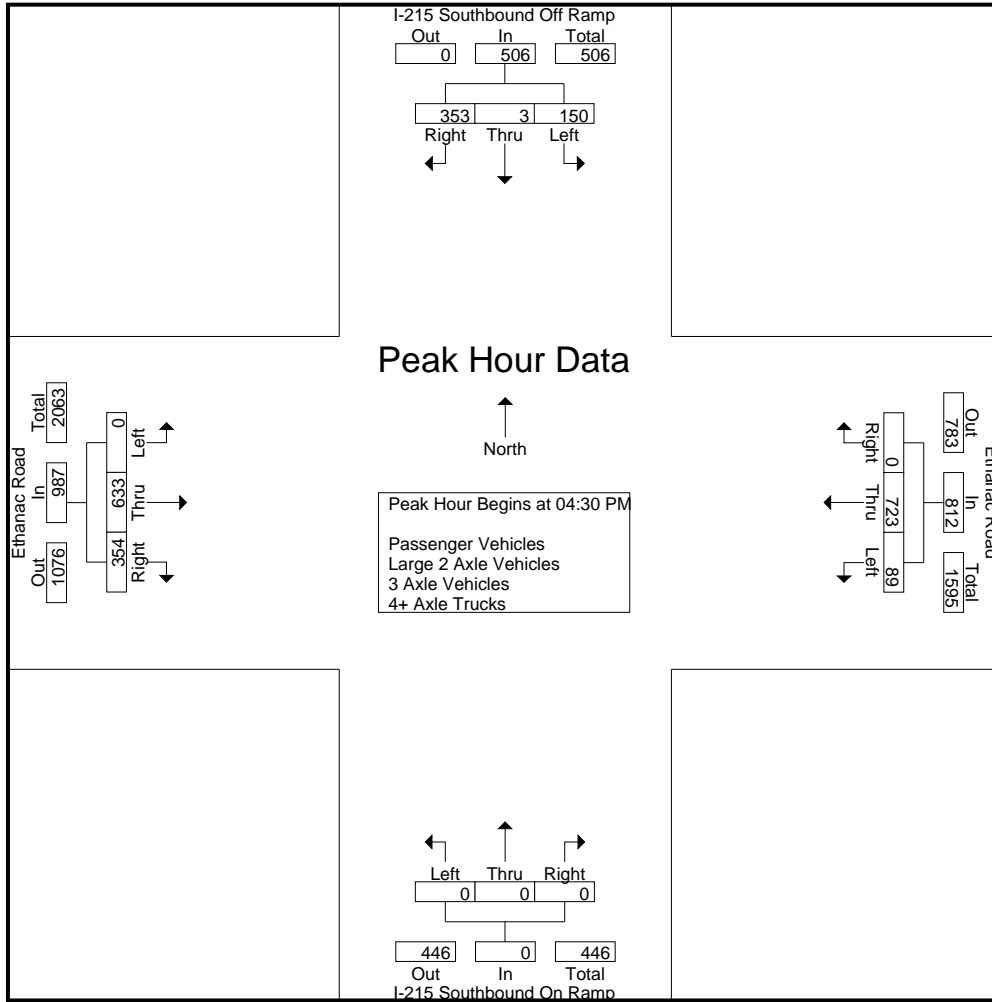
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	41	3	89	133	32	180	0	212	0	0	0	0	0	155	86	241	586
04:15 PM	37	1	91	129	16	192	0	208	0	0	0	0	0	142	86	228	565
04:30 PM	38	2	85	125	22	193	0	215	0	0	0	0	0	146	93	239	579
04:45 PM	41	0	83	124	16	167	0	183	0	0	0	0	0	162	92	254	561
Total	157	6	348	511	86	732	0	818	0	0	0	0	0	605	357	962	2291
05:00 PM	35	0	95	130	26	176	0	202	0	0	0	0	0	157	81	238	570
05:15 PM	36	1	90	127	25	187	0	212	0	0	0	0	0	168	88	256	595
05:30 PM	30	1	83	114	23	190	0	213	0	0	0	0	0	140	87	227	554
05:45 PM	38	0	78	116	19	127	0	146	0	0	0	0	0	150	82	232	494
Total	139	2	346	487	93	680	0	773	0	0	0	0	0	615	338	953	2213
Grand Total	296	8	694	998	179	1412	0	1591	0	0	0	0	0	1220	695	1915	4504
Apprch %	29.7	0.8	69.5		11.3	88.7	0		0	0	0		0	63.7	36.3		
Total %	6.6	0.2	15.4	22.2	4	31.3	0	35.3	0	0	0	0	0	27.1	15.4	42.5	
Passenger Vehicles	284	7	673	964	176	1371	0	1547	0	0	0	0	0	1173	679	1852	4363
% Passenger Vehicles	95.9	87.5	97	96.6	98.3	97.1	0	97.2	0	0	0	0	0	96.1	97.7	96.7	96.9
Large 2 Axle Vehicles	6	0	11	17	3	17	0	20	0	0	0	0	0	38	10	48	85
% Large 2 Axle Vehicles	2	0	1.6	1.7	1.7	1.2	0	1.3	0	0	0	0	0	3.1	1.4	2.5	1.9
3 Axle Vehicles	2	0	4	6	0	21	0	21	0	0	0	0	0	7	1	8	35
% 3 Axle Vehicles	0.7	0	0.6	0.6	0	1.5	0	1.3	0	0	0	0	0	0.6	0.1	0.4	0.8
4+ Axle Trucks	4	1	6	11	0	3	0	3	0	0	0	0	0	2	5	7	21
% 4+ Axle Trucks	1.4	12.5	0.9	1.1	0	0.2	0	0.2	0	0	0	0	0	0.2	0.7	0.4	0.5

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	38	2	85	125	22	193	0	215	0	0	0	0	0	146	93	239	579
04:45 PM	41	0	83	124	16	167	0	183	0	0	0	0	0	162	92	254	561
05:00 PM	35	0	95	130	26	176	0	202	0	0	0	0	0	157	81	238	570
05:15 PM	36	1	90	127	25	187	0	212	0	0	0	0	0	168	88	256	595
Total Volume	150	3	353	506	89	723	0	812	0	0	0	0	0	633	354	987	2305
% App. Total	29.6	0.6	69.8		11	89	0		0	0	0		0	64.1	35.9		
PHF	.915	.375	.929	.973	.856	.937	.000	.944	.000	.000	.000	.000	.000	.942	.952	.964	.968

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:30 PM			
+0 mins.	41	3	89	133	32	180	0	212	0	0	0	0	0	146	93	239
+15 mins.	37	1	91	129	16	192	0	208	0	0	0	0	0	162	92	254
+30 mins.	38	2	85	125	22	193	0	215	0	0	0	0	0	157	81	238
+45 mins.	41	0	83	124	16	167	0	183	0	0	0	0	0	168	88	256
Total Volume	157	6	348	511	86	732	0	818	0	0	0	0	0	633	354	987
% App. Total	30.7	1.2	68.1		10.5	89.5	0		0	0	0	0	0	64.1	35.9	
PHF	.957	.500	.956	.961	.672	.948	.000	.951	.000	.000	.000	.000	.000	.942	.952	.964

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	39	2	89	130	31	174	0	205	0	0	0	0	0	148	86	234	569
04:15 PM	34	1	87	122	16	185	0	201	0	0	0	0	0	134	83	217	540
04:30 PM	37	2	84	123	22	188	0	210	0	0	0	0	0	136	91	227	560
04:45 PM	41	0	80	121	16	166	0	182	0	0	0	0	0	159	91	250	553
Total	151	5	340	496	85	713	0	798	0	0	0	0	0	577	351	928	2222
05:00 PM	33	0	90	123	26	172	0	198	0	0	0	0	0	155	79	234	555
05:15 PM	34	1	85	120	25	177	0	202	0	0	0	0	0	165	84	249	571
05:30 PM	29	1	81	111	23	185	0	208	0	0	0	0	0	132	84	216	535
05:45 PM	37	0	77	114	17	124	0	141	0	0	0	0	0	144	81	225	480
Total	133	2	333	468	91	658	0	749	0	0	0	0	0	596	328	924	2141
Grand Total	284	7	673	964	176	1371	0	1547	0	0	0	0	0	1173	679	1852	4363
Apprch %	29.5	0.7	69.8		11.4	88.6	0		0	0	0	0	0	63.3	36.7		
Total %	6.5	0.2	15.4	22.1	4	31.4	0	35.5	0	0	0	0	0	26.9	15.6	42.4	

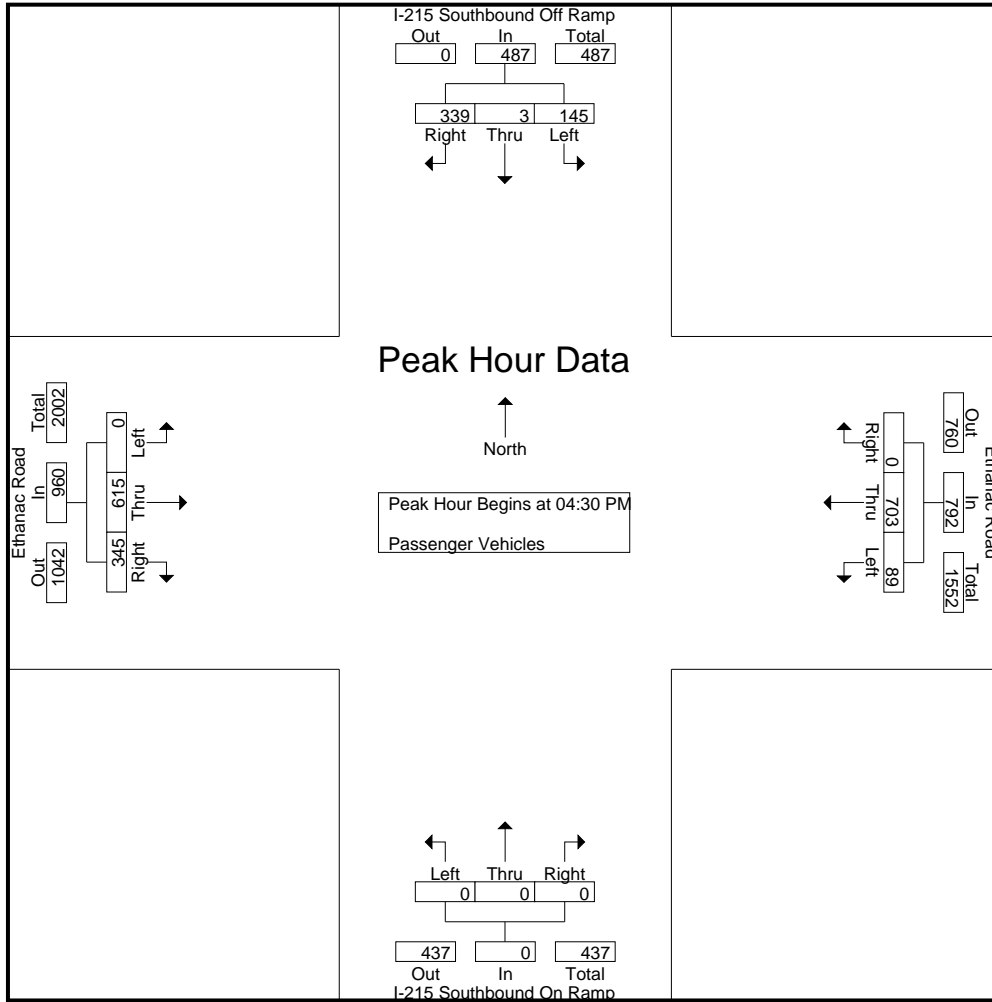
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	37	2	84	123	22	188	0	210	0	0	0	0	0	136	91	227	560
04:45 PM	41	0	80	121	16	166	0	182	0	0	0	0	0	159	91	250	553
05:00 PM	33	0	90	123	26	172	0	198	0	0	0	0	0	155	79	234	555
05:15 PM	34	1	85	120	25	177	0	202	0	0	0	0	0	165	84	249	571
Total Volume	145	3	339	487	89	703	0	792	0	0	0	0	0	615	345	960	2239
% App. Total	29.8	0.6	69.6		11.2	88.8	0		0	0	0	0	0	64.1	35.9		
PHF	.884	.375	.942	.990	.856	.935	.000	.943	.000	.000	.000	.000	.000	.932	.948	.960	.980

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	37	2	84	123	22	188	0	210	0	0	0	0	0	136	91	227
+15 mins.	41	0	80	121	16	166	0	182	0	0	0	0	0	159	91	250
+30 mins.	33	0	90	123	26	172	0	198	0	0	0	0	0	155	79	234
+45 mins.	34	1	85	120	25	177	0	202	0	0	0	0	0	165	84	249
Total Volume	145	3	339	487	89	703	0	792	0	0	0	0	0	615	345	960
% App. Total	29.8	0.6	69.6		11.2	88.8	0		0	0	0		0	64.1	35.9	
PHF	.884	.375	.942	.990	.856	.935	.000	.943	.000	.000	.000	.000	.000	.932	.948	.960

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

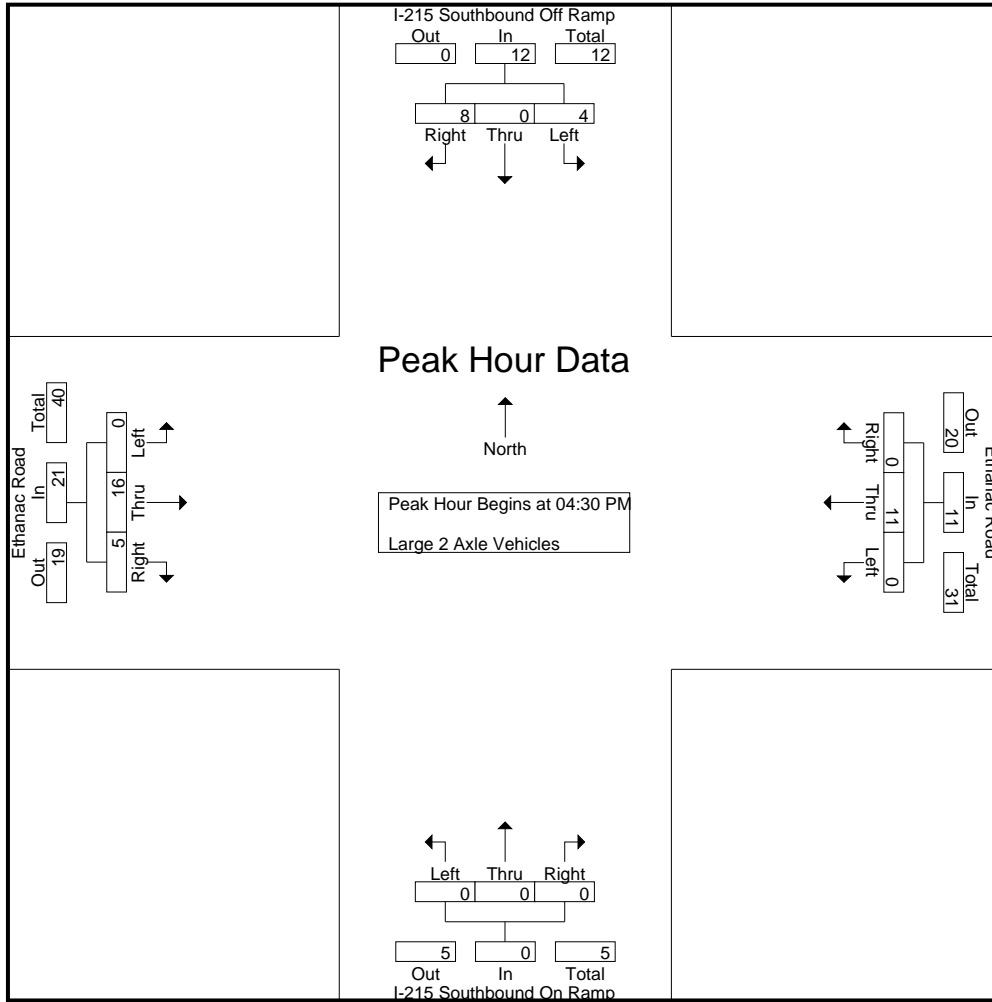
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	4	0	4	7
04:15 PM	0	0	1	1	0	2	0	2	0	0	0	0	0	5	2	7	10
04:30 PM	1	0	1	2	0	3	0	3	0	0	0	0	0	8	1	9	14
04:45 PM	0	0	3	3	0	0	0	0	0	0	0	0	0	3	1	4	7
Total	1	0	5	6	1	7	0	8	0	0	0	0	0	20	4	24	38
05:00 PM	1	0	2	3	0	3	0	3	0	0	0	0	0	2	0	2	8
05:15 PM	2	0	2	4	0	5	0	5	0	0	0	0	0	3	3	6	15
05:30 PM	1	0	2	3	0	1	0	1	0	0	0	0	0	7	2	9	13
05:45 PM	1	0	0	1	2	1	0	3	0	0	0	0	0	6	1	7	11
Total	5	0	6	11	2	10	0	12	0	0	0	0	0	18	6	24	47
Grand Total	6	0	11	17	3	17	0	20	0	0	0	0	0	38	10	48	85
Apprch %	35.3	0	64.7		15	85	0		0	0	0		0	79.2	20.8		
Total %	7.1	0	12.9	20	3.5	20	0	23.5	0	0	0	0	0	44.7	11.8	56.5	

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	1	0	1	2	0	3	0	3	0	0	0	0	0	8	1	9	14
04:45 PM	0	0	3	3	0	0	0	0	0	0	0	0	0	3	1	4	7
05:00 PM	1	0	2	3	0	3	0	3	0	0	0	0	0	2	0	2	8
05:15 PM	2	0	2	4	0	5	0	5	0	0	0	0	0	3	3	6	15
Total Volume	4	0	8	12	0	11	0	11	0	0	0	0	0	16	5	21	44
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	76.2	23.8		
PHF	.500	.000	.667	.750	.000	.550	.000	.550	.000	.000	.000	.000	.000	.500	.417	.583	.733

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	1	0	1	2	0	3	0	3	0	0	0	0	0	8	1	9
+15 mins.	0	0	3	3	0	0	0	0	0	0	0	0	0	3	1	4
+30 mins.	1	0	2	3	0	3	0	3	0	0	0	0	0	2	0	2
+45 mins.	2	0	2	4	0	5	0	5	0	0	0	0	0	3	3	6
Total Volume	4	0	8	12	0	11	0	11	0	0	0	0	0	16	5	21
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	76.2	23.8	
PHF	.500	.000	.667	.750	.000	.550	.000	.550	.000	.000	.000	.000	.000	.500	.417	.583

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	0	0	1	0	3	0	3	0	0	0	0	0	3	0	3	7
04:15 PM	1	0	0	1	0	5	0	5	0	0	0	0	0	1	1	2	8
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	11	0	11	0	0	0	0	0	6	1	7	20
05:00 PM	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	1	1	0	5	0	5	0	0	0	0	0	0	0	0	6
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	4	4	0	10	0	10	0	0	0	0	0	1	0	1	15
Grand Total	2	0	4	6	0	21	0	21	0	0	0	0	0	7	1	8	35
Apprch %	33.3	0	66.7		0	100	0		0	0	0		0	87.5	12.5		
Total %	5.7	0	11.4	17.1	0	60	0	60	0	0	0	0	0	20	2.9	22.9	

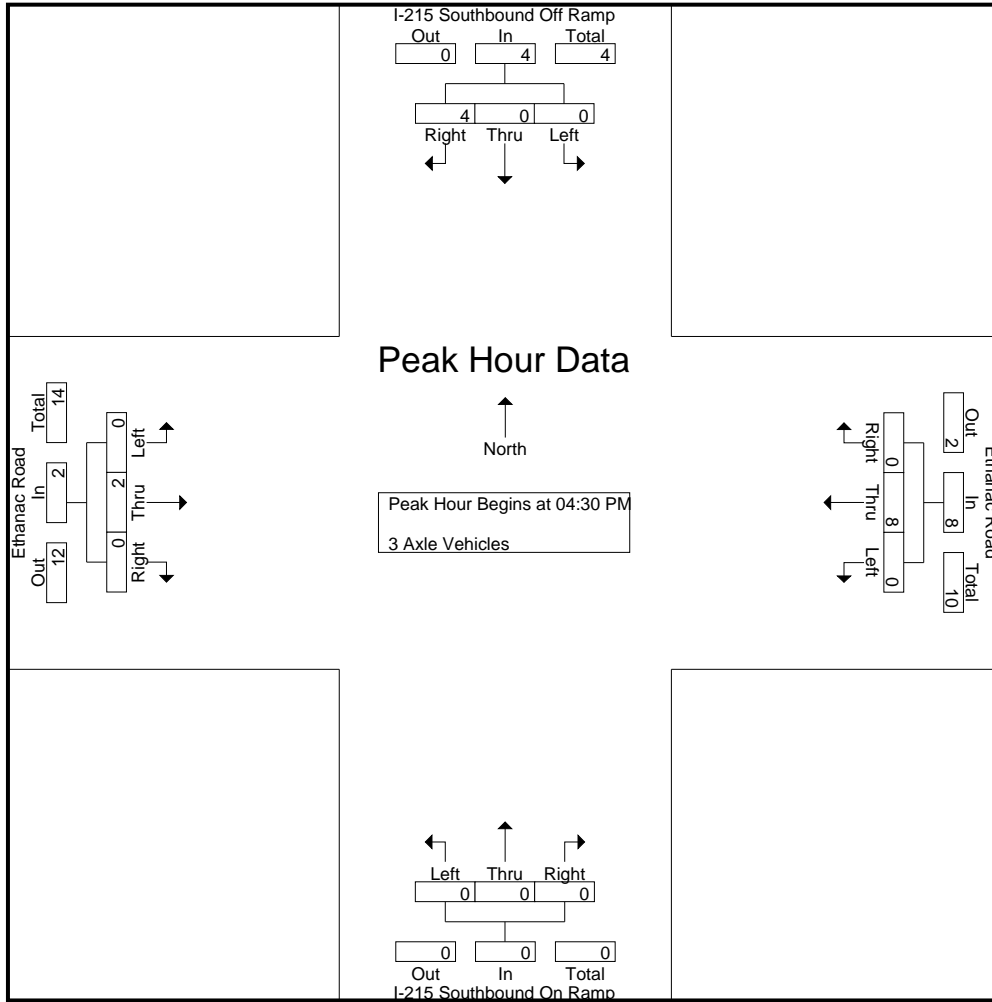
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	1	1	0	5	0	5	0	0	0	0	0	0	0	0	6
Total Volume	0	0	4	4	0	8	0	8	0	0	0	0	0	2	0	2	14
% App. Total	0	0	100		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.333	.333	.000	.400	.000	.400	.000	.000	.000	.000	.000	.250	.000	.250	.583

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	0	5	0	5	0	0	0	0	0	0	0	0
Total Volume	0	0	4	4	0	8	0	8	0	0	0	0	0	2	0	2
% App. Total	0	0	100		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.333	.333	.000	.400	.000	.400	.000	.000	.000	.000	.000	.250	.000	.250

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- 4+ Axle Trucks

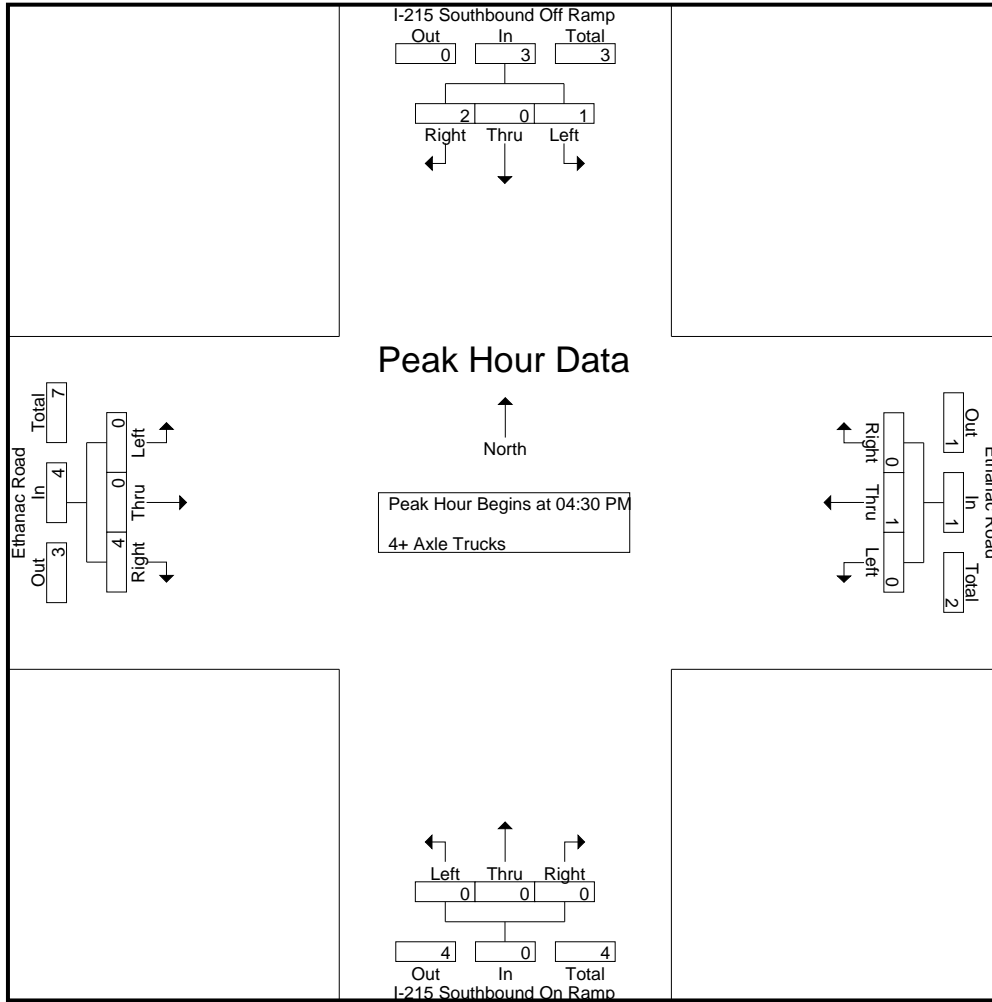
Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	1	1	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	3
04:15 PM	2	0	3	5	0	0	0	0	0	0	0	0	0	2	0	0	0	7
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	1	3	7	0	1	0	1	0	0	0	0	0	2	1	0	3	11
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	2	0	0	4
05:15 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	3
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	2
05:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	3	4	0	2	0	2	0	0	0	0	0	0	4	0	4	10
Grand Total	4	1	6	11	0	3	0	3	0	0	0	0	0	2	5	0	7	21
Apprch %	36.4	9.1	54.5		0	100	0		0	0	0		0	28.6	71.4			
Total %	19	4.8	28.6	52.4	0	14.3	0	14.3	0	0	0	0	0	9.5	23.8		33.3	

Start Time	I-215 Southbound Off Ramp Southbound				Ethanac Road Westbound				I-215 Southbound On Ramp Northbound				Ethanac Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	2	0	2	4
05:15 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Total Volume	1	0	2	3	0	1	0	1	0	0	0	0	0	0	4	0	4	8
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	0	100			
PHF	.250	.000	.250	.375	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.500	.000	.500	.500

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 05_MEN_215S_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	0	2	2
+45 mins.	0	0	2	2	0	0	0	0	0	0	0	0	0	0	1	1
Total Volume	1	0	2	3	0	1	0	1	0	0	0	0	0	0	4	4
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	0	100	
PHF	.250	.000	.250	.375	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.500	.500

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

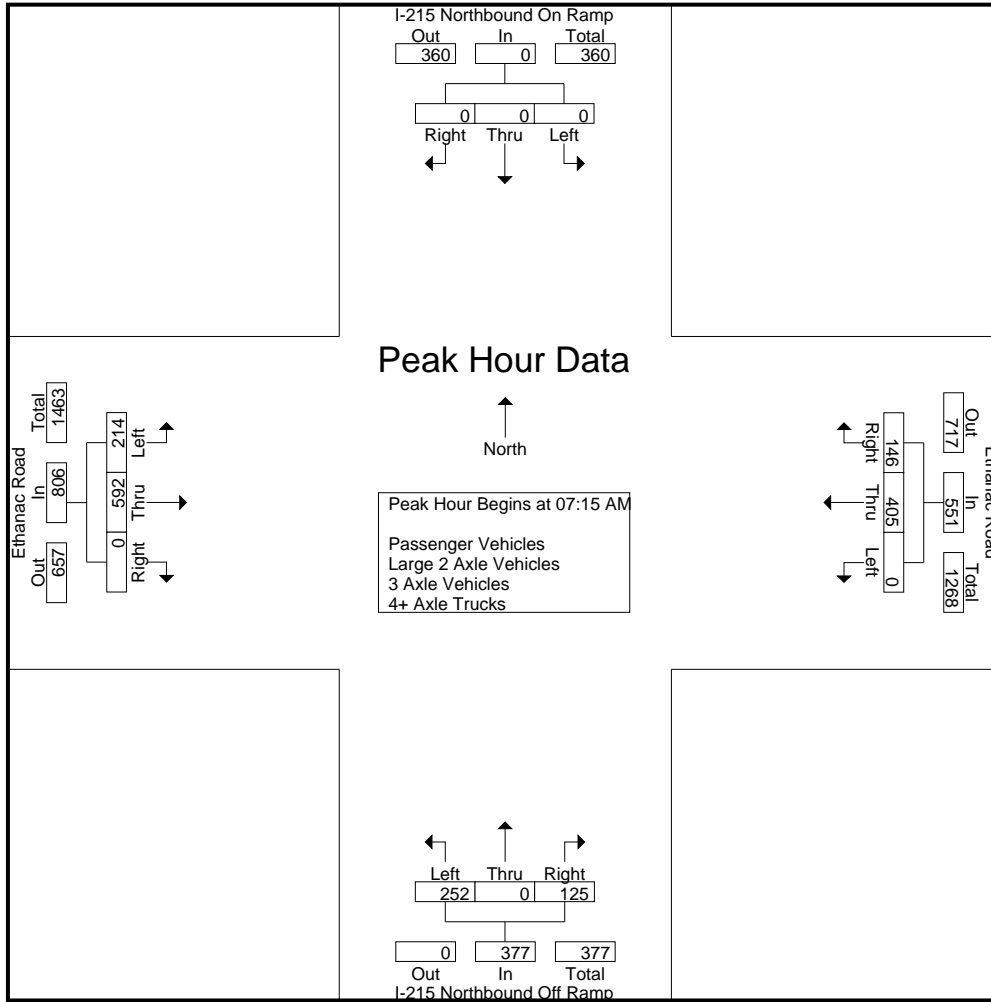
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	62	28	90	44	0	32	76	49	99	0	148	314
07:15 AM	0	0	0	0	0	75	32	107	48	0	32	80	67	149	0	216	403
07:30 AM	0	0	0	0	0	88	39	127	71	0	23	94	52	168	0	220	441
07:45 AM	0	0	0	0	0	128	39	167	75	0	35	110	42	138	0	180	457
Total	0	0	0	0	0	353	138	491	238	0	122	360	210	554	0	764	1615
08:00 AM	0	0	0	0	0	114	36	150	58	0	35	93	53	137	0	190	433
08:15 AM	0	0	0	0	0	115	19	134	61	2	49	112	43	100	0	143	389
08:30 AM	0	0	0	0	0	74	25	99	65	0	33	98	65	58	0	123	320
08:45 AM	0	0	0	0	0	67	26	93	49	1	22	72	50	80	0	130	295
Total	0	0	0	0	0	370	106	476	233	3	139	375	211	375	0	586	1437
Grand Total	0	0	0	0	0	723	244	967	471	3	261	735	421	929	0	1350	3052
Apprch %	0	0	0		0	74.8	25.2		64.1	0.4	35.5		31.2	68.8	0		
Total %	0	0	0	0	0	23.7	8	31.7	15.4	0.1	8.6	24.1	13.8	30.4	0	44.2	
Passenger Vehicles	0	0	0	0	0	658	217	875	438	2	234	674	384	883	0	1267	2816
% Passenger Vehicles	0	0	0	0	0	91	88.9	90.5	93	66.7	89.7	91.7	91.2	95	0	93.9	92.3
Large 2 Axle Vehicles	0	0	0	0	0	36	15	51	13	1	10	24	23	29	0	52	127
% Large 2 Axle Vehicles	0	0	0	0	0	5	6.1	5.3	2.8	33.3	3.8	3.3	5.5	3.1	0	3.9	4.2
3 Axle Vehicles	0	0	0	0	0	24	3	27	11	0	13	24	4	11	0	15	66
% 3 Axle Vehicles	0	0	0	0	0	3.3	1.2	2.8	2.3	0	5	3.3	1	1.2	0	1.1	2.2
4+ Axle Trucks	0	0	0	0	0	5	9	14	9	0	4	13	10	6	0	16	43
% 4+ Axle Trucks	0	0	0	0	0	0.7	3.7	1.4	1.9	0	1.5	1.8	2.4	0.6	0	1.2	1.4

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	75	32	107	48	0	32	80	67	149	0	216	403
07:30 AM	0	0	0	0	0	88	39	127	71	0	23	94	52	168	0	220	441
07:45 AM	0	0	0	0	0	128	39	167	75	0	35	110	42	138	0	180	457
08:00 AM	0	0	0	0	0	114	36	150	58	0	35	93	53	137	0	190	433
Total Volume	0	0	0	0	0	405	146	551	252	0	125	377	214	592	0	806	1734
% App. Total	0	0	0	0	0	73.5	26.5		66.8	0	33.2		26.6	73.4	0		
PHF	.000	.000	.000	.000	.000	.791	.936	.825	.840	.000	.893	.857	.799	.881	.000	.916	.949

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:45 AM				07:15 AM			
+0 mins.	0	0	0	0	0	88	39	127	75	0	35	110	67	149	0	216
+15 mins.	0	0	0	0	0	128	39	167	58	0	35	93	52	168	0	220
+30 mins.	0	0	0	0	0	114	36	150	61	2	49	112	42	138	0	180
+45 mins.	0	0	0	0	0	115	19	134	65	0	33	98	53	137	0	190
Total Volume	0	0	0	0	0	445	133	578	259	2	152	413	214	592	0	806
% App. Total	0	0	0	0	0	77	23		62.7	0.5	36.8		26.6	73.4	0	
PHF	.000	.000	.000	.000	.000	.869	.853	.865	.863	.250	.776	.922	.799	.881	.000	.916

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Passenger Vehicles

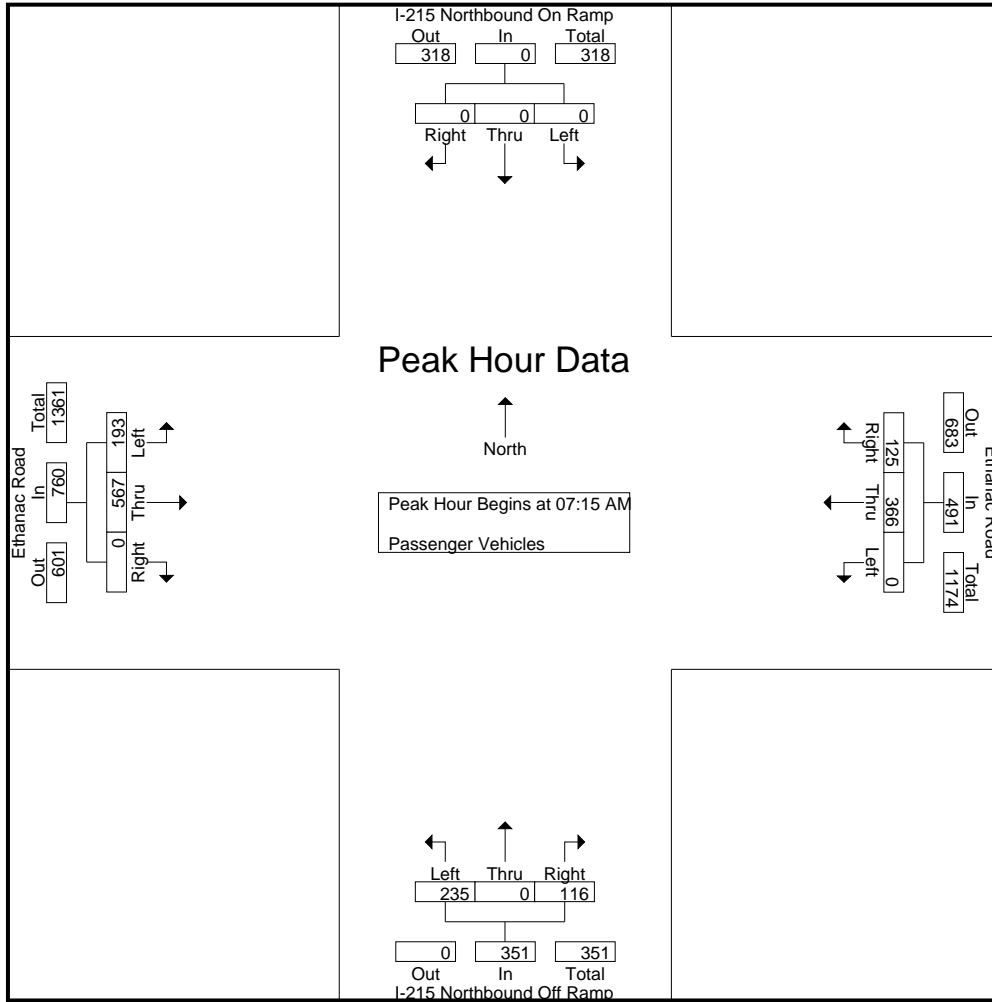
Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	55	27	82	40	0	26	66	42	94	0	136	284
07:15 AM	0	0	0	0	0	62	29	91	42	0	32	74	59	145	0	204	369
07:30 AM	0	0	0	0	0	81	37	118	67	0	20	87	46	163	0	209	414
07:45 AM	0	0	0	0	0	116	31	147	71	0	33	104	39	131	0	170	421
Total	0	0	0	0	0	314	124	438	220	0	111	331	186	533	0	719	1488
08:00 AM	0	0	0	0	0	107	28	135	55	0	31	86	49	128	0	177	398
08:15 AM	0	0	0	0	0	108	19	127	58	1	44	103	41	91	0	132	362
08:30 AM	0	0	0	0	0	68	23	91	62	0	29	91	60	54	0	114	296
08:45 AM	0	0	0	0	0	61	23	84	43	1	19	63	48	77	0	125	272
Total	0	0	0	0	0	344	93	437	218	2	123	343	198	350	0	548	1328
Grand Total	0	0	0	0	0	658	217	875	438	2	234	674	384	883	0	1267	2816
Apprch %	0	0	0	0	0	75.2	24.8		65	0.3	34.7		30.3	69.7	0		
Total %	0	0	0	0	0	23.4	7.7	31.1	15.6	0.1	8.3	23.9	13.6	31.4	0	45	

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	62	29	91	42	0	32	74	59	145	0	204	369
07:30 AM	0	0	0	0	0	81	37	118	67	0	20	87	46	163	0	209	414
07:45 AM	0	0	0	0	0	116	31	147	71	0	33	104	39	131	0	170	421
08:00 AM	0	0	0	0	0	107	28	135	55	0	31	86	49	128	0	177	398
Total Volume	0	0	0	0	0	366	125	491	235	0	116	351	193	567	0	760	1602
% App. Total	0	0	0	0	0	74.5	25.5		67	0	33		25.4	74.6	0		
PHF	.000	.000	.000	.000	.000	.789	.845	.835	.827	.000	.879	.844	.818	.870	.000	.909	.951

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	62	29	91	42	0	32	74	59	145	0	204
+15 mins.	0	0	0	0	0	81	37	118	67	0	20	87	46	163	0	209
+30 mins.	0	0	0	0	0	116	31	147	71	0	33	104	39	131	0	170
+45 mins.	0	0	0	0	0	107	28	135	55	0	31	86	49	128	0	177
Total Volume	0	0	0	0	0	366	125	491	235	0	116	351	193	567	0	760
% App. Total	0	0	0	0	0	74.5	25.5		67	0	33		25.4	74.6	0	
PHF	.000	.000	.000	.000	.000	.789	.845	.835	.827	.000	.879	.844	.818	.870	.000	.909

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

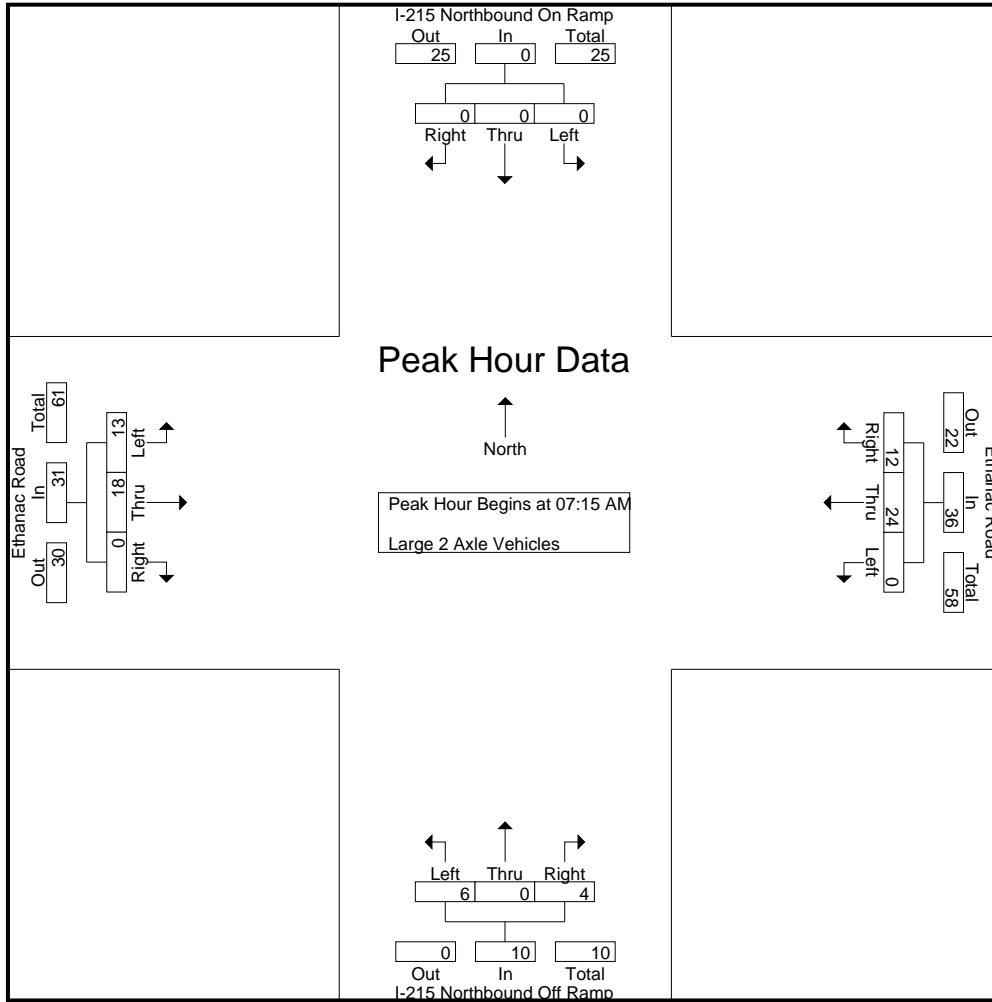
Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	3	0	2	5	6	3	0	9	15
07:15 AM	0	0	0	0	0	9	1	10	2	0	0	2	5	3	0	8	20
07:30 AM	0	0	0	0	0	3	1	4	2	0	2	4	4	1	0	5	13
07:45 AM	0	0	0	0	0	9	7	16	2	0	1	3	2	6	0	8	27
Total	0	0	0	0	0	22	9	31	9	0	5	14	17	13	0	30	75
08:00 AM	0	0	0	0	0	3	3	6	0	0	1	1	2	8	0	10	17
08:15 AM	0	0	0	0	0	5	0	5	0	1	2	3	0	5	0	5	13
08:30 AM	0	0	0	0	0	4	2	6	3	0	1	4	3	1	0	4	14
08:45 AM	0	0	0	0	0	2	1	3	1	0	1	2	1	2	0	3	8
Total	0	0	0	0	0	14	6	20	4	1	5	10	6	16	0	22	52
Grand Total	0	0	0	0	0	36	15	51	13	1	10	24	23	29	0	52	127
Apprch %	0	0	0	0	0	70.6	29.4		54.2	4.2	41.7		44.2	55.8	0		
Total %	0	0	0	0	0	28.3	11.8	40.2	10.2	0.8	7.9	18.9	18.1	22.8	0	40.9	

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	9	1	10	2	0	0	2	5	3	0	8	20
07:30 AM	0	0	0	0	0	3	1	4	2	0	2	4	4	1	0	5	13
07:45 AM	0	0	0	0	0	9	7	16	2	0	1	3	2	6	0	8	27
08:00 AM	0	0	0	0	0	3	3	6	0	0	1	1	2	8	0	10	17
Total Volume	0	0	0	0	0	24	12	36	6	0	4	10	13	18	0	31	77
% App. Total	0	0	0	0	0	66.7	33.3		60	0	40		41.9	58.1	0		
PHF	.000	.000	.000	.000	.000	.667	.429	.563	.750	.000	.500	.625	.650	.563	.000	.775	.713

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	9	1	10	2	0	0	2	5	3	0	8
+15 mins.	0	0	0	0	0	3	1	4	2	0	2	4	4	1	0	5
+30 mins.	0	0	0	0	0	9	7	16	2	0	1	3	2	6	0	8
+45 mins.	0	0	0	0	0	3	3	6	0	0	1	1	2	8	0	10
Total Volume	0	0	0	0	0	24	12	36	6	0	4	10	13	18	0	31
% App. Total	0	0	0	0	0	66.7	33.3		60	0	40		41.9	58.1	0	
PHF	.000	.000	.000	.000	.000	.667	.429	.563	.750	.000	.500	.625	.650	.563	.000	.775

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

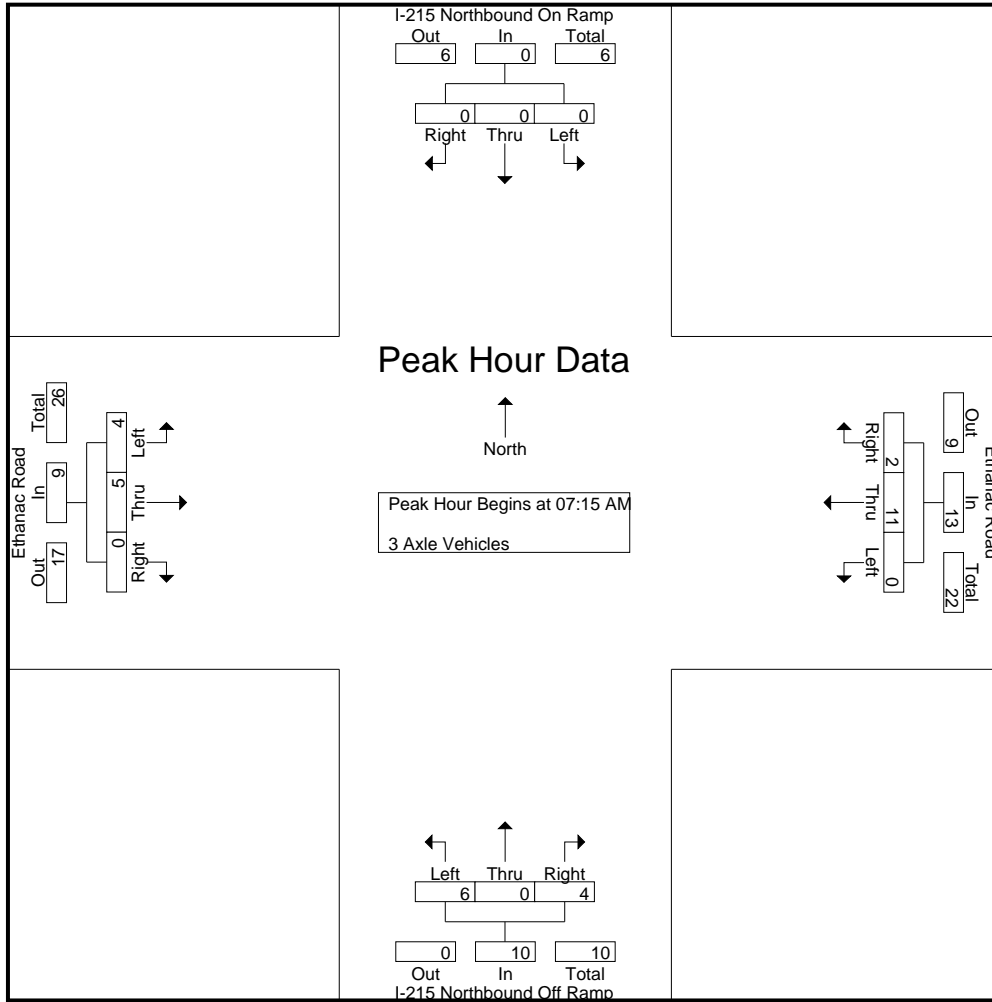
Groups Printed- 3 Axle Vehicles

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	6	0	6	1	0	2	3	0	1	0	1	10
07:15 AM	0	0	0	0	0	2	0	2	3	0	0	3	2	0	0	2	7
07:30 AM	0	0	0	0	0	4	0	4	1	0	1	2	0	3	0	3	9
07:45 AM	0	0	0	0	0	1	0	1	1	0	1	2	1	1	0	2	5
Total	0	0	0	0	0	13	0	13	6	0	4	10	3	5	0	8	31
08:00 AM	0	0	0	0	0	4	2	6	1	0	2	3	1	1	0	2	11
08:15 AM	0	0	0	0	0	2	0	2	1	0	2	3	0	2	0	2	7
08:30 AM	0	0	0	0	0	2	0	2	0	0	3	3	0	2	0	2	7
08:45 AM	0	0	0	0	0	3	1	4	3	0	2	5	0	1	0	1	10
Total	0	0	0	0	0	11	3	14	5	0	9	14	1	6	0	7	35
Grand Total	0	0	0	0	0	24	3	27	11	0	13	24	4	11	0	15	66
Apprch %	0	0	0		0	88.9	11.1		45.8	0	54.2		26.7	73.3	0		
Total %	0	0	0		0	36.4	4.5	40.9	16.7	0	19.7	36.4	6.1	16.7	0	22.7	

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	2	0	2	3	0	0	3	2	0	0	2	7
07:30 AM	0	0	0	0	0	4	0	4	1	0	1	2	0	3	0	3	9
07:45 AM	0	0	0	0	0	1	0	1	1	0	1	2	1	1	0	2	5
08:00 AM	0	0	0	0	0	4	2	6	1	0	2	3	1	1	0	2	11
Total Volume	0	0	0	0	0	11	2	13	6	0	4	10	4	5	0	9	32
% App. Total	0	0	0		0	84.6	15.4		60	0	40		44.4	55.6	0		
PHF	.000	.000	.000	.000	.000	.688	.250	.542	.500	.000	.500	.833	.500	.417	.000	.750	.727

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	2	0	2	3	0	0	3	2	0	0	2
+15 mins.	0	0	0	0	0	4	0	4	1	0	1	2	0	3	0	3
+30 mins.	0	0	0	0	0	1	0	1	1	0	1	2	1	1	0	2
+45 mins.	0	0	0	0	0	4	2	6	1	0	2	3	1	1	0	2
Total Volume	0	0	0	0	0	11	2	13	6	0	4	10	4	5	0	9
% App. Total	0	0	0	0	0	84.6	15.4		60	0	40		44.4	55.6	0	
PHF	.000	.000	.000	.000	.000	.688	.250	.542	.500	.000	.500	.833	.500	.417	.000	.750

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	1	0	0	2	2	1	1	0	2	5
07:15 AM	0	0	0	0	0	2	2	4	1	0	0	1	1	1	0	2	7
07:30 AM	0	0	0	0	0	0	1	1	1	0	0	1	2	1	0	3	5
07:45 AM	0	0	0	0	0	2	1	3	1	0	0	1	0	0	0	0	4
Total	0	0	0	0	0	4	5	9	3	0	2	5	4	3	0	7	21
08:00 AM	0	0	0	0	0	0	3	3	2	0	1	3	1	0	0	1	7
08:15 AM	0	0	0	0	0	0	0	0	2	0	1	3	2	2	0	4	7
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	3
08:45 AM	0	0	0	0	0	1	1	2	2	0	0	2	1	0	0	1	5
Total	0	0	0	0	0	1	4	5	6	0	2	8	6	3	0	9	22
Grand Total	0	0	0	0	0	5	9	14	9	0	4	13	10	6	0	16	43
Apprch %	0	0	0		0	35.7	64.3		69.2	0	30.8		62.5	37.5	0		
Total %	0	0	0		0	11.6	20.9	32.6	20.9	0	9.3	30.2	23.3	14	0	37.2	

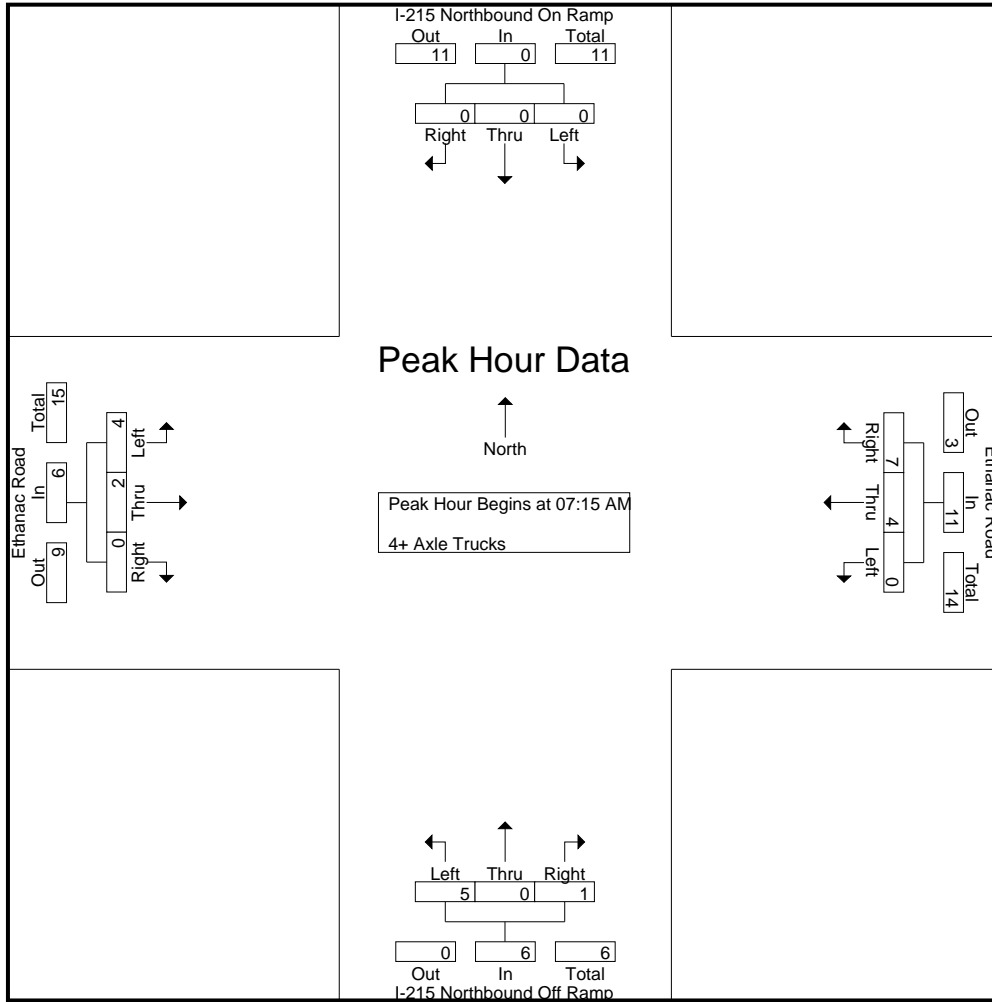
Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	2	2	4	1	0	0	1	1	1	0	2	7
07:30 AM	0	0	0	0	0	0	1	1	1	0	0	1	2	1	0	3	5
07:45 AM	0	0	0	0	0	2	1	3	1	0	0	1	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	3	3	2	0	1	3	1	0	0	1	7
Total Volume	0	0	0	0	0	4	7	11	5	0	1	6	4	2	0	6	23
% App. Total	0	0	0		0	36.4	63.6		83.3	0	16.7		66.7	33.3	0		
PHF	.000	.000	.000	.000	.000	.500	.583	.688	.625	.000	.250	.500	.500	.500	.000	.500	.821

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha AM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	2	2	4	1	0	0	1	1	1	0	2
+15 mins.	0	0	0	0	0	0	1	1	1	0	0	1	2	1	0	3
+30 mins.	0	0	0	0	0	2	1	3	1	0	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	3	3	2	0	1	3	1	0	0	1
Total Volume	0	0	0	0	0	4	7	11	5	0	1	6	4	2	0	6
% App. Total	0	0	0	0	0	36.4	63.6		83.3	0	16.7		66.7	33.3	0	
PHF	.000	.000	.000	.000	.000	.500	.583	.688	.625	.000	.250	.500	.500	.500	.000	.500

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

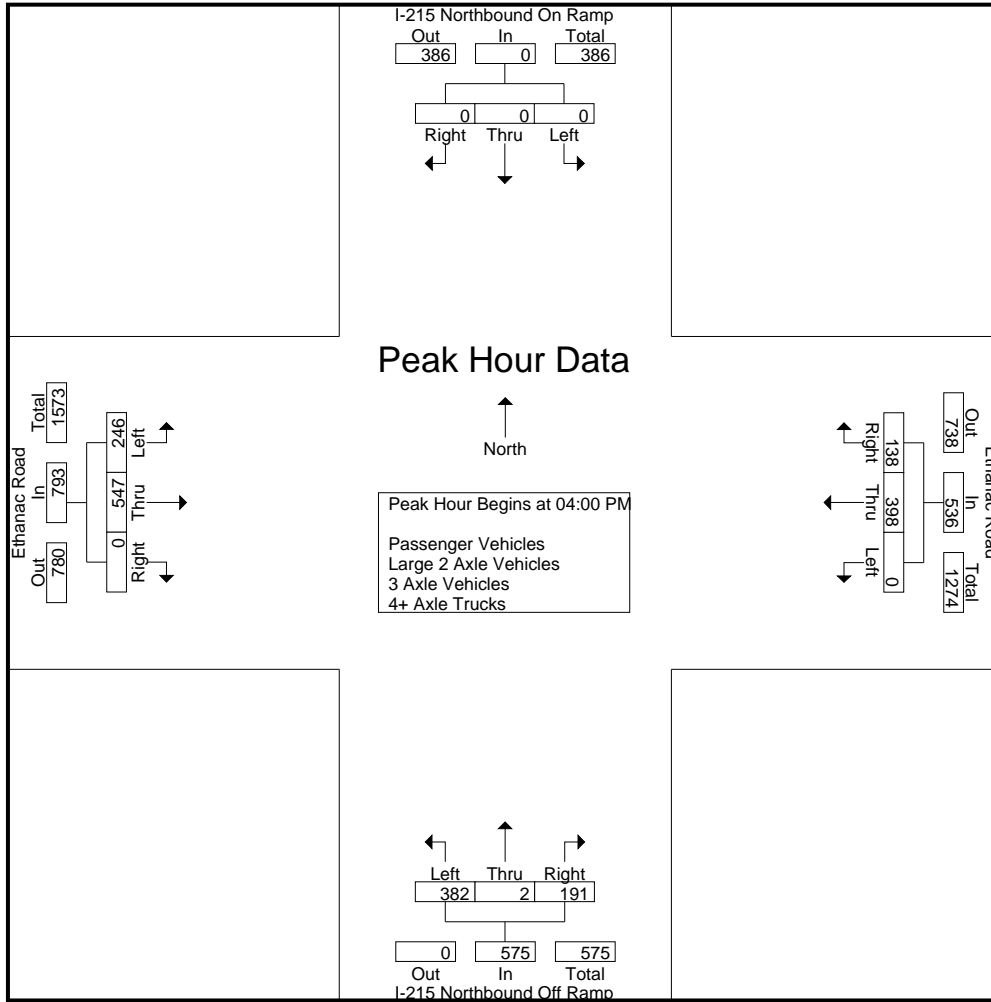
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	96	40	136	114	1	43	158	69	142	0	211	505
04:15 PM	0	0	0	0	0	99	35	134	93	1	49	143	59	117	0	176	453
04:30 PM	0	0	0	0	0	119	31	150	100	0	44	144	60	151	0	211	505
04:45 PM	0	0	0	0	0	84	32	116	75	0	55	130	58	137	0	195	441
Total	0	0	0	0	0	398	138	536	382	2	191	575	246	547	0	793	1904
05:00 PM	0	0	0	0	0	103	29	132	121	0	40	161	52	132	0	184	477
05:15 PM	0	0	0	0	0	102	26	128	109	0	40	149	51	134	0	185	462
05:30 PM	0	0	0	0	0	86	33	119	103	0	43	146	52	116	0	168	433
05:45 PM	0	0	0	0	0	66	20	86	57	1	45	103	46	147	0	193	382
Total	0	0	0	0	0	357	108	465	390	1	168	559	201	529	0	730	1754
Grand Total	0	0	0	0	0	755	246	1001	772	3	359	1134	447	1076	0	1523	3658
Apprch %	0	0	0		0	75.4	24.6		68.1	0.3	31.7		29.3	70.7	0		
Total %	0	0	0	0	0	20.6	6.7	27.4	21.1	0.1	9.8	31	12.2	29.4	0	41.6	
Passenger Vehicles	0	0	0	0	0	745	232	977	732	3	332	1067	434	1042	0	1476	3520
% Passenger Vehicles	0	0	0	0	0	98.7	94.3	97.6	94.8	100	92.5	94.1	97.1	96.8	0	96.9	96.2
Large 2 Axle Vehicles	0	0	0	0	0	8	8	16	16	0	21	37	8	24	0	32	85
% Large 2 Axle Vehicles	0	0	0	0	0	1.1	3.3	1.6	2.1	0	5.8	3.3	1.8	2.2	0	2.1	2.3
3 Axle Vehicles	0	0	0	0	0	2	5	7	22	0	4	26	3	7	0	10	43
% 3 Axle Vehicles	0	0	0	0	0	0.3	2	0.7	2.8	0	1.1	2.3	0.7	0.7	0	0.7	1.2
4+ Axle Trucks	0	0	0	0	0	0	1	1	2	0	2	4	2	3	0	5	10
% 4+ Axle Trucks	0	0	0	0	0	0	0.4	0.1	0.3	0	0.6	0.4	0.4	0.3	0	0.3	0.3

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	0	0	0	0	96	40	136	114	1	43	158	69	142	0	211	505
04:15 PM	0	0	0	0	0	99	35	134	93	1	49	143	59	117	0	176	453
04:30 PM	0	0	0	0	0	119	31	150	100	0	44	144	60	151	0	211	505
04:45 PM	0	0	0	0	0	84	32	116	75	0	55	130	58	137	0	195	441
Total Volume	0	0	0	0	0	398	138	536	382	2	191	575	246	547	0	793	1904
% App. Total	0	0	0	0	0	74.3	25.7		66.4	0.3	33.2		31	69	0		
PHF	.000	.000	.000	.000	.000	.836	.863	.893	.838	.500	.868	.910	.891	.906	.000	.940	.943

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	0	0	0	0	0	96	40	136	75	0	55	130	69	142	0	211
+15 mins.	0	0	0	0	0	99	35	134	121	0	40	161	59	117	0	176
+30 mins.	0	0	0	0	0	119	31	150	109	0	40	149	60	151	0	211
+45 mins.	0	0	0	0	0	84	32	116	103	0	43	146	58	137	0	195
Total Volume	0	0	0	0	0	398	138	536	408	0	178	586	246	547	0	793
% App. Total	0	0	0	0	0	74.3	25.7		69.6	0	30.4		31	69	0	
PHF	.000	.000	.000	.000	.000	.836	.863	.893	.843	.000	.809	.910	.891	.906	.000	.940

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Passenger Vehicles

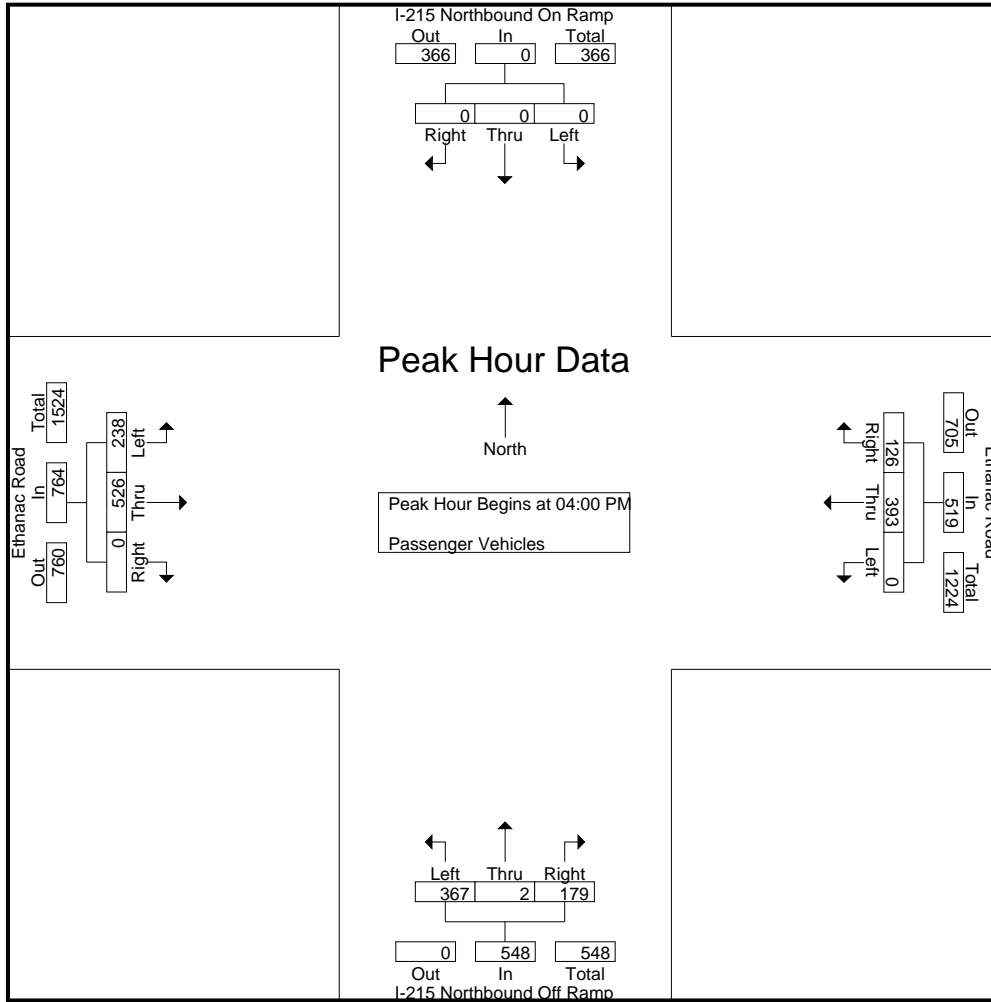
Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	95	38	133	109	1	39	149	67	133	0	200	482
04:15 PM	0	0	0	0	0	96	28	124	85	1	47	133	56	110	0	166	423
04:30 PM	0	0	0	0	0	119	31	150	99	0	42	141	58	148	0	206	497
04:45 PM	0	0	0	0	0	83	29	112	74	0	51	125	57	135	0	192	429
Total	0	0	0	0	0	393	126	519	367	2	179	548	238	526	0	764	1831
05:00 PM	0	0	0	0	0	101	29	130	115	0	34	149	51	128	0	179	458
05:15 PM	0	0	0	0	0	101	26	127	100	0	38	138	50	132	0	182	447
05:30 PM	0	0	0	0	0	85	32	117	98	0	40	138	49	112	0	161	416
05:45 PM	0	0	0	0	0	65	19	84	52	1	41	94	46	144	0	190	368
Total	0	0	0	0	0	352	106	458	365	1	153	519	196	516	0	712	1689
Grand Total	0	0	0	0	0	745	232	977	732	3	332	1067	434	1042	0	1476	3520
Apprch %	0	0	0	0	0	76.3	23.7		68.6	0.3	31.1		29.4	70.6	0		
Total %	0	0	0	0	0	21.2	6.6	27.8	20.8	0.1	9.4	30.3	12.3	29.6	0	41.9	

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	95	38	133	109	1	39	149	67	133	0	200	482
04:15 PM	0	0	0	0	0	96	28	124	85	1	47	133	56	110	0	166	423
04:30 PM	0	0	0	0	0	119	31	150	99	0	42	141	58	148	0	206	497
04:45 PM	0	0	0	0	0	83	29	112	74	0	51	125	57	135	0	192	429
Total Volume	0	0	0	0	0	393	126	519	367	2	179	548	238	526	0	764	1831
% App. Total	0	0	0	0	0	75.7	24.3		67	0.4	32.7		31.2	68.8	0		
PHF	.000	.000	.000	.000	.000	.826	.829	.865	.842	.500	.877	.919	.888	.889	.000	.927	.921

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	95	38	133	109	1	39	149	67	133	0	200
+15 mins.	0	0	0	0	0	96	28	124	85	1	47	133	56	110	0	166
+30 mins.	0	0	0	0	0	119	31	150	99	0	42	141	58	148	0	206
+45 mins.	0	0	0	0	0	83	29	112	74	0	51	125	57	135	0	192
Total Volume	0	0	0	0	0	393	126	519	367	2	179	548	238	526	0	764
% App. Total	0	0	0	0	0	75.7	24.3		67	0.4	32.7		31.2	68.8	0	
PHF	.000	.000	.000	.000	.000	.826	.829	.865	.842	.500	.877	.919	.888	.889	.000	.927

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

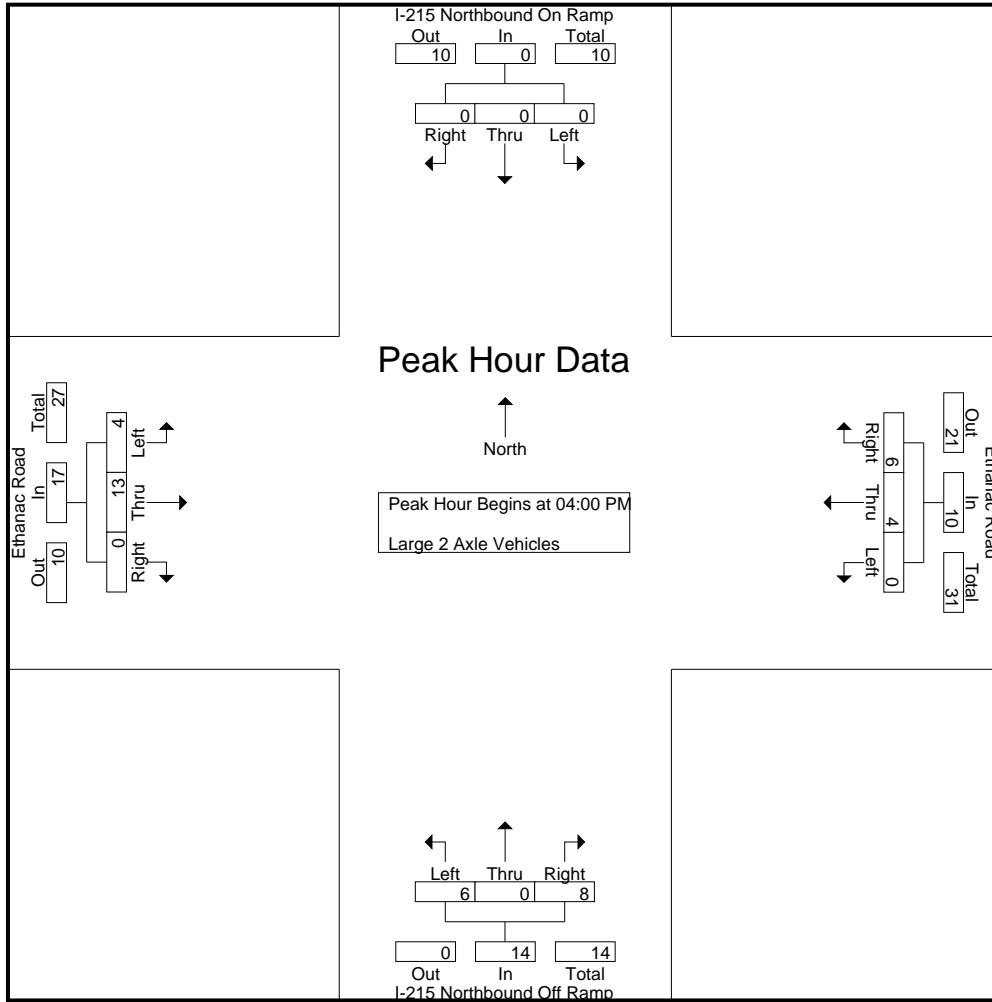
Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	3	0	3	6	0	5	0	5	11
04:15 PM	0	0	0	0	0	3	4	7	2	0	1	3	1	4	0	5	15
04:30 PM	0	0	0	0	0	0	0	0	1	0	1	2	2	2	0	4	6
04:45 PM	0	0	0	0	0	1	2	3	0	0	3	3	1	2	0	3	9
Total	0	0	0	0	0	4	6	10	6	0	8	14	4	13	0	17	41
05:00 PM	0	0	0	0	0	2	0	2	4	0	6	10	1	3	0	4	16
05:15 PM	0	0	0	0	0	1	0	1	3	0	2	5	1	2	0	3	9
05:30 PM	0	0	0	0	0	0	1	1	3	0	3	6	2	4	0	6	13
05:45 PM	0	0	0	0	0	1	1	2	0	0	2	2	0	2	0	2	6
Total	0	0	0	0	0	4	2	6	10	0	13	23	4	11	0	15	44
Grand Total	0	0	0	0	0	8	8	16	16	0	21	37	8	24	0	32	85
Apprch %	0	0	0	0	0	50	50	18.8	43.2	0	56.8	43.5	25	75	0	37.6	
Total %	0	0	0	0	0	9.4	9.4	18.8	18.8	0	24.7	43.5	9.4	28.2	0	37.6	

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	3	0	3	6	0	5	0	5	11
04:15 PM	0	0	0	0	0	3	4	7	2	0	1	3	1	4	0	5	15
04:30 PM	0	0	0	0	0	0	0	0	1	0	1	2	2	2	0	4	6
04:45 PM	0	0	0	0	0	1	2	3	0	0	3	3	1	2	0	3	9
Total Volume	0	0	0	0	0	4	6	10	6	0	8	14	4	13	0	17	41
% App. Total	0	0	0	0	0	40	60	18.8	42.9	0	57.1	43.5	23.5	76.5	0	37.6	
PHF	.000	.000	.000	.000	.000	.333	.375	.357	.500	.000	.667	.583	.500	.650	.000	.850	.683

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	3	0	3	6	0	5	0	5
+15 mins.	0	0	0	0	0	3	4	7	2	0	1	3	1	4	0	5
+30 mins.	0	0	0	0	0	0	0	0	1	0	1	2	2	2	0	4
+45 mins.	0	0	0	0	0	1	2	3	0	0	3	3	1	2	0	3
Total Volume	0	0	0	0	0	4	6	10	6	0	8	14	4	13	0	17
% App. Total	0	0	0	0	0	40	60		42.9	0	57.1		23.5	76.5	0	
PHF	.000	.000	.000	.000	.000	.333	.375	.357	.500	.000	.667	.583	.500	.650	.000	.850

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

Groups Printed- 3 Axle Vehicles

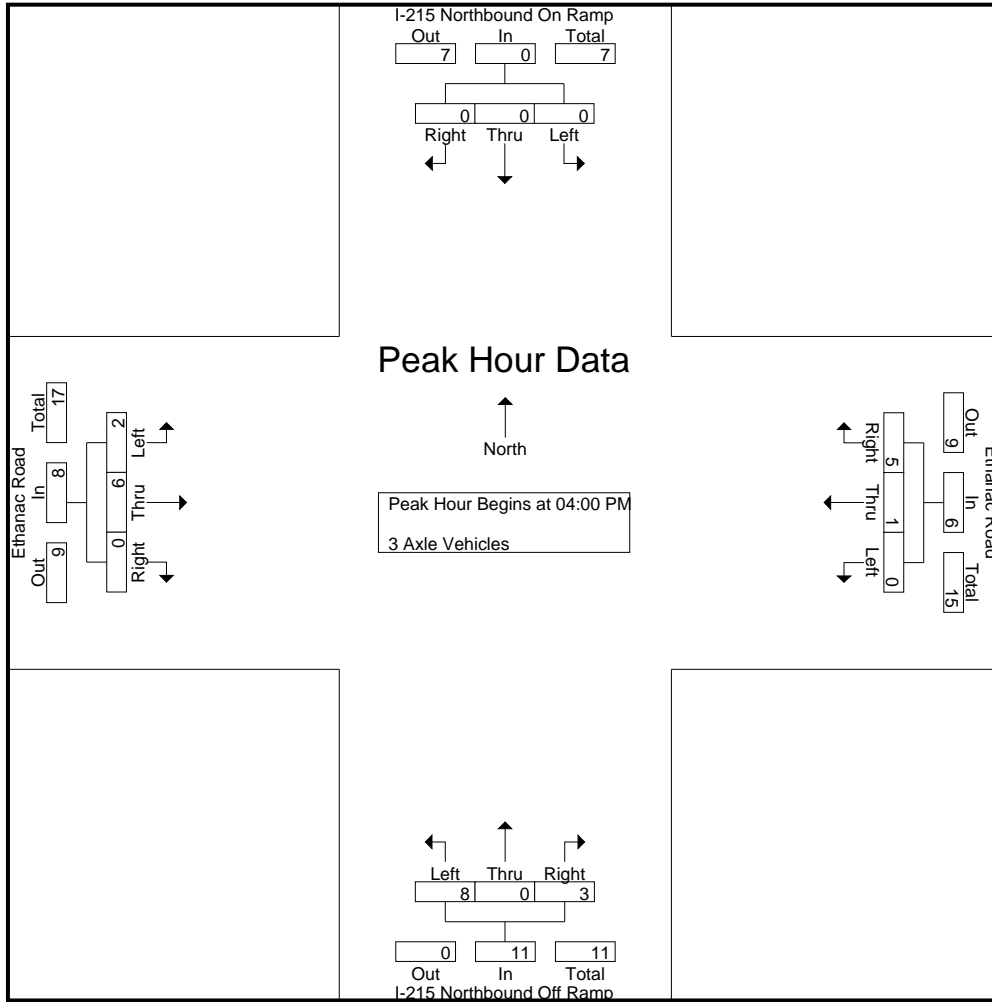
Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	2	3	1	0	1	2	1	3	0	4	9
04:15 PM	0	0	0	0	0	0	2	2	6	0	0	6	1	2	0	3	11
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
04:45 PM	0	0	0	0	0	0	1	1	1	0	1	2	0	0	0	0	3
Total	0	0	0	0	0	1	5	6	8	0	3	11	2	6	0	8	25
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	6
05:30 PM	0	0	0	0	0	1	0	1	2	0	0	2	1	0	0	1	4
05:45 PM	0	0	0	0	0	0	0	0	5	0	1	6	0	1	0	1	7
Total	0	0	0	0	0	1	0	1	14	0	1	15	1	1	0	2	18
Grand Total	0	0	0	0	0	2	5	7	22	0	4	26	3	7	0	10	43
Apprch %	0	0	0		0	28.6	71.4		84.6	0	15.4		30	70	0		
Total %	0	0	0		0	4.7	11.6	16.3	51.2	0	9.3	60.5	7	16.3	0	23.3	

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	2	3	1	0	1	2	1	3	0	4	9
04:15 PM	0	0	0	0	0	0	2	2	6	0	0	6	1	2	0	3	11
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
04:45 PM	0	0	0	0	0	0	1	1	1	0	1	2	0	0	0	0	3
Total Volume	0	0	0	0	0	1	5	6	8	0	3	11	2	6	0	8	25
% App. Total	0	0	0		0	16.7	83.3		72.7	0	27.3		25	75	0		
PHF	.000	.000	.000	.000	.000	.250	.625	.500	.333	.000	.750	.458	.500	.500	.000	.500	.568

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	1	2	3	1	0	1	2	1	3	0	4
+15 mins.	0	0	0	0	0	0	2	2	6	0	0	6	1	2	0	3
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
+45 mins.	0	0	0	0	0	0	1	1	1	0	1	2	0	0	0	0
Total Volume	0	0	0	0	0	1	5	6	8	0	3	11	2	6	0	8
% App. Total	0	0	0	0	0	16.7	83.3		72.7	0	27.3		25	75	0	
PHF	.000	.000	.000	.000	.000	.250	.625	.500	.333	.000	.750	.458	.500	.500	.000	.500

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Ethanac Road
 Weather: Clear

File Name : 06_MEN_215N_Etha PM
 Site Code : 221054
 Start Date : 12/1/2022
 Page No : 1

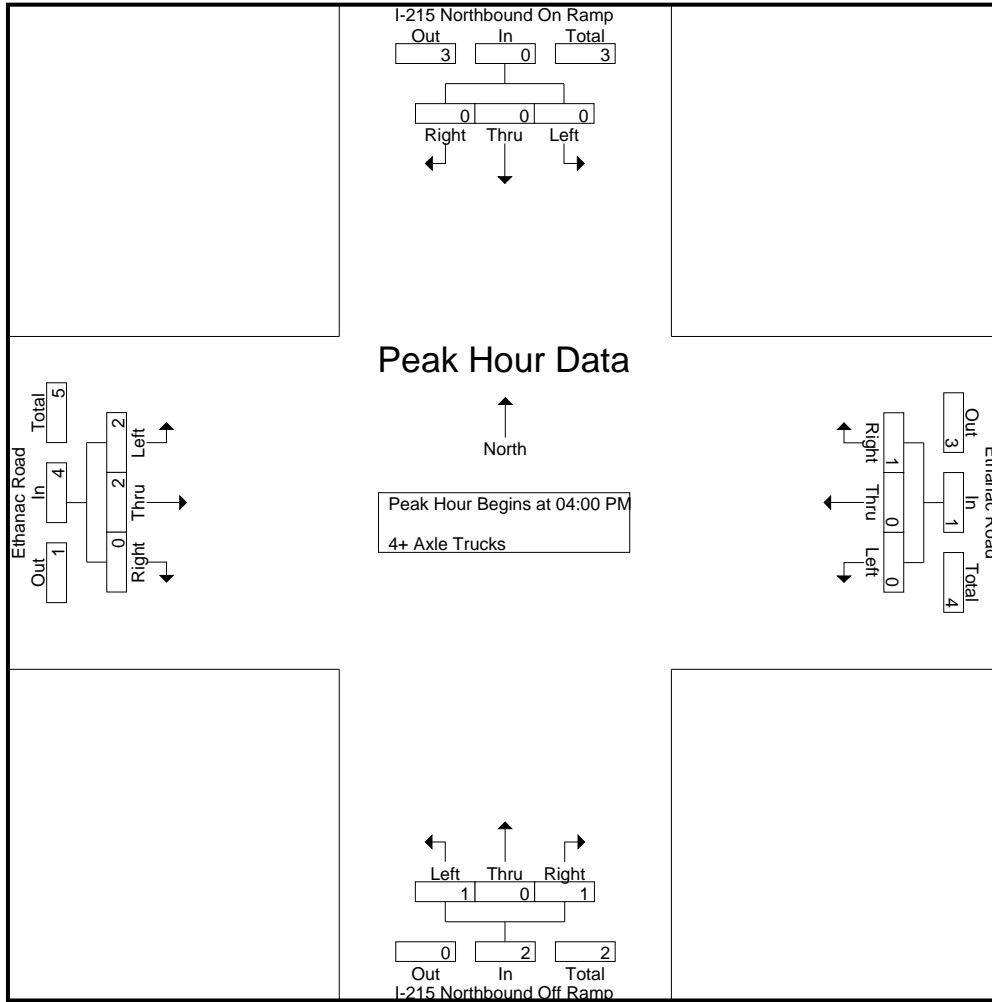
Groups Printed- 4+ Axle Trucks

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	2	3
04:15 PM	0	0	0	0	0	0	1	1	0	0	1	1	1	1	0	2	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	1	0	1	2	2	2	0	4	7
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	0	1	2	0	1	0	1	3
Grand Total	0	0	0	0	0	0	1	1	2	0	2	4	2	3	0	5	10
Apprch %	0	0	0		0	0	100		50	0	50		40	60	0		
Total %	0	0	0		0	0	10	10	20	0	20	40	20	30	0	50	

Start Time	I-215 Northbound On Ramp Southbound				Ethanac Road Westbound				I-215 Northbound Off Ramp Northbound				Ethanac Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	2	3
04:15 PM	0	0	0	0	0	0	1	1	0	0	1	1	1	1	0	2	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	1	1	0	1	2	2	2	0	4	7
% App. Total	0	0	0		0	0	100		50	0	50		50	50	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.250	.000	.250	.500	.500	.500	.000	.500	.438

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	2
+15 mins.	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	1	1	0	1	2	2	2	0	4	4
% App. Total	0	0	0	0	0	0	100		50	0	50		50	50	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.250	.000	.250	.500	.500	.500	.000	.500	

APPENDIX B-2

**TRAFFIC COUNT DATA
SHEETS-
ROADWAY SEGMENT ADT COUNTS**

Counts Unlimited, Inc.

City of Menifee
 Goetz Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN001
 Site Code: 108-23147

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	1	29	1	1	0	0	0	0	0	0	0	0	0	32
01:00	0	22	2	0	0	0	0	0	0	0	0	0	0	24
02:00	0	16	1	0	1	0	0	0	0	0	0	0	0	18
03:00	0	10	3	0	0	1	0	0	0	0	0	0	0	14
04:00	0	12	4	0	1	0	0	0	0	0	0	0	0	17
05:00	0	29	8	0	2	0	0	0	0	0	0	0	0	39
06:00	1	65	16	1	12	3	0	3	3	0	0	0	0	104
07:00	1	90	30	5	8	1	0	0	6	0	0	0	0	141
08:00	0	148	41	2	6	3	0	3	5	0	0	0	0	208
09:00	1	88	29	1	9	4	1	4	8	0	0	0	0	145
10:00	0	101	32	2	5	1	0	2	8	0	0	0	0	151
11:00	0	114	32	2	9	4	2	0	8	0	0	0	0	171
12 PM	0	132	38	3	12	8	1	1	5	0	0	0	0	200
13:00	0	157	45	4	18	4	0	3	4	0	0	0	0	235
14:00	0	180	55	2	14	8	0	2	3	0	0	0	0	264
15:00	1	228	72	0	25	1	0	6	0	1	0	0	0	334
16:00	0	252	75	1	22	0	0	1	0	0	0	0	0	351
17:00	1	245	76	1	30	1	0	3	0	0	0	0	0	357
18:00	0	211	46	0	12	1	0	2	0	0	0	0	0	272
19:00	0	171	40	0	5	0	0	1	0	0	0	0	0	217
20:00	0	112	25	0	5	0	0	0	0	0	0	0	0	142
21:00	0	88	17	1	3	0	0	1	0	0	0	0	0	110
22:00	0	63	9	0	3	0	0	0	0	0	0	0	0	75
23:00	0	47	4	0	2	0	0	0	0	0	0	0	0	53
Total	6	2610	701	26	204	40	4	32	50	1	0	0	0	3674
Percent	0.2%	71.0%	19.1%	0.7%	5.6%	1.1%	0.1%	0.9%	1.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak	00:00	08:00	08:00	07:00	06:00	09:00	11:00	09:00	09:00					08:00
Vol.	1	148	41	5	12	4	2	4	8					208
PM Peak	15:00	16:00	17:00	13:00	17:00	12:00	12:00	15:00	12:00	15:00				17:00
Vol.	1	252	76	4	30	8	1	6	5	1				357
Grand Total	6	2610	701	26	204	40	4	32	50	1	0	0	0	3674
Percent	0.2%	71.0%	19.1%	0.7%	5.6%	1.1%	0.1%	0.9%	1.4%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Goetz Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count
 Southbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN001
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	14	2	0	0	0	0	0	0	0	0	0	0	16
01:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
02:00	0	12	4	2	1	0	0	0	1	0	0	0	0	20
03:00	0	34	7	0	4	0	0	1	0	0	0	0	0	46
04:00	0	79	30	0	8	0	0	1	0	0	0	0	0	118
05:00	0	122	48	0	24	0	0	3	0	0	0	0	0	197
06:00	0	180	58	1	24	1	0	1	0	0	0	0	0	265
07:00	0	340	83	3	24	1	2	3	5	0	0	0	1	462
08:00	2	185	74	3	13	2	1	4	3	1	0	0	0	288
09:00	1	109	39	1	11	1	3	3	4	0	0	0	0	172
10:00	3	122	36	2	3	1	3	4	3	3	0	0	0	180
11:00	1	127	38	1	11	5	4	2	6	0	0	0	0	195
12 PM	1	143	45	0	15	4	2	1	5	0	0	0	1	217
13:00	2	166	54	0	17	4	3	3	5	0	0	0	0	254
14:00	3	133	55	1	17	0	3	3	2	0	0	0	0	217
15:00	1	162	69	2	15	0	0	5	2	0	0	0	0	256
16:00	0	171	52	3	17	2	0	2	1	0	0	0	0	248
17:00	0	157	53	1	23	1	0	0	0	0	0	0	0	235
18:00	1	115	34	0	8	0	0	1	0	0	0	0	0	159
19:00	1	85	18	0	4	0	0	0	0	0	0	0	0	109
20:00	0	61	17	0	3	0	0	0	0	0	0	0	0	81
21:00	1	60	5	0	1	0	0	0	0	0	0	0	0	67
22:00	0	23	13	0	0	0	0	0	0	0	0	0	0	36
23:00	0	18	4	1	0	0	0	0	0	0	0	0	0	23
Total	17	2627	839	21	244	22	21	38	37	4	0	0	2	3872
Percent	0.4%	67.8%	21.7%	0.5%	6.3%	0.6%	0.5%	1.0%	1.0%	0.1%	0.0%	0.0%	0.1%	
AM Peak	10:00	07:00	07:00	07:00	05:00	11:00	11:00	08:00	11:00	10:00			07:00	07:00
Vol.	3	340	83	3	24	5	4	4	6	3			1	462
PM Peak	14:00	16:00	15:00	16:00	17:00	12:00	13:00	15:00	12:00				12:00	15:00
Vol.	3	171	69	3	23	4	3	5	5				1	256
Grand Total	17	2627	839	21	244	22	21	38	37	4	0	0	2	3872
Percent	0.4%	67.8%	21.7%	0.5%	6.3%	0.6%	0.5%	1.0%	1.0%	0.1%	0.0%	0.0%	0.1%	

Counts Unlimited, Inc.

City of Menifee
 Goetz Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count
 Northbound, Southbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN001
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	1	43	3	1	0	0	0	0	0	0	0	0	0	48
01:00	0	31	3	0	1	0	0	0	0	0	0	0	0	35
02:00	0	28	5	2	2	0	0	0	1	0	0	0	0	38
03:00	0	44	10	0	4	1	0	1	0	0	0	0	0	60
04:00	0	91	34	0	9	0	0	1	0	0	0	0	0	135
05:00	0	151	56	0	26	0	0	3	0	0	0	0	0	236
06:00	1	245	74	2	36	4	0	4	3	0	0	0	0	369
07:00	1	430	113	8	32	2	2	3	11	0	0	0	1	603
08:00	2	333	115	5	19	5	1	7	8	1	0	0	0	496
09:00	2	197	68	2	20	5	4	7	12	0	0	0	0	317
10:00	3	223	68	4	8	2	3	6	11	3	0	0	0	331
11:00	1	241	70	3	20	9	6	2	14	0	0	0	0	366
12 PM	1	275	83	3	27	12	3	2	10	0	0	0	1	417
13:00	2	323	99	4	35	8	3	6	9	0	0	0	0	489
14:00	3	313	110	3	31	8	3	5	5	0	0	0	0	481
15:00	2	390	141	2	40	1	0	11	2	1	0	0	0	590
16:00	0	423	127	4	39	2	0	3	1	0	0	0	0	599
17:00	1	402	129	2	53	2	0	3	0	0	0	0	0	592
18:00	1	326	80	0	20	1	0	3	0	0	0	0	0	431
19:00	1	256	58	0	9	0	0	2	0	0	0	0	0	326
20:00	0	173	42	0	8	0	0	0	0	0	0	0	0	223
21:00	1	148	22	1	4	0	0	1	0	0	0	0	0	177
22:00	0	86	22	0	3	0	0	0	0	0	0	0	0	111
23:00	0	65	8	1	2	0	0	0	0	0	0	0	0	76
Total	23	5237	1540	47	448	62	25	70	87	5	0	0	2	7546
Percent	0.3%	69.4%	20.4%	0.6%	5.9%	0.8%	0.3%	0.9%	1.2%	0.1%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	08:00	07:00	06:00	11:00	11:00	08:00	11:00	10:00			07:00	07:00
Vol.	3	430	115	8	36	9	6	7	14	3			1	603
PM Peak	14:00	16:00	15:00	13:00	17:00	12:00	12:00	15:00	12:00	15:00			12:00	16:00
Vol.	3	423	141	4	53	12	3	11	10	1			1	599
Grand Total	23	5237	1540	47	448	62	25	70	87	5	0	0	2	7546
Percent	0.3%	69.4%	20.4%	0.6%	5.9%	0.8%	0.3%	0.9%	1.2%	0.1%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Goetz Road - Wheat Street
 24 Hour Directional Classification Count
 Eastbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN002
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	19	1	0	0	0	0	0	0	0	0	0	0	20
01:00	0	12	2	0	1	0	0	0	0	0	0	0	0	15
02:00	0	15	4	1	1	0	0	0	1	0	0	0	0	22
03:00	0	47	11	1	3	0	0	0	0	0	0	0	0	62
04:00	0	113	33	1	12	1	0	2	0	0	0	1	0	163
05:00	1	157	66	5	22	16	0	5	3	0	0	0	0	275
06:00	1	240	66	6	37	24	0	7	4	0	1	1	0	387
07:00	4	554	131	6	36	6	1	10	9	0	0	1	0	758
08:00	4	355	102	4	26	5	1	10	3	0	0	0	0	510
09:00	0	231	45	3	20	2	0	6	8	0	1	1	0	317
10:00	0	211	48	1	11	4	0	6	16	0	0	0	0	297
11:00	3	271	71	3	19	11	0	3	8	2	0	1	0	392
12 PM	2	332	77	1	23	4	0	4	4	1	0	1	0	449
13:00	1	304	66	1	22	11	0	4	15	1	0	0	0	425
14:00	6	308	86	0	24	4	1	3	8	0	0	1	0	441
15:00	8	351	127	5	29	6	0	7	4	1	0	1	1	540
16:00	0	395	98	2	35	0	0	7	2	0	0	0	0	539
17:00	5	375	118	2	34	0	0	9	0	1	0	0	1	545
18:00	2	262	80	1	16	2	0	3	2	0	0	1	0	369
19:00	1	197	33	0	11	0	0	1	2	1	0	0	1	247
20:00	0	133	28	0	9	0	0	0	1	0	0	0	0	171
21:00	0	113	12	0	7	0	0	1	0	0	0	0	0	133
22:00	1	53	12	0	0	0	0	0	0	0	0	0	0	66
23:00	0	30	6	1	1	0	0	0	0	0	0	0	0	38
Total	39	5078	1323	44	399	96	3	88	90	7	2	9	3	7181
Percent	0.5%	70.7%	18.4%	0.6%	5.6%	1.3%	0.0%	1.2%	1.3%	0.1%	0.0%	0.1%	0.0%	
AM Peak	07:00	07:00	07:00	06:00	06:00	06:00	07:00	07:00	10:00	11:00	06:00	04:00		07:00
Vol.	4	554	131	6	37	24	1	10	16	2	1	1		758
PM Peak	15:00	16:00	15:00	15:00	16:00	13:00	14:00	17:00	13:00	12:00		12:00	15:00	17:00
Vol.	8	395	127	5	35	11	1	9	15	1		1	1	545
Grand Total	39	5078	1323	44	399	96	3	88	90	7	2	9	3	7181
Percent	0.5%	70.7%	18.4%	0.6%	5.6%	1.3%	0.0%	1.2%	1.3%	0.1%	0.0%	0.1%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Goetz Road - Wheat Street
 24 Hour Directional Classification Count
 Westbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN002
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	52	1	0	0	0	0	0	1	0	0	0	0	54
01:00	0	31	5	0	0	0	0	0	0	0	0	0	0	36
02:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
03:00	0	23	3	0	0	1	0	0	0	0	0	0	0	27
04:00	0	64	3	0	3	0	0	0	0	0	0	0	0	70
05:00	0	94	10	0	0	0	0	0	1	0	0	1	0	106
06:00	1	182	23	0	4	8	0	0	3	1	0	0	0	222
07:00	0	306	42	0	9	6	4	0	7	2	0	1	0	377
08:00	2	354	34	0	4	3	5	6	7	1	0	0	0	416
09:00	1	230	30	0	5	9	2	2	11	0	0	0	0	290
10:00	3	212	19	0	6	4	3	2	10	0	0	0	1	260
11:00	1	228	29	0	1	12	5	0	10	0	0	0	2	288
12 PM	1	299	46	0	7	12	6	3	7	1	0	0	0	382
13:00	2	414	57	0	6	6	3	4	10	2	0	1	0	505
14:00	3	372	57	0	3	10	8	5	8	2	0	0	0	468
15:00	5	406	68	0	4	9	7	11	6	4	0	2	1	523
16:00	2	448	75	1	7	8	12	7	2	4	0	1	1	568
17:00	6	450	58	0	4	13	5	6	3	4	0	1	0	550
18:00	2	414	42	0	3	3	4	4	1	1	0	0	0	474
19:00	4	335	27	1	5	1	1	0	1	0	0	1	0	376
20:00	5	244	17	0	2	0	0	1	0	0	0	0	0	269
21:00	1	195	12	0	4	0	1	0	2	0	0	0	0	215
22:00	2	135	3	0	0	0	0	0	1	0	0	0	0	141
23:00	1	83	5	0	0	0	0	0	0	0	0	0	0	89
Total	42	5593	666	2	77	105	66	51	91	22	0	8	5	6728
Percent	0.6%	83.1%	9.9%	0.0%	1.1%	1.6%	1.0%	0.8%	1.4%	0.3%	0.0%	0.1%	0.1%	
AM Peak	10:00	08:00	07:00		07:00	11:00	08:00	08:00	09:00	07:00		05:00	11:00	08:00
Vol.	3	354	42		9	12	5	6	11	2		1	2	416
PM Peak	17:00	17:00	16:00	16:00	12:00	17:00	16:00	15:00	13:00	15:00		15:00	15:00	16:00
Vol.	6	450	75	1	7	13	12	11	10	4		2	1	568
Grand Total	42	5593	666	2	77	105	66	51	91	22	0	8	5	6728
Percent	0.6%	83.1%	9.9%	0.0%	1.1%	1.6%	1.0%	0.8%	1.4%	0.3%	0.0%	0.1%	0.1%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Goetz Road - Wheat Street
 24 Hour Directional Classification Count
 Eastbound, Westbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN002
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	71	2	0	0	0	0	0	1	0	0	0	0	74
01:00	0	43	7	0	1	0	0	0	0	0	0	0	0	51
02:00	0	37	4	1	1	0	0	0	1	0	0	0	0	44
03:00	0	70	14	1	3	1	0	0	0	0	0	0	0	89
04:00	0	177	36	1	15	1	0	2	0	0	0	1	0	233
05:00	1	251	76	5	22	16	0	5	4	0	0	1	0	381
06:00	2	422	89	6	41	32	0	7	7	1	1	1	0	609
07:00	4	860	173	6	45	12	5	10	16	2	0	2	0	1135
08:00	6	709	136	4	30	8	6	16	10	1	0	0	0	926
09:00	1	461	75	3	25	11	2	8	19	0	1	1	0	607
10:00	3	423	67	1	17	8	3	8	26	0	0	0	1	557
11:00	4	499	100	3	20	23	5	3	18	2	0	1	2	680
12 PM	3	631	123	1	30	16	6	7	11	2	0	1	0	831
13:00	3	718	123	1	28	17	3	8	25	3	0	1	0	930
14:00	9	680	143	0	27	14	9	8	16	2	0	1	0	909
15:00	13	757	195	5	33	15	7	18	10	5	0	3	2	1063
16:00	2	843	173	3	42	8	12	14	4	4	0	1	1	1107
17:00	11	825	176	2	38	13	5	15	3	5	0	1	1	1095
18:00	4	676	122	1	19	5	4	7	3	1	0	1	0	843
19:00	5	532	60	1	16	1	1	1	3	1	0	1	1	623
20:00	5	377	45	0	11	0	0	1	1	0	0	0	0	440
21:00	1	308	24	0	11	0	1	1	2	0	0	0	0	348
22:00	3	188	15	0	0	0	0	0	1	0	0	0	0	207
23:00	1	113	11	1	1	0	0	0	0	0	0	0	0	127
Total	81	10671	1989	46	476	201	69	139	181	29	2	17	8	13909
Percent	0.6%	76.7%	14.3%	0.3%	3.4%	1.4%	0.5%	1.0%	1.3%	0.2%	0.0%	0.1%	0.1%	
AM Peak	08:00	07:00	07:00	06:00	07:00	06:00	08:00	08:00	10:00	07:00	06:00	07:00	11:00	07:00
Vol.	6	860	173	6	45	32	6	16	26	2	1	2	2	1135
PM Peak	15:00	16:00	15:00	15:00	16:00	13:00	16:00	15:00	13:00	15:00		15:00	15:00	16:00
Vol.	13	843	195	5	42	17	12	18	25	5		3	2	1107
Grand Total	81	10671	1989	46	476	201	69	139	181	29	2	17	8	13909
Percent	0.6%	76.7%	14.3%	0.3%	3.4%	1.4%	0.5%	1.0%	1.3%	0.2%	0.0%	0.1%	0.1%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Wheat Street - Murrieta Road
 24 Hour Directional Classification Count
Eastbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN003
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	20	1	0	0	0	0	0	0	0	0	0	0	21
01:00	0	12	1	0	2	0	0	0	0	0	0	0	0	15
02:00	0	15	4	1	1	0	0	0	1	0	0	0	0	22
03:00	0	46	10	1	3	0	0	0	0	0	0	0	0	60
04:00	0	115	36	1	8	1	0	2	1	0	0	0	0	164
05:00	0	153	66	6	24	17	0	6	3	0	0	0	0	275
06:00	1	236	71	7	36	25	2	8	4	0	2	0	0	392
07:00	2	559	118	4	29	5	1	16	7	3	0	1	1	746
08:00	1	351	97	2	26	6	0	15	5	2	0	0	1	506
09:00	0	231	54	2	23	4	1	8	8	0	0	0	0	331
10:00	0	220	54	1	12	3	0	6	14	0	0	0	0	310
11:00	4	268	74	3	18	10	2	3	10	0	0	1	0	393
12 PM	1	333	84	3	23	6	0	6	4	0	0	0	1	461
13:00	2	290	75	2	21	13	0	5	14	0	0	0	1	423
14:00	9	310	91	1	22	5	2	6	3	0	0	1	1	451
15:00	4	348	106	4	32	5	1	10	4	1	1	0	0	516
16:00	1	392	105	3	36	1	0	9	2	0	0	0	1	550
17:00	6	386	117	1	36	0	0	6	2	0	0	0	0	554
18:00	2	280	79	1	19	0	0	3	2	0	0	0	0	386
19:00	1	206	32	0	12	0	0	0	3	0	0	0	0	254
20:00	0	135	28	0	10	0	0	0	1	0	0	0	0	174
21:00	0	111	12	0	7	0	0	1	0	0	0	0	0	131
22:00	0	57	12	0	0	0	0	0	0	0	0	0	0	69
23:00	0	32	5	1	2	0	0	0	0	0	0	0	0	40
Total	34	5106	1332	44	402	101	9	110	88	6	3	3	6	7244
Percent	0.5%	70.5%	18.4%	0.6%	5.5%	1.4%	0.1%	1.5%	1.2%	0.1%	0.0%	0.0%	0.1%	
AM Peak	11:00	07:00	07:00	06:00	06:00	06:00	06:00	07:00	10:00	07:00	06:00	07:00	07:00	07:00
Vol.	4	559	118	7	36	25	2	16	14	3	2	1	1	746
PM Peak	14:00	16:00	17:00	15:00	16:00	13:00	14:00	15:00	13:00	15:00	15:00	14:00	12:00	17:00
Vol.	9	392	117	4	36	13	2	10	14	1	1	1	1	554
Grand Total	34	5106	1332	44	402	101	9	110	88	6	3	3	6	7244
Percent	0.5%	70.5%	18.4%	0.6%	5.5%	1.4%	0.1%	1.5%	1.2%	0.1%	0.0%	0.0%	0.1%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

MEN003

Site Code: 108-23147

City of Menifee
Ethanac Road
B/ Wheat Street - Murrieta Road
24 Hour Directional Classification Count
Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	50	7	0	0	0	0	0	1	0	0	0	0	58
01:00	0	24	9	0	0	0	0	0	0	0	0	0	0	33
02:00	0	20	2	0	0	0	0	0	0	0	0	0	0	22
03:00	1	16	7	0	1	1	0	0	0	0	0	0	0	26
04:00	0	57	9	0	5	0	0	0	0	0	0	0	0	71
05:00	0	78	25	0	4	0	0	2	0	0	0	0	0	109
06:00	1	137	47	0	24	7	0	3	1	1	0	0	1	222
07:00	1	260	58	5	22	5	2	3	5	1	1	1	0	364
08:00	3	306	77	3	11	2	0	9	5	1	0	1	0	418
09:00	1	182	75	3	14	8	1	5	10	1	0	0	0	300
10:00	1	188	39	3	12	4	2	6	10	0	0	0	1	266
11:00	0	188	52	0	18	11	4	3	11	0	0	0	2	289
12 PM	2	267	64	2	23	12	3	9	7	1	1	0	1	392
13:00	4	371	90	4	28	4	1	9	6	0	2	0	1	520
14:00	2	328	77	2	27	7	1	8	7	0	0	1	0	460
15:00	3	374	101	2	26	2	3	17	3	2	1	2	0	536
16:00	7	382	130	3	28	8	5	14	2	0	1	2	0	582
17:00	4	390	113	0	26	12	3	8	1	1	1	0	0	559
18:00	0	378	78	1	21	1	3	2	0	0	0	0	0	484
19:00	0	296	61	4	12	0	0	2	0	0	0	0	0	375
20:00	0	217	48	2	8	0	0	1	0	0	0	0	0	276
21:00	0	176	32	4	3	0	0	0	1	0	0	0	0	216
22:00	1	123	16	0	3	0	0	0	1	0	0	0	0	144
23:00	1	77	12	0	2	0	0	1	0	0	0	0	0	93
Total	32	4885	1229	38	318	84	28	102	71	8	7	7	6	6815
Percent	0.5%	71.7%	18.0%	0.6%	4.7%	1.2%	0.4%	1.5%	1.0%	0.1%	0.1%	0.1%	0.1%	
AM Peak	08:00	08:00	08:00	07:00	06:00	11:00	11:00	08:00	11:00	06:00	07:00	07:00	11:00	08:00
Vol.	3	306	77	5	24	11	4	9	11	1	1	1	2	418
PM Peak	16:00	17:00	16:00	13:00	13:00	12:00	16:00	15:00	12:00	15:00	13:00	15:00	12:00	16:00
Vol.	7	390	130	4	28	12	5	17	7	2	2	2	1	582
Grand Total	32	4885	1229	38	318	84	28	102	71	8	7	7	6	6815
Percent	0.5%	71.7%	18.0%	0.6%	4.7%	1.2%	0.4%	1.5%	1.0%	0.1%	0.1%	0.1%	0.1%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Wheat Street - Murrieta Road
 24 Hour Directional Classification Count
 Eastbound, Westbound

PO Box 1178
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 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN003
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	70	8	0	0	0	0	0	1	0	0	0	0	79
01:00	0	36	10	0	2	0	0	0	0	0	0	0	0	48
02:00	0	35	6	1	1	0	0	0	1	0	0	0	0	44
03:00	1	62	17	1	4	1	0	0	0	0	0	0	0	86
04:00	0	172	45	1	13	1	0	2	1	0	0	0	0	235
05:00	0	231	91	6	28	17	0	8	3	0	0	0	0	384
06:00	2	373	118	7	60	32	2	11	5	1	2	0	1	614
07:00	3	819	176	9	51	10	3	19	12	4	1	2	1	1110
08:00	4	657	174	5	37	8	0	24	10	3	0	1	1	924
09:00	1	413	129	5	37	12	2	13	18	1	0	0	0	631
10:00	1	408	93	4	24	7	2	12	24	0	0	0	1	576
11:00	4	456	126	3	36	21	6	6	21	0	0	1	2	682
12 PM	3	600	148	5	46	18	3	15	11	1	1	0	2	853
13:00	6	661	165	6	49	17	1	14	20	0	2	0	2	943
14:00	11	638	168	3	49	12	3	14	10	0	0	2	1	911
15:00	7	722	207	6	58	7	4	27	7	3	2	2	0	1052
16:00	8	774	235	6	64	9	5	23	4	0	1	2	1	1132
17:00	10	776	230	1	62	12	3	14	3	1	1	0	0	1113
18:00	2	658	157	2	40	1	3	5	2	0	0	0	0	870
19:00	1	502	93	4	24	0	0	2	3	0	0	0	0	629
20:00	0	352	76	2	18	0	0	1	1	0	0	0	0	450
21:00	0	287	44	4	10	0	0	1	1	0	0	0	0	347
22:00	1	180	28	0	3	0	0	0	1	0	0	0	0	213
23:00	1	109	17	1	4	0	0	1	0	0	0	0	0	133
Total	66	9991	2561	82	720	185	37	212	159	14	10	10	12	14059
Percent	0.5%	71.1%	18.2%	0.6%	5.1%	1.3%	0.3%	1.5%	1.1%	0.1%	0.1%	0.1%	0.1%	
AM Peak	08:00	07:00	07:00	07:00	06:00	06:00	11:00	08:00	10:00	07:00	06:00	07:00	11:00	07:00
Vol.	4	819	176	9	60	32	6	24	24	4	2	2	2	1110
PM Peak	14:00	17:00	16:00	13:00	16:00	12:00	16:00	15:00	13:00	15:00	13:00	14:00	12:00	16:00
Vol.	11	776	235	6	64	18	5	27	20	3	2	2	2	1132
Grand Total	66	9991	2561	82	720	185	37	212	159	14	10	10	12	14059
Percent	0.5%	71.1%	18.2%	0.6%	5.1%	1.3%	0.3%	1.5%	1.1%	0.1%	0.1%	0.1%	0.1%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Murrieta Road - Evans Road
 24 Hour Directional Classification Count
Eastbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN004
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	27	7	0	0	0	0	0	0	0	0	0	0	34
01:00	0	13	5	0	2	0	0	0	0	0	0	0	0	20
02:00	0	11	3	1	5	0	0	0	1	0	0	0	0	21
03:00	0	54	13	0	6	0	0	0	0	0	0	0	0	73
04:00	0	137	34	3	26	1	0	2	1	0	0	0	0	204
05:00	0	201	83	5	39	18	0	11	3	0	0	0	0	360
06:00	3	289	83	8	55	16	1	19	6	1	1	0	0	482
07:00	6	553	150	6	49	6	0	20	5	1	2	2	0	800
08:00	4	427	129	4	40	4	0	20	6	0	0	2	0	636
09:00	1	293	74	5	38	5	1	10	5	2	0	1	0	435
10:00	1	275	87	4	24	2	0	9	11	1	1	0	3	418
11:00	3	328	86	5	31	8	0	4	9	0	0	0	0	474
12 PM	2	349	110	6	43	6	0	14	7	1	0	0	0	538
13:00	1	329	120	2	34	11	0	10	15	0	0	1	0	523
14:00	4	343	100	4	39	6	0	11	4	0	0	0	1	512
15:00	8	393	134	5	42	6	0	21	4	3	0	1	0	617
16:00	3	371	131	6	46	1	0	16	2	2	0	2	0	580
17:00	6	365	146	2	44	1	0	17	1	3	1	1	0	587
18:00	6	308	113	3	30	1	0	8	2	0	0	0	0	471
19:00	1	210	64	3	18	0	0	9	3	0	0	0	0	308
20:00	0	129	56	1	17	0	0	2	1	0	0	0	0	206
21:00	1	108	30	0	13	0	0	0	0	0	0	0	0	152
22:00	0	63	23	0	3	0	0	0	0	0	0	0	0	89
23:00	0	30	15	1	6	0	0	0	0	0	0	0	0	52
Total	50	5606	1796	74	650	92	2	203	86	14	5	10	4	8592
Percent	0.6%	65.2%	20.9%	0.9%	7.6%	1.1%	0.0%	2.4%	1.0%	0.2%	0.1%	0.1%	0.0%	
AM Peak	07:00	07:00	07:00	06:00	06:00	05:00	06:00	07:00	10:00	09:00	07:00	07:00	10:00	07:00
Vol.	6	553	150	8	55	18	1	20	11	2	2	2	3	800
PM Peak	15:00	15:00	17:00	12:00	16:00	13:00		15:00	13:00	15:00	17:00	16:00	14:00	15:00
Vol.	8	393	146	6	46	11		21	15	3	1	2	1	617
Grand Total	50	5606	1796	74	650	92	2	203	86	14	5	10	4	8592
Percent	0.6%	65.2%	20.9%	0.9%	7.6%	1.1%	0.0%	2.4%	1.0%	0.2%	0.1%	0.1%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Murrieta Road - Evans Road
 24 Hour Directional Classification Count
 Westbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN004
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	56	11	0	1	0	0	0	1	0	0	0	0	69
01:00	0	30	8	0	0	0	0	0	1	0	0	0	0	39
02:00	0	22	4	0	1	0	0	0	0	0	0	0	0	27
03:00	1	21	6	0	1	1	0	0	0	0	0	0	0	30
04:00	0	44	12	0	7	0	0	0	0	0	0	0	0	63
05:00	0	71	32	1	12	0	0	3	0	0	0	0	1	120
06:00	0	139	54	3	29	6	0	6	4	1	0	0	0	242
07:00	1	222	70	4	33	3	2	12	6	0	0	1	1	355
08:00	1	306	115	3	25	1	0	12	5	0	2	2	2	474
09:00	3	202	96	3	31	8	1	6	10	0	0	0	0	360
10:00	0	213	58	4	27	3	1	9	13	0	1	0	0	329
11:00	1	242	77	2	25	7	5	8	11	3	0	0	1	382
12 PM	2	320	91	4	28	10	3	10	8	1	1	0	1	479
13:00	1	375	117	6	46	1	1	21	9	0	1	0	0	578
14:00	2	366	112	3	42	5	0	12	6	1	0	1	0	550
15:00	4	428	149	1	54	2	2	15	2	0	1	1	1	660
16:00	0	428	141	4	46	5	5	20	2	0	1	3	0	655
17:00	4	480	128	3	48	9	4	14	4	0	1	2	0	697
18:00	0	425	88	1	37	2	2	5	1	0	1	0	0	562
19:00	1	331	84	6	29	1	0	6	2	1	1	0	0	462
20:00	1	243	57	2	21	0	0	3	0	0	0	0	0	327
21:00	0	211	47	4	13	0	0	2	1	0	0	0	0	278
22:00	1	127	21	0	4	0	0	0	1	0	0	0	0	154
23:00	0	79	26	0	4	0	0	2	0	0	0	0	0	111
Total	23	5381	1604	54	564	64	26	166	87	7	10	10	7	8003
Percent	0.3%	67.2%	20.0%	0.7%	7.0%	0.8%	0.3%	2.1%	1.1%	0.1%	0.1%	0.1%	0.1%	
AM Peak	09:00	08:00	08:00	07:00	07:00	09:00	11:00	07:00	10:00	11:00	08:00	08:00	08:00	08:00
Vol.	3	306	115	4	33	8	5	12	13	3	2	2	2	474
PM Peak	15:00	17:00	15:00	13:00	15:00	12:00	16:00	13:00	13:00	12:00	12:00	16:00	12:00	17:00
Vol.	4	480	149	6	54	10	5	21	9	1	1	3	1	697
Grand Total	23	5381	1604	54	564	64	26	166	87	7	10	10	7	8003
Percent	0.3%	67.2%	20.0%	0.7%	7.0%	0.8%	0.3%	2.1%	1.1%	0.1%	0.1%	0.1%	0.1%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
Ethanac Road
B/ Murrieta Road - Evans Road
24 Hour Directional Classification Count
Eastbound, Westbound

MEN004
Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	83	18	0	1	0	0	0	1	0	0	0	0	103
01:00	0	43	13	0	2	0	0	0	1	0	0	0	0	59
02:00	0	33	7	1	6	0	0	0	1	0	0	0	0	48
03:00	1	75	19	0	7	1	0	0	0	0	0	0	0	103
04:00	0	181	46	3	33	1	0	2	1	0	0	0	0	267
05:00	0	272	115	6	51	18	0	14	3	0	0	0	1	480
06:00	3	428	137	11	84	22	1	25	10	2	1	0	0	724
07:00	7	775	220	10	82	9	2	32	11	1	2	3	1	1155
08:00	5	733	244	7	65	5	0	32	11	0	2	4	2	1110
09:00	4	495	170	8	69	13	2	16	15	2	0	1	0	795
10:00	1	488	145	8	51	5	1	18	24	1	2	0	3	747
11:00	4	570	163	7	56	15	5	12	20	3	0	0	1	856
12 PM	4	669	201	10	71	16	3	24	15	2	1	0	1	1017
13:00	2	704	237	8	80	12	1	31	24	0	1	1	0	1101
14:00	6	709	212	7	81	11	0	23	10	1	0	1	1	1062
15:00	12	821	283	6	96	8	2	36	6	3	1	2	1	1277
16:00	3	799	272	10	92	6	5	36	4	2	1	5	0	1235
17:00	10	845	274	5	92	10	4	31	5	3	2	3	0	1284
18:00	6	733	201	4	67	3	2	13	3	0	1	0	0	1033
19:00	2	541	148	9	47	1	0	15	5	1	1	0	0	770
20:00	1	372	113	3	38	0	0	5	1	0	0	0	0	533
21:00	1	319	77	4	26	0	0	2	1	0	0	0	0	430
22:00	1	190	44	0	7	0	0	0	1	0	0	0	0	243
23:00	0	109	41	1	10	0	0	2	0	0	0	0	0	163
Total	73	10987	3400	128	1214	156	28	369	173	21	15	20	11	16595
Percent	0.4%	66.2%	20.5%	0.8%	7.3%	0.9%	0.2%	2.2%	1.0%	0.1%	0.1%	0.1%	0.1%	
AM Peak	07:00	07:00	08:00	06:00	06:00	06:00	11:00	07:00	10:00	11:00	07:00	08:00	10:00	07:00
Vol.	7	775	244	11	84	22	5	32	24	3	2	4	3	1155
PM Peak	15:00	17:00	15:00	12:00	15:00	12:00	16:00	15:00	13:00	15:00	17:00	16:00	12:00	17:00
Vol.	12	845	283	10	96	16	5	36	24	3	2	5	1	1284
Grand Total	73	10987	3400	128	1214	156	28	369	173	21	15	20	11	16595
Percent	0.4%	66.2%	20.5%	0.8%	7.3%	0.9%	0.2%	2.2%	1.0%	0.1%	0.1%	0.1%	0.1%	

Counts Unlimited, Inc.

PO Box 1178
 Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
 Ethanac Road
 B/ Evans Road - Case Road
 24 Hour Directional Classification Count
Eastbound

MEN005
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	24	3	0	0	1	0	0	0	0	0	0	0	28
01:00	0	14	5	0	2	0	0	0	0	0	0	0	0	21
02:00	0	17	5	1	2	0	0	0	1	0	0	0	0	26
03:00	0	54	14	1	3	0	0	0	0	0	0	0	0	72
04:00	0	160	44	1	16	1	0	1	1	0	0	0	0	224
05:00	1	219	84	6	27	21	0	10	2	1	0	0	0	371
06:00	3	313	86	8	41	15	0	16	7	0	0	0	0	489
07:00	15	602	140	4	30	6	6	17	9	1	1	2	1	834
08:00	4	442	114	4	24	7	0	14	7	2	1	0	0	619
09:00	0	321	68	4	24	7	1	8	8	0	0	0	0	441
10:00	1	291	85	3	21	4	1	6	14	1	0	0	1	428
11:00	3	364	81	5	20	10	0	5	10	0	0	1	0	499
12 PM	2	409	104	4	25	7	0	5	4	1	1	1	2	565
13:00	2	378	93	2	24	17	1	8	13	0	0	1	0	539
14:00	4	385	105	2	21	6	1	9	5	1	0	0	0	539
15:00	11	421	123	4	25	8	1	11	3	1	0	0	1	609
16:00	4	445	109	4	31	4	0	13	1	2	1	0	1	615
17:00	9	442	115	0	26	2	0	12	2	0	1	0	0	609
18:00	2	341	97	3	22	1	0	4	2	0	0	0	0	472
19:00	3	250	45	1	12	0	0	1	3	0	0	0	0	315
20:00	0	158	32	0	8	0	0	2	1	0	0	0	0	201
21:00	1	127	17	0	7	2	0	0	0	0	0	0	0	154
22:00	1	69	18	0	0	0	0	0	0	0	0	0	0	88
23:00	2	33	10	1	2	0	0	0	0	0	0	0	0	48
Total	68	6279	1597	58	413	119	11	142	93	10	5	5	6	8806
Percent	0.8%	71.3%	18.1%	0.7%	4.7%	1.4%	0.1%	1.6%	1.1%	0.1%	0.1%	0.1%	0.1%	
AM Peak	07:00	07:00	07:00	06:00	06:00	05:00	07:00	07:00	10:00	08:00	07:00	07:00	07:00	07:00
Vol.	15	602	140	8	41	21	6	17	14	2	1	2	1	834
PM Peak	15:00	16:00	15:00	12:00	16:00	13:00	13:00	16:00	13:00	16:00	12:00	12:00	12:00	16:00
Vol.	11	445	123	4	31	17	1	13	13	2	1	1	2	615
Grand Total	68	6279	1597	58	413	119	11	142	93	10	5	5	6	8806
Percent	0.8%	71.3%	18.1%	0.7%	4.7%	1.4%	0.1%	1.6%	1.1%	0.1%	0.1%	0.1%	0.1%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

MEN005

Site Code: 108-23147

City of Menifee
Ethanac Road
B/ Evans Road - Case Road
24 Hour Directional Classification Count
Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	53	11	0	1	0	0	0	1	0	0	0	0	66
01:00	0	31	7	0	1	0	0	0	1	0	0	0	0	40
02:00	0	22	5	0	0	0	0	0	0	0	0	0	0	27
03:00	1	21	6	0	2	1	0	0	0	0	0	0	0	31
04:00	0	42	15	0	6	0	0	0	0	0	0	0	0	63
05:00	1	79	44	1	13	0	0	0	1	0	0	0	0	139
06:00	2	140	60	4	32	7	0	5	3	1	0	0	0	254
07:00	1	237	71	5	30	5	2	16	4	3	2	1	0	377
08:00	6	283	120	6	21	1	4	15	7	0	0	2	0	465
09:00	2	193	91	5	24	7	0	9	11	2	0	0	1	345
10:00	2	205	74	5	27	2	1	12	9	0	0	0	0	337
11:00	3	243	82	2	27	9	7	15	7	0	1	0	1	397
12 PM	7	315	93	5	30	11	3	12	9	1	0	0	0	486
13:00	7	389	123	6	56	4	2	15	4	2	0	1	2	611
14:00	7	344	96	3	47	4	0	17	5	2	1	2	2	530
15:00	8	431	141	1	48	4	2	15	3	1	0	1	1	656
16:00	5	431	146	4	36	9	2	29	1	5	1	1	0	670
17:00	9	445	139	2	52	7	3	8	5	2	1	0	0	673
18:00	4	419	100	1	35	3	4	11	1	2	1	0	0	581
19:00	3	334	70	5	23	2	0	4	3	0	1	0	0	445
20:00	1	233	60	2	15	1	0	5	0	0	0	0	0	317
21:00	1	203	44	4	12	0	0	2	1	0	0	0	0	267
22:00	1	125	19	0	3	0	0	1	1	0	0	0	0	150
23:00	0	87	17	0	6	0	0	2	0	0	0	0	0	112
Total	71	5305	1634	61	547	77	30	193	77	21	8	8	7	8039
Percent	0.9%	66.0%	20.3%	0.8%	6.8%	1.0%	0.4%	2.4%	1.0%	0.3%	0.1%	0.1%	0.1%	
AM Peak	08:00	08:00	08:00	08:00	06:00	11:00	11:00	07:00	09:00	07:00	07:00	08:00	09:00	08:00
Vol.	6	283	120	6	32	9	7	16	11	3	2	2	1	465
PM Peak	17:00	17:00	16:00	13:00	13:00	12:00	18:00	16:00	12:00	16:00	14:00	14:00	13:00	17:00
Vol.	9	445	146	6	56	11	4	29	9	5	1	2	2	673
Grand Total	71	5305	1634	61	547	77	30	193	77	21	8	8	7	8039
Percent	0.9%	66.0%	20.3%	0.8%	6.8%	1.0%	0.4%	2.4%	1.0%	0.3%	0.1%	0.1%	0.1%	

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City of Menifee
Ethanac Road
B/ Evans Road - Case Road
24 Hour Directional Classification Count
Eastbound, Westbound

MEN005
Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	77	14	0	1	1	0	0	1	0	0	0	0	94
01:00	0	45	12	0	3	0	0	0	1	0	0	0	0	61
02:00	0	39	10	1	2	0	0	0	1	0	0	0	0	53
03:00	1	75	20	1	5	1	0	0	0	0	0	0	0	103
04:00	0	202	59	1	22	1	0	1	1	0	0	0	0	287
05:00	2	298	128	7	40	21	0	10	3	1	0	0	0	510
06:00	5	453	146	12	73	22	0	21	10	1	0	0	0	743
07:00	16	839	211	9	60	11	8	33	13	4	3	3	1	1211
08:00	10	725	234	10	45	8	4	29	14	2	1	2	0	1084
09:00	2	514	159	9	48	14	1	17	19	2	0	0	1	786
10:00	3	496	159	8	48	6	2	18	23	1	0	0	1	765
11:00	6	607	163	7	47	19	7	20	17	0	1	1	1	896
12 PM	9	724	197	9	55	18	3	17	13	2	1	1	2	1051
13:00	9	767	216	8	80	21	3	23	17	2	0	2	2	1150
14:00	11	729	201	5	68	10	1	26	10	3	1	2	2	1069
15:00	19	852	264	5	73	12	3	26	6	2	0	1	2	1265
16:00	9	876	255	8	67	13	2	42	2	7	2	1	1	1285
17:00	18	887	254	2	78	9	3	20	7	2	2	0	0	1282
18:00	6	760	197	4	57	4	4	15	3	2	1	0	0	1053
19:00	6	584	115	6	35	2	0	5	6	0	1	0	0	760
20:00	1	391	92	2	23	1	0	7	1	0	0	0	0	518
21:00	2	330	61	4	19	2	0	2	1	0	0	0	0	421
22:00	2	194	37	0	3	0	0	1	1	0	0	0	0	238
23:00	2	120	27	1	8	0	0	2	0	0	0	0	0	160
Total	139	11584	3231	119	960	196	41	335	170	31	13	13	13	16845
Percent	0.8%	68.8%	19.2%	0.7%	5.7%	1.2%	0.2%	2.0%	1.0%	0.2%	0.1%	0.1%	0.1%	
AM Peak	07:00	07:00	08:00	06:00	06:00	06:00	07:00	07:00	10:00	07:00	07:00	07:00	07:00	07:00
Vol.	16	839	234	12	73	22	8	33	23	4	3	3	1	1211
PM Peak	15:00	17:00	15:00	12:00	13:00	13:00	18:00	16:00	13:00	16:00	16:00	13:00	12:00	16:00
Vol.	19	887	264	9	80	21	4	42	17	7	2	2	2	1285
Grand Total	139	11584	3231	119	960	196	41	335	170	31	13	13	13	16845
Percent	0.8%	68.8%	19.2%	0.7%	5.7%	1.2%	0.2%	2.0%	1.0%	0.2%	0.1%	0.1%	0.1%	

Counts Unlimited, Inc.

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City of Menifee
 Ethanac Road
 B/ Case Road - Interstate 215 Southbound
 24 Hour Directional Classification Count

MEN006
 Site Code: 108-23147

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	52	7	0	2	1	0	0	1	0	0	0	0	63
01:00	0	29	9	1	2	0	0	0	6	0	0	0	0	47
02:00	0	30	8	1	2	0	0	0	2	0	0	0	0	43
03:00	0	78	18	1	3	1	0	1	3	0	0	0	0	105
04:00	0	194	58	1	31	1	0	3	5	0	2	0	0	295
05:00	2	273	112	9	38	16	0	18	9	0	2	0	0	479
06:00	1	389	120	5	61	20	3	21	11	2	0	0	1	634
07:00	4	469	127	7	52	9	2	28	12	1	2	0	1	714
08:00	8	488	157	6	48	6	2	32	13	3	2	3	2	770
09:00	2	425	133	3	49	7	1	25	9	4	0	1	0	659
10:00	6	393	140	6	47	5	0	22	25	1	0	0	0	645
11:00	3	508	143	5	39	14	2	14	16	6	1	1	1	753
12 PM	7	532	167	4	48	8	5	16	12	1	1	4	1	806
13:00	6	506	147	5	39	9	4	20	23	2	1	0	1	763
14:00	8	488	139	7	49	9	2	19	5	7	1	1	0	735
15:00	7	537	175	6	53	9	0	22	7	4	4	0	1	825
16:00	2	529	150	5	37	9	0	25	6	3	2	0	0	768
17:00	6	568	153	1	37	5	1	16	5	2	0	0	2	796
18:00	5	497	137	3	27	2	2	12	1	3	0	0	1	690
19:00	2	389	76	3	21	2	0	16	6	0	0	0	0	515
20:00	2	270	53	0	14	2	0	5	1	0	0	0	0	347
21:00	0	178	38	0	9	2	0	2	5	0	0	0	0	234
22:00	0	126	28	0	4	0	0	0	5	0	0	0	0	163
23:00	0	76	13	1	2	1	0	0	1	0	0	0	0	94
Total	71	8024	2308	80	714	138	24	317	189	39	18	10	11	11943
Percent	0.6%	67.2%	19.3%	0.7%	6.0%	1.2%	0.2%	2.7%	1.6%	0.3%	0.2%	0.1%	0.1%	
AM Peak	08:00	11:00	08:00	05:00	06:00	06:00	06:00	08:00	10:00	11:00	04:00	08:00	08:00	08:00
Vol.	8	508	157	9	61	20	3	32	25	6	2	3	2	770
PM Peak	14:00	17:00	15:00	14:00	15:00	13:00	12:00	16:00	13:00	14:00	15:00	12:00	17:00	15:00
Vol.	8	568	175	7	53	9	5	25	23	7	4	4	2	825
Grand Total	71	8024	2308	80	714	138	24	317	189	39	18	10	11	11943
Percent	0.6%	67.2%	19.3%	0.7%	6.0%	1.2%	0.2%	2.7%	1.6%	0.3%	0.2%	0.1%	0.1%	

Counts Unlimited, Inc.

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City of Menifee
Ethanac Road
B/ Case Road - Interstate 215 Southbound
24 Hour Directional Classification Count

MEN006
Site Code: 108-23147

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	71	18	0	2	0	0	0	0	0	0	0	0	91
01:00	2	204	93	2	42	4	1	9	4	0	0	0	0	361
02:00	7	293	129	6	69	8	1	24	10	1	1	0	0	549
03:00	6	476	201	10	52	9	3	22	9	0	1	0	0	789
04:00	5	416	168	11	49	6	1	14	12	2	2	0	0	686
05:00	1	350	123	1	38	7	0	9	13	0	0	1	2	545
06:00	8	397	140	3	41	8	8	12	12	1	0	1	2	633
07:00	4	426	154	8	51	13	5	20	13	5	0	1	2	702
08:00	10	557	152	8	39	11	2	25	17	3	1	2	2	829
09:00	8	568	173	6	59	5	6	13	6	4	0	2	1	851
10:00	10	563	184	7	58	6	4	19	5	0	0	0	1	857
11:00	7	633	220	6	60	7	4	19	2	8	0	1	1	968
12 PM	13	646	177	5	48	12	10	25	7	5	0	0	0	948
13:00	9	614	164	2	53	9	5	9	2	1	0	0	0	868
14:00	7	561	132	8	35	7	2	15	1	0	1	0	0	769
15:00	4	359	92	4	18	2	0	5	2	1	0	0	1	488
16:00	2	314	68	5	16	1	0	4	2	0	0	0	0	412
17:00	1	193	46	0	5	0	0	0	3	0	0	0	0	248
18:00	0	145	20	0	4	0	0	1	1	0	0	1	0	172
19:00	0	94	12	0	4	0	0	0	3	0	0	0	0	113
20:00	0	66	14	0	4	1	0	0	2	0	0	0	0	87
21:00	0	48	12	0	1	2	0	0	3	0	0	0	0	66
22:00	1	38	6	0	1	0	0	0	2	0	0	0	0	48
23:00	0	60	17	2	6	2	0	1	3	0	0	0	0	91
Total	105	8092	2515	94	755	120	52	246	134	31	6	9	12	12171
Percent	0.9%	66.5%	20.7%	0.8%	6.2%	1.0%	0.4%	2.0%	1.1%	0.3%	0.0%	0.1%	0.1%	
AM Peak	08:00	11:00	11:00	04:00	02:00	07:00	06:00	08:00	08:00	11:00	04:00	08:00	05:00	11:00
Vol.	10	633	220	11	69	13	8	25	17	8	2	2	2	968
PM Peak	12:00	12:00	12:00	14:00	13:00	12:00	12:00	12:00	12:00	12:00	14:00	18:00	15:00	12:00
Vol.	13	646	177	8	53	12	10	25	7	5	1	1	1	948
Grand Total	105	8092	2515	94	755	120	52	246	134	31	6	9	12	12171
Percent	0.9%	66.5%	20.7%	0.8%	6.2%	1.0%	0.4%	2.0%	1.1%	0.3%	0.0%	0.1%	0.1%	

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Case Road - Interstate 215 Southbound
 24 Hour Directional Classification Count
 Eastbound, Westbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN006
 Site Code: 108-23147

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/15/23	0	123	25	0	4	1	0	0	1	0	0	0	0	154
01:00	2	233	102	3	44	4	1	9	10	0	0	0	0	408
02:00	7	323	137	7	71	8	1	24	12	1	1	0	0	592
03:00	6	554	219	11	55	10	3	23	12	0	1	0	0	894
04:00	5	610	226	12	80	7	1	17	17	2	4	0	0	981
05:00	3	623	235	10	76	23	0	27	22	0	2	1	2	1024
06:00	9	786	260	8	102	28	11	33	23	3	0	1	3	1267
07:00	8	895	281	15	103	22	7	48	25	6	2	1	3	1416
08:00	18	1045	309	14	87	17	4	57	30	6	3	5	4	1599
09:00	10	993	306	9	108	12	7	38	15	8	0	3	1	1510
10:00	16	956	324	13	105	11	4	41	30	1	0	0	1	1502
11:00	10	1141	363	11	99	21	6	33	18	14	1	2	2	1721
12 PM	20	1178	344	9	96	20	15	41	19	6	1	4	1	1754
13:00	15	1120	311	7	92	18	9	29	25	3	1	0	1	1631
14:00	15	1049	271	15	84	16	4	34	6	7	2	1	0	1504
15:00	11	896	267	10	71	11	0	27	9	5	4	0	2	1313
16:00	4	843	218	10	53	10	0	29	8	3	2	0	0	1180
17:00	7	761	199	1	42	5	1	16	8	2	0	0	2	1044
18:00	5	642	157	3	31	2	2	13	2	3	0	1	1	862
19:00	2	483	88	3	25	2	0	16	9	0	0	0	0	628
20:00	2	336	67	0	18	3	0	5	3	0	0	0	0	434
21:00	0	226	50	0	10	4	0	2	8	0	0	0	0	300
22:00	1	164	34	0	5	0	0	0	7	0	0	0	0	211
23:00	0	136	30	3	8	3	0	1	4	0	0	0	0	185
Total	176	16116	4823	174	1469	258	76	563	323	70	24	19	23	24114
Percent	0.7%	66.8%	20.0%	0.7%	6.1%	1.1%	0.3%	2.3%	1.3%	0.3%	0.1%	0.1%	0.1%	
AM Peak	08:00	11:00	11:00	07:00	09:00	06:00	06:00	08:00	08:00	11:00	04:00	08:00	08:00	11:00
Vol.	18	1141	363	15	108	28	11	57	30	14	4	5	4	1721
PM Peak	12:00	12:00	12:00	14:00	12:00	12:00	12:00	12:00	13:00	14:00	15:00	12:00	15:00	12:00
Vol.	20	1178	344	15	96	20	15	41	25	7	4	4	2	1754
Grand Total	176	16116	4823	174	1469	258	76	563	323	70	24	19	23	24114
Percent	0.7%	66.8%	20.0%	0.7%	6.1%	1.1%	0.3%	2.3%	1.3%	0.3%	0.1%	0.1%	0.1%	

Counts Unlimited, Inc.

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City of Perris
Ethanac Road
B/ Interstate 215 Southbound - Interstate 215 Northbound
24 Hour Directional Classification Count

PER002
Site Code: 108-221054

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12/01/22	0	80	6	0	1	0	0	0	4	1	0	0	0	92
01:00	0	62	4	0	0	0	0	0	2	0	1	0	0	69
02:00	0	49	10	0	1	0	0	1	1	0	0	0	0	62
03:00	1	41	6	0	0	1	0	0	1	0	0	0	0	50
04:00	0	88	13	0	0	3	1	0	1	0	0	0	0	106
05:00	0	178	52	0	6	1	0	1	2	0	3	0	0	243
06:00	3	271	97	0	14	4	0	1	9	0	1	0	0	400
07:00	0	388	163	2	21	8	0	2	7	0	2	0	0	593
08:00	1	558	149	5	26	6	0	12	7	0	1	0	1	766
09:00	1	410	139	0	24	6	0	5	7	0	1	0	0	593
10:00	2	315	148	1	18	9	0	6	14	1	1	0	0	515
11:00	0	320	99	1	24	4	1	3	14	0	0	0	0	466
12 PM	6	352	131	2	19	4	0	4	7	0	1	0	0	526
13:00	1	417	128	1	24	4	0	6	14	0	0	0	0	595
14:00	2	458	147	0	18	8	0	7	10	0	1	0	0	651
15:00	3	538	168	3	23	12	0	9	6	0	1	0	0	763
16:00	3	516	166	5	19	4	0	7	7	0	0	0	0	727
17:00	3	583	150	4	24	4	0	3	7	0	0	0	0	778
18:00	3	581	147	0	14	2	0	1	0	0	0	0	0	748
19:00	0	382	88	0	11	1	0	1	3	0	0	0	0	486
20:00	0	283	57	0	15	2	0	0	0	0	1	0	0	358
21:00	4	231	33	0	5	1	0	0	2	0	0	0	0	276
22:00	0	182	19	0	4	0	0	0	2	0	0	0	0	207
23:00	1	139	22	0	1	2	0	0	3	0	0	0	0	168
Total	34	7422	2142	24	312	86	2	69	130	2	14	0	1	10238
Percent	0.3%	72.5%	20.9%	0.2%	3.0%	0.8%	0.0%	0.7%	1.3%	0.0%	0.1%	0.0%	0.0%	
AM Peak	06:00	08:00	07:00	08:00	08:00	10:00	04:00	08:00	10:00	00:00	05:00		08:00	08:00
Vol.	3	558	163	5	26	9	1	12	14	1	3		1	766
PM Peak	12:00	17:00	15:00	16:00	13:00	15:00		15:00	13:00		12:00			17:00
Vol.	6	583	168	5	24	12		9	14		1			778
Grand Total	34	7422	2142	24	312	86	2	69	130	2	14	0	1	10238
Percent	0.3%	72.5%	20.9%	0.2%	3.0%	0.8%	0.0%	0.7%	1.3%	0.0%	0.1%	0.0%	0.0%	

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City of Perris
Ethanac Road
B/ Interstate 215 Southbound - Interstate 215 Northbound
24 Hour Directional Classification Count

PER002
Site Code: 108-221054

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12/01/22	0	73	5	0	0	0	0	0	1	1	0	0	0	80
01:00	0	46	5	0	1	0	0	0	1	1	0	0	0	54
02:00	0	30	5	0	0	0	0	1	0	0	0	0	0	36
03:00	0	28	4	0	1	0	0	0	0	0	0	2	0	35
04:00	0	39	10	0	1	1	0	0	0	0	1	0	0	52
05:00	1	119	29	0	3	0	0	0	2	0	1	0	0	155
06:00	0	134	52	0	14	4	0	0	6	0	0	0	0	210
07:00	0	217	78	3	19	12	0	20	6	0	0	0	0	355
08:00	0	419	120	4	22	10	0	20	8	0	0	0	0	603
09:00	0	433	153	2	15	7	0	13	6	0	0	1	0	630
10:00	0	285	138	2	16	7	0	12	8	1	1	0	0	470
11:00	0	327	121	1	2	15	0	3	8	0	0	0	0	477
12 PM	2	411	140	0	6	4	7	2	11	0	0	0	0	583
13:00	0	448	125	2	12	7	3	2	6	1	0	0	0	606
14:00	4	430	152	2	13	6	2	1	10	0	0	0	0	620
15:00	0	563	152	3	10	3	1	5	7	0	0	0	0	744
16:00	3	644	175	3	20	7	0	1	4	0	3	0	0	860
17:00	3	614	158	3	8	8	2	2	1	0	0	0	0	799
18:00	1	625	107	2	6	13	3	2	1	0	0	1	0	761
19:00	3	456	102	1	7	4	0	1	0	0	0	0	0	574
20:00	1	321	34	6	1	0	0	1	2	0	0	0	0	366
21:00	0	256	32	2	3	1	0	0	2	0	0	0	0	296
22:00	0	171	28	1	3	1	0	0	1	0	0	0	0	205
23:00	0	102	16	1	0	1	0	0	0	0	0	0	0	120
Total	18	7191	1941	38	183	111	18	86	91	4	6	4	0	9691
Percent	0.2%	74.2%	20.0%	0.4%	1.9%	1.1%	0.2%	0.9%	0.9%	0.0%	0.1%	0.0%	0.0%	
AM Peak	05:00	09:00	09:00	08:00	08:00	11:00		07:00	08:00	00:00	04:00	03:00		09:00
Vol.	1	433	153	4	22	15		20	8	1	1	2		630
PM Peak	14:00	16:00	16:00	20:00	16:00	18:00	12:00	15:00	12:00	13:00	16:00	18:00		16:00
Vol.	4	644	175	6	20	13	7	5	11	1	3	1		860
Grand Total	18	7191	1941	38	183	111	18	86	91	4	6	4	0	9691
Percent	0.2%	74.2%	20.0%	0.4%	1.9%	1.1%	0.2%	0.9%	0.9%	0.0%	0.1%	0.0%	0.0%	

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City of Perris
Ethanac Road
B/ Interstate 215 Southbound - Interstate 215 Northbound
24 Hour Directional Classification Count
Eastbound, Westbound

PER002
Site Code: 108-221054

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12/01/22	0	153	11	0	1	0	0	0	5	2	0	0	0	172
01:00	0	108	9	0	1	0	0	0	3	1	1	0	0	123
02:00	0	79	15	0	1	0	0	2	1	0	0	0	0	98
03:00	1	69	10	0	1	1	0	0	1	0	0	2	0	85
04:00	0	127	23	0	1	4	1	0	1	0	1	0	0	158
05:00	1	297	81	0	9	1	0	1	4	0	4	0	0	398
06:00	3	405	149	0	28	8	0	1	15	0	1	0	0	610
07:00	0	605	241	5	40	20	0	22	13	0	2	0	0	948
08:00	1	977	269	9	48	16	0	32	15	0	1	0	1	1369
09:00	1	843	292	2	39	13	0	18	13	0	1	1	0	1223
10:00	2	600	286	3	34	16	0	18	22	2	2	0	0	985
11:00	0	647	220	2	26	19	1	6	22	0	0	0	0	943
12 PM	8	763	271	2	25	8	7	6	18	0	1	0	0	1109
13:00	1	865	253	3	36	11	3	8	20	1	0	0	0	1201
14:00	6	888	299	2	31	14	2	8	20	0	1	0	0	1271
15:00	3	1101	320	6	33	15	1	14	13	0	1	0	0	1507
16:00	6	1160	341	8	39	11	0	8	11	0	3	0	0	1587
17:00	6	1197	308	7	32	12	2	5	8	0	0	0	0	1577
18:00	4	1206	254	2	20	15	3	3	1	0	0	1	0	1509
19:00	3	838	190	1	18	5	0	2	3	0	0	0	0	1060
20:00	1	604	91	6	16	2	0	1	2	0	1	0	0	724
21:00	4	487	65	2	8	2	0	0	4	0	0	0	0	572
22:00	0	353	47	1	7	1	0	0	3	0	0	0	0	412
23:00	1	241	38	1	1	3	0	0	3	0	0	0	0	288
Total	52	14613	4083	62	495	197	20	155	221	6	20	4	1	19929
Percent	0.3%	73.3%	20.5%	0.3%	2.5%	1.0%	0.1%	0.8%	1.1%	0.0%	0.1%	0.0%	0.0%	
AM Peak	06:00	08:00	09:00	08:00	08:00	07:00	04:00	08:00	10:00	00:00	05:00	03:00	08:00	08:00
Vol.	3	977	292	9	48	20	1	32	22	2	4	2	1	1369
PM Peak	12:00	18:00	16:00	16:00	16:00	15:00	12:00	15:00	13:00	13:00	16:00	18:00		16:00
Vol.	8	1206	341	8	39	15	7	14	20	1	3	1		1587
Grand Total	52	14613	4083	62	495	197	20	155	221	6	20	4	1	19929
Percent	0.3%	73.3%	20.5%	0.3%	2.5%	1.0%	0.1%	0.8%	1.1%	0.0%	0.1%	0.0%	0.0%	

Existing Peak Hour Volumes - Classification Counts

1 Goetz Rd at Ethanac Rd

AM Peak Hour Volumes										PM Peak Hour Volumes									
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age					2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				
NL	2	0	0	0	0	0.0%	0	0.0	2	5	0	0	0	0	0.0%	0	0.0	5	
NT	241	5	2	0	7	2.8%	12	1.7	253	131	4	1	1	6	4.4%	11	1.8	142	
NR	390	7	2	6	15	3.7%	33	2.2	423	162	5	0	0	5	3.0%	8	1.6	170	
SL	234	9	7	2	18	7.1%	34	1.9	268	296	7	1	2	10	3.3%	19	1.9	315	
ST	95	4	2	0	6	5.9%	10	1.7	105	235	1	0	0	1	0.4%	2	2.0	237	
SR	7	1	0	0	1	12.5%	2	2.0	9	29	0	0	0	0	0.0%	0	0.0	29	
EL	17	0	0	0	0	0.0%	0	0.0	17	19	0	0	0	0	0.0%	0	0.0	19	
ET	124	1	0	0	1	0.8%	2	2.0	126	52	0	0	0	0	0.0%	0	0.0	52	
ER	3	1	0	0	1	25.0%	2	2.0	5	5	0	0	0	0	0.0%	0	0.0	5	
WL	144	7	2	2	11	7.1%	21	1.9	165	264	6	0	0	6	2.2%	9	1.5	273	
WT	53	0	0	0	0	0.0%	0	0.0	53	83	3	0	0	3	3.5%	5	1.7	88	
WR	226	9	4	1	14	5.8%	25	1.8	251	228	5	13	2	20	8.1%	40	2.0	268	
									1,677									1,603	
North Leg Volumes																			
Approach	336	14	9	2	25		46		382	560	8	1	2	11		21		581	
Depart	484	14	6	1	21		37		521	378	9	14	3	26		51		429	
Total	820	28	15	3	46	5.3%	83	1.8	903	938	17	15	5	37	3.8%	72	1.9	1,010	
South Leg Volumes																			
Approach	633	12	4	6	22		45		678	298	9	1	1	11		19		317	
Depart	242	12	4	2	18		33		275	504	7	0	0	7		11		515	
Total	875	24	8	8	40	4.4%	78	2.0	953	802	16	1	1	18	2.2%	30	1.7	832	
East Leg Volumes																			
Approach	423	16	6	3	25		46		469	575	14	13	2	29		54		629	
Depart	748	17	9	8	34		69		817	510	12	1	2	15		27		537	
Total	1,171	33	15	11	59	4.8%	115	1.9	1,286	1,085	26	14	4	44	3.9%	81	1.8	1,166	
West Leg Volumes																			
Approach	144	2	0	0	2		4		148	76	0	0	0	0		0		76	
Depart	62	1	0	0	1		2		64	117	3	0	0	3		5		122	
Total	206	3	0	0	3	1.4%	6	2.0	212	193	3	0	0	3	1.5%	5	1.7	198	
All Legs																			
Approach	1,536	44	19	11	74		141		1,677	1,509	31	15	5	51		94		1,603	
Depart	1,536	44	19	11	74		141		1,677	1,509	31	15	5	51		94		1,603	
Total	3,072	88	38	22	148	4.6%	282	1.9	3,354	3,018	62	30	10	102	3.3%	188	1.8	3,206	

Existing Peak Hour Volumes - Classification Counts

2 Wheat St at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	2	0	0	0	0	0.0%	0	0.0	2	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	5	0	0	0	0	0.0%	0	0.0	5	3	0	0	0	0.0%	0	0.0	3	
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	763	21	9	8	38	4.7%	74	1.9	837	566	13	2	2	17	2.9%	30	1.8	596
ER	1	0	0	0	0	0.0%	0	0.0	1	1	0	0	0	0.0%	0	0.0	1	
WL	3	0	0	0	0	0.0%	0	0.0	3	10	0	0	0	0.0%	0	0.0	10	
WT	422	20	6	3	29	6.4%	51	1.8	473	575	12	18	0	30	5.0%	54	1.8	629
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
									1,321									1,239
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0		0
South Leg Volumes																		
Approach	7	0	0	0	0		0		7	3	0	0	0	0		0		3
Depart	4	0	0	0	0		0		4	11	0	0	0	0		0		11
Total	11	0	0	0	0	0.0%	0	0.0	11	14	0	0	0	0.0%	0	0.0		14
East Leg Volumes																		
Approach	425	20	6	3	29		51		476	585	12	18	0	30		54		639
Depart	768	21	9	8	38		74		842	569	13	2	2	17		30		599
Total	1,193	41	15	11	67	5.3%	125	1.9	1,318	1,154	25	20	2	47	3.9%	84	1.8	1,238
West Leg Volumes																		
Approach	764	21	9	8	38		74		838	567	13	2	2	17		30		597
Depart	424	20	6	3	29		51		475	575	12	18	0	30		54		629
Total	1,188	41	15	11	67	5.3%	125	1.9	1,313	1,142	25	20	2	47	4.0%	84	1.8	1,226
All Legs																		
Approach	1,196	41	15	11	67		125		1,321	1,155	25	20	2	47		84		1,239
Depart	1,196	41	15	11	67		125		1,321	1,155	25	20	2	47		84		1,239
Total	2,392	82	30	22	134	5.3%	250	1.9	2,642	2,310	50	40	4	94	3.9%	168	1.8	2,478

Existing Peak Hour Volumes - Classification Counts

3 Murrieta Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age				
NL	82	3	0	0	3	3.5%	5	1.7	87	101	2	1	0	3	2.9%	5	1.7	106
NT	97	5	0	0	5	4.9%	8	1.6	105	61	1	0	0	1	1.6%	2	2.0	63
NR	115	6	0	1	7	5.7%	12	1.7	127	147	4	0	1	5	3.3%	9	1.8	156
SL	88	1	0	0	1	1.1%	2	2.0	90	44	0	0	0	0	0.0%	0	0.0	44
ST	50	2	0	0	2	3.8%	3	1.5	53	91	0	0	0	0	0.0%	0	0.0	91
SR	2	0	0	0	0	0.0%	0	0.0	2	5	0	0	0	0	0.0%	0	0.0	5
EL	9	0	0	0	0	0.0%	0	0.0	9	5	0	0	0	0	0.0%	0	0.0	5
ET	691	15	9	10	34	4.7%	71	2.1	762	431	12	0	4	16	3.6%	30	1.9	461
ER	67	3	0	0	3	4.3%	5	1.7	72	124	1	2	0	3	2.4%	6	2.0	130
WL	56	5	1	1	7	11.1%	13	1.9	69	171	5	0	1	6	3.4%	11	1.8	182
WT	331	12	5	5	22	6.2%	43	2.0	374	473	7	17	1	25	5.0%	48	1.9	521
WR	37	1	0	0	1	2.6%	2	2.0	39	52	0	1	0	1	1.9%	2	2.0	54
									1,789									1,818
North Leg Volumes																		
Approach	140	3	0	0	3		5		145	140	0	0	0	0		0		140
Depart	143	6	0	0	6		10		153	118	1	1	0	2		4		122
Total	283	9	0	0	9	3.1%	15	1.7	298	258	1	1	0	2	0.8%	4	2.0	262
South Leg Volumes																		
Approach	294	14	0	1	15		25		319	309	7	1	1	9		16		325
Depart	173	10	1	1	12		21		194	386	6	2	1	9		17		403
Total	467	24	1	2	27	5.5%	46	1.7	513	695	13	3	2	18	2.5%	33	1.8	728
East Leg Volumes																		
Approach	424	18	6	6	30		58		482	696	12	18	2	32		61		757
Depart	894	22	9	11	42		85		979	622	16	0	5	21		39		661
Total	1,318	40	15	17	72	5.2%	143	2.0	1,461	1,318	28	18	7	53	3.9%	100	1.9	1,418
West Leg Volumes																		
Approach	767	18	9	10	37		76		843	560	13	2	4	19		36		596
Depart	415	15	5	5	25		48		463	579	9	18	1	28		53		632
Total	1,182	33	14	15	62	5.0%	124	2.0	1,306	1,139	22	20	5	47	4.0%	89	1.9	1,228
All Legs																		
Approach	1,625	53	15	17	85		164		1,789	1,705	32	21	7	60		113		1,818
Depart	1,625	53	15	17	85		164		1,789	1,705	32	21	7	60		113		1,818
Total	3,250	106	30	34	170	5.0%	328	1.9	3,578	3,410	64	42	14	120	3.4%	226	1.9	3,636

Existing Peak Hour Volumes - Classification Counts

4 Evans Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes					Average PCE	Total PCE Volume		
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age				
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	2	1	0	0	1	33.3%	2	2.0	4	1	0	0	0	0.0%	0	0.0	1	
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	894	29	9	8	46	4.9%	86	1.9	980	624	17	0	1	18	2.8%	29	1.6	653
ER	1	0	0	0	0	0.0%	0	0.0	1	0	0	0	0	0.0%	0	0.0	0	
WL	0	1	0	0	1	100.0%	2	2.0	2	2	0	0	0	0.0%	0	0.0	2	
WT	439	32	5	3	40	8.4%	67	1.7	506	689	20	19	1	40	5.5%	71	1.8	760
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
									1,493									1,416
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0		0		0	0
Depart	0	0	0	0	0		0		0	0	0	0	0		0		0	0
Total	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	0
South Leg Volumes																		
Approach	2	1	0	0	1		2		4	1	0	0	0		0		1	1
Depart	1	1	0	0	1		2		3	2	0	0	0		0		2	2
Total	3	2	0	0	2	40.0%	4	2.0	7	3	0	0	0	0.0%	0	0.0	3	3
East Leg Volumes																		
Approach	439	33	5	3	41		69		508	691	20	19	1	40		71		762
Depart	896	30	9	8	47		88		984	625	17	0	1	18		29		654
Total	1,335	63	14	11	88	6.2%	157	1.8	1,492	1,316	37	19	2	58	4.2%	100	1.7	1,416
West Leg Volumes																		
Approach	895	29	9	8	46		86		981	624	17	0	1	18		29		653
Depart	439	32	5	3	40		67		506	689	20	19	1	40		71		760
Total	1,334	61	14	11	86	6.1%	153	1.8	1,487	1,313	37	19	2	58	4.2%	100	1.7	1,413
All Legs																		
Approach	1,336	63	14	11	88		157		1,493	1,316	37	19	2	58		100		1,416
Depart	1,336	63	14	11	88		157		1,493	1,316	37	19	2	58		100		1,416
Total	2,672	126	28	22	176	6.2%	314	1.8	2,986	2,632	74	38	4	116	4.2%	200	1.7	2,832

Existing Peak Hour Volumes - Classification Counts

5 Barnett Rd/Case Rd at Ethanac Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	11	8	1	1	10	47.6%	17	1.7	28	22	0	1	0	1	4.3%	2	2.0	24
NT	24	2	0	0	2	7.7%	3	1.5	27	30	0	0	0	0	0.0%	0	0.0	30
NR	80	26	2	4	32	28.6%	55	1.7	135	60	3	1	5	9	13.0%	22	2.4	82
SL	279	16	2	5	23	7.6%	43	1.9	322	425	2	0	1	3	0.7%	6	2.0	431
ST	19	0	0	0	0	0.0%	0	0.0	19	51	0	0	1	1	1.9%	3	3.0	54
SR	68	2	0	0	2	2.9%	3	1.5	71	119	1	1	0	2	1.7%	4	2.0	123
EL	140	3	0	0	3	2.1%	5	1.7	145	160	1	0	0	1	0.6%	2	2.0	162
ET	707	22	8	8	38	5.1%	73	1.9	780	445	15	0	1	16	3.5%	26	1.6	471
ER	22	2	0	0	2	8.3%	3	1.5	25	18	0	0	2	2	10.0%	6	3.0	24
WL	33	16	1	4	21	38.9%	38	1.8	71	67	1	3	2	6	8.2%	14	2.3	81
WT	341	19	5	4	28	7.6%	51	1.8	392	510	10	17	1	28	5.2%	52	1.9	562
WR	295	9	0	1	10	3.3%	17	1.7	312	355	1	0	0	1	0.3%	2	2.0	357
									2,327									2,401
North Leg Volumes																		
Approach	366	18	2	5	25		46		412	595	3	1	2	6		13		608
Depart	459	14	0	1	15		25		484	545	2	0	0	2		4		549
Total	825	32	2	6	40	4.6%	71	1.8	896	1,140	5	1	2	8	0.7%	17	2.1	1,157
South Leg Volumes																		
Approach	115	36	3	5	44		75		190	112	3	2	5	10		24		136
Depart	74	18	1	4	23		41		115	136	1	3	5	9		23		159
Total	189	54	4	9	67	26.2%	116	1.7	305	248	4	5	10	19	7.1%	47	2.5	295
East Leg Volumes																		
Approach	669	44	6	9	59		106		775	932	12	20	3	35		68		1,000
Depart	1,066	64	12	17	93		171		1,237	930	20	1	7	28		54		984
Total	1,735	108	18	26	152	8.1%	277	1.8	2,012	1,862	32	21	10	63	3.3%	122	1.9	1,984
West Leg Volumes																		
Approach	869	27	8	8	43		81		950	623	16	0	3	19		34		657
Depart	420	29	6	5	40		71		491	651	11	19	1	31		58		709
Total	1,289	56	14	13	83	6.0%	152	1.8	1,441	1,274	27	19	4	50	3.8%	92	1.8	1,366
All Legs																		
Approach	2,019	125	19	27	171		308		2,327	2,262	34	23	13	70		139		2,401
Depart	2,019	125	19	27	171		308		2,327	2,262	34	23	13	70		139		2,401
Total	4,038	250	38	54	342	7.8%	616	1.8	4,654	4,524	68	46	26	140	3.0%	278	2.0	4,802

Existing Peak Hour Volumes - Classification Counts

6 I-215 SB Ramps at Ethanac Road

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SL	98	4	3	1	8	7.5%	15	1.9	113	145	4	0	1	5	3.3%	9	1.8	154
ST	1	0	0	0	0	0.0%	0	0.0	1	3	0	0	0	0	0.0%	0	0.0	3
SR	210	26	2	2	30	12.5%	49	1.6	259	339	8	4	2	14	4.0%	26	1.9	365
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	659	34	5	2	41	5.9%	67	1.6	726	615	16	2	0	18	2.8%	28	1.6	643
ER	418	27	10	2	39	8.5%	67	1.7	485	345	5	0	4	9	2.5%	20	2.2	365
WL	51	17	11	3	31	37.8%	57	1.8	108	89	0	0	0	0	0.0%	0	0.0	89
WT	536	16	8	5	29	5.1%	55	1.9	591	703	11	8	1	20	2.8%	36	1.8	739
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									2,283									2,358
North Leg Volumes																		
Approach	309	30	5	3	38		64		373	487	12	4	3	19		35		522
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	309	30	5	3	38	11.0%	64	1.7	373	487	12	4	3	19	3.8%	35	1.8	522
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	470	44	21	5	70		124		594	437	5	0	4	9		20		457
Total	470	44	21	5	70	13.0%	124	1.8	594	437	5	0	4	9	2.0%	20	2.2	457
East Leg Volumes																		
Approach	587	33	19	8	60		112		699	792	11	8	1	20		36		828
Depart	757	38	8	3	49		82		839	760	20	2	1	23		37		797
Total	1,344	71	27	11	109	7.5%	194	1.8	1,538	1,552	31	10	2	43	2.7%	73	1.7	1,625
West Leg Volumes																		
Approach	1,077	61	15	4	80		134		1,211	960	21	2	4	27		48		1,008
Depart	746	42	10	7	59		104		850	1,042	19	12	3	34		62		1,104
Total	1,823	103	25	11	139	7.1%	238	1.7	2,061	2,002	40	14	7	61	3.0%	110	1.8	2,112
All Legs																		
Approach	1,973	124	39	15	178		310		2,283	2,239	44	14	8	66		119		2,358
Depart	1,973	124	39	15	178		310		2,283	2,239	44	14	8	66		119		2,358
Total	3,946	248	78	30	356	8.3%	620	1.7	4,566	4,478	88	28	16	132	2.9%	238	1.8	4,716

Existing Peak Hour Volumes - Classification Counts

7

I-215 NB Ramps at Ethanac Road

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	235	6	6	5	17	6.7%	36	2.1	271	367	6	8	1	15	3.9%	28	1.9	395
NT	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
NR	116	4	4	1	9	7.2%	17	1.9	133	179	8	3	1	12	6.3%	21	1.8	200
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	193	13	4	4	21	9.8%	40	1.9	233	238	4	2	2	8	3.3%	16	2.0	254
ET	567	18	5	2	25	4.2%	43	1.7	610	526	13	6	2	21	3.8%	38	1.8	564
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	366	24	11	4	39	9.6%	70	1.8	436	393	4	1	0	5	1.3%	8	1.6	401
WR	125	12	2	7	21	14.4%	43	2.0	168	126	6	5	1	12	8.7%	22	1.8	148
									1,851									1,964
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	318	25	6	11	42		83		401	366	10	7	3	20		38		404
Total	318	25	6	11	42	11.7%	83	2.0	401	366	10	7	3	20	5.2%	38	1.9	404
South Leg Volumes																		
Approach	351	10	10	6	26		53		404	548	14	11	2	27		49		597
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	351	10	10	6	26	6.9%	53	2.0	404	548	14	11	2	27	4.7%	49	1.8	597
East Leg Volumes																		
Approach	491	36	13	11	60		113		604	519	10	6	1	17		30		549
Depart	683	22	9	3	34		60		743	705	21	9	3	33		59		764
Total	1,174	58	22	14	94	7.4%	173	1.8	1,347	1,224	31	15	4	50	3.9%	89	1.8	1,313
West Leg Volumes																		
Approach	760	31	9	6	46		83		843	764	17	8	4	29		54		818
Depart	601	30	17	9	56		106		707	760	10	9	1	20		36		796
Total	1,361	61	26	15	102	7.0%	189	1.9	1,550	1,524	27	17	5	49	3.1%	90	1.8	1,614
All Legs																		
Approach	1,602	77	32	23	132		249		1,851	1,831	41	25	7	73		133		1,964
Depart	1,602	77	32	23	132		249		1,851	1,831	41	25	7	73		133		1,964
Total	3,204	154	64	46	264	7.6%	498	1.9	3,702	3,662	82	50	14	146	3.8%	266	1.8	3,928

Existing Peak Hour Volumes - Classification Counts

8 Goetz Rd at McLaughlin Rd

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	2	0	0	0	0	0.0%	0	0.0	2	8	0	0	0	0	0.0%	0	0.0	8
NT	273	11	3	6	20	6.8%	41	2.1	314	184	6	4	1	11	5.6%	20	1.8	204
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	120	9	4	2	15	11.1%	28	1.9	148	244	9	0	0	9	3.6%	14	1.6	258
SR	50	2	0	0	2	3.8%	3	1.5	53	106	3	0	0	3	2.8%	5	1.7	111
EL	170	2	0	0	2	1.2%	3	1.5	173	68	3	0	0	3	4.2%	5	1.7	73
ET	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ER	9	0	0	0	0	0.0%	0	0.0	9	10	1	0	0	1	9.1%	2	2.0	12
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									699									666
North Leg Volumes																		
Approach	170	11	4	2	17		31		201	350	12	0	0	12		19		369
Depart	443	13	3	6	22		44		487	252	9	4	1	14		25		277
Total	613	24	7	8	39	6.0%	75	1.9	688	602	21	4	1	26	4.1%	44	1.7	646
South Leg Volumes																		
Approach	275	11	3	6	20		41		316	192	6	4	1	11		20		212
Depart	129	9	4	2	15		28		157	254	10	0	0	10		16		270
Total	404	20	7	8	35	8.0%	69	2.0	473	446	16	4	1	21	4.5%	36	1.7	482
East Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
West Leg Volumes																		
Approach	179	2	0	0	2		3		182	78	4	0	0	4		7		85
Depart	52	2	0	0	2		3		55	114	3	0	0	3		5		119
Total	231	4	0	0	4	1.7%	6	1.5	237	192	7	0	0	7	3.5%	12	1.7	204
All Legs																		
Approach	624	24	7	8	39		75		699	620	22	4	1	27		46		666
Depart	624	24	7	8	39		75		699	620	22	4	1	27		46		666
Total	1,248	48	14	16	78	5.9%	150	1.9	1,398	1,240	44	8	2	54	4.2%	92	1.7	1,332

APPENDIX C

INTERSECTION ANALYSIS
WORKSHEETS

APPENDIX C-1

INTERSECTION ANALYSIS
WORKSHEETS -
EXISTING CONDITIONS

Menifee Compass Northern Gateway Project

Vistro File: K:\...\Menifee CNG_AM.vistro

Scenario 1 EX AM

Report File: K:\...\1. EX AM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.589	44.2	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.010	23.8	C
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.538	30.6	C
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.008	12.2	B
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.506	31.4	C
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.734	22.3	C
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.651	29.0	C
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.371	16.6	C
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition		0.000	0.0	
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.009	10.7	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	44.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.589

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	253	423	268	105	9	17	126	5	165	53	251
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	253	423	268	105	9	17	126	5	165	53	251
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	65	108	69	27	2	4	32	1	42	14	64
Total Analysis Volume [veh/h]	2	259	434	275	108	9	17	129	5	169	54	257
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	15	54	0	29	68	0	11	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	35	35	20	55	55	3	36	36	13	46	46
g / C, Green / Cycle	0.00	0.29	0.29	0.17	0.46	0.46	0.03	0.30	0.30	0.11	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.27	0.15	0.03	0.01	0.01	0.04	0.00	0.09	0.01	0.16
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	7	554	471	304	1649	736	46	1078	481	197	1380	616
d1, Uniform Delay [s]	59.57	34.86	41.17	48.95	18.32	17.87	57.54	30.67	29.67	52.55	23.31	27.30
k, delay calibration	0.11	0.11	0.16	0.16	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	18.27	0.61	11.00	13.70	0.02	0.01	4.90	0.23	0.04	10.25	0.05	2.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.47	0.92	0.90	0.07	0.01	0.37	0.12	0.01	0.86	0.04	0.42
d, Delay for Lane Group [s/veh]	77.84	35.47	52.17	62.65	18.33	17.88	62.44	30.90	29.71	62.80	23.36	29.38
Lane Group LOS	E	D	D	E	B	B	E	C	C	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.10	6.04	13.20	8.92	0.80	0.13	0.55	1.35	0.10	5.39	0.47	5.50
50th-Percentile Queue Length [ft/ln]	2.41	150.94	330.04	223.00	20.05	3.28	13.87	33.68	2.59	134.66	11.78	137.42
95th-Percentile Queue Length [veh/ln]	0.17	10.07	19.16	13.82	1.44	0.24	1.00	2.43	0.19	9.19	0.85	9.34
95th-Percentile Queue Length [ft/ln]	4.35	251.69	479.02	345.45	36.10	5.90	24.97	60.63	4.67	229.81	21.21	233.55

Movement, Approach, & Intersection Results

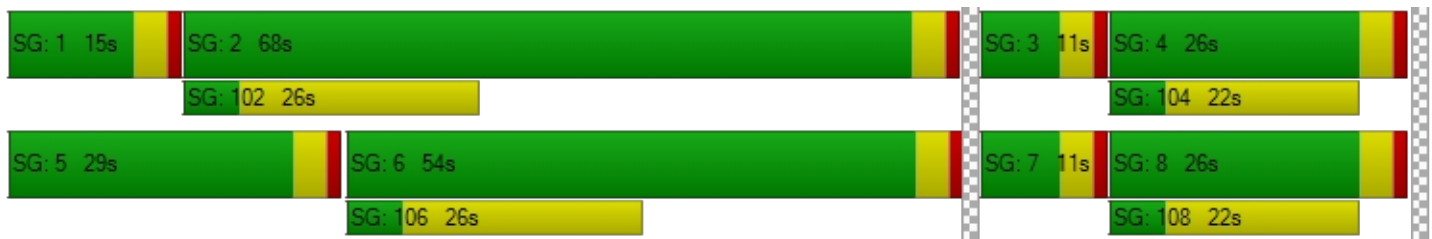
d_M, Delay for Movement [s/veh]	77.84	35.47	52.17	62.65	18.33	17.88	62.44	30.90	29.71	62.80	23.36	29.38
Movement LOS	E	D	D	E	B	B	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	46.02			49.42			34.41			40.47		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	44.22											
Intersection LOS	D											
Intersection V/C	0.589											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.633	2.616	2.659	2.915
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	833	1067	367	367
d_b, Bicycle Delay [s]	20.42	13.07	40.02	40.02
I_b,int, Bicycle LOS Score for Intersection	2.706	1.883	1.684	1.824
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	23.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	2	5	837	1	3	473
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	5	837	1	3	473
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	223	0	1	126
Total Analysis Volume [veh/h]	2	5	893	1	3	505
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	23.82	11.57	0.00	0.00	9.71	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	1.47	1.47	0.00	0.00	0.29	0.00
d_A, Approach Delay [s/veh]	15.07		0.00		0.06	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.10					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	30.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.538

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	87	105	127	90	53	2	9	762	72	69	374	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	105	127	90	53	2	9	762	72	69	374	39
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	27	33	23	14	1	2	197	19	18	97	10
Total Analysis Volume [veh/h]	90	109	131	93	55	2	9	788	74	71	387	40
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	64	0	0	22	0	11	22	0	12	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	12	12	2	61	61	6	66	66
g / C, Green / Cycle	0.21	0.10	0.10	0.02	0.51	0.51	0.05	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.19	0.08	0.00	0.00	0.23	0.23	0.04	0.11	0.11
s, saturation flow rate [veh/h]	1753	1842	1615	1810	1900	1843	1810	1900	1838
c, Capacity [veh/h]	364	178	156	28	968	940	96	1040	1006
d1, Uniform Delay [s]	46.41	53.27	49.05	58.45	18.74	18.74	56.01	13.88	13.89
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.62	9.69	0.03	6.46	1.52	1.57	10.62	0.45	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.83	0.01	0.32	0.45	0.45	0.74	0.21	0.21
d, Delay for Lane Group [s/veh]	55.03	62.96	49.08	64.91	20.26	20.31	66.63	14.33	14.37
Lane Group LOS	E	E	D	E	C	C	E	B	B
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.16	4.75	0.05	0.31	7.53	7.32	2.34	2.88	2.82
50th-Percentile Queue Length [ft/ln]	254.07	118.81	1.36	7.82	188.36	183.12	58.39	72.09	70.48
95th-Percentile Queue Length [veh/ln]	15.39	8.33	0.10	0.56	12.04	11.76	4.20	5.19	5.07
95th-Percentile Queue Length [ft/ln]	384.77	208.18	2.46	14.08	300.90	294.09	105.10	129.76	126.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.03	55.03	55.03	62.96	62.96	49.08	64.91	20.28	20.31	66.63	14.35	14.37
Movement LOS	E	E	E	E	E	D	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	55.03			62.77			20.75			21.80		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	30.56											
Intersection LOS	C											
Intersection V/C	0.538											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.106	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	300	300	317
d_b, Bicycle Delay [s]	15.00	43.35	43.35	42.50
I_b,int, Bicycle LOS Score for Intersection	2.104	1.807	2.278	1.970
Bicycle LOS	B	A	B	A

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	4	980	1	2	506
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	980	1	2	506
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	263	0	1	136
Total Analysis Volume [veh/h]	0	4	1054	1	2	544
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	29.37	12.25	0.00	0.00	10.41	0.00
Movement LOS	D	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	0.60	0.60	0.00	0.00	0.23	0.00
d_A, Approach Delay [s/veh]	12.25		0.00		0.04	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.04					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	31.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.506

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	28	27	135	322	19	71	145	780	25	71	392	312
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	27	135	322	19	71	145	780	25	71	392	312
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	7	36	85	5	19	38	206	7	19	104	82
Total Analysis Volume [veh/h]	30	29	143	340	20	75	153	825	26	75	414	330
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	30	0	19	47	0	12	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	14	14	14	12	67	67	6	61	61
g / C, Green / Cycle	0.14	0.12	0.12	0.12	0.10	0.55	0.55	0.05	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.12	0.10	0.03	0.03	0.08	0.23	0.02	0.04	0.11	0.20
s, saturation flow rate [veh/h]	1678	3514	1720	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	233	422	206	194	184	2003	894	98	1831	817
d1, Uniform Delay [s]	50.60	51.44	47.82	47.83	52.89	15.48	12.15	55.99	16.52	18.39
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.45	3.68	0.58	0.62	9.28	0.63	0.06	11.61	0.29	1.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.81	0.24	0.24	0.83	0.41	0.03	0.76	0.23	0.40
d, Delay for Lane Group [s/veh]	60.04	55.12	48.41	48.45	62.17	16.11	12.21	67.61	16.81	19.87
Lane Group LOS	E	E	D	D	E	B	B	E	B	B
Critical Lane Group	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.28	4.98	1.31	1.23	4.85	6.08	0.31	2.49	3.03	5.58
50th-Percentile Queue Length [ft/ln]	157.07	124.56	32.76	30.83	121.13	152.07	7.68	62.16	75.69	139.48
95th-Percentile Queue Length [veh/ln]	10.39	8.64	2.36	2.22	8.46	10.13	0.55	4.48	5.45	9.45
95th-Percentile Queue Length [ft/ln]	259.83	216.07	58.97	55.49	211.38	253.20	13.82	111.90	136.24	236.32

Movement, Approach, & Intersection Results

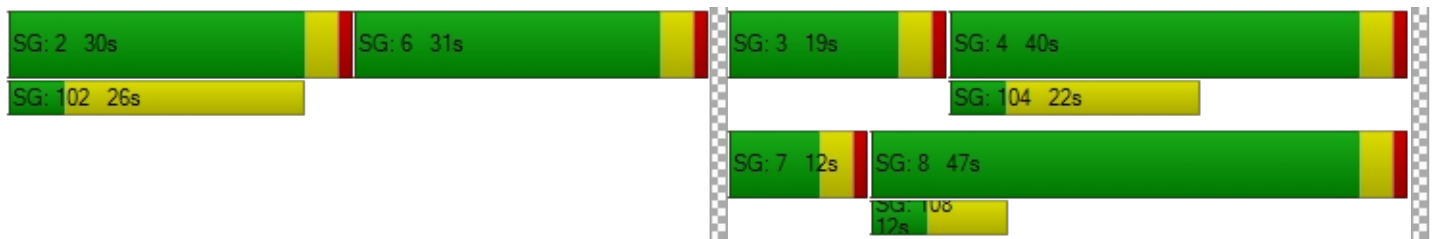
d_M, Delay for Movement [s/veh]	60.04	60.04	60.04	55.12	48.41	48.43	62.17	16.11	12.21	67.61	16.81	19.87
Movement LOS	E	E	E	E	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	60.04			53.66			23.03			22.69		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	31.37											
Intersection LOS	C											
Intersection V/C	0.506											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.019	2.654	2.881	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	450	433	717	600
d_b, Bicycle Delay [s]	36.04	36.82	24.70	29.40
I_b,int, Bicycle LOS Score for Intersection	1.893	2.277	2.388	2.235
Bicycle LOS	A	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	22.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.734

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	113	1	259	0	726	485	108	591	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	113	1	259	0	726	485	108	591	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9470	0.9470	0.9470	1.0000	0.9470	0.9470	0.9470	0.9470	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	30	0	68	0	192	128	29	156	0
Total Analysis Volume [veh/h]	0	0	0	119	1	273	0	767	512	114	624	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	44	0	0	65	0	11	76	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		23	23	73	73	9	86
g / C, Green / Cycle		0.19	0.19	0.61	0.61	0.08	0.72
(v / s)_i Volume / Saturation Flow Rate		0.07	0.17	0.40	0.32	0.06	0.17
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		345	308	1152	979	142	2597
d1, Uniform Delay [s]		42.10	47.31	15.60	13.62	54.41	5.78
k, delay calibration		0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.60	8.50	3.05	2.00	10.19	0.22
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.35	0.89	0.67	0.52	0.81	0.24
d, Delay for Lane Group [s/veh]		42.70	55.80	18.66	15.62	64.60	6.00
Lane Group LOS		D	E	B	B	E	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		3.07	8.43	12.96	7.53	3.68	2.19
50th-Percentile Queue Length [ft/ln]		76.76	210.70	324.01	188.19	91.91	54.65
95th-Percentile Queue Length [veh/ln]		5.53	13.19	18.86	12.03	6.62	3.93
95th-Percentile Queue Length [ft/ln]		138.17	329.73	471.61	300.68	165.43	98.37

Movement, Approach, & Intersection Results

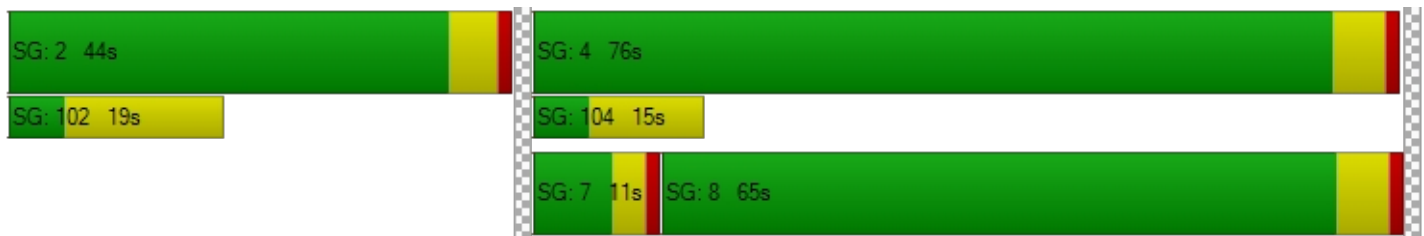
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	42.70	42.70	55.80	0.00	18.66	15.62	64.60	6.00	0.00
Movement LOS				D	D	E		B	B	E	A	
d_A, Approach Delay [s/veh]	0.00			51.80			17.44			15.05		
Approach LOS	A			D			B			B		
d_I, Intersection Delay [s/veh]	22.31											
Intersection LOS	C											
Intersection V/C	0.734											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.147	0.000	2.806
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	645	988	1172
d_b, Bicycle Delay [s]	60.00	27.54	15.35	10.29
I_b,int, Bicycle LOS Score for Intersection	4.132	2.208	3.670	2.168
Bicycle LOS	D	B	D	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	29.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.651

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	271	0	133	0	0	0	233	610	0	0	436	168
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	271	0	133	0	0	0	233	610	0	0	436	168
Peak Hour Factor	0.9480	0.9480	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	1.0000	1.0000	0.9480	0.9480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	0	35	0	0	0	61	161	0	0	115	44
Total Analysis Volume [veh/h]	286	0	140	0	0	0	246	643	0	0	460	177
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	38	0	0	0	0	26	82	0	0	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	21	21		18	88	65
g / C, Green / Cycle	0.18	0.18		0.15	0.73	0.54
(v / s)_i Volume / Saturation Flow Rate	0.16	0.09		0.14	0.34	0.35
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1811
c, Capacity [veh/h]	324	289		279	1385	981
d1, Uniform Delay [s]	48.01	44.26		49.70	6.65	19.42
k, delay calibration	0.13	0.11		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	9.15	1.25		9.00	1.12	3.32
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.48		0.88	0.46	0.65
d, Delay for Lane Group [s/veh]	57.17	45.52		58.70	7.77	22.75
Lane Group LOS	E	D		E	A	C
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	8.91	3.75		7.65	5.50	12.16
50th-Percentile Queue Length [ft/ln]	222.86	93.79		191.18	137.46	303.93
95th-Percentile Queue Length [veh/ln]	13.81	6.75		12.18	9.34	17.88
95th-Percentile Queue Length [ft/ln]	345.28	168.82		304.56	233.60	446.88

Movement, Approach, & Intersection Results

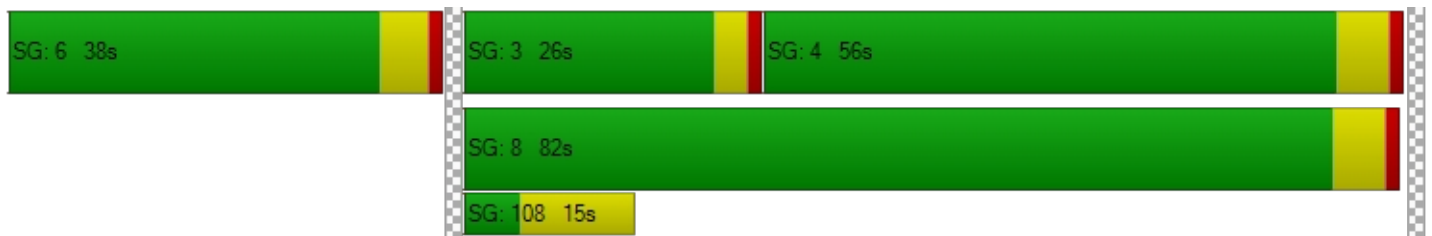
d_M, Delay for Movement [s/veh]	57.17	57.17	45.52	0.00	0.00	0.00	58.70	7.77	0.00	0.00	22.75	22.75
Movement LOS	E	E	D				E	A			C	C
d_A, Approach Delay [s/veh]	53.34			0.00			21.87			22.75		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	29.02											
Intersection LOS	C											
Intersection V/C	0.651											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.163	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	545	0	1272	838
d_b, Bicycle Delay [s]	31.76	60.00	7.96	20.24
I_b,int, Bicycle LOS Score for Intersection	2.263	4.132	3.026	2.611
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	16.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.371

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	314	0	0	148	53	173	0	9	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	314	0	0	148	53	173	0	9	0	0	0
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	83	0	0	39	14	46	0	2	0	0	0
Total Analysis Volume [veh/h]	2	331	0	0	156	56	182	0	9	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.63	0.00	0.00	7.90	0.00	0.00	16.60	16.76	9.06	12.74	13.06	10.03
Movement LOS	A	A	A	A	A	A	C	C	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	1.69	1.69	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.11	0.00	0.00	0.00	0.00	0.00	42.37	42.37	0.76	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.05			0.00			16.25			11.94		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	4.24											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.50	8.30	7.20	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.40		3.60		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.00					
Intersection LOS						

Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	719	2	6	533
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	719	2	6	533
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	184	1	2	137
Total Analysis Volume [veh/h]	0	6	737	2	6	546
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	20.47	10.74	0.00	0.00	9.14	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	0.72	0.72	0.00	0.00	0.52	0.00
d_A, Approach Delay [s/veh]	10.74		0.00		0.10	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.09					
Intersection LOS	B					

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Vistro File: K:\...\Menifee CNG_PM.vistro

Scenario 1 EX PM

Report File: K:\...\1. EX PM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.463	42.4	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.004	10.3	B
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.555	33.9	C
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.002	10.5	B
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.533	33.1	C
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.796	27.1	C
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.690	33.3	C
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.161	14.0	B
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition		0.000	0.0	
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.018	18.3	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	42.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.463

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	5	142	170	315	237	29	19	52	5	273	88	268
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	142	170	315	237	29	19	52	5	273	88	268
Peak Hour Factor	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	36	43	80	60	7	5	13	1	69	22	68
Total Analysis Volume [veh/h]	5	144	173	320	241	29	19	53	5	277	89	272
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	30	0	45	64	0	12	26	0	19	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	15	15	23	38	38	3	45	45	21	62	62
g / C, Green / Cycle	0.01	0.13	0.13	0.20	0.31	0.31	0.03	0.37	0.37	0.17	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.11	0.18	0.07	0.02	0.01	0.01	0.00	0.15	0.02	0.17
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	17	243	206	354	1135	507	50	1350	603	308	1866	833
d1, Uniform Delay [s]	59.05	49.40	51.13	47.19	30.27	28.77	57.33	23.93	23.65	48.76	14.42	16.91
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.39	2.31	8.75	8.71	0.09	0.05	4.67	0.05	0.02	9.27	0.05	1.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.59	0.84	0.91	0.21	0.06	0.38	0.04	0.01	0.90	0.05	0.33
d, Delay for Lane Group [s/veh]	68.43	51.71	59.88	55.90	30.36	28.82	62.00	23.98	23.67	58.03	14.47	17.95
Lane Group LOS	E	D	E	E	C	C	E	C	C	E	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.19	4.10	5.40	9.81	2.48	0.57	0.61	0.47	0.09	8.59	0.58	4.27
50th-Percentile Queue Length [ft/ln]	4.77	102.40	135.03	245.22	61.96	14.25	15.36	11.76	2.25	214.79	14.38	106.86
95th-Percentile Queue Length [veh/ln]	0.34	7.37	9.21	14.95	4.46	1.03	1.11	0.85	0.16	13.40	1.04	7.67
95th-Percentile Queue Length [ft/ln]	8.58	184.32	230.32	373.63	111.53	25.66	27.66	21.17	4.05	334.97	25.88	191.63

Movement, Approach, & Intersection Results

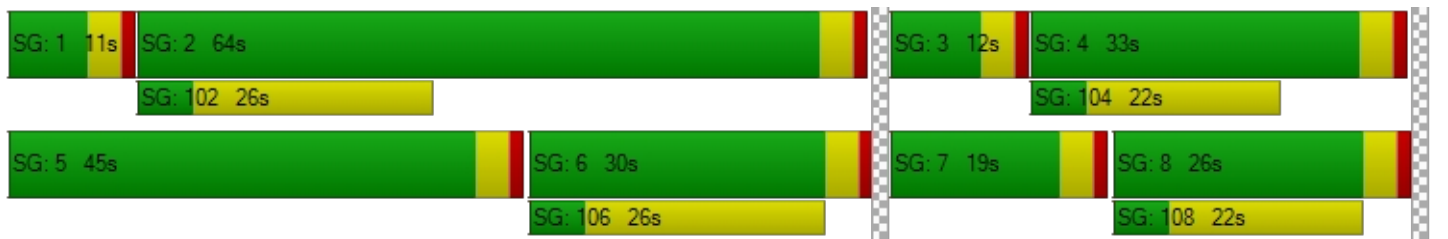
d_M, Delay for Movement [s/veh]	68.43	51.71	59.88	55.90	30.36	28.82	62.00	23.98	23.67	58.03	14.47	17.95
Movement LOS	E	D	E	E	C	C	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	56.36			44.14			33.34			34.87		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	42.41											
Intersection LOS	D											
Intersection V/C	0.463											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.590	2.648	2.656	2.884
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	1000	367	483
d_b, Bicycle Delay [s]	36.82	15.00	40.02	34.50
I_b,int, Bicycle LOS Score for Intersection	2.091	2.046	1.623	1.911
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	3	596	1	10	629
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	596	1	10	629
Peak Hour Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	158	0	3	167
Total Analysis Volume [veh/h]	0	3	633	1	11	668
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	19.76	10.28	0.00	0.00	8.80	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.03	0.00
95th-Percentile Queue Length [ft/ln]	0.33	0.33	0.00	0.00	0.87	0.00
d_A, Approach Delay [s/veh]	10.28		0.00		0.14	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.10					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd**

Control Type:	Signalized	Delay (sec / veh):	33.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.555

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	63	156	44	91	5	5	461	130	182	521	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	63	156	44	91	5	5	461	130	182	521	54
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	17	41	12	24	1	1	122	34	48	138	14
Total Analysis Volume [veh/h]	112	67	165	47	97	5	5	489	138	193	552	57
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	59	0	0	16	0	11	29	0	16	34	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	11	11	1	52	52	15	66	66
g / C, Green / Cycle	0.22	0.09	0.09	0.01	0.43	0.43	0.12	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.20	0.08	0.00	0.00	0.17	0.17	0.11	0.16	0.16
s, saturation flow rate [veh/h]	1726	1869	1615	1810	1900	1759	1810	1900	1838
c, Capacity [veh/h]	377	172	149	17	820	759	225	1039	1005
d1, Uniform Delay [s]	45.75	53.59	49.62	59.05	23.38	23.42	51.49	14.73	14.73
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.72	10.18	0.09	9.39	1.43	1.57	9.07	0.73	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.84	0.03	0.30	0.40	0.40	0.86	0.30	0.30
d, Delay for Lane Group [s/veh]	54.48	63.77	49.71	68.43	24.81	24.99	60.56	15.46	15.49
Lane Group LOS	D	E	D	E	C	C	E	B	B
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.58	4.65	0.14	0.19	6.25	5.87	6.05	4.39	4.26
50th-Percentile Queue Length [ft/ln]	264.38	116.31	3.44	4.77	156.19	146.82	151.32	109.75	106.48
95th-Percentile Queue Length [veh/ln]	15.91	8.19	0.25	0.34	10.35	9.85	10.09	7.83	7.64
95th-Percentile Queue Length [ft/ln]	397.71	204.75	6.20	8.58	258.67	246.18	252.20	195.65	191.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.48	54.48	54.48	63.77	63.77	49.71	68.43	24.87	24.99	60.56	15.48	15.49
Movement LOS	D	D	D	E	E	D	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	54.48			63.30			25.24			26.33		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	33.85											
Intersection LOS	C											
Intersection V/C	0.555											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.091	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	917	200	417	500
d_b, Bicycle Delay [s]	17.60	48.60	37.60	33.75
I_b,int, Bicycle LOS Score for Intersection	2.127	1.805	2.081	2.221
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	1	653	0	2	760
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	653	0	2	760
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	174	0	1	203
Total Analysis Volume [veh/h]	0	1	698	0	2	812
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	22.42	10.52	0.00	0.00	8.97	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	0.12	0.12	0.00	0.00	0.17	0.00
d_A, Approach Delay [s/veh]	10.52		0.00		0.02	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.02					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	33.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	24	30	82	431	54	123	162	471	24	81	562	357
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	30	82	431	54	123	162	471	24	81	562	357
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	8	21	112	14	32	42	122	6	21	146	93
Total Analysis Volume [veh/h]	25	31	85	448	56	128	168	490	25	84	584	371
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	31	0	33	30	0	29	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	18	18	18	13	67	67	7	61	61
g / C, Green / Cycle	0.10	0.15	0.15	0.15	0.11	0.55	0.55	0.06	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.08	0.13	0.05	0.05	0.09	0.14	0.02	0.05	0.16	0.23
s, saturation flow rate [veh/h]	1704	3514	1770	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	170	535	269	246	201	2003	894	110	1823	814
d1, Uniform Delay [s]	53.00	49.43	45.60	45.62	52.30	13.82	12.14	55.49	17.62	19.18
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.80	3.58	0.80	0.88	8.93	0.29	0.06	10.33	0.47	1.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.84	0.36	0.36	0.84	0.24	0.03	0.76	0.32	0.46
d, Delay for Lane Group [s/veh]	62.79	53.01	46.39	46.50	61.23	14.11	12.20	65.83	18.08	21.02
Lane Group LOS	E	D	D	D	E	B	B	E	B	C
Critical Lane Group	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.46	6.49	2.52	2.32	5.29	3.21	0.30	2.74	4.55	6.55
50th-Percentile Queue Length [ft/ln]	111.46	162.25	62.93	58.00	132.15	80.35	7.38	68.52	113.73	163.64
95th-Percentile Queue Length [veh/ln]	7.92	10.67	4.53	4.18	9.06	5.79	0.53	4.93	8.05	10.74
95th-Percentile Queue Length [ft/ln]	198.03	266.70	113.27	104.40	226.41	144.64	13.28	123.34	201.18	268.54

Movement, Approach, & Intersection Results

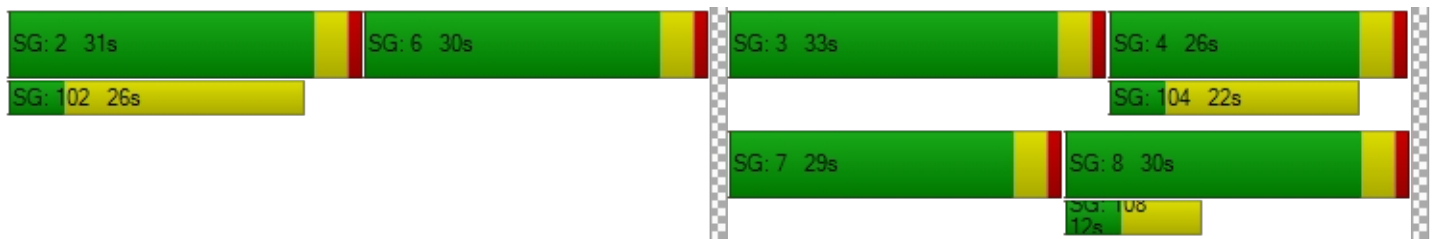
d_M, Delay for Movement [s/veh]	62.79	62.79	62.79	53.01	46.39	46.47	61.23	14.11	12.20	65.83	18.08	21.02
Movement LOS	E	E	E	D	D	D	E	B	B	E	B	C
d_A, Approach Delay [s/veh]	62.79			51.10			25.63			22.99		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	33.08											
Intersection LOS	C											
Intersection V/C	0.533											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.004	2.745	2.853	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	450	433	367
d_b, Bicycle Delay [s]	36.82	36.04	36.82	40.02
I_b,int, Bicycle LOS Score for Intersection	1.792	2.602	2.123	2.417
Bicycle LOS	A	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	27.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.796

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				↑↓			↑↓			↑↑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	154	3	365	0	643	365	89	739	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	154	3	365	0	643	365	89	739	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8890	0.8890	0.8890	1.0000	0.8890	0.8890	0.8890	0.8890	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	43	1	103	0	181	103	25	208	0
Total Analysis Volume [veh/h]	0	0	0	173	3	411	0	723	411	100	831	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	50	0	0	59	0	11	70	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		33	33	64	64	8	76
g / C, Green / Cycle		0.28	0.28	0.53	0.53	0.07	0.63
(v / s)_i Volume / Saturation Flow Rate		0.10	0.25	0.38	0.25	0.06	0.23
s, saturation flow rate [veh/h]		1811	1615	1900	1615	1810	3618
c, Capacity [veh/h]		501	447	1005	854	126	2285
d1, Uniform Delay [s]		34.78	42.11	21.51	17.87	54.97	10.57
k, delay calibration		0.11	0.21	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.42	14.25	4.44	1.94	10.66	0.45
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.35	0.92	0.72	0.48	0.79	0.36
d, Delay for Lane Group [s/veh]		35.19	56.37	25.95	19.81	65.64	11.02
Lane Group LOS		D	E	C	B	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.07	13.11	15.13	7.02	3.25	4.70
50th-Percentile Queue Length [ft/ln]		101.73	327.78	378.19	175.50	81.33	117.61
95th-Percentile Queue Length [veh/ln]		7.32	19.05	21.51	11.37	5.86	8.26
95th-Percentile Queue Length [ft/ln]		183.12	476.24	537.65	284.13	146.39	206.54

Movement, Approach, & Intersection Results

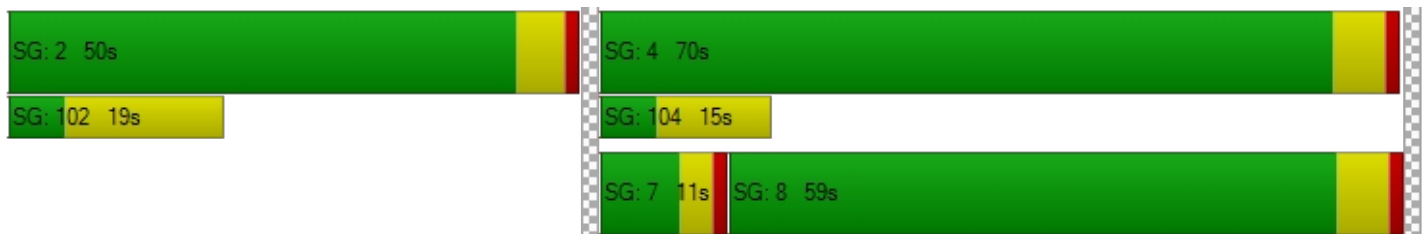
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	35.19	35.19	56.37	0.00	25.95	19.81	65.64	11.02	0.00
Movement LOS				D	D	E		C	B	E	B	
d_A, Approach Delay [s/veh]	0.00			50.02			23.73			16.88		
Approach LOS	A			D			C			B		
d_I, Intersection Delay [s/veh]	27.14											
Intersection LOS	C											
Intersection V/C	0.796											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.242	0.000	2.889
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	745	888	1072
d_b, Bicycle Delay [s]	60.00	23.63	18.54	12.93
I_b,int, Bicycle LOS Score for Intersection	4.132	2.528	3.431	2.328
Bicycle LOS	D	B	C	B

Sequence




Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	33.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	395	2	200	0	0	0	254	564	0	0	401	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	395	2	200	0	0	0	254	564	0	0	401	148
Peak Hour Factor	0.9680	0.9680	0.9680	1.0000	1.0000	1.0000	0.9680	0.9680	1.0000	1.0000	0.9680	0.9680
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	102	1	52	0	0	0	66	146	0	0	104	38
Total Analysis Volume [veh/h]	408	2	207	0	0	0	262	583	0	0	414	153
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	59	0	0	0	0	26	61	0	0	35	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	30	30		20	79	55
g / C, Green / Cycle	0.25	0.25		0.16	0.66	0.46
(v / s)_i Volume / Saturation Flow Rate	0.23	0.13		0.14	0.31	0.31
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1814
c, Capacity [veh/h]	453	404		295	1250	837
d1, Uniform Delay [s]	43.59	38.67		49.12	10.13	25.33
k, delay calibration	0.11	0.11		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	6.99	1.00		8.80	1.25	4.39
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.51		0.89	0.47	0.68
d, Delay for Lane Group [s/veh]	50.58	39.67		57.91	11.38	29.72
Lane Group LOS	D	D		E	B	C
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	12.25	5.20		8.11	6.82	12.68
50th-Percentile Queue Length [ft/ln]	306.20	130.11		202.64	170.39	317.03
95th-Percentile Queue Length [veh/ln]	17.99	8.95		12.77	11.10	18.52
95th-Percentile Queue Length [ft/ln]	449.69	223.64		319.37	277.42	463.04

Movement, Approach, & Intersection Results

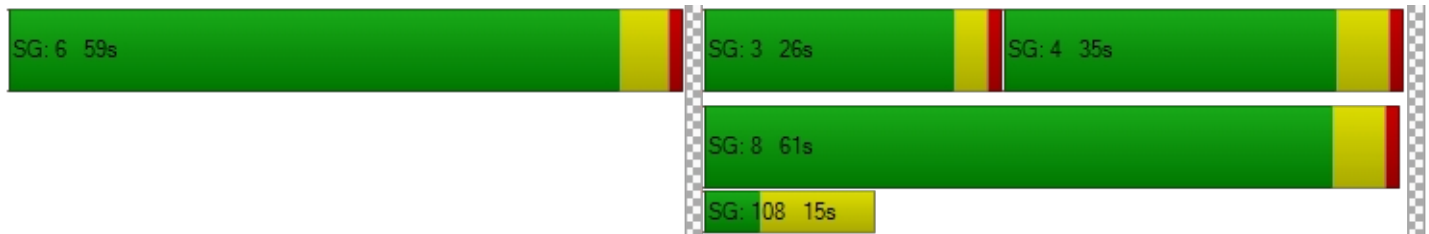
d_M, Delay for Movement [s/veh]	50.58	50.58	39.67	0.00	0.00	0.00	57.91	11.38	0.00	0.00	29.72	29.72
Movement LOS	D	D	D				E	B			C	C
d_A, Approach Delay [s/veh]	46.92			0.00			25.81			29.72		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	33.32											
Intersection LOS	C											
Intersection V/C	0.690											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.256	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	895	0	922	488
d_b, Bicycle Delay [s]	18.32	60.00	17.44	34.28
I_b,int, Bicycle LOS Score for Intersection	2.578	4.132	2.954	2.495
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	14.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.161

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	8	204	0	0	258	111	73	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	204	0	0	258	111	73	0	12	0	0	0
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	54	0	0	68	29	19	0	3	0	0	0
Total Analysis Volume [veh/h]	8	216	0	0	274	118	77	0	13	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.08	0.00	0.00	7.64	0.00	0.00	13.98	14.12	9.76	13.39	13.96	9.34
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.00	0.00	0.00	0.57	0.57	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.51	0.00	0.00	0.00	0.00	0.00	14.25	14.25	1.29	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.29			0.00			13.37			12.23		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.80											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.50	8.30	7.20	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.40		3.60		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.00					
Intersection LOS						

Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	18.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.018

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	559	1	4	621
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	2	559	1	4	621
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	146	0	1	162
Total Analysis Volume [veh/h]	5	2	583	1	4	648
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	18.35	10.30	0.00	0.00	8.61	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	1.61	1.61	0.00	0.00	0.30	0.00
d_A, Approach Delay [s/veh]	16.05		0.00		0.05	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.12					
Intersection LOS	C					

APPENDIX C-2

INTERSECTION ANALYSIS
WORKSHEETS -
EXISTING PLUS PROJECT

Menifee Compass Northern Gateway Project

Vistro File: K:\...\Menifee CNG_AM.vistro

Scenario 2 EX WP AM

Report File: K:\...\2. EX WP AM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.591	45.2	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.011	24.4	C
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.545	30.3	C
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.008	34.3	D
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.506	30.9	C
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.774	24.6	C
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.677	31.0	C
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.417	19.0	C
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition	SB Left	0.001	8.9	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.010	10.8	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	45.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.591

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	253	423	268	105	9	17	126	5	165	53	251
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	1	2	3	0	0	0	0	25	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	254	424	270	108	9	17	126	5	190	53	251
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	65	109	69	28	2	4	32	1	49	14	64
Total Analysis Volume [veh/h]	2	261	435	277	111	9	17	129	5	195	54	257
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	15	54	0	29	68	0	11	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	3.7	0.0	2.0	3.7	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.70	5.70	4.00	5.70	5.70	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	0	35	35	20	55	55	3	30	30	15	42	42
g / C, Green / Cycle	0.00	0.29	0.29	0.17	0.46	0.46	0.03	0.25	0.25	0.12	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.27	0.15	0.03	0.01	0.01	0.04	0.00	0.11	0.01	0.16
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	7	555	472	306	1655	739	46	916	409	224	1272	568
d1, Uniform Delay [s]	59.61	34.85	41.14	48.89	18.21	17.75	57.55	34.71	33.58	51.63	25.60	30.00
k, delay calibration	0.11	0.11	0.16	0.17	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.12	0.62	11.15	13.95	0.02	0.01	4.95	0.32	0.05	9.95	0.06	2.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.29	0.47	0.92	0.90	0.07	0.01	0.37	0.14	0.01	0.87	0.04	0.45
d, Delay for Lane Group [s/veh]	80.72	35.47	52.29	62.85	18.23	17.76	62.50	35.03	33.63	61.58	25.67	32.59
Lane Group LOS	F	D	D	E	B	B	E	D	C	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.10	6.09	13.25	9.00	0.82	0.13	0.56	1.45	0.11	6.17	0.50	5.85
50th-Percentile Queue Length [ft/ln]	2.49	152.17	331.25	225.09	20.55	3.27	13.88	36.34	2.80	154.26	12.49	146.37
95th-Percentile Queue Length [veh/ln]	0.18	10.13	19.22	13.92	1.48	0.24	1.00	2.62	0.20	10.24	0.90	9.82
95th-Percentile Queue Length [ft/ln]	4.49	253.32	480.49	348.11	36.99	5.88	24.99	65.41	5.05	256.11	22.48	245.58

Movement, Approach, & Intersection Results

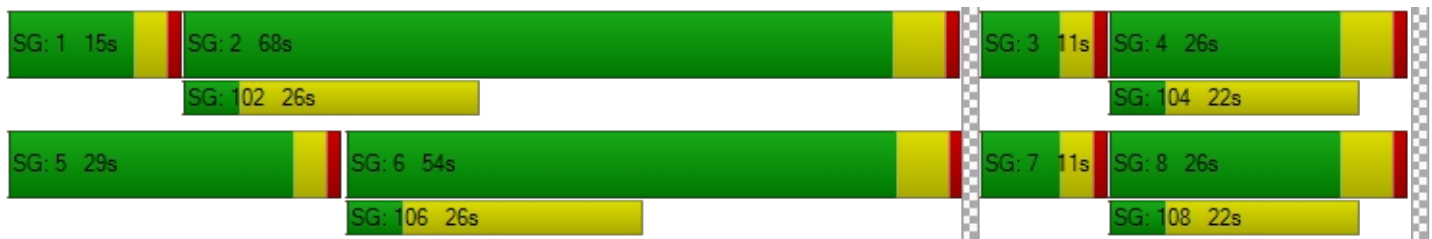
d_M, Delay for Movement [s/veh]	80.72	35.47	52.29	62.85	18.23	17.76	62.50	35.03	33.63	61.58	25.67	32.59
Movement LOS	F	D	D	E	B	B	E	D	C	E	C	C
d_A, Approach Delay [s/veh]	46.08			49.35			38.08			43.02		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	45.25											
Intersection LOS	D											
Intersection V/C	0.591											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.643	2.618	2.659	2.922
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	805	1038	338	338
d_b, Bicycle Delay [s]	21.42	13.87	41.42	41.42
I_b,int, Bicycle LOS Score for Intersection	2.711	1.887	1.684	1.838
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	24.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	2	5	837	1	3	473
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	2	1	0	25
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	20	839	2	3	498
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	5	224	1	1	133
Total Analysis Volume [veh/h]	2	21	895	2	3	531
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	24.44	11.77	0.00	0.00	9.72	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.15	0.15	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	3.76	3.76	0.00	0.00	0.30	0.00
d_A, Approach Delay [s/veh]	12.87		0.00		0.05	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.22					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	30.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	87	105	127	90	53	2	9	762	72	69	374	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	2	0	0	0	0	17	0	1	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	87	105	129	90	53	2	9	779	72	70	429	39
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	27	33	23	14	1	2	201	19	18	111	10
Total Analysis Volume [veh/h]	90	109	133	93	55	2	9	806	74	72	444	40
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	64	0	0	22	0	11	22	0	12	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	12	12	2	61	61	6	66	66
g / C, Green / Cycle	0.21	0.10	0.10	0.02	0.51	0.51	0.05	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.19	0.08	0.00	0.00	0.23	0.24	0.04	0.13	0.13
s, saturation flow rate [veh/h]	1752	1842	1615	1810	1900	1844	1810	1900	1846
c, Capacity [veh/h]	366	178	156	28	966	937	96	1037	1008
d1, Uniform Delay [s]	46.34	53.27	49.05	58.45	18.96	18.96	56.02	14.20	14.21
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.62	9.69	0.03	6.46	1.59	1.64	10.98	0.54	0.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.83	0.01	0.32	0.46	0.46	0.75	0.24	0.24
d, Delay for Lane Group [s/veh]	54.95	62.96	49.08	64.91	20.56	20.61	67.00	14.73	14.76
Lane Group LOS	D	E	D	E	C	C	E	B	B
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.22	4.75	0.05	0.31	7.77	7.56	2.38	3.34	3.27
50th-Percentile Queue Length [ft/ln]	255.53	118.81	1.36	7.82	194.30	188.98	59.39	83.44	81.66
95th-Percentile Queue Length [veh/ln]	15.46	8.33	0.10	0.56	12.34	12.07	4.28	6.01	5.88
95th-Percentile Queue Length [ft/ln]	386.60	208.18	2.46	14.08	308.60	301.71	106.90	150.20	146.98

Movement, Approach, & Intersection Results

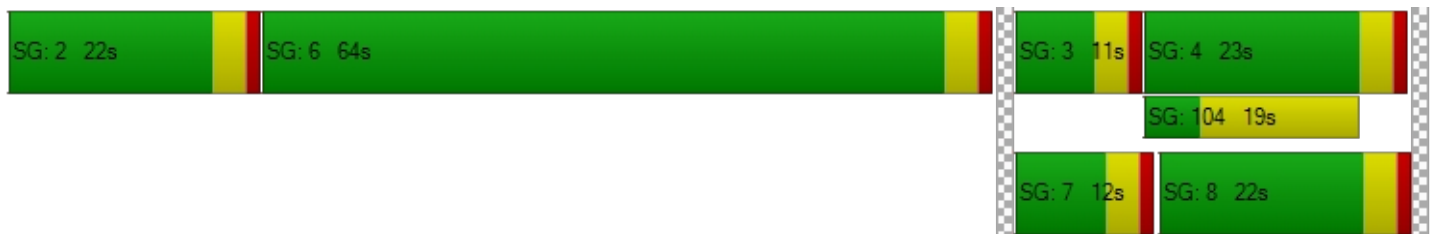
d_M, Delay for Movement [s/veh]	54.95	54.95	54.95	62.96	62.96	49.08	64.91	20.58	20.61	67.00	14.75	14.76
Movement LOS	D	D	D	E	E	D	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	54.95			62.77			21.03			21.52		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	30.26											
Intersection LOS	C											
Intersection V/C	0.545											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.106	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	300	300	317
d_b, Bicycle Delay [s]	15.00	43.35	43.35	42.50
I_b,int, Bicycle LOS Score for Intersection	2.107	1.807	2.293	2.018
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	34.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	4	980	1	2	506
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	6	15	4	21	55
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	10	995	5	23	561
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	267	1	6	151
Total Analysis Volume [veh/h]	1	11	1070	5	25	603
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.01	0.00	0.04	0.01
d_M, Delay for Movement [s/veh]	34.30	12.59	0.00	0.00	10.70	0.00
Movement LOS	D	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.12	0.00
95th-Percentile Queue Length [ft/ln]	2.34	2.34	0.00	0.00	2.97	0.00
d_A, Approach Delay [s/veh]	14.39		0.00		0.43	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.26					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	30.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.506

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	28	27	135	322	19	71	145	780	25	71	392	312
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	21	0	0	76	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	27	135	322	19	71	145	801	25	71	468	312
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	7	36	85	5	19	38	212	7	19	124	82
Total Analysis Volume [veh/h]	30	29	143	340	20	75	153	847	26	75	495	330
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	30	0	19	47	0	12	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	14	14	14	12	67	67	6	61	61
g / C, Green / Cycle	0.14	0.12	0.12	0.12	0.10	0.55	0.55	0.05	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.12	0.10	0.03	0.03	0.08	0.23	0.02	0.04	0.14	0.20
s, saturation flow rate [veh/h]	1678	3514	1720	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	233	422	206	194	184	2003	894	98	1831	817
d1, Uniform Delay [s]	50.60	51.44	47.82	47.83	52.89	15.61	12.15	55.99	16.95	18.39
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.45	3.68	0.58	0.62	9.28	0.66	0.06	11.61	0.36	1.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.81	0.24	0.24	0.83	0.42	0.03	0.76	0.27	0.40
d, Delay for Lane Group [s/veh]	60.04	55.12	48.41	48.45	62.17	16.26	12.21	67.61	17.31	19.87
Lane Group LOS	E	E	D	D	E	B	B	E	B	B
Critical Lane Group	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.28	4.98	1.31	1.23	4.85	6.30	0.31	2.49	3.72	5.58
50th-Percentile Queue Length [ft/ln]	157.07	124.56	32.76	30.83	121.13	157.42	7.68	62.16	92.92	139.48
95th-Percentile Queue Length [veh/ln]	10.39	8.64	2.36	2.22	8.46	10.41	0.55	4.48	6.69	9.45
95th-Percentile Queue Length [ft/ln]	259.83	216.07	58.97	55.49	211.38	260.30	13.82	111.90	167.26	236.32

Movement, Approach, & Intersection Results

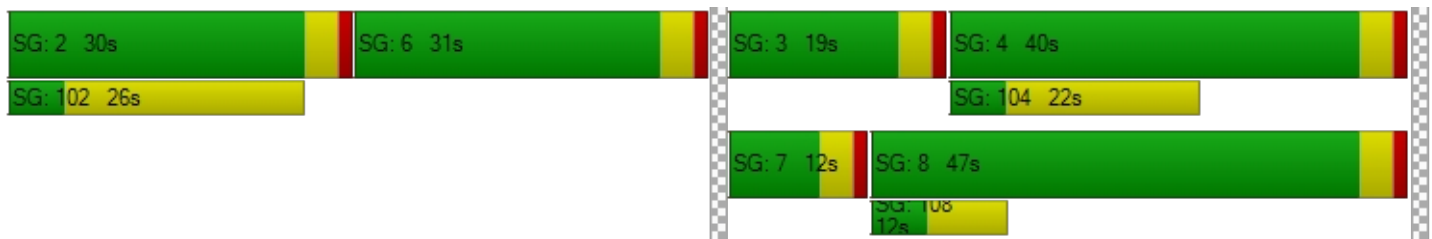
d_M, Delay for Movement [s/veh]	60.04	60.04	60.04	55.12	48.41	48.43	62.17	16.26	12.21	67.61	17.31	19.87
Movement LOS	E	E	E	E	D	D	E	B	B	E	B	B
d_A, Approach Delay [s/veh]	60.04			53.66			23.00			22.44		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	30.93											
Intersection LOS	C											
Intersection V/C	0.506											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.019	2.654	2.908	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	450	433	717	600
d_b, Bicycle Delay [s]	36.04	36.82	24.70	29.40
I_b,int, Bicycle LOS Score for Intersection	1.893	2.277	2.406	2.302
Bicycle LOS	A	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	24.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.774

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	113	1	259	0	726	485	108	591	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	42	0	13	8	0	34	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	113	1	301	0	739	493	108	625	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9470	0.9470	0.9470	1.0000	0.9470	0.9470	0.9470	0.9470	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	30	0	79	0	195	130	29	165	0
Total Analysis Volume [veh/h]	0	0	0	119	1	318	0	780	521	114	660	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	44	0	0	65	0	11	76	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		26	26	70	70	9	83
g / C, Green / Cycle		0.22	0.22	0.58	0.58	0.08	0.69
(v / s)_i Volume / Saturation Flow Rate		0.07	0.20	0.41	0.32	0.06	0.18
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		394	352	1100	935	142	2498
d1, Uniform Delay [s]		39.32	45.72	18.04	15.69	54.41	7.03
k, delay calibration		0.11	0.16	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.43	11.91	3.87	2.39	10.19	0.26
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.30	0.90	0.71	0.56	0.81	0.26
d, Delay for Lane Group [s/veh]		39.76	57.63	21.91	18.09	64.60	7.28
Lane Group LOS		D	E	C	B	E	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		2.94	10.08	14.72	8.49	3.68	2.71
50th-Percentile Queue Length [ft/ln]		73.56	252.09	368.03	212.27	91.91	67.86
95th-Percentile Queue Length [veh/ln]		5.30	15.29	21.01	13.27	6.62	4.89
95th-Percentile Queue Length [ft/ln]		132.41	382.29	525.34	331.74	165.43	122.16

Movement, Approach, & Intersection Results

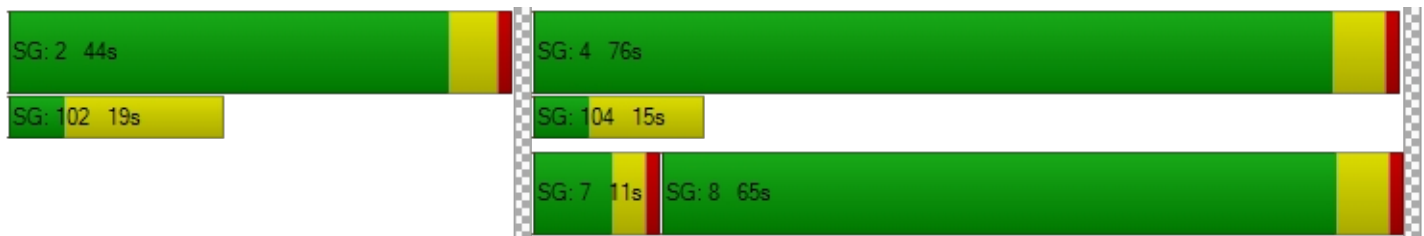
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	39.76	39.76	57.63	0.00	21.91	18.09	64.60	7.28	0.00
Movement LOS				D	D	E		C	B	E	A	
d_A, Approach Delay [s/veh]	0.00			52.73			20.38			15.73		
Approach LOS	A			D			C			B		
d_I, Intersection Delay [s/veh]	24.58											
Intersection LOS	C											
Intersection V/C	0.774											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.169	0.000	2.826
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	645	988	1172
d_b, Bicycle Delay [s]	60.00	27.54	15.35	10.29
I_b,int, Bicycle LOS Score for Intersection	4.132	2.282	3.706	2.198
Bicycle LOS	D	B	D	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	31.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.677

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	271	0	133	0	0	0	233	610	0	0	436	168
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	29	0	0	0	0	0	12	1	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	0	133	0	0	0	245	611	0	0	441	168
Peak Hour Factor	0.9480	0.9480	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	1.0000	1.0000	0.9480	0.9480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	79	0	35	0	0	0	65	161	0	0	116	44
Total Analysis Volume [veh/h]	316	0	140	0	0	0	258	645	0	0	465	177
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	38	0	0	0	0	26	82	0	0	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	23	23		19	86	62
g / C, Green / Cycle	0.19	0.19		0.16	0.71	0.52
(v / s)_i Volume / Saturation Flow Rate	0.17	0.09		0.14	0.34	0.35
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1812
c, Capacity [veh/h]	353	315		290	1355	941
d1, Uniform Delay [s]	47.09	42.56		49.34	7.47	21.45
k, delay calibration	0.17	0.11		0.12	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	11.95	0.98		10.03	1.20	3.99
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.44		0.89	0.48	0.68
d, Delay for Lane Group [s/veh]	59.05	43.54		59.37	8.67	25.44
Lane Group LOS	E	D		E	A	C
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	10.09	3.65		8.09	6.07	13.18
50th-Percentile Queue Length [ft/ln]	252.13	91.36		202.26	151.70	329.40
95th-Percentile Queue Length [veh/ln]	15.29	6.58		12.76	10.11	19.13
95th-Percentile Queue Length [ft/ln]	382.33	164.45		318.88	252.70	478.22

Movement, Approach, & Intersection Results

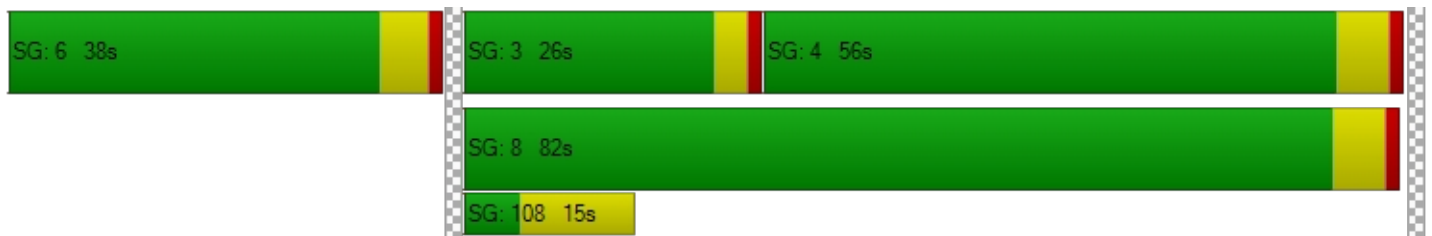
d_M, Delay for Movement [s/veh]	59.05	59.05	43.54	0.00	0.00	0.00	59.37	8.67	0.00	0.00	25.44	25.44
Movement LOS	E	E	D				E	A			C	C
d_A, Approach Delay [s/veh]	54.29			0.00			23.16			25.44		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	30.98											
Intersection LOS	C											
Intersection V/C	0.677											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.178	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	545	0	1272	838
d_b, Bicycle Delay [s]	31.76	60.00	7.96	20.24
I_b,int, Bicycle LOS Score for Intersection	2.312	4.132	3.050	2.619
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.417

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	314	0	0	148	53	173	0	9	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	1	28	0	0	0	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	315	1	28	148	53	173	0	9	0	0	1
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	83	0	7	39	14	46	0	2	0	0	0
Total Analysis Volume [veh/h]	2	332	1	30	156	56	182	0	9	0	0	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.02	0.00	0.00	0.42	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.63	0.00	0.00	7.98	0.00	0.00	19.01	19.11	9.06	13.68	13.98	10.05
Movement LOS	A	A	A	A	A	A	C	C	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.07	0.07	0.00	2.02	2.02	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.11	0.00	0.00	1.86	1.86	0.00	50.41	50.41	0.76	0.11	0.11	0.11
d_A, Approach Delay [s/veh]	0.05			0.99			18.54			10.05		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	4.95											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	29	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	29	0	0	5
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	8	0	0	1
Total Analysis Volume [veh/h]	1	1	31	0	0	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.89	8.32	7.25	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.06	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.15	0.15	1.45	1.45	0.00	0.00
d_A, Approach Delay [s/veh]	8.60		7.25		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.37					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	719	2	6	533
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	30	25
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	736	2	36	558
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	189	1	9	143
Total Analysis Volume [veh/h]	0	6	754	2	37	572
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.04	0.01
d_M, Delay for Movement [s/veh]	23.40	10.81	0.00	0.00	9.35	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.13	0.00
95th-Percentile Queue Length [ft/ln]	0.73	0.73	0.00	0.00	3.35	0.00
d_A, Approach Delay [s/veh]	10.81		0.00		0.57	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.30					
Intersection LOS	B					

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Vistro File: K:\...\Menifee CNG_PM.vistro

Scenario 2 EX WP PM

Report File: K:\...\2. EX WP PM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.464	42.5	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.091	10.8	B
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.572	33.8	C
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.022	25.5	D
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.533	32.5	C
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Left	0.839	28.6	C
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	0.721	34.8	C
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.169	14.5	B
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition	SB Left	0.004	8.6	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.021	20.4	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	42.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.464

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	5	142	170	315	237	29	19	52	5	273	88	268
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	1	1	0	0	0	0	9	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	146	170	316	238	29	19	52	5	282	88	269
Peak Hour Factor	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	37	43	80	60	7	5	13	1	72	22	68
Total Analysis Volume [veh/h]	5	148	173	321	242	29	19	53	5	286	89	273
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	30	0	45	64	0	12	26	0	19	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	15	15	23	38	38	3	44	44	21	62	62
g / C, Green / Cycle	0.01	0.13	0.13	0.20	0.31	0.31	0.03	0.37	0.37	0.18	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.11	0.18	0.07	0.02	0.01	0.01	0.00	0.16	0.02	0.17
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	17	243	206	355	1137	508	50	1331	594	317	1864	832
d1, Uniform Delay [s]	59.05	49.50	51.12	47.16	30.23	28.72	57.33	24.33	24.05	48.50	14.45	16.97
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.39	2.47	8.73	8.71	0.09	0.05	4.67	0.06	0.03	9.40	0.05	1.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.61	0.84	0.91	0.21	0.06	0.38	0.04	0.01	0.90	0.05	0.33
d, Delay for Lane Group [s/veh]	68.43	51.97	59.85	55.86	30.32	28.77	62.00	24.39	24.07	57.90	14.50	18.02
Lane Group LOS	E	D	E	E	C	C	E	C	C	E	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.19	4.22	5.40	9.84	2.49	0.57	0.61	0.48	0.09	8.87	0.58	4.30
50th-Percentile Queue Length [ft/ln]	4.77	105.62	134.99	245.95	62.17	14.24	15.36	11.89	2.27	221.76	14.40	107.52
95th-Percentile Queue Length [veh/ln]	0.34	7.60	9.21	14.98	4.48	1.03	1.11	0.86	0.16	13.76	1.04	7.70
95th-Percentile Queue Length [ft/ln]	8.58	189.90	230.26	374.55	111.90	25.63	27.66	21.40	4.09	343.88	25.92	192.55

Movement, Approach, & Intersection Results

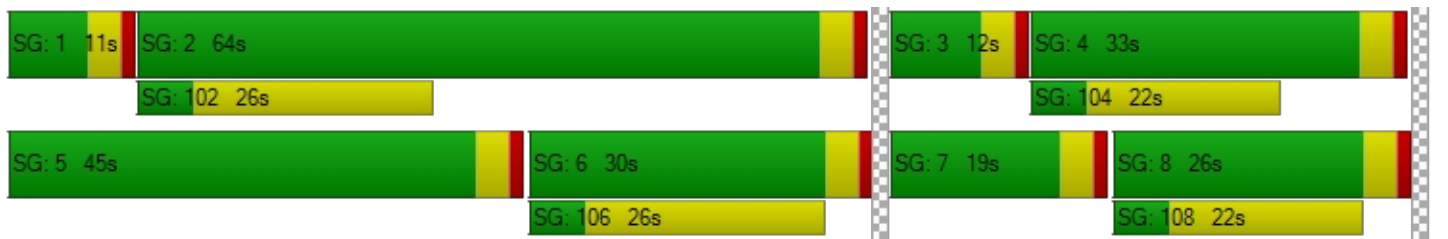
d_M, Delay for Movement [s/veh]	68.43	51.97	59.85	55.86	30.32	28.77	62.00	24.39	24.07	57.90	14.50	18.02
Movement LOS	E	D	E	E	C	C	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	56.40			44.09			33.65			35.14		
Approach LOS	E			D			C			D		
d_I, Intersection Delay [s/veh]	42.51											
Intersection LOS	D											
Intersection V/C	0.464											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.594	2.650	2.656	2.887
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	1000	367	483
d_b, Bicycle Delay [s]	36.82	15.00	40.02	34.50
I_b,int, Bicycle LOS Score for Intersection	2.098	2.048	1.623	1.916
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.091

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	3	596	1	10	629
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	55	1	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	58	597	1	10	639
Peak Hour Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	15	158	0	3	170
Total Analysis Volume [veh/h]	0	62	634	1	11	678
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.09	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	20.40	10.79	0.00	0.00	8.80	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.30	0.30	0.00	0.00	0.03	0.00
95th-Percentile Queue Length [ft/ln]	7.45	7.45	0.00	0.00	0.87	0.00
d_A, Approach Delay [s/veh]	10.79		0.00		0.14	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.55					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	33.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.572

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	63	156	44	91	5	5	461	130	182	521	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	1	0	0	0	0	55	1	2	21	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	63	157	44	91	5	5	516	131	184	542	54
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	17	42	12	24	1	1	137	35	49	144	14
Total Analysis Volume [veh/h]	112	67	166	47	97	5	5	547	139	195	575	57
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	59	0	0	16	0	11	29	0	16	34	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	11	11	1	52	52	15	66	66
g / C, Green / Cycle	0.22	0.09	0.09	0.01	0.43	0.43	0.13	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.20	0.08	0.00	0.00	0.19	0.19	0.11	0.17	0.17
s, saturation flow rate [veh/h]	1725	1869	1615	1810	1900	1769	1810	1900	1840
c, Capacity [veh/h]	378	172	149	17	817	760	227	1037	1005
d1, Uniform Delay [s]	45.71	53.59	49.62	59.05	23.98	24.01	51.42	14.88	14.88
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.72	10.18	0.09	9.39	1.68	1.82	9.07	0.78	0.80
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.84	0.03	0.30	0.43	0.44	0.86	0.31	0.31
d, Delay for Lane Group [s/veh]	54.44	63.77	49.71	68.43	25.66	25.83	60.49	15.65	15.68
Lane Group LOS	D	E	D	E	C	C	E	B	B
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.60	4.65	0.14	0.19	7.00	6.60	6.11	4.60	4.46
50th-Percentile Queue Length [ft/ln]	265.10	116.31	3.44	4.77	175.08	164.88	152.83	114.93	111.60
95th-Percentile Queue Length [veh/ln]	15.94	8.19	0.25	0.34	11.34	10.81	10.17	8.11	7.93
95th-Percentile Queue Length [ft/ln]	398.61	204.75	6.20	8.58	283.58	270.17	254.21	202.84	198.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.44	54.44	54.44	63.77	63.77	49.71	68.43	25.72	25.83	60.49	15.67	15.68
Movement LOS	D	D	D	E	E	D	E	C	C	E	B	B
d_A, Approach Delay [s/veh]	54.44			63.30			26.05			26.24		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	33.75											
Intersection LOS	C											
Intersection V/C	0.572											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.091	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	917	200	417	500
d_b, Bicycle Delay [s]	17.60	48.60	37.60	33.75
I_b,int, Bicycle LOS Score for Intersection	2.129	1.805	2.130	2.242
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	25.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	1	653	0	2	760
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	21	54	2	8	19
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	22	707	2	10	779
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	6	189	1	3	208
Total Analysis Volume [veh/h]	4	24	755	2	11	832
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.04	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	25.51	11.26	0.00	0.00	9.22	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.19	0.19	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	4.82	4.82	0.00	0.00	0.97	0.00
d_A, Approach Delay [s/veh]	13.30		0.00		0.12	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.29					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	32.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	24	30	82	431	54	123	162	471	24	81	562	357
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	75	0	0	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	30	82	431	54	123	162	546	24	81	589	357
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	8	21	112	14	32	42	142	6	21	153	93
Total Analysis Volume [veh/h]	25	31	85	448	56	128	168	568	25	84	612	371
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	31	0	33	30	0	29	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	18	18	18	13	67	67	7	61	61
g / C, Green / Cycle	0.10	0.15	0.15	0.15	0.11	0.55	0.55	0.06	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.08	0.13	0.05	0.05	0.09	0.16	0.02	0.05	0.17	0.23
s, saturation flow rate [veh/h]	1704	3514	1770	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	170	535	269	246	201	2003	894	110	1823	814
d1, Uniform Delay [s]	53.00	49.43	45.60	45.62	52.30	14.18	12.14	55.49	17.78	19.18
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.80	3.58	0.80	0.88	8.93	0.36	0.06	10.33	0.50	1.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.84	0.36	0.36	0.84	0.28	0.03	0.76	0.34	0.46
d, Delay for Lane Group [s/veh]	62.79	53.01	46.39	46.50	61.23	14.53	12.20	65.83	18.28	21.02
Lane Group LOS	E	D	D	D	E	B	B	E	B	C
Critical Lane Group	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.46	6.49	2.52	2.32	5.29	3.82	0.30	2.74	4.81	6.55
50th-Percentile Queue Length [ft/ln]	111.46	162.25	62.93	58.00	132.15	95.59	7.38	68.52	120.34	163.64
95th-Percentile Queue Length [veh/ln]	7.92	10.67	4.53	4.18	9.06	6.88	0.53	4.93	8.41	10.74
95th-Percentile Queue Length [ft/ln]	198.03	266.70	113.27	104.40	226.41	172.07	13.28	123.34	210.29	268.54

Movement, Approach, & Intersection Results

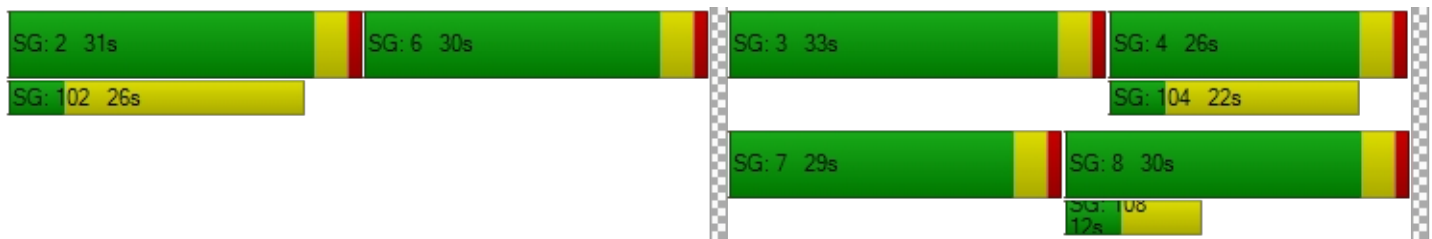
d_M, Delay for Movement [s/veh]	62.79	62.79	62.79	53.01	46.39	46.47	61.23	14.53	12.20	65.83	18.28	21.02
Movement LOS	E	E	E	D	D	D	E	B	B	E	B	C
d_A, Approach Delay [s/veh]	62.79			51.10			24.76			22.98		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	32.49											
Intersection LOS	C											
Intersection V/C	0.533											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.004	2.745	2.881	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	450	433	367
d_b, Bicycle Delay [s]	36.82	36.04	36.82	40.02
I_b,int, Bicycle LOS Score for Intersection	1.792	2.602	2.187	2.440
Bicycle LOS	A	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.839

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	154	3	365	0	643	365	89	739	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	14	0	46	29	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	154	3	379	0	689	394	89	752	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8890	0.8890	0.8890	1.0000	0.8890	0.8890	0.8890	0.8890	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	43	1	107	0	194	111	25	211	0
Total Analysis Volume [veh/h]	0	0	0	173	3	426	0	775	443	100	846	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	50	0	0	59	0	11	70	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		34	34	62	62	8	75
g / C, Green / Cycle		0.28	0.28	0.52	0.52	0.07	0.62
(v / s)_i Volume / Saturation Flow Rate		0.10	0.26	0.41	0.27	0.06	0.23
s, saturation flow rate [veh/h]		1811	1615	1900	1615	1810	3618
c, Capacity [veh/h]		517	461	988	840	126	2253
d1, Uniform Delay [s]		33.93	41.61	23.36	19.06	54.97	11.14
k, delay calibration		0.11	0.23	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.39	15.28	6.24	2.37	10.66	0.48
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.34	0.92	0.78	0.53	0.79	0.38
d, Delay for Lane Group [s/veh]		34.32	56.89	29.59	21.43	65.64	11.62
Lane Group LOS		C	E	C	C	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.01	13.69	17.68	8.00	3.25	4.98
50th-Percentile Queue Length [ft/ln]		100.20	342.22	441.93	199.97	81.33	124.61
95th-Percentile Queue Length [veh/ln]		7.21	19.76	24.57	12.64	5.86	8.65
95th-Percentile Queue Length [ft/ln]		180.37	493.91	614.32	315.93	146.39	216.15

Movement, Approach, & Intersection Results

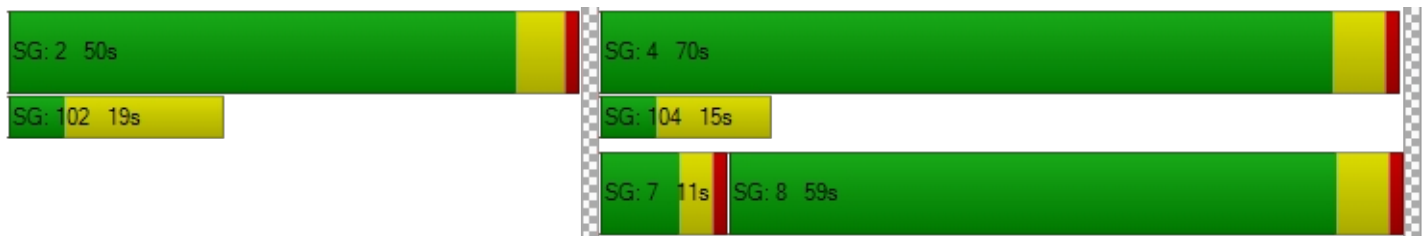
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	34.32	34.32	56.89	0.00	29.59	21.43	65.64	11.62	0.00
Movement LOS				C	C	E		C	C	E	B	
d_A, Approach Delay [s/veh]	0.00			50.29			26.62			17.33		
Approach LOS	A			D			C			B		
d_I, Intersection Delay [s/veh]	28.59											
Intersection LOS	C											
Intersection V/C	0.839											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.249	0.000	2.916
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	745	888	1072
d_b, Bicycle Delay [s]	60.00	23.63	18.54	12.93
I_b,int, Bicycle LOS Score for Intersection	4.132	2.553	3.569	2.340
Bicycle LOS	D	B	D	B

Sequence




Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	34.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.721

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	395	2	200	0	0	0	254	564	0	0	401	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	0	0	0	0	0	41	5	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	406	2	200	0	0	0	295	569	0	0	403	148
Peak Hour Factor	0.9680	0.9680	0.9680	1.0000	1.0000	1.0000	0.9680	0.9680	1.0000	1.0000	0.9680	0.9680
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	105	1	52	0	0	0	76	147	0	0	104	38
Total Analysis Volume [veh/h]	419	2	207	0	0	0	305	588	0	0	416	153
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	59	0	0	0	0	26	61	0	0	35	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	31	31		22	78	52
g / C, Green / Cycle	0.26	0.26		0.19	0.65	0.43
(v / s)_i Volume / Saturation Flow Rate	0.23	0.13		0.17	0.31	0.31
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1814
c, Capacity [veh/h]	464	414		338	1239	783
d1, Uniform Delay [s]	43.23	38.05		47.71	10.53	28.23
k, delay calibration	0.11	0.11		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	7.02	0.93		8.82	1.31	5.83
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.50		0.90	0.47	0.73
d, Delay for Lane Group [s/veh]	50.25	38.99		56.53	11.83	34.06
Lane Group LOS	D	D		E	B	C
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	12.56	5.15		9.38	7.08	13.81
50th-Percentile Queue Length [ft/ln]	313.96	128.78		234.46	177.02	345.33
95th-Percentile Queue Length [veh/ln]	18.37	8.87		14.40	11.44	19.91
95th-Percentile Queue Length [ft/ln]	459.26	221.84		360.01	286.12	497.71

Movement, Approach, & Intersection Results

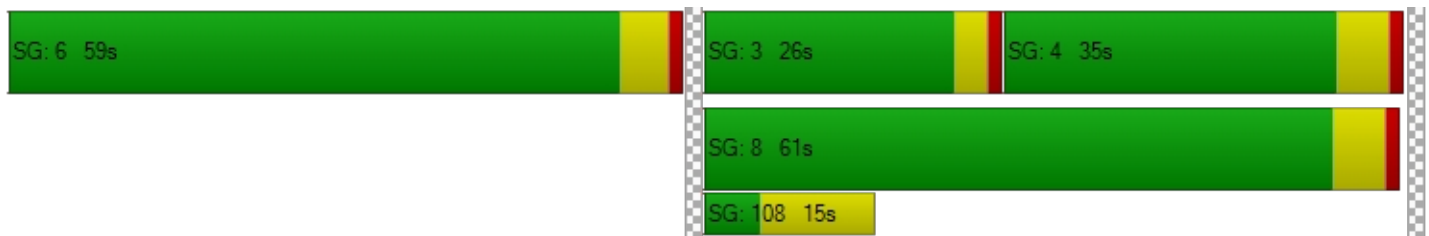
d_M, Delay for Movement [s/veh]	50.25	50.25	38.99	0.00	0.00	0.00	56.53	11.83	0.00	0.00	34.06	34.06
Movement LOS	D	D	D				E	B			C	C
d_A, Approach Delay [s/veh]	46.54			0.00			27.10			34.06		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	34.84											
Intersection LOS	C											
Intersection V/C	0.721											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.262	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	895	0	922	488
d_b, Bicycle Delay [s]	18.32	60.00	17.44	34.28
I_b,int, Bicycle LOS Score for Intersection	2.596	4.132	3.033	2.498
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	14.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.169

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	8	204	0	0	258	111	73	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	9	1	0	0	0	0	1	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	204	0	9	259	111	73	0	12	1	0	4
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	54	0	2	69	29	19	0	3	0	0	1
Total Analysis Volume [veh/h]	8	216	0	10	275	118	77	0	13	1	0	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.00	0.17	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.08	0.00	0.00	7.66	0.00	0.00	14.50	14.56	9.76	13.76	14.33	9.38
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.02	0.02	0.00	0.60	0.60	0.05	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.51	0.00	0.00	0.55	0.55	0.00	15.05	15.05	1.29	0.55	0.55	0.55
d_A, Approach Delay [s/veh]	0.29			0.19			13.81			10.26		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.99											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	5	9	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	5	9	0	0	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	2	0	0	0
Total Analysis Volume [veh/h]	4	5	9	0	0	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.63	8.33	7.21	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.65	0.65	0.42	0.42	0.00	0.00
d_A, Approach Delay [s/veh]	8.47		7.21		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.43					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	20.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	559	1	4	621
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	56	0	11	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	2	615	1	15	631
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	160	0	4	164
Total Analysis Volume [veh/h]	5	2	641	1	16	658
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.01	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	20.41	10.59	0.00	0.00	8.85	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	1.83	1.83	0.00	0.00	1.28	0.00
d_A, Approach Delay [s/veh]	17.60		0.00		0.21	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.20					
Intersection LOS	C					

APPENDIX C-3

**INTERSECTION ANALYSIS
WORKSHEETS -
OPENING YEAR 2025 CUMULATIVE**

Menifee Compass Northern Gateway Project

Vistro File: K:\...\Menifee CNG_AM_2023-08-30.vistro

Scenario 3 OY CUM AM

Report File: K:\...\3. OY CUM AM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.686	47.5	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.470	188.4	F
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Right	0.971	96.4	F
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	79.887	10,000.0	F
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Right	0.812	44.3	D
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	1.484	183.9	F
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	WB Thru	1.329	193.2	F
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.416	18.9	C
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition	SB Left	0.014	8.6	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.360	377.3	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	47.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	253	423	268	105	9	17	126	5	165	53	251
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	18	31	64	6	0	0	6	0	29	1	42
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	271	454	343	111	9	18	137	5	194	56	303
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	69	116	88	28	2	5	35	1	50	14	78
Total Analysis Volume [veh/h]	2	278	466	352	114	9	18	141	5	199	57	311
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	38	46	0	37	45	0	11	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	37	37	25	62	62	3	26	26	15	38	38
g / C, Green / Cycle	0.00	0.31	0.31	0.21	0.52	0.52	0.03	0.22	0.22	0.13	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.15	0.29	0.19	0.03	0.01	0.01	0.04	0.00	0.11	0.02	0.19
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	7	591	502	383	1876	837	48	793	354	226	1150	513
d1, Uniform Delay [s]	59.58	33.38	40.05	46.29	14.36	13.99	57.45	38.05	36.68	51.64	28.37	34.59
k, delay calibration	0.11	0.11	0.24	0.24	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	18.99	0.58	15.24	17.28	0.01	0.01	4.86	0.49	0.07	10.64	0.08	5.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.47	0.93	0.92	0.06	0.01	0.38	0.18	0.01	0.88	0.05	0.61
d, Delay for Lane Group [s/veh]	78.57	33.96	55.29	63.57	14.38	13.99	62.31	38.54	36.76	62.28	28.46	39.83
Lane Group LOS	E	C	E	E	B	B	E	D	D	E	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.10	6.34	14.69	11.66	0.72	0.11	0.59	1.69	0.12	6.34	0.56	8.05
50th-Percentile Queue Length [ft/ln]	2.44	158.52	367.17	291.62	18.11	2.80	14.64	42.16	2.97	158.45	14.04	201.13
95th-Percentile Queue Length [veh/ln]	0.18	10.47	20.97	17.27	1.30	0.20	1.05	3.04	0.21	10.47	1.01	12.70
95th-Percentile Queue Length [ft/ln]	4.38	261.77	524.30	431.65	32.61	5.04	26.35	75.88	5.34	261.67	25.28	317.42

Movement, Approach, & Intersection Results

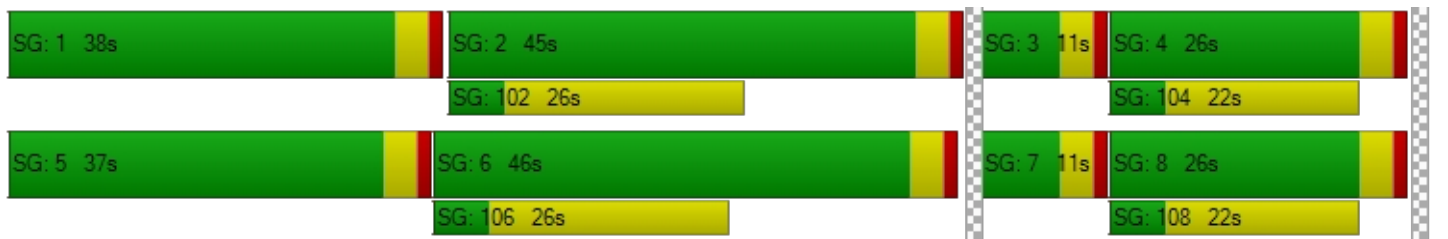
d_M, Delay for Movement [s/veh]	78.57	33.96	55.29	63.57	14.38	13.99	62.31	38.54	36.76	62.28	28.46	39.83
Movement LOS	E	C	E	E	B	B	E	D	D	E	C	D
d_A, Approach Delay [s/veh]	47.40			50.83			41.10			46.56		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	47.46											
Intersection LOS	D											
Intersection V/C	0.686											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.661	2.667	2.663	2.963
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	700	683	367	367
d_b, Bicycle Delay [s]	25.35	26.00	40.02	40.02
I_b,int, Bicycle LOS Score for Intersection	2.791	1.951	1.695	1.871
Bicycle LOS	C	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	188.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.470

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	2	5	837	1	3	473
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0000	1.0400	1.0000	1.0000
In-Process Volume [veh/h]	9	102	274	55	243	145
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	107	1111	56	246	618
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	29	296	15	66	165
Total Analysis Volume [veh/h]	12	114	1186	60	263	660
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.47	0.26	0.01	0.00	0.47	0.01
d_M, Delay for Movement [s/veh]	188.38	55.71	0.00	0.00	16.78	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	4.58	4.58	0.00	0.00	2.45	0.00
95th-Percentile Queue Length [ft/ln]	114.42	114.42	0.00	0.00	61.22	0.00
d_A, Approach Delay [s/veh]	68.35		0.00		4.78	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	5.67					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	96.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.971

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	87	105	127	90	53	2	9	762	72	69	374	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	53	13	262	11	4	17	0	453	62	92	568	7
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	143	122	394	105	59	19	9	1245	137	164	957	48
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	32	102	27	15	5	2	322	35	42	247	12
Total Analysis Volume [veh/h]	148	126	407	109	61	20	9	1287	142	170	990	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	14	0	11	47	0	14	50	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	10	10	2	40	40	13	51	51
g / C, Green / Cycle	0.34	0.08	0.08	0.02	0.33	0.33	0.11	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.40	0.09	0.01	0.00	0.38	0.38	0.09	0.28	0.28
s, saturation flow rate [veh/h]	1702	1841	1615	1810	1900	1835	1810	1900	1868
c, Capacity [veh/h]	582	153	135	30	629	607	200	808	794
d1, Uniform Delay [s]	39.50	55.00	51.05	58.33	40.14	40.14	52.37	27.38	27.39
k, delay calibration	0.50	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	94.28	67.40	0.50	5.55	85.59	89.63	9.54	4.01	4.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.17	1.11	0.15	0.30	1.15	1.16	0.85	0.65	0.65
d, Delay for Lane Group [s/veh]	133.78	122.40	51.55	63.88	125.73	129.77	61.90	31.39	31.48
Lane Group LOS	F	F	D	E	F	F	E	C	C
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	31.46	7.39	0.57	0.31	32.36	31.93	5.38	12.01	11.84
50th-Percentile Queue Length [ft/ln]	786.62	184.74	14.14	7.71	808.96	798.22	134.45	300.20	295.96
95th-Percentile Queue Length [veh/ln]	44.99	12.28	1.02	0.56	45.66	45.31	9.18	17.69	17.48
95th-Percentile Queue Length [ft/ln]	1124.65	306.88	25.44	13.88	1141.44	1132.81	229.53	442.27	437.02

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	133.78	133.78	133.78	122.40	122.40	51.55	63.88	127.50	129.77	61.90	31.43	31.48
Movement LOS	F	F	F	F	F	D	E	F	F	E	C	C
d_A, Approach Delay [s/veh]	133.78			114.94			127.33			35.72		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	96.41											
Intersection LOS	F											
Intersection V/C	0.971											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.138	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	167	717	767
d_b, Bicycle Delay [s]	26.00	50.42	24.70	22.82
I_b,int, Bicycle LOS Score for Intersection	2.683	1.873	2.746	2.558
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	79.887

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	4	980	1	2	506
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	29	177	693	28	288	637
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	181	1712	29	290	1163
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	49	460	8	78	313
Total Analysis Volume [veh/h]	31	195	1841	31	312	1251
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	79.89	0.72	0.02	0.00	0.96	0.01
d_M, Delay for Movement [s/veh]	10000.00	10000.00	0.00	0.00	76.18	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	30.66	30.66	0.00	0.00	9.99	0.00
95th-Percentile Queue Length [ft/ln]	766.59	766.59	0.00	0.00	249.71	0.00
d_A, Approach Delay [s/veh]	10000.00		0.00		15.21	
Approach LOS	F		A		C	
d_I, Intersection Delay [s/veh]	623.81					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	44.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.812

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	28	27	135	322	19	71	145	780	25	71	392	312
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	69	0	0	9	0	801	0	47	870	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	28	209	335	20	83	151	1612	26	121	1278	324
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	7	55	89	5	22	40	426	7	32	338	86
Total Analysis Volume [veh/h]	31	30	221	354	21	88	160	1704	27	128	1351	342
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	30	0	16	65	0	11	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	21	15	15	15	12	58	58	10	56	56
g / C, Green / Cycle	0.18	0.12	0.12	0.12	0.10	0.48	0.48	0.09	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.17	0.10	0.03	0.03	0.09	0.47	0.02	0.07	0.37	0.21
s, saturation flow rate [veh/h]	1661	3514	1711	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	291	434	211	200	186	1739	776	158	1682	751
d1, Uniform Delay [s]	49.15	51.25	47.65	47.65	52.98	30.59	16.46	53.80	27.41	21.79
k, delay calibration	0.22	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	27.66	3.78	0.66	0.70	10.95	17.33	0.08	9.55	4.17	1.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.97	0.82	0.27	0.27	0.86	0.98	0.03	0.81	0.80	0.46
d, Delay for Lane Group [s/veh]	76.82	55.04	48.31	48.35	63.93	47.92	16.54	63.35	31.58	23.77
Lane Group LOS	E	E	D	D	E	D	B	E	C	C
Critical Lane Group	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.20	5.19	1.50	1.42	5.15	25.99	0.39	4.09	16.10	6.50
50th-Percentile Queue Length [ft/ln]	255.07	129.68	37.49	35.44	128.85	649.76	9.74	102.18	402.55	162.57
95th-Percentile Queue Length [veh/ln]	15.44	8.92	2.70	2.55	8.88	34.35	0.70	7.36	22.68	10.68
95th-Percentile Queue Length [ft/ln]	386.03	223.06	67.48	63.79	221.93	858.78	17.54	183.92	567.07	267.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	76.82	76.82	76.82	55.04	48.31	48.34	63.93	47.92	16.54	63.35	31.58	23.77
Movement LOS	E	E	E	E	D	D	E	D	B	E	C	C
d_A, Approach Delay [s/veh]	76.82			53.46			48.83			32.35		
Approach LOS	E			D			D			C		
d_I, Intersection Delay [s/veh]	44.35											
Intersection LOS	D											
Intersection V/C	0.812											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.139	2.671	3.378	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	167	433	1017	933
d_b, Bicycle Delay [s]	50.42	36.82	14.50	17.07
I_b,int, Bicycle LOS Score for Intersection	2.025	2.324	3.120	3.062
Bicycle LOS	B	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	183.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.484

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	113	1	259	0	726	485	108	591	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	319	0	467	0	464	406	107	451	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	437	1	736	0	1219	910	219	1066	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9470	0.9470	0.9470	1.0000	0.9470	0.9470	0.9470	0.9470	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	115	0	194	0	322	240	58	281	0
Total Analysis Volume [veh/h]	0	0	0	461	1	777	0	1287	961	231	1126	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	41	0	0	62	0	17	79	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		36	36	52	52	17	73
g / C, Green / Cycle		0.30	0.30	0.43	0.43	0.15	0.61
(v / s)_i Volume / Saturation Flow Rate		0.26	0.48	0.68	0.60	0.13	0.31
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		538	480	823	699	262	2210
d1, Uniform Delay [s]		39.76	42.15	34.02	34.02	50.33	13.19
k, delay calibration		0.33	0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		11.39	287.23	259.99	177.47	9.51	0.84
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.86	1.62	1.56	1.37	0.88	0.51
d, Delay for Lane Group [s/veh]		51.15	329.38	294.01	211.49	59.84	14.04
Lane Group LOS		D	F	F	F	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		14.02	51.91	81.36	53.13	7.23	7.76
50th-Percentile Queue Length [ft/ln]		350.47	1297.78	2033.98	1328.21	180.77	194.06
95th-Percentile Queue Length [veh/ln]		20.16	80.39	124.35	79.43	11.64	12.33
95th-Percentile Queue Length [ft/ln]		503.98	2009.86	3108.87	1985.68	291.02	308.29

Movement, Approach, & Intersection Results

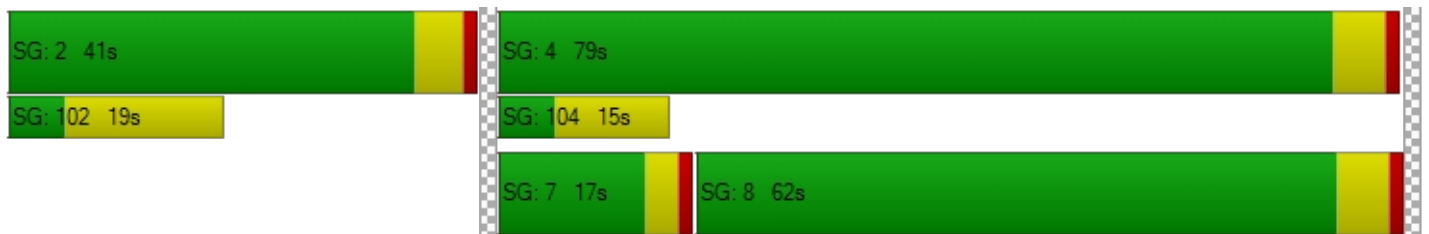
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	51.15	51.15	329.38	0.00	294.01	211.49	59.84	14.04	0.00
Movement LOS				D	D	F		F	F	E	B	
d_A, Approach Delay [s/veh]	0.00			225.63			258.73			21.83		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	183.90											
Intersection LOS	F											
Intersection V/C	1.484											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.559	0.000	3.408
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	595	938	1222
d_b, Bicycle Delay [s]	60.00	29.61	16.91	9.09
I_b,int, Bicycle LOS Score for Intersection	4.132	3.604	5.269	2.679
Bicycle LOS	D	D	F	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	193.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.329

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	271	0	133	0	0	0	233	610	0	0	436	168
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	394	0	319	0	0	0	440	343	0	0	164	107
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	676	0	457	0	0	0	682	977	0	0	617	282
Peak Hour Factor	0.9480	0.9480	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	1.0000	1.0000	0.9480	0.9480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	178	0	121	0	0	0	180	258	0	0	163	74
Total Analysis Volume [veh/h]	713	0	482	0	0	0	719	1031	0	0	651	297
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	37	0	0	0	0	36	83	0	0	47	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	32	32		32	77	41
g / C, Green / Cycle	0.26	0.26		0.27	0.64	0.34
(v / s)_i Volume / Saturation Flow Rate	0.39	0.30		0.40	0.54	0.53
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1800
c, Capacity [veh/h]	478	427		483	1224	620
d1, Uniform Delay [s]	44.15	44.15		44.00	16.61	39.35
k, delay calibration	0.50	0.50		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	232.10	83.95		231.33	7.14	246.56
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.49	1.13		1.49	0.84	1.53
d, Delay for Lane Group [s/veh]	276.25	128.10		275.33	23.75	285.91
Lane Group LOS	F	F		F	C	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	44.44	22.10		44.60	20.62	59.51
50th-Percentile Queue Length [ft/ln]	1110.92	552.58		1114.89	515.38	1487.76
95th-Percentile Queue Length [veh/ln]	67.48	32.01		67.72	28.06	90.64
95th-Percentile Queue Length [ft/ln]	1687.00	800.35		1692.92	701.54	2266.01

Movement, Approach, & Intersection Results

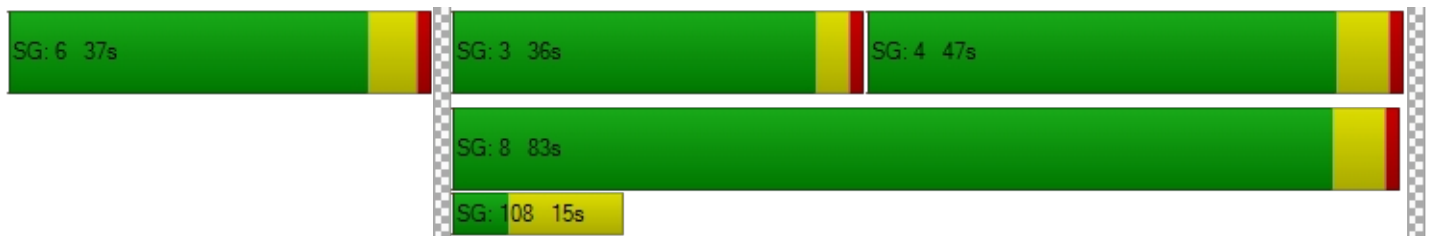
d_M, Delay for Movement [s/veh]	276.25	276.25	128.10	0.00	0.00	0.00	275.33	23.75	0.00	0.00	285.91	285.91
Movement LOS	F	F	F				F	C			F	F
d_A, Approach Delay [s/veh]	216.50			0.00			127.11			285.91		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	193.22											
Intersection LOS	F											
Intersection V/C	1.329											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.538	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	528	0	1288	688
d_b, Bicycle Delay [s]	32.49	60.00	7.60	25.81
I_b,int, Bicycle LOS Score for Intersection	3.531	4.132	4.447	3.124
Bicycle LOS	D	D	E	C

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	18.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.416

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵			↵↵			↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	314	0	0	148	53	173	0	9	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	21	0	3	28	0	0	0	0	0	0	10
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	335	0	3	176	53	173	0	9	0	0	10
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	88	0	1	46	14	46	0	2	0	0	3
Total Analysis Volume [veh/h]	2	353	0	3	185	56	182	0	9	0	0	11
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	7.70	0.00	0.00	7.97	0.00	0.00	18.94	18.81	9.22	13.54	13.79	10.26
Movement LOS	A	A	A	A	A	A	C	C	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.00	2.01	2.01	0.03	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.11	0.00	0.00	0.19	0.19	0.00	50.18	50.18	0.79	1.21	1.21	1.21
d_A, Approach Delay [s/veh]	0.04			0.10			18.48			10.26		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	4.60											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	13	0	0	3	10	7
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	0	0	3	10	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	0	1	3	2
Total Analysis Volume [veh/h]	14	0	0	3	11	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.63	8.41	7.23	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.06	1.06	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.45					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	377.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.360

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	719	2	6	533
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	4	171	615	6	262	478
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	177	1363	8	268	1032
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	45	349	2	69	264
Total Analysis Volume [veh/h]	4	181	1397	8	275	1057
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.36	0.47	0.01	0.00	0.56	0.01
d_M, Delay for Movement [s/veh]	377.31	62.71	0.00	0.00	21.18	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	6.29	6.29	0.00	0.00	3.38	0.00
95th-Percentile Queue Length [ft/ln]	157.32	157.32	0.00	0.00	84.45	0.00
d_A, Approach Delay [s/veh]	69.51		0.00		4.37	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	6.39					
Intersection LOS	F					

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Vistro File: K:\...\Menifee CNG_PM.vistro

Scenario 3 OY CUM PM

Report File: K:\...\3. OY CUM PM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.587	43.1	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.888	352.3	F
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Right	1.138	173.9	F
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	16.829	8,989.5	F
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Right	0.825	47.4	D
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	1.971	345.8	F
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	1.780	370.5	F
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.189	15.9	C
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition	SB Left	0.011	8.7	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	3.877	2,163.1	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	43.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.587

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	5	142	170	315	237	29	19	52	5	273	88	268
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	10	39	67	20	0	0	3	0	40	6	76
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	152	209	395	257	30	20	57	5	313	98	355
Peak Hour Factor	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	39	53	100	65	8	5	14	1	79	25	90
Total Analysis Volume [veh/h]	5	154	212	401	261	30	20	58	5	318	99	360
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	30	0	53	72	0	11	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	18	18	29	46	46	3	34	34	23	53	53
g / C, Green / Cycle	0.01	0.15	0.15	0.24	0.38	0.38	0.03	0.28	0.28	0.19	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.13	0.22	0.07	0.02	0.01	0.02	0.00	0.18	0.03	0.22
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	16	289	245	435	1387	619	51	1018	455	349	1613	720
d1, Uniform Delay [s]	59.09	46.95	49.67	44.47	24.58	23.24	57.28	31.48	31.07	47.44	18.95	23.71
k, delay calibration	0.11	0.11	0.11	0.12	0.11	0.11	0.11	0.50	0.50	0.16	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.36	1.53	8.78	9.55	0.06	0.03	4.75	0.11	0.04	13.17	0.07	2.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.53	0.86	0.92	0.19	0.05	0.39	0.06	0.01	0.91	0.06	0.50
d, Delay for Lane Group [s/veh]	69.45	48.48	58.45	54.02	24.64	23.27	62.02	31.58	31.11	60.61	19.02	26.19
Lane Group LOS	E	D	E	D	C	C	E	C	C	E	B	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.19	4.22	6.57	12.24	2.37	0.52	0.65	0.61	0.11	10.19	0.76	7.30
50th-Percentile Queue Length [ft/ln]	4.83	105.60	164.28	306.07	59.23	12.94	16.15	15.24	2.67	254.70	19.09	182.38
95th-Percentile Queue Length [veh/ln]	0.35	7.59	10.78	17.98	4.26	0.93	1.16	1.10	0.19	15.42	1.37	11.72
95th-Percentile Queue Length [ft/ln]	8.70	189.87	269.38	449.53	106.62	23.30	29.07	27.43	4.80	385.57	34.35	293.12

Movement, Approach, & Intersection Results

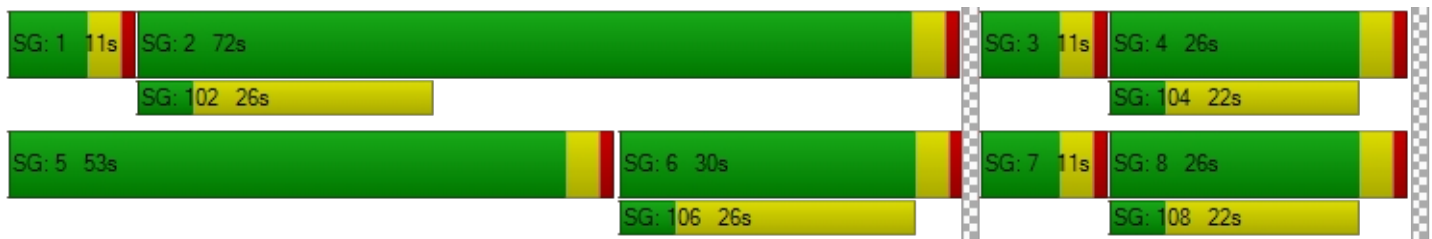
d_M, Delay for Movement [s/veh]	69.45	48.48	58.45	54.02	24.64	23.27	62.02	31.58	31.11	60.61	19.02	26.19
Movement LOS	E	D	E	D	C	C	E	C	C	E	B	C
d_A, Approach Delay [s/veh]	54.46			41.60			38.89			39.36		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	43.06											
Intersection LOS	D											
Intersection V/C	0.587											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.625	2.714	2.660	2.945
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	1133	367	367
d_b, Bicycle Delay [s]	36.82	11.27	40.02	40.02
I_b,int, Bicycle LOS Score for Intersection	2.172	2.131	1.628	1.987
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	352.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.888

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	3	596	1	10	629
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0000	1.0400	1.0000	1.0000
In-Process Volume [veh/h]	44	344	220	39	184	315
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	347	816	40	194	944
Peak Hour Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	92	217	11	51	251
Total Analysis Volume [veh/h]	47	368	866	42	206	1002
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.89	0.66	0.01	0.00	0.27	0.01
d_M, Delay for Movement [s/veh]	352.31	290.77	0.00	0.00	11.51	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	24.64	24.64	0.00	0.00	1.10	0.00
95th-Percentile Queue Length [ft/ln]	616.12	616.12	0.00	0.00	27.55	0.00
d_A, Approach Delay [s/veh]	297.74		0.00		1.96	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	49.76					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	173.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.138

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	63	156	44	91	5	5	461	130	182	521	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	74	5	173	7	12	11	0	694	95	280	646	12
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	184	71	335	53	107	16	5	1173	230	469	1188	68
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	19	89	14	28	4	1	311	61	124	315	18
Total Analysis Volume [veh/h]	195	75	355	56	113	17	5	1244	244	497	1260	72
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	14	0	39	46	0	29	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	10	10	1	32	32	35	66	66
g / C, Green / Cycle	0.23	0.08	0.08	0.01	0.26	0.26	0.29	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.37	0.09	0.01	0.00	0.40	0.41	0.27	0.35	0.36
s, saturation flow rate [veh/h]	1703	1869	1615	1810	1900	1794	1810	1900	1864
c, Capacity [veh/h]	383	156	135	18	503	475	531	1042	1022
d1, Uniform Delay [s]	46.50	55.00	50.95	58.96	44.12	44.12	41.28	18.87	19.03
k, delay calibration	0.50	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	295.76	58.95	0.42	7.90	239.55	250.84	8.26	3.02	3.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.63	1.09	0.13	0.27	1.51	1.53	0.94	0.64	0.65
d, Delay for Lane Group [s/veh]	342.26	113.95	51.37	66.86	283.66	294.95	49.54	21.90	22.23
Lane Group LOS	F	F	D	E	F	F	D	C	C
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	42.48	7.14	0.48	0.19	47.65	46.48	14.75	12.45	12.52
50th-Percentile Queue Length [ft/ln]	1062.10	178.42	11.98	4.66	1191.22	1161.97	368.63	311.15	313.11
95th-Percentile Queue Length [veh/ln]	65.76	11.85	0.86	0.34	72.24	70.95	21.04	18.23	18.33
95th-Percentile Queue Length [ft/ln]	1643.89	296.25	21.57	8.39	1805.88	1773.72	526.07	455.80	458.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	342.26	342.26	342.26	113.95	113.95	51.37	66.86	288.06	294.95	49.54	22.06	22.23
Movement LOS	F	F	F	F	F	D	E	F	F	D	C	C
d_A, Approach Delay [s/veh]	342.26			108.23			288.45			29.53		
Approach LOS	F			F			F			C		
d_I, Intersection Delay [s/veh]	173.89											
Intersection LOS	F											
Intersection V/C	1.138											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			51.34			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			2.120			0.000			0.000		
Crosswalk LOS	F			B			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	450			167			700			533		
d_b, Bicycle Delay [s]	36.04			50.42			25.35			32.27		
I_b,int, Bicycle LOS Score for Intersection	2.591			1.867			2.791			3.069		
Bicycle LOS	B			A			C			C		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	8,989.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	16.829

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	1	653	0	2	760
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	46	269	906	30	234	893
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	270	1585	30	236	1683
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	72	423	8	63	450
Total Analysis Volume [veh/h]	49	288	1693	32	252	1798
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	16.83	0.95	0.02	0.00	0.68	0.02
d_M, Delay for Movement [s/veh]	8989.53	7765.03	0.00	0.00	32.90	0.00
Movement LOS	F	F	A	A	D	A
95th-Percentile Queue Length [veh/ln]	42.71	42.71	0.00	0.00	4.80	0.00
95th-Percentile Queue Length [ft/ln]	1067.87	1067.87	0.00	0.00	119.91	0.00
d_A, Approach Delay [s/veh]	7943.07		0.00		4.04	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	652.99					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	47.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.825

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	24	30	82	431	54	123	162	471	24	81	562	357
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	65	0	0	3	0	1110	0	80	1044	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	31	150	448	56	131	168	1600	25	164	1628	371
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	8	39	116	15	34	44	416	6	43	423	96
Total Analysis Volume [veh/h]	26	32	156	466	58	136	175	1663	26	170	1692	386
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	27	0	17	65	0	14	62	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	19	19	19	13	58	58	13	58	58
g / C, Green / Cycle	0.12	0.15	0.15	0.15	0.11	0.48	0.48	0.11	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.13	0.13	0.06	0.06	0.10	0.46	0.02	0.09	0.47	0.24
s, saturation flow rate [veh/h]	1674	3514	1767	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	200	543	273	250	201	1741	777	202	1743	778
d1, Uniform Delay [s]	52.83	49.44	45.48	45.51	52.52	29.88	16.41	52.29	30.27	21.17
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	50.21	4.06	0.83	0.92	11.12	13.29	0.08	9.19	15.66	2.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.07	0.86	0.37	0.37	0.87	0.96	0.03	0.84	0.97	0.50
d, Delay for Lane Group [s/veh]	103.04	53.50	46.31	46.43	63.63	43.17	16.49	61.48	45.93	23.43
Lane Group LOS	F	D	D	D	E	D	B	E	D	C
Critical Lane Group	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	8.54	6.80	2.65	2.45	5.63	24.01	0.37	5.36	25.20	7.32
50th-Percentile Queue Length [ft/ln]	213.46	169.90	66.19	61.29	140.79	600.34	9.36	134.01	630.00	183.00
95th-Percentile Queue Length [veh/ln]	13.71	11.07	4.77	4.41	9.52	32.05	0.67	9.16	33.43	11.76
95th-Percentile Queue Length [ft/ln]	342.63	276.79	119.14	110.33	238.09	801.25	16.85	228.94	835.82	293.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	103.04	103.04	103.04	53.50	46.31	46.39	63.63	43.17	16.49	61.48	45.93	23.43
Movement LOS	F	F	F	D	D	D	E	D	B	E	D	C
d_A, Approach Delay [s/veh]	103.04			51.40			44.72			43.24		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	47.44											
Intersection LOS	D											
Intersection V/C	0.825											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.148	2.763	3.475	0.000
Crosswalk LOS	B	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	167	383	1017	967
d_b, Bicycle Delay [s]	50.42	39.20	14.50	16.02
I_b,int, Bicycle LOS Score for Intersection	1.913	2.649	3.097	3.414
Bicycle LOS	A	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	345.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.971

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	154	3	365	0	643	365	89	739	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	201	0	561	0	673	503	323	565	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	361	3	941	0	1342	883	416	1334	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8890	0.8890	0.8890	1.0000	0.8890	0.8890	0.8890	0.8890	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	102	1	265	0	377	248	117	375	0
Total Analysis Volume [veh/h]	0	0	0	406	3	1058	0	1510	993	468	1501	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	33	0	0	71	0	16	87	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		29	29	46	46	33	83
g / C, Green / Cycle		0.24	0.24	0.38	0.38	0.28	0.69
(v / s)_i Volume / Saturation Flow Rate		0.23	0.66	0.79	0.61	0.26	0.41
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		437	390	727	618	499	2502
d1, Uniform Delay [s]		44.58	45.50	37.05	37.05	42.43	9.75
k, delay calibration		0.38	0.50	0.50	0.50	0.23	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		24.49	777.10	489.89	281.01	16.07	1.07
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.93	2.71	2.08	1.61	0.94	0.60
d, Delay for Lane Group [s/veh]		69.07	822.60	526.95	318.06	58.50	10.82
Lane Group LOS		E	F	F	F	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		14.45	95.42	118.66	65.03	15.06	8.69
50th-Percentile Queue Length [ft/ln]		361.22	2385.58	2966.62	1625.71	376.38	217.28
95th-Percentile Queue Length [veh/ln]		20.68	150.47	188.12	100.75	21.42	13.53
95th-Percentile Queue Length [ft/ln]		517.07	3761.86	4703.02	2518.63	535.46	338.15

Movement, Approach, & Intersection Results

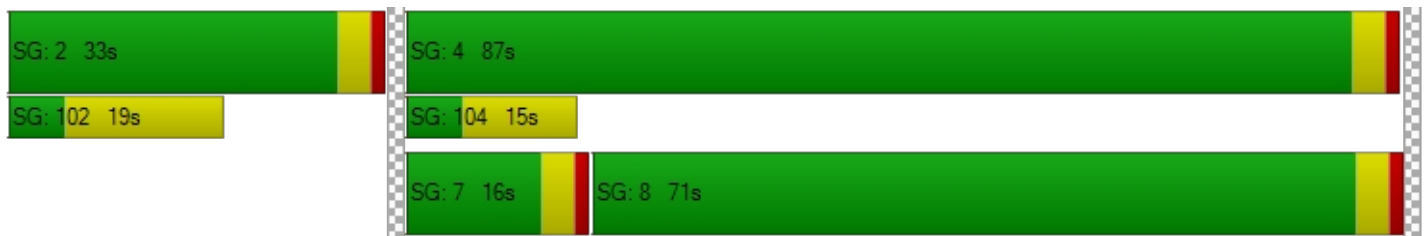
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	69.07	69.07	822.60	0.00	526.95	318.06	58.50	10.82	0.00
Movement LOS				E	E	F		F	F	E	B	
d_A, Approach Delay [s/veh]	0.00			612.51			444.08			22.15		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	345.80											
Intersection LOS	F											
Intersection V/C	1.971											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.671	0.000	3.725
Crosswalk LOS	F	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	483	1117	1383
d_b, Bicycle Delay [s]	60.00	34.50	11.70	5.70
I_b,int, Bicycle LOS Score for Intersection	4.132	3.980	5.690	3.184
Bicycle LOS	D	D	F	C

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	370.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.780

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	395	2	200	0	0	0	254	564	0	0	401	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	523	0	201	0	0	0	612	262	0	0	365	323
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	934	2	409	0	0	0	876	849	0	0	782	477
Peak Hour Factor	0.9680	0.9680	0.9680	1.0000	1.0000	1.0000	0.9680	0.9680	1.0000	1.0000	0.9680	0.9680
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	241	1	106	0	0	0	226	219	0	0	202	123
Total Analysis Volume [veh/h]	965	2	423	0	0	0	905	877	0	0	808	493
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	37	0	0	0	0	34	83	0	0	49	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	32	32		30	77	43
g / C, Green / Cycle	0.26	0.26		0.25	0.64	0.36
(v / s)_i Volume / Saturation Flow Rate	0.53	0.26		0.50	0.46	0.73
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1781
c, Capacity [veh/h]	478	427		452	1224	643
d1, Uniform Delay [s]	44.15	44.02		45.00	14.11	38.35
k, delay calibration	0.50	0.42		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	467.57	37.90		458.06	3.62	466.52
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	2.02	0.99		2.00	0.72	2.02
d, Delay for Lane Group [s/veh]	511.72	81.91		503.06	17.73	504.87
Lane Group LOS	F	F		F	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	75.71	16.51		70.35	14.37	100.88
50th-Percentile Queue Length [ft/ln]	1892.74	412.63		1758.79	359.28	2522.06
95th-Percentile Queue Length [veh/ln]	118.68	23.17		110.12	20.59	159.77
95th-Percentile Queue Length [ft/ln]	2967.10	579.20		2753.06	514.71	3994.27

Movement, Approach, & Intersection Results

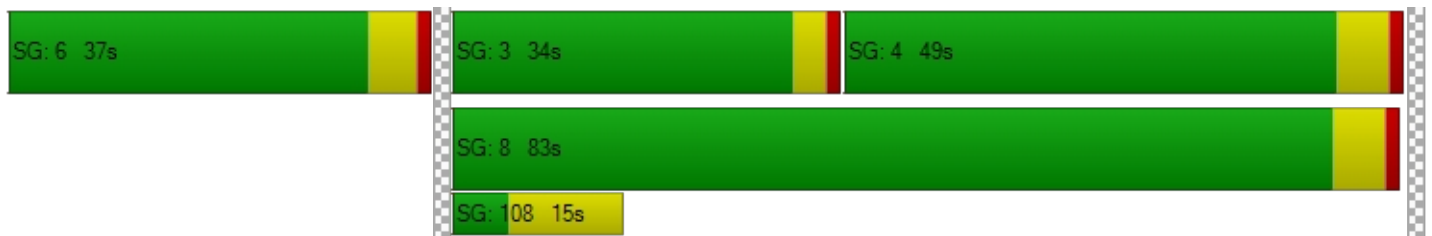
d_M, Delay for Movement [s/veh]	511.72	511.72	81.91	0.00	0.00	0.00	503.06	17.73	0.00	0.00	504.87	504.87
Movement LOS	F	F	F				F	B			F	F
d_A, Approach Delay [s/veh]	380.92			0.00			264.20			504.87		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	370.47											
Intersection LOS	F											
Intersection V/C	1.780											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.633	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	528	0	1288	722
d_b, Bicycle Delay [s]	32.49	60.00	7.60	24.51
I_b,int, Bicycle LOS Score for Intersection	3.853	4.132	4.500	3.706
Bicycle LOS	D	D	E	D

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.189

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	8	204	0	0	258	111	73	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	31	0	12	29	0	0	0	0	0	0	7
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	235	0	12	287	111	73	0	12	0	0	7
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	62	0	3	76	29	19	0	3	0	0	2
Total Analysis Volume [veh/h]	8	249	0	13	304	118	77	0	13	0	0	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.00	0.19	0.00	0.02	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	8.16	0.00	0.00	7.74	0.00	0.00	15.89	15.78	9.95	14.75	15.24	9.57
Movement LOS	A	A	A	A	A	A	C	C	A	B	C	A
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.03	0.03	0.00	0.69	0.69	0.05	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.53	0.00	0.00	0.74	0.74	0.00	17.20	17.20	1.34	0.67	0.67	0.67
d_A, Approach Delay [s/veh]	0.25			0.23			15.03			9.57		
Approach LOS	A			A			C			A		
d_I, Intersection Delay [s/veh]	2.01											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	10	0	0	12	7	14
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	0	12	7	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	0	3	2	4
Total Analysis Volume [veh/h]	11	0	0	13	7	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.67	8.40	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.84	0.84	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.07					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	2,163.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.877

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	559	1	4	621
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	22	245	733	4	283	755
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	247	1314	5	287	1401
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	64	343	1	75	365
Total Analysis Volume [veh/h]	28	258	1370	5	299	1461
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	3.88	0.66	0.01	0.00	0.59	0.01
d_M, Delay for Movement [s/veh]	2163.15	1673.81	0.00	0.00	21.93	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	31.29	31.29	0.00	0.00	3.79	0.00
95th-Percentile Queue Length [ft/ln]	782.25	782.25	0.00	0.00	94.77	0.00
d_A, Approach Delay [s/veh]	1721.72		0.00		3.73	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	145.85					
Intersection LOS	F					

APPENDIX C-4

**INTERSECTION ANALYSIS
WORKSHEETS -
OPENING YEAR 2025 CUMULATIVE
PLUS PROJECT**

Menifee Compass Northern Gateway Project

Vistro File: K:\...Menifee CNG_AM_2023-08-30.vistro

Scenario 4 OY CUM WP AM

Report File: K:\...4. OY CUM WP AM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.687	47.8	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.482	197.7	F
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	EB Right	0.978	98.9	F
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Right	0.755	10,000.0	F
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Right	0.818	46.0	D
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	1.525	194.2	F
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	1.356	202.6	F
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.467	22.1	C
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition	SB Left	0.017	9.0	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.494	533.7	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	47.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.687

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	2	253	423	268	105	9	17	126	5	165	53	251
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	18	31	64	6	0	0	6	0	29	1	42
Site-Generated Trips [veh/h]	0	1	1	2	3	0	0	0	0	25	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	272	455	345	114	9	18	137	5	219	56	303
Peak Hour Factor	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	70	117	88	29	2	5	35	1	56	14	78
Total Analysis Volume [veh/h]	2	279	467	354	117	9	18	141	5	225	57	311
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	38	46	0	37	45	0	11	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	37	37	26	62	62	3	24	24	17	38	38
g / C, Green / Cycle	0.00	0.31	0.31	0.21	0.52	0.52	0.03	0.20	0.20	0.14	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.15	0.29	0.20	0.03	0.01	0.01	0.04	0.00	0.12	0.02	0.19
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	7	592	503	385	1882	840	48	738	330	250	1144	511
d1, Uniform Delay [s]	59.60	33.34	40.01	46.23	14.27	13.88	57.45	39.55	38.13	50.87	28.51	34.76
k, delay calibration	0.11	0.11	0.24	0.24	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.51	0.58	15.36	17.45	0.01	0.01	4.87	0.57	0.08	11.09	0.08	5.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.47	0.93	0.92	0.06	0.01	0.38	0.19	0.02	0.90	0.05	0.61
d, Delay for Lane Group [s/veh]	80.11	33.92	55.38	63.68	14.28	13.89	62.32	40.12	38.21	61.96	28.59	40.09
Lane Group LOS	F	C	E	E	B	B	E	D	D	E	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.10	6.36	14.73	11.75	0.74	0.11	0.59	1.73	0.12	7.17	0.56	8.08
50th-Percentile Queue Length [ft/ln]	2.48	159.03	368.32	293.64	18.52	2.79	14.64	43.22	3.05	179.24	14.08	201.90
95th-Percentile Queue Length [veh/ln]	0.18	10.50	21.03	17.37	1.33	0.20	1.05	3.11	0.22	11.56	1.01	12.74
95th-Percentile Queue Length [ft/ln]	4.46	262.44	525.70	434.15	33.34	5.02	26.35	77.80	5.48	289.02	25.35	318.41

Movement, Approach, & Intersection Results

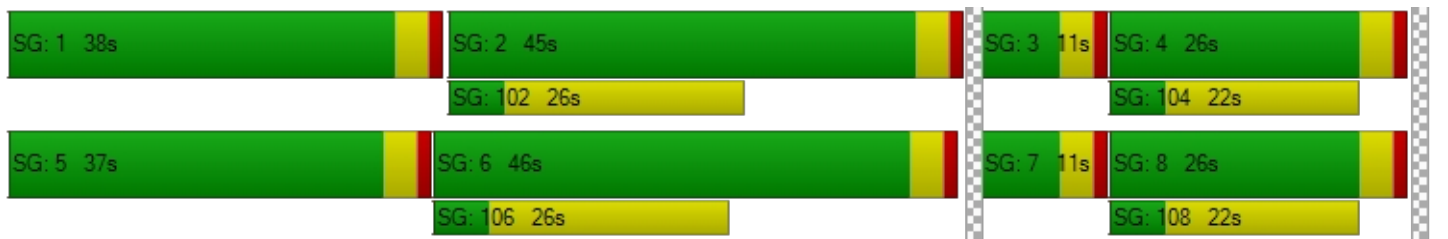
d_M, Delay for Movement [s/veh]	80.11	33.92	55.38	63.68	14.28	13.89	62.32	40.12	38.21	61.96	28.59	40.09
Movement LOS	F	C	E	E	B	B	E	D	D	E	C	D
d_A, Approach Delay [s/veh]	47.44			50.70			42.50			47.28		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	47.77											
Intersection LOS	D											
Intersection V/C	0.687											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.671	2.669	2.663	2.970
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	700	683	367	367
d_b, Bicycle Delay [s]	25.35	26.00	40.02	40.02
I_b,int, Bicycle LOS Score for Intersection	2.794	1.956	1.695	1.886
Bicycle LOS	C	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	197.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.482

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	2	5	837	1	3	473
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0000	1.0400	1.0000	1.0000
In-Process Volume [veh/h]	9	102	274	55	243	145
Site-Generated Trips [veh/h]	0	15	2	1	0	25
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	122	1113	57	246	643
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	33	297	15	66	172
Total Analysis Volume [veh/h]	12	130	1188	61	263	686
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.48	0.30	0.01	0.00	0.47	0.01
d_M, Delay for Movement [s/veh]	197.71	61.29	0.00	0.00	16.83	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	5.24	5.24	0.00	0.00	2.46	0.00
95th-Percentile Queue Length [ft/ln]	130.97	130.97	0.00	0.00	61.49	0.00
d_A, Approach Delay [s/veh]	72.82		0.00		4.66	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	6.31					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	98.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.978

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	87	105	127	90	53	2	9	762	72	69	374	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	53	13	262	11	4	17	0	453	62	92	568	7
Site-Generated Trips [veh/h]	0	0	2	0	0	0	0	17	0	1	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	143	122	396	105	59	19	9	1262	137	165	1012	48
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	32	102	27	15	5	2	326	35	43	262	12
Total Analysis Volume [veh/h]	148	126	410	109	61	20	9	1305	142	171	1047	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	45	0	0	14	0	11	47	0	14	50	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	10	10	2	40	40	13	51	51
g / C, Green / Cycle	0.34	0.08	0.08	0.02	0.33	0.33	0.11	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.40	0.09	0.01	0.00	0.39	0.39	0.09	0.29	0.29
s, saturation flow rate [veh/h]	1702	1841	1615	1810	1900	1836	1810	1900	1870
c, Capacity [veh/h]	581	153	135	30	628	607	201	808	795
d1, Uniform Delay [s]	39.50	55.00	51.05	58.33	40.17	40.17	52.34	27.95	27.97
k, delay calibration	0.50	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	96.43	67.40	0.50	5.55	91.78	96.15	9.55	4.67	4.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.18	1.11	0.15	0.30	1.17	1.18	0.85	0.68	0.68
d, Delay for Lane Group [s/veh]	135.93	122.40	51.55	63.88	131.95	136.32	61.89	32.62	32.73
Lane Group LOS	F	F	D	E	F	F	E	C	C
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	31.80	7.39	0.57	0.31	33.39	32.99	5.41	13.00	12.84
50th-Percentile Queue Length [ft/ln]	795.09	184.74	14.14	7.71	834.75	824.85	135.24	325.04	320.99
95th-Percentile Queue Length [veh/ln]	45.54	12.28	1.02	0.56	47.32	47.03	9.22	18.92	18.72
95th-Percentile Queue Length [ft/ln]	1138.42	306.88	25.44	13.88	1183.00	1175.76	230.60	472.88	467.90

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	135.93	135.93	135.93	122.40	122.40	51.55	63.88	133.87	136.32	61.89	32.67	32.73
Movement LOS	F	F	F	F	F	D	E	F	F	E	C	C
d_A, Approach Delay [s/veh]	135.93			114.94			133.67			36.62		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	98.91											
Intersection LOS	F											
Intersection V/C	0.978											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.138	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	167	717	767
d_b, Bicycle Delay [s]	26.00	50.42	24.70	22.82
I_b,int, Bicycle LOS Score for Intersection	2.688	1.873	2.761	2.606
Bicycle LOS	B	A	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	4	980	1	2	506
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	29	177	693	28	288	637
Site-Generated Trips [veh/h]	1	6	15	4	21	55
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	187	1727	33	311	1218
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	50	464	9	84	327
Total Analysis Volume [veh/h]	32	201	1857	35	334	1310
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.76	0.02	0.00	1.04	0.01
d_M, Delay for Movement [s/veh]	10000.00	10000.00	0.00	0.00	99.40	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	31.87	31.87	0.00	0.00	12.10	0.00
95th-Percentile Queue Length [ft/ln]	796.67	796.67	0.00	0.00	302.44	0.00
d_A, Approach Delay [s/veh]	10000.00		0.00		20.19	
Approach LOS	F		A		C	
d_I, Intersection Delay [s/veh]	627.01					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	46.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.818

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	28	27	135	322	19	71	145	780	25	71	392	312
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	69	0	0	9	0	801	0	47	870	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	21	0	0	76	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	28	209	335	20	83	151	1633	26	121	1354	324
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	7	55	89	5	22	40	432	7	32	358	86
Total Analysis Volume [veh/h]	31	30	221	354	21	88	160	1726	27	128	1431	342
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	30	0	16	65	0	11	60	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	21	15	15	15	12	58	58	10	56	56
g / C, Green / Cycle	0.18	0.12	0.12	0.12	0.10	0.48	0.48	0.09	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.17	0.10	0.03	0.03	0.09	0.48	0.02	0.07	0.40	0.21
s, saturation flow rate [veh/h]	1661	3514	1711	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	291	434	211	200	186	1739	776	158	1682	751
d1, Uniform Delay [s]	49.15	51.25	47.65	47.65	52.98	30.95	16.46	53.80	28.41	21.79
k, delay calibration	0.22	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	27.66	3.78	0.66	0.70	10.95	19.91	0.08	9.55	5.62	1.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.97	0.82	0.27	0.27	0.86	0.99	0.03	0.81	0.85	0.46
d, Delay for Lane Group [s/veh]	76.82	55.04	48.31	48.35	63.93	50.86	16.54	63.35	34.04	23.77
Lane Group LOS	E	E	D	D	E	D	B	E	C	C
Critical Lane Group	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.20	5.19	1.50	1.42	5.15	27.15	0.39	4.09	17.92	6.50
50th-Percentile Queue Length [ft/ln]	255.07	129.68	37.49	35.44	128.85	678.79	9.74	102.18	448.10	162.57
95th-Percentile Queue Length [veh/ln]	15.44	8.92	2.70	2.55	8.88	35.70	0.70	7.36	24.87	10.68
95th-Percentile Queue Length [ft/ln]	386.03	223.06	67.48	63.79	221.93	892.43	17.54	183.92	621.69	267.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	76.82	76.82	76.82	55.04	48.31	48.34	63.93	50.86	16.54	63.35	34.04	23.77
Movement LOS	E	E	E	E	D	D	E	D	B	E	C	C
d_A, Approach Delay [s/veh]	76.82			53.46			51.47			34.16		
Approach LOS	E			D			D			C		
d_I, Intersection Delay [s/veh]	46.02											
Intersection LOS	D											
Intersection V/C	0.818											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.139	2.671	3.406	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	167	433	1017	933
d_b, Bicycle Delay [s]	50.42	36.82	14.50	17.07
I_b,int, Bicycle LOS Score for Intersection	2.025	2.324	3.138	3.128
Bicycle LOS	B	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	194.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.525

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	113	1	259	0	726	485	108	591	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	319	0	467	0	464	406	107	451	0
Site-Generated Trips [veh/h]	0	0	0	0	0	42	0	13	8	0	34	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	437	1	778	0	1232	918	219	1100	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9470	0.9470	0.9470	1.0000	0.9470	0.9470	0.9470	0.9470	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	115	0	205	0	325	242	58	290	0
Total Analysis Volume [veh/h]	0	0	0	461	1	822	0	1301	969	231	1162	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	41	0	0	62	0	17	79	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		36	36	52	52	17	73
g / C, Green / Cycle		0.30	0.30	0.43	0.43	0.15	0.61
(v / s)_i Volume / Saturation Flow Rate		0.26	0.51	0.68	0.60	0.13	0.32
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		538	480	823	699	262	2210
d1, Uniform Delay [s]		39.76	42.15	34.02	34.02	50.33	13.39
k, delay calibration		0.33	0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		11.39	328.66	267.54	182.44	9.51	0.90
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.86	1.71	1.58	1.39	0.88	0.53
d, Delay for Lane Group [s/veh]		51.15	370.81	301.56	216.47	59.84	14.29
Lane Group LOS		D	F	F	F	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		14.02	57.44	83.09	54.09	7.23	8.13
50th-Percentile Queue Length [ft/ln]		350.47	1436.01	2077.14	1352.37	180.77	203.33
95th-Percentile Queue Length [veh/ln]		20.16	89.61	127.30	81.06	11.64	12.81
95th-Percentile Queue Length [ft/ln]		503.98	2240.14	3182.39	2026.49	291.02	320.25

Movement, Approach, & Intersection Results

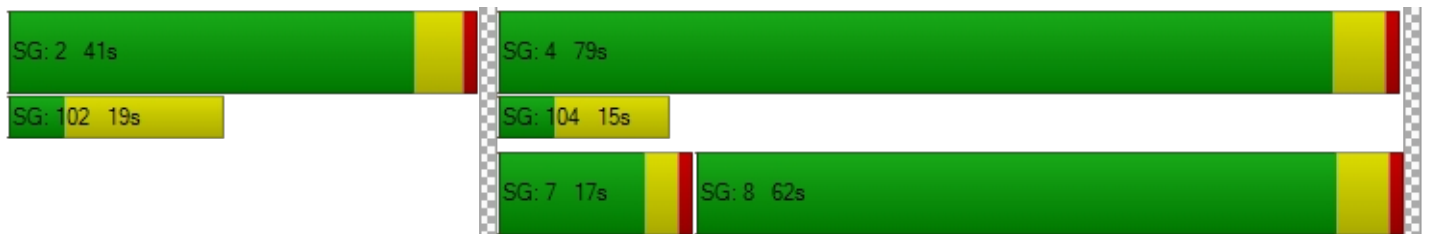
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	51.15	51.15	370.81	0.00	301.56	216.47	59.84	14.29	0.00
Movement LOS				D	D	F		F	F	E	B	
d_A, Approach Delay [s/veh]	0.00			255.79			265.24			21.84		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	194.25											
Intersection LOS	F											
Intersection V/C	1.525											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.581	0.000	3.428
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	595	938	1222
d_b, Bicycle Delay [s]	60.00	29.61	16.91	9.09
I_b,int, Bicycle LOS Score for Intersection	4.132	3.678	5.305	2.709
Bicycle LOS	D	D	F	B

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	202.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.356

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	271	0	133	0	0	0	233	610	0	0	436	168
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	394	0	319	0	0	0	440	343	0	0	164	107
Site-Generated Trips [veh/h]	29	0	0	0	0	0	12	1	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	705	0	457	0	0	0	694	978	0	0	622	282
Peak Hour Factor	0.9480	0.9480	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	1.0000	1.0000	0.9480	0.9480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	186	0	121	0	0	0	183	258	0	0	164	74
Total Analysis Volume [veh/h]	744	0	482	0	0	0	732	1032	0	0	656	297
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	37	0	0	0	0	36	83	0	0	47	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	32	32		32	77	41
g / C, Green / Cycle	0.26	0.26		0.27	0.64	0.34
(v / s)_i Volume / Saturation Flow Rate	0.41	0.30		0.40	0.54	0.53
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1801
c, Capacity [veh/h]	478	427		483	1224	620
d1, Uniform Delay [s]	44.15	44.15		44.00	16.63	39.35
k, delay calibration	0.50	0.50		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	260.52	83.95		243.11	7.18	249.92
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.56	1.13		1.52	0.84	1.54
d, Delay for Lane Group [s/veh]	304.67	128.10		287.11	23.81	289.27
Lane Group LOS	F	F		F	C	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	48.21	22.10		46.18	20.67	60.11
50th-Percentile Queue Length [ft/ln]	1205.25	552.58		1154.39	516.67	1502.68
95th-Percentile Queue Length [veh/ln]	73.69	32.01		70.32	28.12	91.64
95th-Percentile Queue Length [ft/ln]	1842.29	800.35		1757.92	703.05	2290.88

Movement, Approach, & Intersection Results

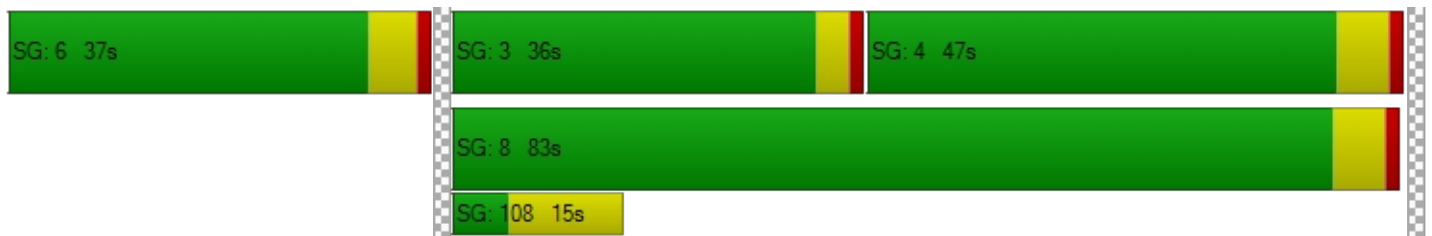
d_M, Delay for Movement [s/veh]	304.67	304.67	128.10	0.00	0.00	0.00	287.11	23.81	0.00	0.00	289.27	289.27
Movement LOS	F	F	F				F	C			F	F
d_A, Approach Delay [s/veh]	235.25			0.00			133.07			289.27		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	202.60											
Intersection LOS	F											
Intersection V/C	1.356											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.553	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	528	0	1288	688
d_b, Bicycle Delay [s]	32.49	60.00	7.60	25.81
I_b,int, Bicycle LOS Score for Intersection	3.583	4.132	4.470	3.132
Bicycle LOS	D	D	E	C

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	22.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.467

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	314	0	0	148	53	173	0	9	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	21	0	3	28	0	0	0	0	0	0	10
Site-Generated Trips [veh/h]	0	1	1	28	0	0	0	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	336	1	31	176	53	173	0	9	0	0	11
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	89	0	8	46	14	46	0	2	0	0	3
Total Analysis Volume [veh/h]	2	354	1	33	185	56	182	0	9	0	0	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.00	0.00	0.47	0.00	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	7.70	0.00	0.00	8.05	0.00	0.00	22.11	21.89	9.22	14.59	14.80	10.28
Movement LOS	A	A	A	A	A	A	C	C	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.08	0.08	0.00	2.41	2.41	0.03	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.11	0.00	0.00	2.09	2.09	0.00	60.24	60.24	0.79	1.32	1.32	1.32
d_A, Approach Delay [s/veh]	0.04			0.97			21.50			10.28		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	5.41											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	13	0	0	3	10	7
Site-Generated Trips [veh/h]	1	1	29	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	1	29	3	10	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	8	1	3	3
Total Analysis Volume [veh/h]	15	1	31	3	11	13
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.04	8.44	7.29	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.06	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.33	1.33	1.48	1.48	0.00	0.00
d_A, Approach Delay [s/veh]	9.00		6.65		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	533.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.494

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	6	719	2	6	533
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	4	171	615	6	262	478
Site-Generated Trips [veh/h]	0	0	17	0	30	25
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	177	1380	8	298	1057
Peak Hour Factor	0.9760	0.9760	0.9760	0.9760	0.9760	0.9760
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	45	353	2	76	271
Total Analysis Volume [veh/h]	4	181	1414	8	305	1083
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.49	0.48	0.01	0.00	0.63	0.01
d_M, Delay for Movement [s/veh]	533.66	98.75	0.00	0.00	24.18	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	7.98	7.98	0.00	0.00	4.27	0.00
95th-Percentile Queue Length [ft/ln]	199.49	199.49	0.00	0.00	106.84	0.00
d_A, Approach Delay [s/veh]	108.16		0.00		5.31	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	9.14					
Intersection LOS	F					

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Vistro File: K:\...\Menifee CNG_PM.vistro

Scenario 4 OY CUM WP PM

Report File: K:\...4. OY CUM WP PM.pdf

8/30/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Goetz Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Left	0.588	43.3	D
2	Wheat St at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	0.897	400.4	F
3	Murrieta Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Right	1.156	185.5	F
4	Evans Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	26.161	10,000.0	F
5	Barnett Rd/Case Rd at Ethanac Rd	Signalized	HCM 6th Edition	NB Right	0.836	51.8	D
6	I-215 SB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	SB Right	2.014	389.2	F
7	I-215 NB Ramps at Ethanac Rd	Signalized	HCM 6th Edition	EB Left	1.810	383.0	F
8	Goetz Rd at McLaughlin Rd	Two-way stop	HCM 6th Edition	EB Left	0.198	16.5	C
9	Wheat St at McLaughlin Rd	Two-way stop	HCM 6th Edition	SB Left	0.016	8.8	A
10	Byers Rd at Ethanac Rd	Two-way stop	HCM 6th Edition	NB Left	5.180	2,946.2	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Goetz Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	43.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.588

Intersection Setup

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	5	142	170	315	237	29	19	52	5	273	88	268
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	10	39	67	20	0	0	3	0	40	6	76
Site-Generated Trips [veh/h]	0	4	0	1	1	0	0	0	0	9	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	156	209	396	258	30	20	57	5	322	98	356
Peak Hour Factor	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850	0.9850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	40	53	101	65	8	5	14	1	82	25	90
Total Analysis Volume [veh/h]	5	158	212	402	262	30	20	58	5	327	99	361
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	30	0	53	72	0	11	26	0	11	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	21	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	18	18	29	46	46	3	33	33	24	53	53
g / C, Green / Cycle	0.01	0.15	0.15	0.24	0.38	0.38	0.03	0.28	0.28	0.20	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.13	0.22	0.07	0.02	0.01	0.02	0.00	0.18	0.03	0.22
s, saturation flow rate [veh/h]	1810	1900	1615	1810	3618	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	16	289	246	436	1390	620	51	999	446	357	1611	719
d1, Uniform Delay [s]	59.09	47.05	49.66	44.43	24.54	23.19	57.28	31.95	31.53	47.18	18.99	23.78
k, delay calibration	0.11	0.11	0.11	0.13	0.11	0.11	0.11	0.50	0.50	0.18	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.36	1.61	8.76	9.61	0.07	0.03	4.75	0.11	0.05	14.14	0.07	2.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.55	0.86	0.92	0.19	0.05	0.39	0.06	0.01	0.92	0.06	0.50
d, Delay for Lane Group [s/veh]	69.45	48.67	58.42	54.04	24.60	23.22	62.02	32.06	31.58	61.31	19.06	26.28
Lane Group LOS	E	D	E	D	C	C	E	C	C	E	B	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.19	4.35	6.57	12.28	2.38	0.52	0.65	0.62	0.11	10.56	0.76	7.33
50th-Percentile Queue Length [ft/ln]	4.83	108.67	164.23	306.98	59.41	12.93	16.15	15.38	2.69	263.96	19.11	183.33
95th-Percentile Queue Length [veh/ln]	0.35	7.77	10.77	18.03	4.28	0.93	1.16	1.11	0.19	15.89	1.38	11.77
95th-Percentile Queue Length [ft/ln]	8.70	194.15	269.32	450.65	106.93	23.27	29.07	27.69	4.85	397.19	34.40	294.36

Movement, Approach, & Intersection Results

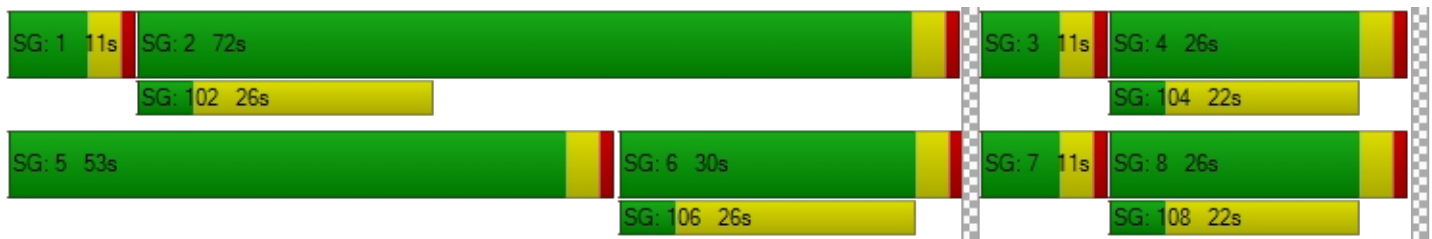
d_M, Delay for Movement [s/veh]	69.45	48.67	58.42	54.04	24.60	23.22	62.02	32.06	31.58	61.31	19.06	26.28
Movement LOS	E	D	E	D	C	C	E	C	C	E	B	C
d_A, Approach Delay [s/veh]	54.46			41.60			39.25			39.93		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	43.31											
Intersection LOS	D											
Intersection V/C	0.588											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.630	2.716	2.660	2.948
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	1133	367	367
d_b, Bicycle Delay [s]	36.82	11.27	40.02	40.02
I_b,int, Bicycle LOS Score for Intersection	2.178	2.132	1.628	1.992
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Wheat St at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	400.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.897

Intersection Setup

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Wheat St		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	3	596	1	10	629
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0000	1.0400	1.0000	1.0000
In-Process Volume [veh/h]	44	344	220	39	184	315
Site-Generated Trips [veh/h]	0	55	1	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	402	817	40	194	954
Peak Hour Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	107	217	11	51	253
Total Analysis Volume [veh/h]	47	427	867	42	206	1013
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.90	0.76	0.01	0.00	0.27	0.01
d_M, Delay for Movement [s/veh]	400.42	338.17	0.00	0.00	11.52	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	29.60	29.60	0.00	0.00	1.10	0.00
95th-Percentile Queue Length [ft/ln]	740.04	740.04	0.00	0.00	27.58	0.00
d_A, Approach Delay [s/veh]	344.34		0.00		1.95	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	63.64					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 3: Murrieta Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	185.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.156

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	106	63	156	44	91	5	5	461	130	182	521	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	74	5	173	7	12	11	0	694	95	280	646	12
Site-Generated Trips [veh/h]	0	0	1	0	0	0	0	55	1	2	21	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	184	71	336	53	107	16	5	1228	231	471	1209	68
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	19	89	14	28	4	1	326	61	125	321	18
Total Analysis Volume [veh/h]	195	75	356	56	113	17	5	1302	245	499	1282	72
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	14	0	39	46	0	29	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	10	10	1	32	32	35	66	66
g / C, Green / Cycle	0.23	0.08	0.08	0.01	0.26	0.26	0.30	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.37	0.09	0.01	0.00	0.41	0.42	0.28	0.36	0.36
s, saturation flow rate [veh/h]	1703	1869	1615	1810	1900	1798	1810	1900	1865
c, Capacity [veh/h]	383	156	135	18	501	474	533	1042	1022
d1, Uniform Delay [s]	46.50	55.00	50.95	58.96	44.18	44.18	41.21	19.04	19.20
k, delay calibration	0.50	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	296.97	58.95	0.42	7.90	266.95	280.93	8.26	3.16	3.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.63	1.09	0.13	0.27	1.57	1.60	0.94	0.65	0.66
d, Delay for Lane Group [s/veh]	343.47	113.95	51.37	66.86	311.13	325.11	49.47	22.20	22.56
Lane Group LOS	F	F	D	E	F	F	D	C	C
Critical Lane Group	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	42.61	7.14	0.48	0.19	51.27	50.35	14.80	12.77	12.87
50th-Percentile Queue Length [ft/ln]	1065.24	178.42	11.98	4.66	1281.75	1258.74	370.00	319.35	321.87
95th-Percentile Queue Length [veh/ln]	65.96	11.85	0.86	0.34	78.21	77.32	21.11	18.64	18.76
95th-Percentile Queue Length [ft/ln]	1649.02	296.25	21.57	8.39	1955.24	1933.11	527.72	465.89	468.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	343.47	343.47	343.47	113.95	113.95	51.37	66.86	316.66	325.11	49.47	22.37	22.56
Movement LOS	F	F	F	F	F	D	E	F	F	D	C	C
d_A, Approach Delay [s/veh]	343.47			108.23			317.19			29.68		
Approach LOS	F			F			F			C		
d_I, Intersection Delay [s/veh]	185.54											
Intersection LOS	F											
Intersection V/C	1.156											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.120	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	450	167	700	533
d_b, Bicycle Delay [s]	36.04	50.42	25.35	32.27
I_b,int, Bicycle LOS Score for Intersection	2.593	1.867	2.840	3.088
Bicycle LOS	B	A	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Evans Rd at Ethanac Rd

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	26.161

Intersection Setup

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	1	653	0	2	760
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	46	269	906	30	234	893
Site-Generated Trips [veh/h]	4	21	54	2	8	19
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	291	1639	32	244	1702
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	78	438	9	65	455
Total Analysis Volume [veh/h]	53	311	1751	34	261	1818
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	26.16	1.08	0.02	0.00	0.74	0.02
d_M, Delay for Movement [s/veh]	10000.00	10000.00	0.00	0.00	39.50	0.00
Movement LOS	F	F	A	A	E	A
95th-Percentile Queue Length [veh/ln]	46.75	46.75	0.00	0.00	5.72	0.00
95th-Percentile Queue Length [ft/ln]	1168.73	1168.73	0.00	0.00	143.10	0.00
d_A, Approach Delay [s/veh]	10000.00		0.00		4.96	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	863.37					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Barnett Rd/Case Rd at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	51.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.836

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	55.00			55.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	24	30	82	431	54	123	162	471	24	81	562	357
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	65	0	0	3	0	1110	0	80	1044	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	75	0	0	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	31	150	448	56	131	168	1675	25	164	1655	371
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	8	39	116	15	34	44	435	6	43	430	96
Total Analysis Volume [veh/h]	26	32	156	466	58	136	175	1741	26	170	1720	386
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	7	10	0	7	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	27	0	17	65	0	14	62	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	21	0	0	7	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	19	19	19	13	58	58	13	58	58
g / C, Green / Cycle	0.12	0.15	0.15	0.15	0.11	0.48	0.48	0.11	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.13	0.13	0.06	0.06	0.10	0.48	0.02	0.09	0.48	0.24
s, saturation flow rate [veh/h]	1674	3514	1767	1615	1810	3618	1615	1810	3618	1615
c, Capacity [veh/h]	200	543	273	250	201	1741	777	202	1743	778
d1, Uniform Delay [s]	52.83	49.44	45.48	45.51	52.52	31.13	16.41	52.29	30.72	21.17
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	50.21	4.06	0.83	0.92	11.12	21.58	0.08	9.19	18.66	2.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.07	0.86	0.37	0.37	0.87	1.00	0.03	0.84	0.99	0.50
d, Delay for Lane Group [s/veh]	103.04	53.50	46.31	46.43	63.63	52.70	16.49	61.48	49.37	23.43
Lane Group LOS	F	D	D	D	E	F	B	E	D	C
Critical Lane Group	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.54	6.80	2.65	2.45	5.63	27.90	0.37	5.36	26.60	7.32
50th-Percentile Queue Length [ft/ln]	213.46	169.90	66.19	61.29	140.79	697.41	9.36	134.01	665.04	183.00
95th-Percentile Queue Length [veh/ln]	13.71	11.07	4.77	4.41	9.52	36.56	0.67	9.16	35.06	11.76
95th-Percentile Queue Length [ft/ln]	342.63	276.79	119.14	110.33	238.09	913.98	16.85	228.94	876.50	293.93

Movement, Approach, & Intersection Results

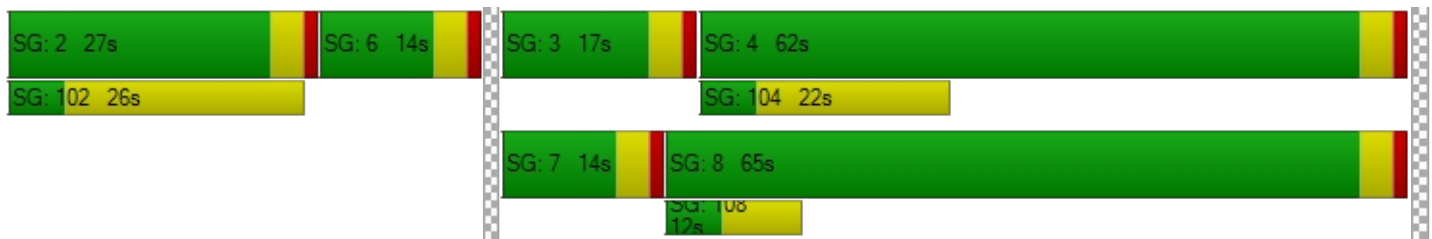
d_M, Delay for Movement [s/veh]	103.04	103.04	103.04	53.50	46.31	46.39	63.63	52.70	16.49	61.48	49.37	23.43
Movement LOS	F	F	F	D	D	D	E	F	B	E	D	C
d_A, Approach Delay [s/veh]	103.04			51.40			53.20			45.88		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	51.79											
Intersection LOS	D											
Intersection V/C	0.836											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.148	2.763	3.504	0.000
Crosswalk LOS	B	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	167	383	1017	967
d_b, Bicycle Delay [s]	50.42	39.20	14.50	16.02
I_b,int, Bicycle LOS Score for Intersection	1.913	2.649	3.162	3.437
Bicycle LOS	A	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: I-215 SB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	389.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.014

Intersection Setup

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	154	3	365	0	643	365	89	739	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	201	0	561	0	673	503	323	565	0
Site-Generated Trips [veh/h]	0	0	0	0	0	14	0	46	29	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	361	3	955	0	1388	912	416	1347	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8890	0.8890	0.8890	1.0000	0.8890	0.8890	0.8890	0.8890	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	102	1	269	0	390	256	117	379	0
Total Analysis Volume [veh/h]	0	0	0	406	3	1074	0	1561	1026	468	1515	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	33	0	0	71	0	16	87	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		120	120	120	120	120	120
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		28	28	44	44	33	81
g / C, Green / Cycle		0.23	0.23	0.37	0.37	0.28	0.68
(v / s)_i Volume / Saturation Flow Rate		0.23	0.67	0.82	0.64	0.26	0.42
s, saturation flow rate [veh/h]		1810	1615	1900	1615	1810	3618
c, Capacity [veh/h]		418	373	700	595	499	2451
d1, Uniform Delay [s]		45.86	46.15	37.90	37.90	42.43	10.74
k, delay calibration		0.35	0.50	0.50	0.50	0.23	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		32.22	853.75	558.56	333.35	16.07	1.18
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.98	2.88	2.23	1.73	0.94	0.62
d, Delay for Lane Group [s/veh]		78.08	899.90	596.47	371.26	58.50	11.92
Lane Group LOS		E	F	F	F	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		15.40	99.11	127.71	71.35	15.06	9.47
50th-Percentile Queue Length [ft/ln]		385.07	2477.71	3192.78	1783.72	376.38	236.73
95th-Percentile Queue Length [veh/ln]		21.84	155.75	202.97	111.72	21.42	14.52
95th-Percentile Queue Length [ft/ln]		545.98	3893.83	5074.27	2793.06	535.46	362.90

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	78.08	78.08	899.90	0.00	596.47	371.26	58.50	11.92	0.00
Movement LOS				E	E	F		F	F	E	B	
d_A, Approach Delay [s/veh]	0.00			673.25			507.15			22.91		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	389.20											
Intersection LOS	F											
Intersection V/C	2.014											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.678	0.000	3.751
Crosswalk LOS	F	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	462	1088	1355
d_b, Bicycle Delay [s]	60.00	35.50	12.47	6.24
I_b,int, Bicycle LOS Score for Intersection	4.132	4.007	5.828	3.196
Bicycle LOS	D	D	F	C

Sequence

Ring 1	2	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: I-215 NB Ramps at Ethanac Rd

Control Type:	Signalized	Delay (sec / veh):	383.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.810

Intersection Setup

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	395	2	200	0	0	0	254	564	0	0	401	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	523	0	201	0	0	0	612	262	0	0	365	323
Site-Generated Trips [veh/h]	11	0	0	0	0	0	41	5	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	945	2	409	0	0	0	917	854	0	0	784	477
Peak Hour Factor	0.9680	0.9680	0.9680	1.0000	1.0000	1.0000	0.9680	0.9680	1.0000	1.0000	0.9680	0.9680
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	244	1	106	0	0	0	237	221	0	0	202	123
Total Analysis Volume [veh/h]	976	2	423	0	0	0	947	882	0	0	810	493
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	37	0	0	0	0	34	83	0	0	49	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	5.30	5.30		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30		2.00	3.70	3.70
g_i, Effective Green Time [s]	32	32		30	77	43
g / C, Green / Cycle	0.26	0.26		0.25	0.64	0.36
(v / s)_i Volume / Saturation Flow Rate	0.54	0.26		0.52	0.46	0.73
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1781
c, Capacity [veh/h]	478	427		452	1224	643
d1, Uniform Delay [s]	44.15	44.02		45.00	14.18	38.35
k, delay calibration	0.50	0.42		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	477.84	37.90		499.52	3.69	467.82
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	2.05	0.99		2.09	0.72	2.03
d, Delay for Lane Group [s/veh]	521.99	81.91		544.52	17.86	506.17
Lane Group LOS	F	F		F	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	77.07	16.51		75.56	14.53	101.12
50th-Percentile Queue Length [ft/ln]	1926.87	412.63		1889.05	363.37	2528.12
95th-Percentile Queue Length [veh/ln]	120.89	23.17		118.50	20.79	160.17
95th-Percentile Queue Length [ft/ln]	3022.24	579.20		2962.50	519.68	4004.29

Movement, Approach, & Intersection Results

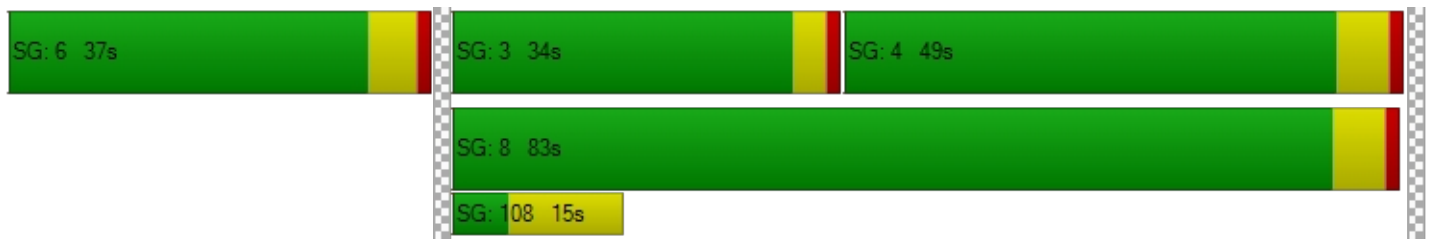
d_M, Delay for Movement [s/veh]	521.99	521.99	81.91	0.00	0.00	0.00	544.52	17.86	0.00	0.00	506.17	506.17
Movement LOS	F	F	F				F	B			F	F
d_A, Approach Delay [s/veh]	389.12			0.00			290.55			506.17		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	383.00											
Intersection LOS	F											
Intersection V/C	1.810											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.638	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	528	0	1288	722
d_b, Bicycle Delay [s]	32.49	60.00	7.60	24.51
I_b,int, Bicycle LOS Score for Intersection	3.871	4.132	4.577	3.710
Bicycle LOS	D	D	E	D

Sequence

Ring 1	-	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Goetz Rd at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	16.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.198

Intersection Setup

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Goetz Rd			Goetz Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	8	204	0	0	258	111	73	0	12	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	31	0	12	29	0	0	0	0	0	0	7
Site-Generated Trips [veh/h]	0	0	0	9	1	0	0	0	0	1	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	235	0	21	288	111	73	0	12	1	0	11
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	62	0	6	76	29	19	0	3	0	0	3
Total Analysis Volume [veh/h]	8	249	0	22	305	118	77	0	13	1	0	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.02	0.00	0.00	0.20	0.00	0.02	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	8.16	0.00	0.00	7.76	0.00	0.00	16.52	16.30	9.95	15.16	15.64	9.62
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	A
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.05	0.05	0.00	0.73	0.73	0.05	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.53	0.00	0.00	1.26	1.26	0.00	18.17	18.17	1.34	1.37	1.37	1.37
d_A, Approach Delay [s/veh]	0.25			0.38			15.58			10.05		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	2.20											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Wheat St at McLaughlin Rd

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Wheat St		McLaughlin Rd		McLaughlin Rd	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	10	0	0	12	7	14
Site-Generated Trips [veh/h]	4	5	9	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	5	9	12	7	15
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	2	3	2	4
Total Analysis Volume [veh/h]	15	5	9	13	7	16
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.81	8.44	7.26	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.55	1.55	0.42	0.42	0.00	0.00
d_A, Approach Delay [s/veh]	8.72		2.97		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.69					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 10: Byers Rd at Ethanac Rd**

Control Type:	Two-way stop	Delay (sec / veh):	2,946.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.180

Intersection Setup

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	5	2	559	1	4	621
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	22	245	733	4	283	755
Site-Generated Trips [veh/h]	0	0	56	0	11	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	247	1370	5	298	1411
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	64	357	1	78	368
Total Analysis Volume [veh/h]	28	258	1429	5	311	1471
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	5.18	0.69	0.01	0.00	0.65	0.01
d_M, Delay for Movement [s/veh]	2946.16	2289.67	0.00	0.00	25.29	0.00
Movement LOS	F	F	A	A	D	A
95th-Percentile Queue Length [veh/ln]	32.91	32.91	0.00	0.00	4.55	0.00
95th-Percentile Queue Length [ft/ln]	822.84	822.84	0.00	0.00	113.67	0.00
d_A, Approach Delay [s/veh]	2353.94		0.00		4.41	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	194.49					
Intersection LOS	F					

APPENDIX C-5

**INTERSECTION ANALYSIS
WORKSHEETS -
OPENING YEAR 2025 CUMULATIVE
PLUS PROJECT WITH
IMPROVEMENTS**

Option 1: NB Left-Out Restricted

Number	2					
Intersection	Wheat St at Ethanac Rd					
Control Type	Two-way stop					
Analysis Method	HCM 6th Edition					
Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	2	5	837	1	3	473
Total Analysis Volume [veh/h]	12	130	1223	61	263	707

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0




Capacity Analysis

Calculated Rank	0	2	1	1	2	1
v_c, Conflicting Flow Rate	0	642	0	0	1284	0
v_c, Stage 1	0	642	0	0	1284	0
v_c, Stage 2	0	0	0	0	0	0
c_p,x, Potential Capacity [veh/h]	0	422	0	0	547	0
c_p,x, Stage 1 [veh/h]	0	1443	0	0	2361	0
c_p,x, Stage 2 [veh/h]	0	1091	0	0	1636	0
c_m,x, Movement Capacity [veh/h]	0	422	100000	100000	547	100000
c_m,x, Stage 1 [veh/h]	0	0	0	0	0	0
c_m,x, Stage 2 [veh/h]	0	0	0	0	0	0
c_T, Total Capacity [veh/h]	0	422	100000	100000	547	100000

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.31	0.01	0.00	0.48	0.01
d_M, Delay for Movement [s/veh]	0.00	17.30	0.00	0.00	17.52	0.00
Movement LOS		C	A	A	C	A
Critical Movement		No	No	No	Yes	No
95th-Percentile Queue Length [veh/ln]	0.00	1.29	0.00	0.00	2.59	0.00
95th-Percentile Queue Length [ft/ln]	0.00	32.29	0.00	0.00	64.70	0.00
d_A, Approach Delay [s/veh]	17.30		0.00		4.75	
Approach LOS	C		A		A	
V/C_I, Worst Movement V/C Ratio	0.48					
d_I, Worst Movement Control Delay [s/veh]	17.52					
d_I, Intersection Delay [s/veh]	2.88					
Intersection LOS	C					

Option 1: NB Left-Out Restricted

Number	2					
Intersection	Wheat St at Ethanac Rd					
Control Type	Two-way stop					
Analysis Method	HCM 6th Edition					
Name	Wheat St		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	3	596	1	10	629
Total Analysis Volume [veh/h]	47	427	893	42	206	1039

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Capacity Analysis

Calculated Rank	0	2	1	1	2	1
v_c, Conflicting Flow Rate	0	468	0	0	935	0
v_c, Stage 1	0	468	0	0	935	0
v_c, Stage 2	0	0	0	0	0	0
c_p,x, Potential Capacity [veh/h]	0	547	0	0	741	0
c_p,x, Stage 1 [veh/h]	0	1341	0	0	2148	0
c_p,x, Stage 2 [veh/h]	0	1091	0	0	1636	0
c_m,x, Movement Capacity [veh/h]	0	547	100000	100000	741	100000
c_m,x, Stage 1 [veh/h]	0	0	0	0	0	0
c_m,x, Stage 2 [veh/h]	0	0	0	0	0	0
c_T, Total Capacity [veh/h]	0	547	100000	100000	741	100000

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.78	0.01	0.00	0.28	0.01
d_M, Delay for Movement [s/veh]	0.00	31.05	0.00	0.00	11.72	0.00
Movement LOS		D	A	A	B	A
Critical Movement		Yes	No	No	No	No
95th-Percentile Queue Length [veh/ln]	0.00	7.19	0.00	0.00	1.14	0.00
95th-Percentile Queue Length [ft/ln]	0.00	179.86	0.00	0.00	28.42	0.00
d_A, Approach Delay [s/veh]	31.05		0.00		1.94	
Approach LOS	D		A		A	
V/C_I, Worst Movement V/C Ratio	0.78					
d_I, Worst Movement Control Delay [s/veh]	31.05					
d_I, Intersection Delay [s/veh]	6.01					
Intersection LOS	D					

Option 2: Add NBL, NBR with Overlap Phasing, SBL, and EBR Lanes. NBL/SBL Protected Phasing.

Number	3											
Intersection	Murrieta Rd at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	87	105	127	90	53	2	9	762	72	69	374	39
Total Analysis Volume [veh/h]	148	126	410	109	61	20	9	1305	142	171	1047	50

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	10	7	10	0	7	10	0	7	10	0
Maximum Green [s]	7	30	30	7	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	21	21	17	14	0	11	58	0	24	71	0
Walk [s]	0	5	5	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No		No	No	
Maximum Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.10	0.12	0.32	0.07	0.10	0.10	0.02	0.51	0.51	0.16	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.08	0.07	0.25	0.06	0.03	0.01	0.00	0.36	0.09	0.09	0.29	0.29
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	3618	1615	1810	1900	1870
c, Capacity [veh/h]	178	229	510	135	184	156	29	1842	822	294	1246	1226
X, volume / capacity	0.83	0.55	0.80	0.80	0.33	0.13	0.31	0.71	0.17	0.58	0.44	0.44
d, Delay for Lane Group [s/veh]	62.67	51.78	49.37	65.22	51.61	49.92	64.54	24.95	16.31	48.32	11.18	11.21

Lane Group LOS	E	D	D	E	D	D	E	C	B	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	4.74	3.61	12.23	3.56	1.73	0.55	0.31	13.42	2.06	4.71	6.37	6.29
50th-Percentile Queue Length [ft/ln]	118.60	90.17	305.84	89.05	43.14	13.83	7.78	335.60	51.52	117.64	159.28	157.23
95th-Percentile Queue Length [veh/ln]	8.32	6.49	17.97	6.41	3.11	1.00	0.56	19.43	3.71	8.26	10.51	10.40
95th-Percentile Queue Length [ft/ln]	207.90	162.30	449.24	160.29	77.66	24.89	14.00	485.82	92.73	206.58	262.77	260.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.67	51.78	49.37	65.22	51.61	49.92	64.54	24.95	16.31	48.32	11.19	11.21
Movement LOS	E	D	D	E	D	D	E	C	B	D	B	B
Critical Movement	No	No	No	Yes	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	52.69			59.24			24.36			16.20		
Approach LOS	D			E			C			B		
d_I, Intersection Delay [s/veh]	28.71											
Intersection LOS	C											
Intersection V/C	0.575											

Option 2: Add NBL, NBR with Overlap Phasing, SBL, and EBR Lanes. NBL/SBL Protected Phasing.

Number	3											
Intersection	Murrieta Rd at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	106	63	156	44	91	5	5	461	130	182	521	54
Total Analysis Volume [veh/h]	195	75	356	56	113	17	5	1302	245	499	1282	72

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	10	7	10	0	7	10	0	7	10	0
Maximum Green [s]	7	30	30	7	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	18	21	21	11	14	0	31	49	0	39	57	0
Walk [s]	0	5	5	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No		No	No	
Maximum Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.12	0.15	0.47	0.05	0.08	0.08	0.01	0.38	0.38	0.29	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.11	0.04	0.22	0.03	0.06	0.01	0.00	0.36	0.15	0.28	0.36	0.36
so, Base Saturation Flow per Lane [pc/h/lane]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	3618	1615	1810	1900	1865
c, Capacity [veh/h]	211	284	762	89	156	133	18	1369	611	523	1250	1227
X, volume / capacity	0.92	0.26	0.47	0.63	0.72	0.13	0.28	0.95	0.40	0.95	0.54	0.55
d, Delay for Lane Group [s/veh]	87.96	45.67	22.95	62.99	59.92	51.50	67.39	51.29	29.27	67.93	12.61	12.79

Lane Group LOS	F	D	C	E	E	D	E	D	C	E	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.74	1.97	6.72	1.80	3.52	0.48	0.19	20.08	5.22	17.50	8.60	8.66
50th-Percentile Queue Length [ft/ln]	193.43	49.34	168.11	44.99	87.90	12.00	4.70	502.01	130.48	437.52	214.92	216.44
95th-Percentile Queue Length [veh/ln]	12.30	3.55	10.98	3.24	6.33	0.86	0.34	27.43	8.97	24.36	13.41	13.48
95th-Percentile Queue Length [ft/ln]	307.48	88.82	274.43	80.98	158.22	21.61	8.46	685.73	224.15	609.04	335.13	337.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	87.96	45.67	22.95	62.99	59.92	51.50	67.39	51.29	29.27	67.93	12.70	12.79
Movement LOS	F	D	C	E	E	D	E	D	C	E	B	B
Critical Movement	Yes	No	No	No	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	45.92			60.08			47.86			27.57		
Approach LOS	D			E			D			C		
d_I, Intersection Delay [s/veh]	39.20											
Intersection LOS	D											
Intersection V/C	0.820											

Option 1: Install Traffic Signal. Add NBL and NBR Turn Lanes. Add Protected WBL Turn Phasing.

Number	4					
Intersection	Evans Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	4	980	1	2	506
Total Analysis Volume [veh/h]	32	201	1857	35	334	1310

Intersection Settings

Cycle Length [s]	120					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	69	0	30	99
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.14	0.14	0.56	0.56	0.20	0.79
(v / s)_i Volume / Saturation Flow Rate	0.02	0.12	0.50	0.50	0.18	0.36
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3	
s, saturation flow rate [veh/h]	1810	1615	1900	1888	1810	3618
c, Capacity [veh/h]	252	225	1064	1057	363	2872
X, volume / capacity	0.13	0.89	0.89	0.89	0.92	0.46
d, Delay for Lane Group [s/veh]	45.47	62.38	34.22	34.91	66.27	4.52
Lane Group LOS	D	E	C	C	E	A

Critical Lane Group	NO	Yes	NO	Yes	Yes	NO
50th-Percentile Queue Length [veh/ln]	0.86	6.65	23.72	23.99	11.31	3.36
50th-Percentile Queue Length [ft/ln]	21.41	166.29	592.89	599.65	282.75	84.06
95th-Percentile Queue Length [veh/ln]	1.54	10.88	31.70	32.02	16.83	6.05
95th-Percentile Queue Length [ft/ln]	38.54	272.03	792.56	800.45	420.64	151.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.47	62.38	34.56	34.91	66.27	4.52
Movement LOS	D	E	C	C	E	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	60.06		34.57		17.06	
Approach LOS	E		C		B	
d_I, Intersection Delay [s/veh]	28.51					
Intersection LOS	C					
Intersection V/C	0.810					

Option 1: Install Traffic Signal. Add NBL and NBR Turn Lanes. Add Protected WBL Turn Phasing.

Number	4					
Intersection	Evans Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Evans Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	1	653	0	2	760
Total Analysis Volume [veh/h]	53	311	1751	34	261	1818

Intersection Settings

Cycle Length [s]	120					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	10	0	7	10
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	33	0	64	0	23	87
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.21	0.21	0.53	0.53	0.16	0.72
(v / s)_i Volume / Saturation Flow Rate	0.03	0.19	0.47	0.47	0.14	0.50
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3	
s, saturation flow rate [veh/h]	1810	1615	1900	1887	1810	3618
c, Capacity [veh/h]	380	339	1011	1004	287	2618
X, volume / capacity	0.14	0.92	0.88	0.89	0.91	0.69
d, Delay for Lane Group [s/veh]	38.77	67.71	35.90	36.59	63.14	10.76
Lane Group LOS	D	E	D	D	E	B

Critical Lane Group	NO	Yes	NO	Yes	Yes	NO
50th-Percentile Queue Length [veh/ln]	1.30	11.05	22.97	23.22	8.47	10.44
50th-Percentile Queue Length [ft/ln]	32.48	276.15	574.25	580.47	211.81	260.99
95th-Percentile Queue Length [veh/ln]	2.34	16.50	30.83	31.12	13.25	15.74
95th-Percentile Queue Length [ft/ln]	58.46	412.41	770.75	778.03	331.15	393.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	38.77	67.71	36.24	36.59	63.14	10.76
Movement LOS	D	E	D	D	E	B
Critical Movement	No	Yes	No	No	No	No
d_A, Approach Delay [s/veh]	63.50		36.24		17.34	
Approach LOS	E		D		B	
d_I, Intersection Delay [s/veh]	29.29					
Intersection LOS	C					
Intersection V/C	0.810					

Option 1: Add 2nd EBT and WBL Turn Lanes. Modify SB Approach to dedicated SBL, SBR, and SB-Shared Lanes. Dedicated EBR Turn Lane.

Number	6											
Intersection	I-215 SB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	0	0	113	1	259	0	726	485	108	591	0
Total Analysis Volume [veh/h]	0	0	0	461	1	822	0	1301	969	231	1162	0

Intersection Settings

Cycle Length [s]	120											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	16.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	10	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	30	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	4.7	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	54	0	0	54	54	12	66	0
Walk [s]	0	0	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	10	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall					No			No	No	No	No	
Maximum Recall					No			No	No	No	No	
Pedestrian Recall					No			No	No	No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.34	0.34	0.34	0.45	0.84	0.09	0.57
(v / s)_i Volume / Saturation Flow Rate	0.24	0.29	0.27	0.36	0.60	0.07	0.32
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900
Arrival type	3			3			3
s, saturation flow rate [veh/h]	1810	1498	1615	3618	1615	3514	3618
c, Capacity [veh/h]	611	538	545	1636	1352	300	2065
X, volume / capacity	0.70	0.80	0.79	0.80	0.72	0.77	0.56
d, Delay for Lane Group [s/veh]	36.45	41.87	40.34	32.21	7.26	57.91	17.40
Lane Group LOS	D	D	D	C	A	E	B

Critical Lane Group	No	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	10.72	11.84	11.48	15.62	5.23	3.47	9.30
50th-Percentile Queue Length [ft/ln]	268.11	295.95	286.94	390.60	130.82	86.81	232.54
95th-Percentile Queue Length [veh/ln]	16.10	17.48	17.03	22.11	8.98	6.25	14.30
95th-Percentile Queue Length [ft/ln]	402.38	437.02	425.85	552.67	224.61	156.26	357.58

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	36.84	41.87	41.07	0.00	32.21	7.26	57.91	17.40	0.00
Movement LOS				D	D	D		C	A	E	B	
Critical Movement				No	No	No		No	No	Yes	No	
d_A, Approach Delay [s/veh]	0.00			39.55			21.56			24.12		
Approach LOS	A			D			C			C		
d_I, Intersection Delay [s/veh]	26.95											
Intersection LOS	C											
Intersection V/C	0.853											

Option 1: Add 2nd EBT and WBL Turn Lanes. Modify SB Approach to dedicated SBL, SBR, and SB-Shared Lanes. Dedicated EBR Turn Lane.

Number	6											
Intersection	I-215 SB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 SB On Ramp			I-215 SB Off Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	0	0	154	3	365	0	643	365	89	739	0
Total Analysis Volume [veh/h]	0	0	0	406	3	1074	0	1561	1026	468	1515	0

Intersection Settings

Cycle Length [s]	120											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	16.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	10	7	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	30	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	4.7	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	43	0	0	58	58	19	77	0
Walk [s]	0	0	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	10	10	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall					No			No	No	No	No	
Maximum Recall					No			No	No	No	No	
Pedestrian Recall					No			No	No	No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.31	0.31	0.31	0.40	0.77	0.16	0.59
(v / s)_i Volume / Saturation Flow Rate	0.22	0.36	0.31	0.43	0.64	0.13	0.42
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900
Arrival type	3			3			3
s, saturation flow rate [veh/h]	1810	1616	1615	3618	1615	3514	3618
c, Capacity [veh/h]	568	538	507	1465	1238	548	2149
X, volume / capacity	0.71	1.08	0.97	1.07	0.83	0.85	0.70
d, Delay for Lane Group [s/veh]	39.94	105.54	71.42	78.97	15.46	53.22	18.97
Lane Group LOS	D	F	E	F	B	D	B

Critical Lane Group	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	10.66	25.01	18.08	28.58	13.53	6.86	13.28
50th-Percentile Queue Length [ft/ln]	266.54	625.30	452.01	714.39	338.35	171.53	331.90
95th-Percentile Queue Length [veh/ln]	16.02	34.99	25.05	39.11	19.57	11.16	19.25
95th-Percentile Queue Length [ft/ln]	400.42	874.69	626.34	977.73	489.19	278.92	481.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	39.94	105.54	89.83	0.00	78.97	15.46	53.22	18.97	0.00
Movement LOS				D	F	F		F	B	D	B	
Critical Movement				No	Yes	No		No	No	No	No	
d_A, Approach Delay [s/veh]	0.00			76.21			53.78			27.05		
Approach LOS	A			E			D			C		
d_I, Intersection Delay [s/veh]	50.52											
Intersection LOS	D											
Intersection V/C	1.068											

Option 1: Add 2nd EBT, WBT, EBL, and NBL Turn Lanes. Add a dedicated WBR Turn Lane.

Number	7											
Intersection	I-215 NB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	271	0	133	0	0	0	233	610	0	0	436	168
Total Analysis Volume [veh/h]	744	0	482	0	0	0	732	1032	0	0	656	297

Intersection Settings

Cycle Length [s]	120											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	1.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	64	0	0	0	0	34	56	0	0	22	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.33	0.33	0.33		0.24	0.58	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.21	0.21	0.30		0.21	0.29	0.18	0.18
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900		1900	1900	1900	1900
Arrival type	3			3	3		3	
s, saturation flow rate [veh/h]	1810	1810	1615		3514	3618	3618	1615
c, Capacity [veh/h]	599	599	534		829	2089	1116	498
X, volume / capacity	0.62	0.62	0.90		0.88	0.49	0.59	0.60
d, Delay for Lane Group [s/veh]	34.89	34.89	47.07		47.60	15.82	37.33	40.35
Lane Group LOS	C	C	D		D	B	D	D

Critical Lane Group	No	No	Yes		Yes	NO	NO	Yes
50th-Percentile Queue Length [veh/ln]	8.97	8.97	14.20		10.41	7.65	8.06	7.72
50th-Percentile Queue Length [ft/ln]	224.14	224.14	354.91		260.17	191.28	201.47	192.94
95th-Percentile Queue Length [veh/ln]	13.88	13.88	20.38		15.70	12.19	12.71	12.27
95th-Percentile Queue Length [ft/ln]	346.90	346.90	509.39		392.43	304.69	317.86	306.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.89	34.89	47.07	0.00	0.00	0.00	47.60	15.82	0.00	0.00	37.33	40.35
Movement LOS	C	C	D				D	B			D	D
Critical Movement	No	No	No				Yes	No			No	No
d_A, Approach Delay [s/veh]	39.68			0.00			29.01			38.27		
Approach LOS	D			A			C			D		
d_I, Intersection Delay [s/veh]	34.56											
Intersection LOS	C											
Intersection V/C	0.696											

Option 1: Add 2nd EBT, WBT, EBL, and NBL Turn Lanes. Add a dedicated WBR Turn Lane.

Number	7											
Intersection	I-215 NB Ramps at Ethanac Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB Off Ramp			I-215 NB On Ramp			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	395	2	200	0	0	0	254	564	0	0	401	148
Total Analysis Volume [veh/h]	976	2	423	0	0	0	947	882	0	0	810	493

Intersection Settings

Cycle Length [s]	120											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	1.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	4.3	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	39	0	0	0	0	38	81	0	0	43	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.28	0.28	0.28		0.28	0.63	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.27	0.27	0.26		0.27	0.24	0.22	0.31
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900		1900	1900	1900	1900
Arrival type	3			3	3		3	
s, saturation flow rate [veh/h]	1810	1810	1615		3514	3618	3618	1615
c, Capacity [veh/h]	508	508	454		992	2270	1128	503
X, volume / capacity	0.96	0.96	0.93		0.95	0.39	0.72	0.98
d, Delay for Lane Group [s/veh]	70.21	70.16	65.65		48.55	11.51	40.57	76.20
Lane Group LOS	E	E	E		D	B	D	E

Critical Lane Group	Yes	NO	NO		Yes	NO	NO	Yes
50th-Percentile Queue Length [veh/ln]	17.58	17.58	14.67		13.91	5.19	10.61	18.52
50th-Percentile Queue Length [ft/ln]	439.57	439.40	366.73		347.76	129.70	265.23	463.05
95th-Percentile Queue Length [veh/ln]	24.46	24.45	20.95		20.03	8.92	15.95	25.58
95th-Percentile Queue Length [ft/ln]	611.49	611.29	523.76		500.68	223.08	398.77	639.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	70.19	70.16	65.65	0.00	0.00	0.00	48.55	11.51	0.00	0.00	40.57	76.20
Movement LOS	E	E	E				D	B			D	E
Critical Movement	No	No	No				No	No			No	Yes
d_A, Approach Delay [s/veh]	68.82			0.00			30.69			54.05		
Approach LOS	E			A			C			D		
d_I, Intersection Delay [s/veh]	49.19											
Intersection LOS	D											
Intersection V/C	0.852											

Option 1: Install Traffic Signal, Modify NB Approach

Number	10					
Intersection	Byers Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	6	719	2	6	533
Total Analysis Volume [veh/h]	4	181	1414	8	305	1083

Intersection Settings

Cycle Length [s]	120					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	3	2	0	1	6
Auxiliary Signal Groups		1,3				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	10	0	7	10
Maximum Green [s]	17	17	55	0	36	95
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	11	11	66	0	43	109
Walk [s]	5	5	5	0	0	5
Pedestrian Clearance [s]	10	10	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.06	0.28	0.65	0.65	0.19	0.88
(v / s)_i Volume / Saturation Flow Rate	0.00	0.11	0.37	0.37	0.17	0.30
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3	
s, saturation flow rate [veh/h]	1810	1615	1900	1896	1810	3618
c, Capacity [veh/h]	106	457	1235	1233	347	3165
X, volume / capacity	0.04	0.40	0.58	0.58	0.88	0.34
d, Delay for Lane Group [s/veh]	53.47	35.28	13.69	13.72	54.43	1.63

Lane Group LOS	D	D	B	B	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.12	4.36	9.58	9.59	9.20	0.42
50th-Percentile Queue Length [ft/ln]	2.96	108.97	239.50	239.85	230.09	10.47
95th-Percentile Queue Length [veh/ln]	0.21	7.78	14.66	14.67	14.18	0.75
95th-Percentile Queue Length [ft/ln]	5.33	194.57	366.41	366.84	354.47	18.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.47	35.28	13.70	13.72	54.43	1.63
Movement LOS	D	D	B	B	D	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	35.67		13.70		13.23	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	14.84					
Intersection LOS	B					
Intersection V/C	0.632					

Option 1: Install Traffic Signal, Modify NB Approach

Number	10					
Intersection	Byers Rd at Ethanac Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Byers Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	5	2	559	1	4	621
Total Analysis Volume [veh/h]	28	258	1429	5	311	1471

Intersection Settings

Cycle Length [s]	120					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Semi-actuated					
Lost time [s]	0.00					
Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	3	2	0	1	6
Auxiliary Signal Groups		1,3				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	7	10	0	7	10
Maximum Green [s]	26	26	49	0	33	86
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	11	11	65	0	44	109
Walk [s]	5	5	5	0	0	5
Pedestrian Clearance [s]	10	10	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.06	0.29	0.65	0.65	0.20	0.88
(v / s)_i Volume / Saturation Flow Rate	0.02	0.16	0.38	0.38	0.17	0.41
so, Base Saturation Flow per Lane [pc/h/lane]	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3	
s, saturation flow rate [veh/h]	1810	1615	1900	1898	1810	3618
c, Capacity [veh/h]	106	465	1226	1224	356	3165
X, volume / capacity	0.27	0.55	0.58	0.59	0.87	0.46
d, Delay for Lane Group [s/veh]	55.37	37.22	14.18	14.19	53.60	2.07

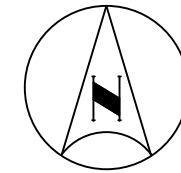
Lane Group LOS	E	D	B	B	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.85	6.54	9.92	9.93	9.32	0.68
50th-Percentile Queue Length [ft/ln]	21.24	163.57	247.92	248.14	232.95	17.00
95th-Percentile Queue Length [veh/ln]	1.53	10.74	15.08	15.09	14.32	1.22
95th-Percentile Queue Length [ft/ln]	38.23	268.44	377.03	377.31	358.11	30.60

Movement, Approach, & Intersection Results

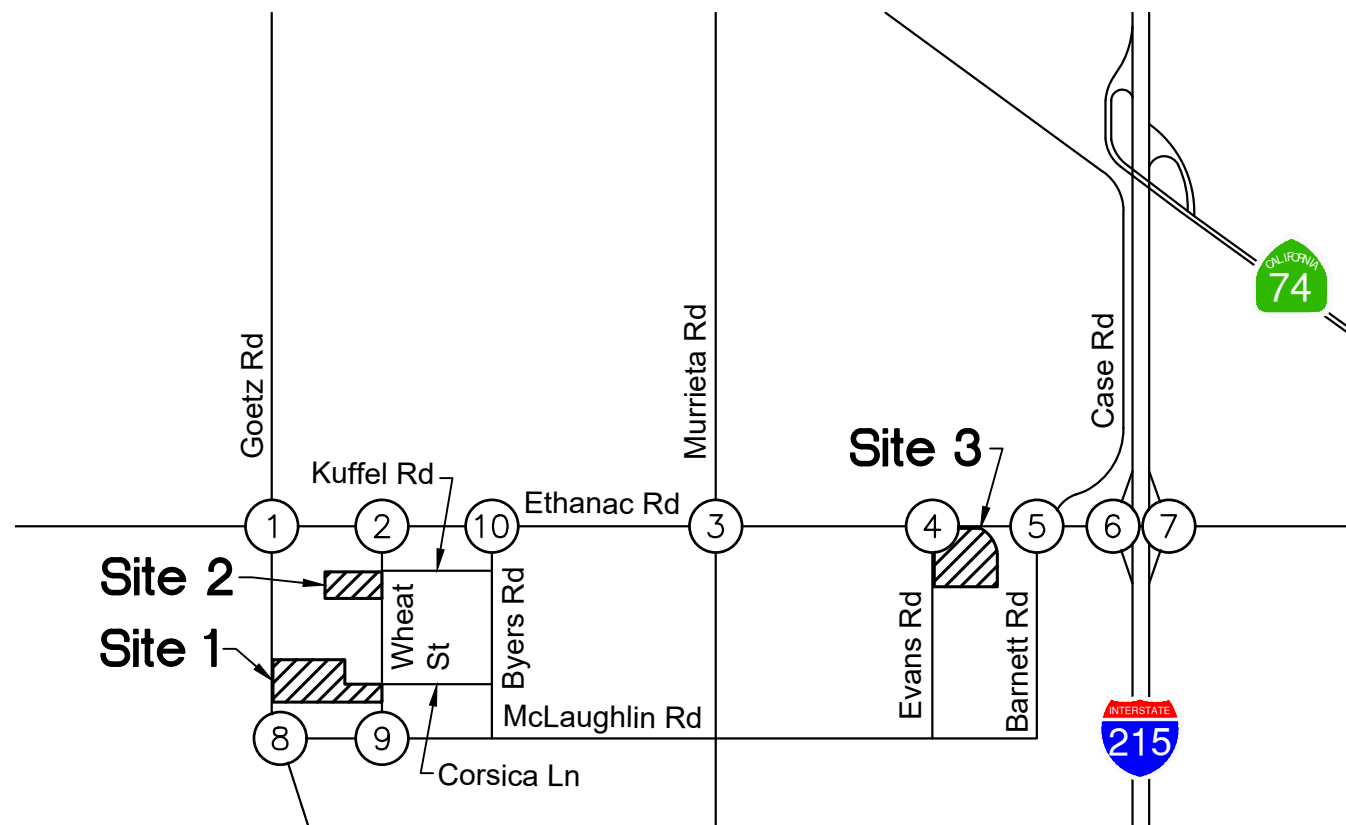
d_M, Delay for Movement [s/veh]	55.37	37.22	14.19	14.19	53.60	2.07
Movement LOS	E	D	B	B	D	A
Critical Movement	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	39.00		14.19		11.06	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	14.62					
Intersection LOS	B					
Intersection V/C	0.641					

APPENDIX D

PROJECT TRIP DISTRIBUTION



NOT TO SCALE



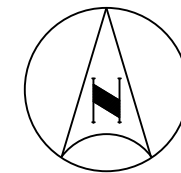
1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">← 10%</div> <div style="text-align: center;">← 70%</div> </div>	<div style="display: flex; justify-content: center; align-items: center;">← 70%</div>	<div style="display: flex; justify-content: center; align-items: center;">← 70%</div>	<div style="display: flex; justify-content: center; align-items: center;">← 70%</div>	<div style="display: flex; justify-content: center; align-items: center;">← 70%</div>
<div style="display: flex; justify-content: center; align-items: center;">(10%) →</div>	<div style="display: flex; justify-content: center; align-items: center;">(70%) →</div>	<div style="display: flex; justify-content: center; align-items: center;">(70%) →</div>	<div style="display: flex; justify-content: center; align-items: center;">(70%) →</div>	<div style="display: flex; justify-content: center; align-items: center;">(70%) →</div>
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">← 35%</div> <div style="text-align: center;">← 35%</div> </div>	<div style="display: flex; justify-content: center; align-items: center;">← 10%</div>	<div style="display: flex; justify-content: center; align-items: center;"> <div style="text-align: center;">80%</div> <div style="text-align: center;">(10%)</div> <div style="text-align: center;">(5%)</div> </div>	<div style="display: flex; justify-content: center; align-items: center;"> <div style="text-align: center;">(15%)</div> <div style="text-align: center;">(15%)</div> <div style="text-align: center;">15%</div> </div>	<div style="display: flex; justify-content: center; align-items: center;">← 70%</div>
<div style="display: flex; justify-content: center; align-items: center;"> <div style="text-align: center;">(45%) →</div> <div style="text-align: center;">(25%) →</div> </div>	<div style="display: flex; justify-content: center; align-items: center;"> <div style="text-align: center;">(35%) →</div> <div style="text-align: center;">(10%) →</div> <div style="text-align: center;">25%</div> </div>	<div style="display: flex; justify-content: center; align-items: center;">5%</div>	<div style="display: flex; justify-content: center; align-items: center;">85%</div>	<div style="display: flex; justify-content: center; align-items: center;">(70%) →</div>

LEGEND:

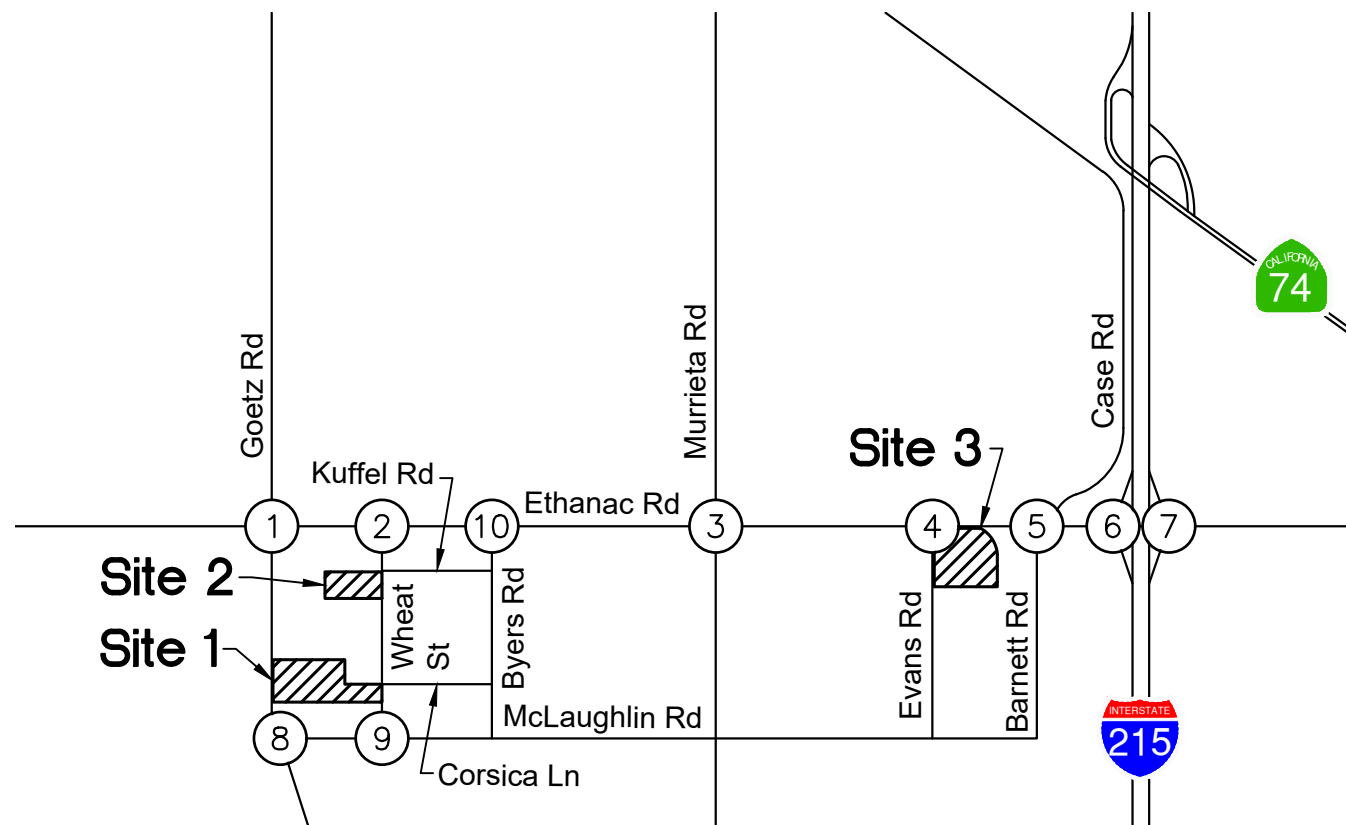
- = Project Site
- = Study Intersection
- xx%(yy%) = Inbound (Outbound) Passenger Car Distribution

APPENDIX D-1
SITE 1 PROJECT PASSENGER CAR TRAFFIC DISTRIBUTION







NOT TO SCALE

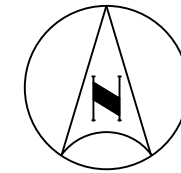


1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
		←100%	←100%	←100%
	(100%)↗	(100%)→	(100%)→	(100%)→
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd
↖60% ←40%				←100%
(60%)→ (40%)↘	(60%)↗ 40%			(100%)→

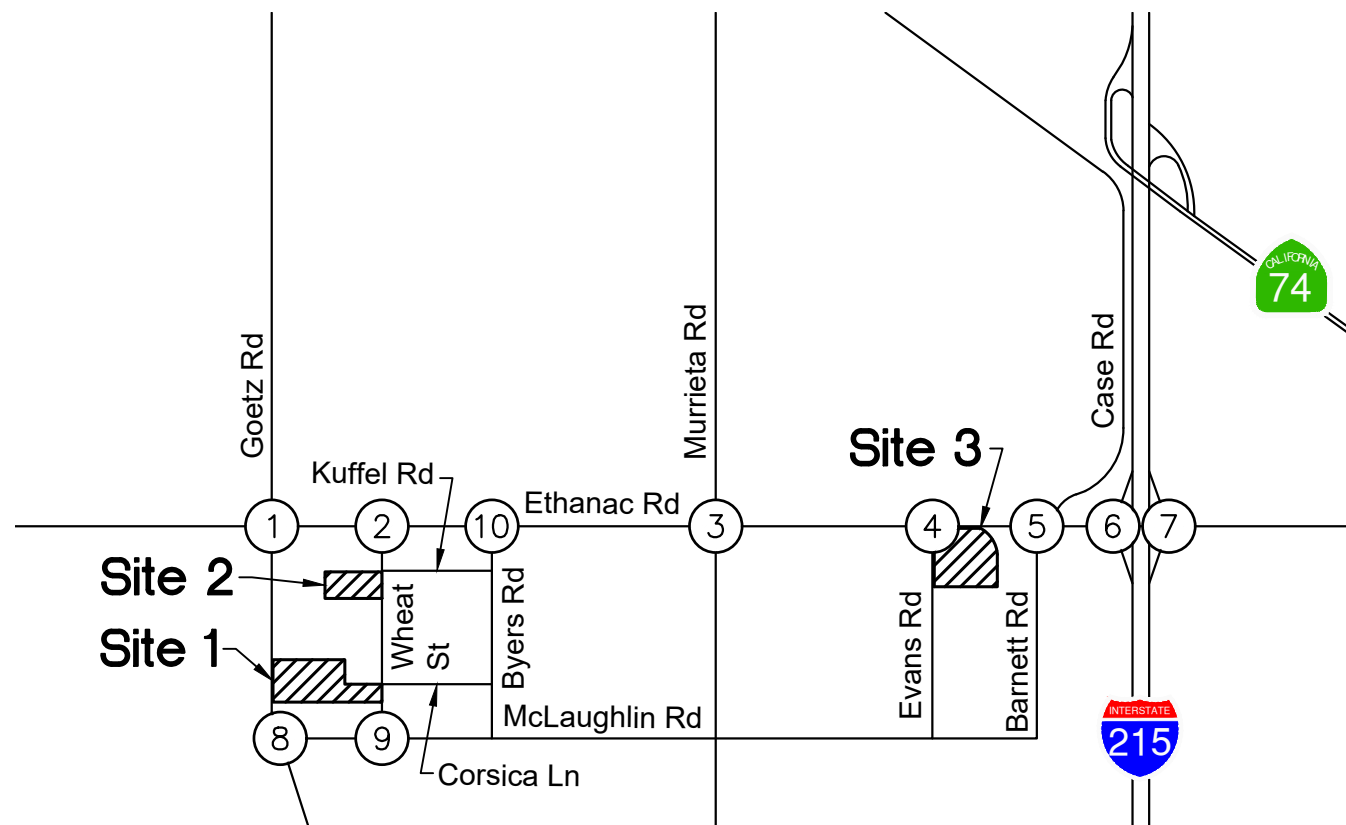
LEGEND:

-  = Project Site
-  = Study Intersection
- xx%(yy%) = Inbound (Outbound) Truck Distribution

APPENDIX D-2
SITE 1 PROJECT TRUCK TRAFFIC DISTRIBUTION



NOT TO SCALE



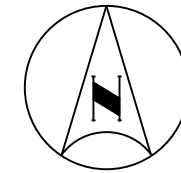
1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd

LEGEND:

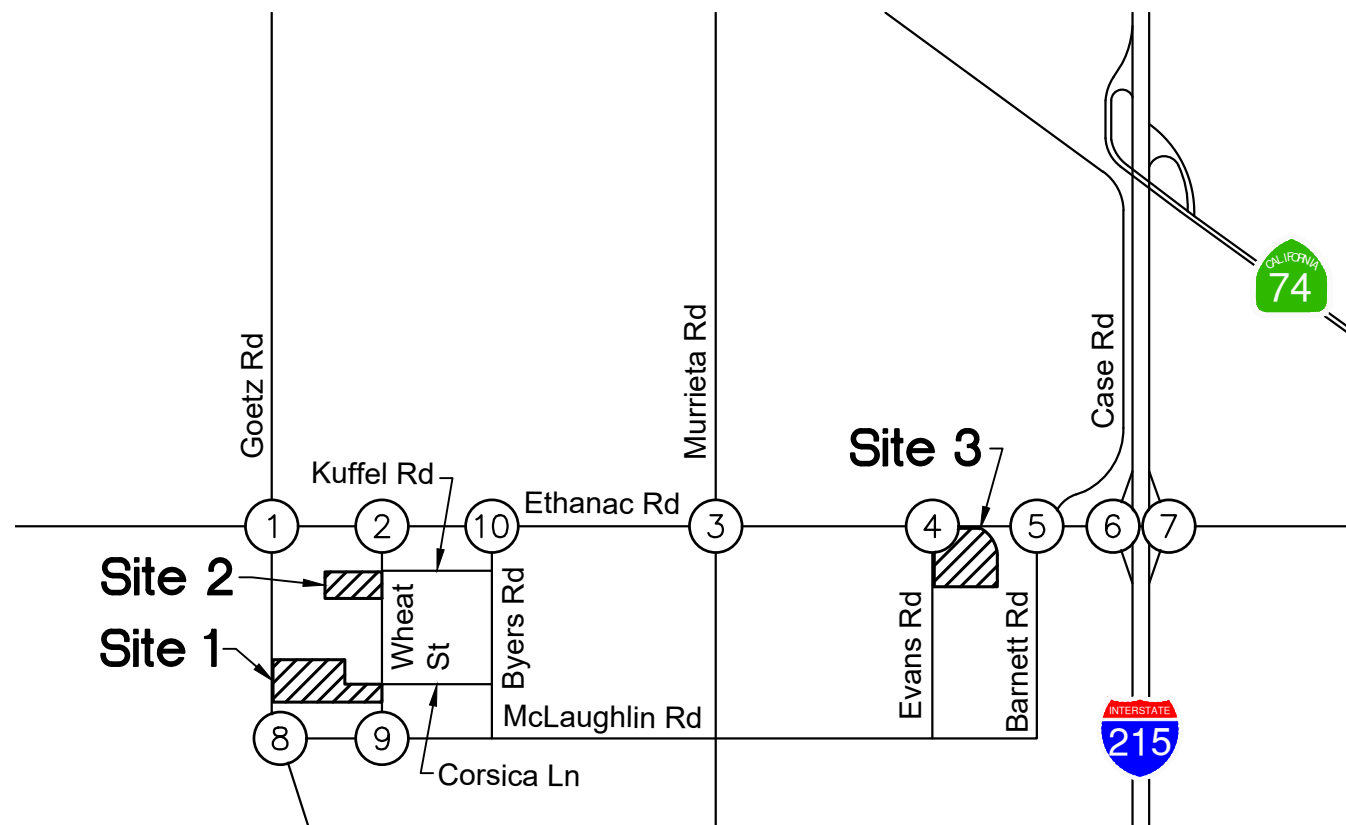
- = Project Site
- = Study Intersection
- xx%(yy%) = Inbound (Outbound) Passenger Car Distribution

APPENDIX D-3
SITE 2 PROJECT PASSENGER CAR TRAFFIC DISTRIBUTION







NOT TO SCALE

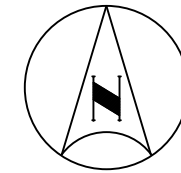


1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
		←100%	←100%	←100%
	(100%)↗	(100%)→	(100%)→	(100%)→
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd
↖60%				←100%
(60%)→ (40%)↘	(60%)↗ 40%			(100%)→

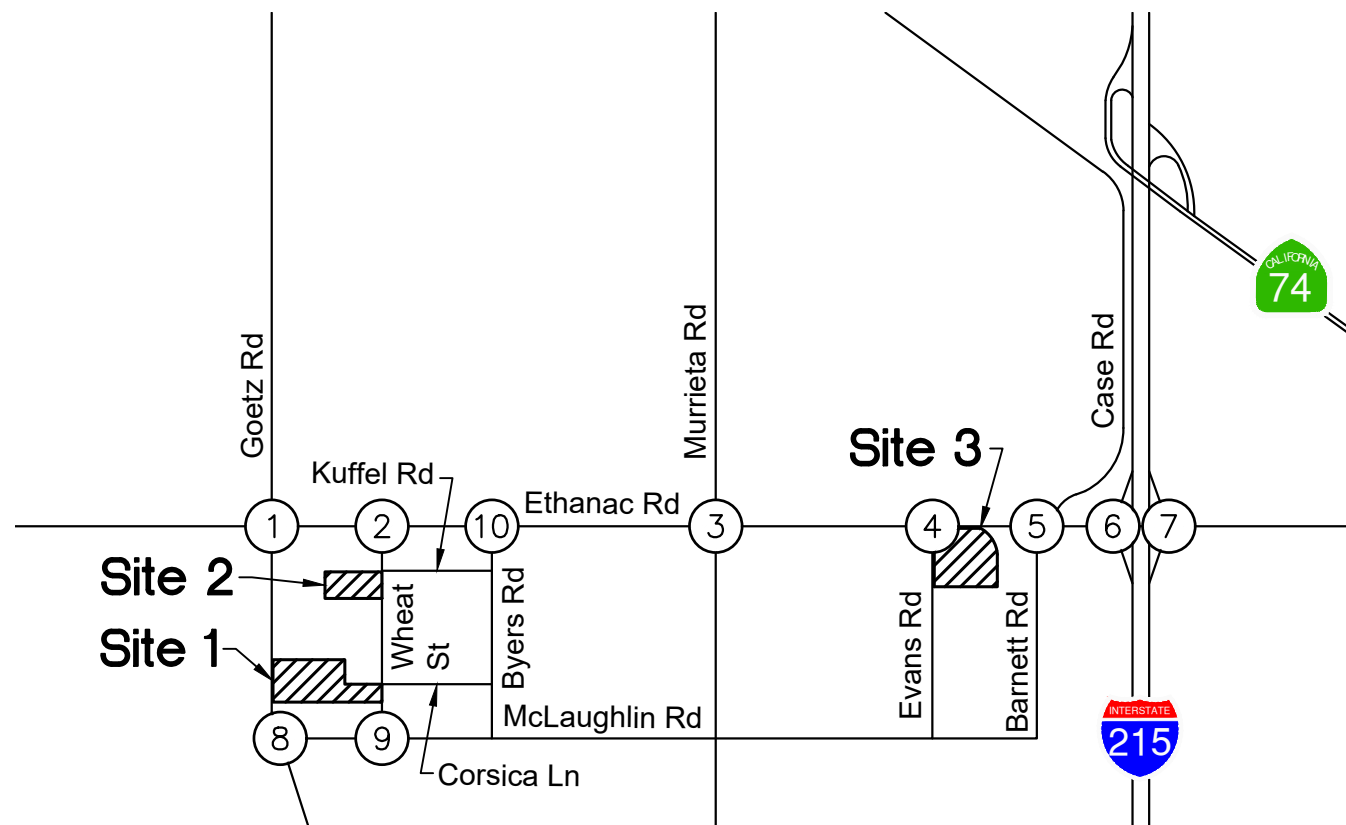
LEGEND:

-  = Project Site
-  = Study Intersection
- xx%(yy%) = Inbound (Outbound) Truck Distribution

APPENDIX D-4
SITE 2 PROJECT TRUCK TRAFFIC DISTRIBUTION



NOT TO SCALE



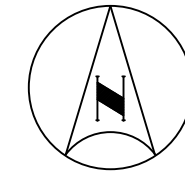
1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd

LEGEND:

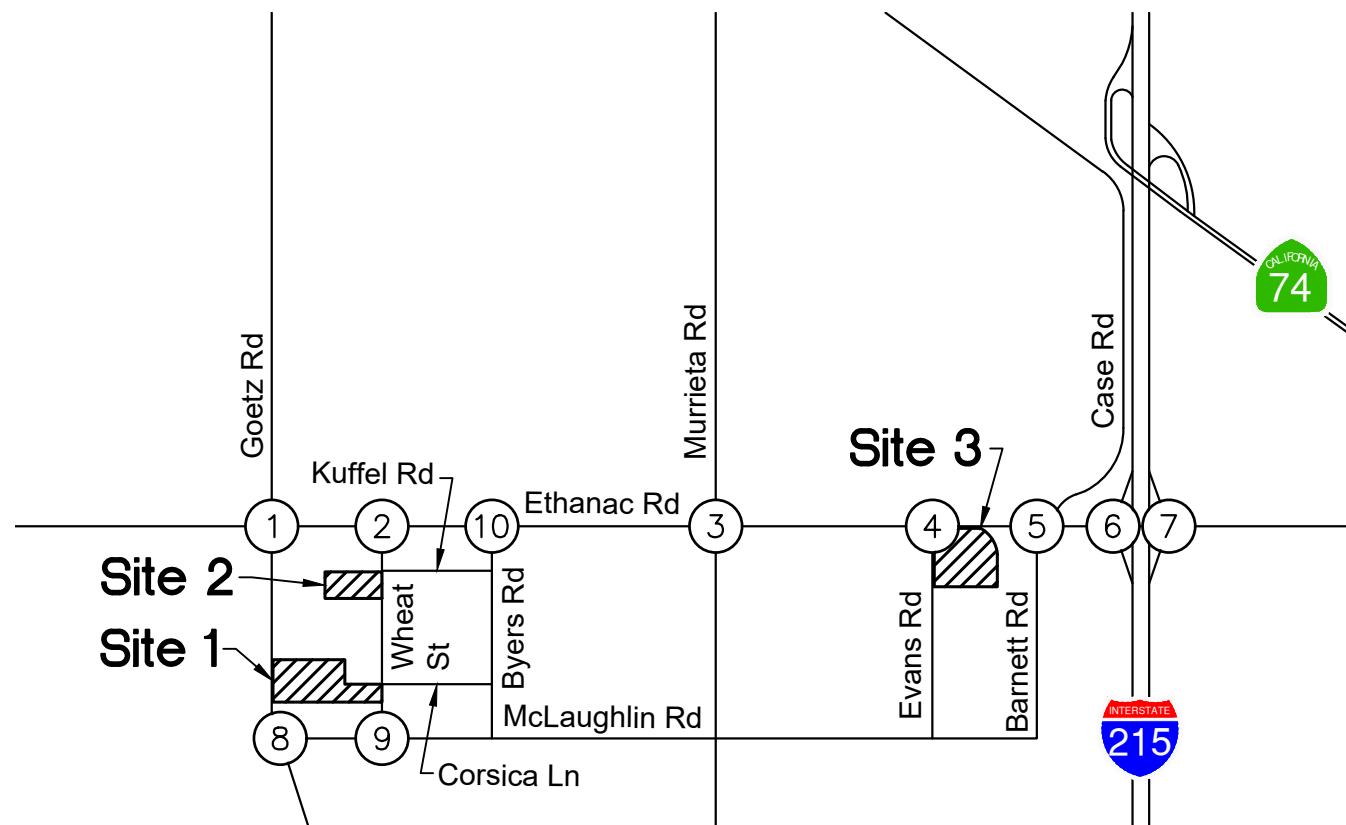
- = Project Site
- = Study Intersection
- xx%(yy%) = Inbound (Outbound) Passenger Car Distribution

APPENDIX D-5
SITE 3 PROJECT PASSENGER CAR TRAFFIC DISTRIBUTION







NOT TO SCALE



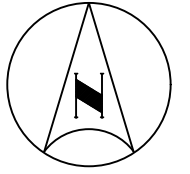
1. Goetz Rd at Ethanac Rd	2. Wheat St at Ethanac Rd	3. Murrieta Rd at Ethanac Rd	4. Evans Rd at Ethanac Rd	5. Barnett Rd/Case Rd at Ethanac Rd
				←100%
			←100%	(100%)→
			(100%)↗	
6. I-215 SB Ramps at Ethanac Rd	7. I-215 NB Ramps at Ethanac Rd	8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	9. Wheat St at McLaughlin Rd	10. Byers Rd at Ethanac Rd
↙60%				
←40%				
(60%)→				
(40%)↘	(60%)↗			
	↘40%			

LEGEND:

-  = Project Site
-  = Study Intersection
- xx%(yy%) = Inbound (Outbound) Truck Distribution

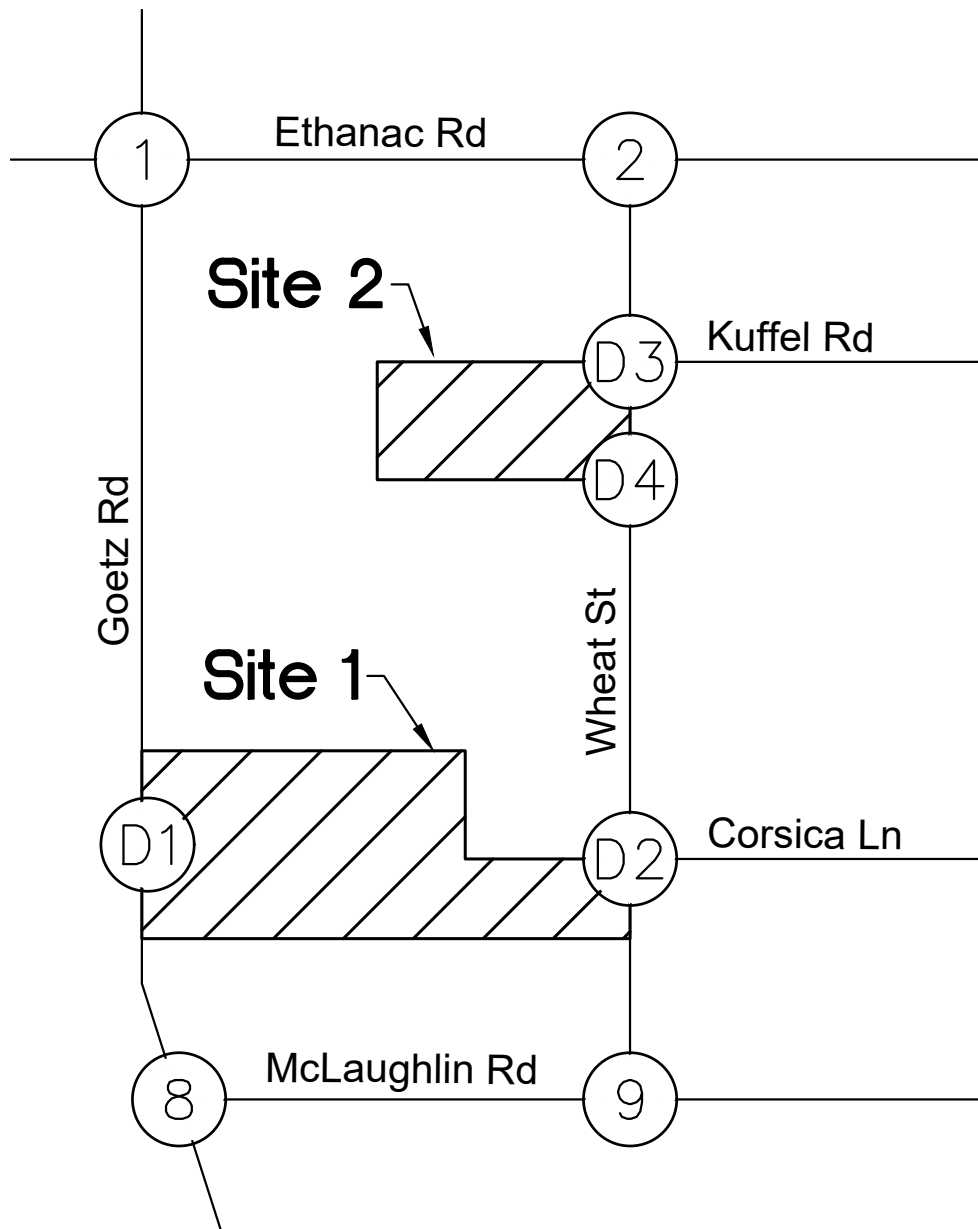
APPENDIX D-6
SITE 3 PROJECT TRUCK TRAFFIC DISTRIBUTION





NOT TO SCALE

1. Goetz Rd at Ethanac Rd	
↓ 10%	← 70%
	↑ (10%)
D1. Goetz Rd at Project Driveway	
↓ 80%	
	↑ (10%)
8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	
↓ 80%	← (10%)
	← (5%)
	↑ 5%



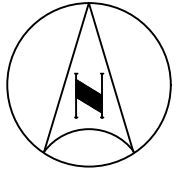
2. Wheat St at Ethanac Rd	
	← 70%
	↑ (70%)
D3. Wheat St at North Project Driveway	
	↑ (70%)
D4. Wheat St at South Project Driveway	
	↑ (70%)
D2. Wheat St at Corsica Lane/South Driveway	
(70%) →	↑ 100%
(30%) →	
9. Wheat St at McLaughlin Rd	
↓ (15%)	← 15%
↓ (15%)	
85%	

LEGEND:

- = Project Site
- xx% = Passenger Car Inbound Trip Distribution Percentage
- (yy%) = Passenger Car Outbound Trip Distribution Percentage

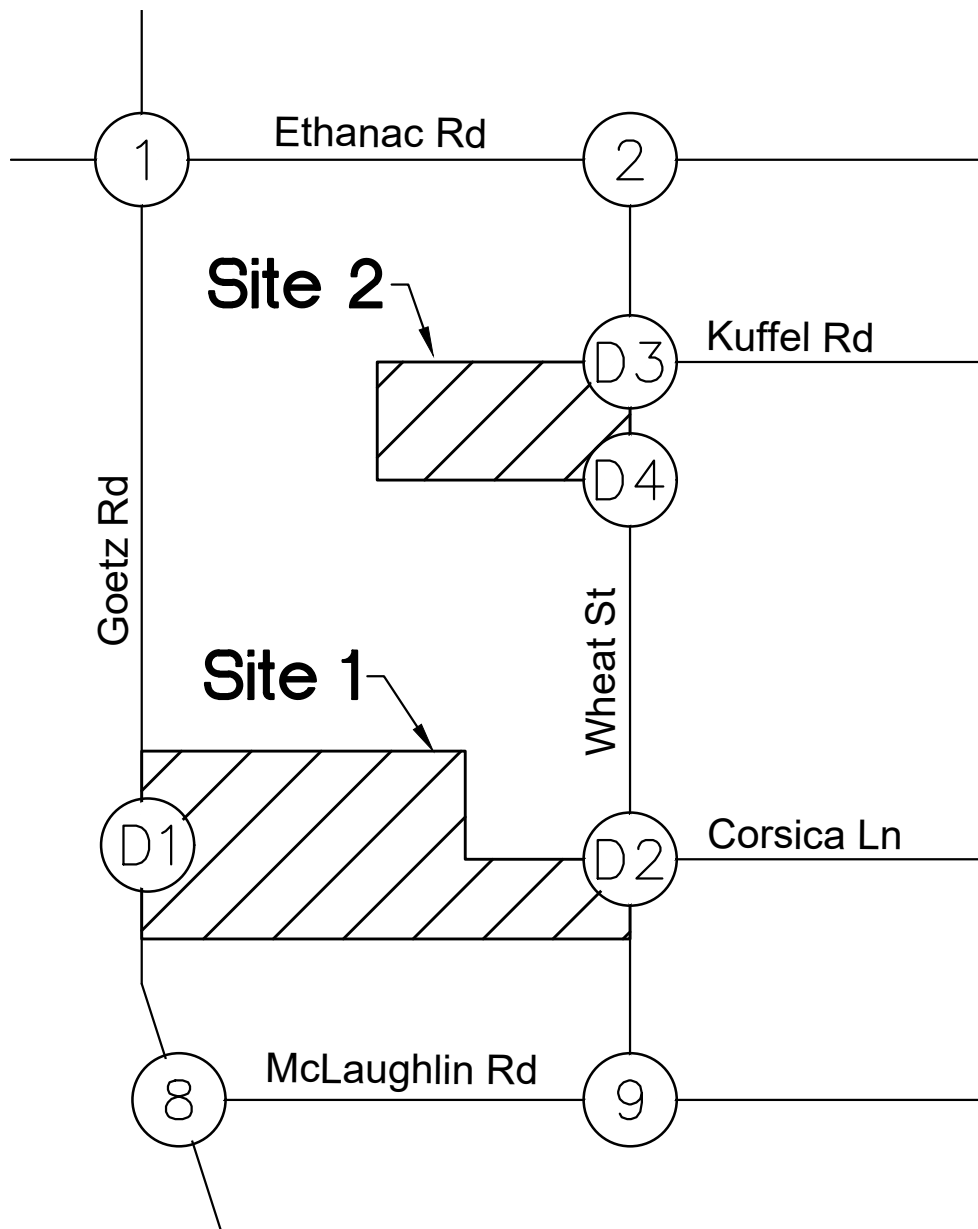
APPENDIX D-7
SITE 1 DRIVEWAY PASSENGER CAR TRIP DISTRIBUTION





NOT TO SCALE

1. Goetz Rd at Ethanac Rd	
D1. Goetz Rd at Project Driveway	
8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	

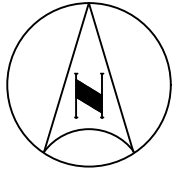


2. Wheat St at Ethanac Rd	
	(100%) ↗
D3. Wheat St at North Project Driveway	
	(100%) ↑
D4. Wheat St at South Project Driveway	
	(100%) ↑
D2. Wheat St at Corsica Lane/South Driveway	
	←100%
(100%) ↗	
9. Wheat St at McLaughlin Rd	

LEGEND:

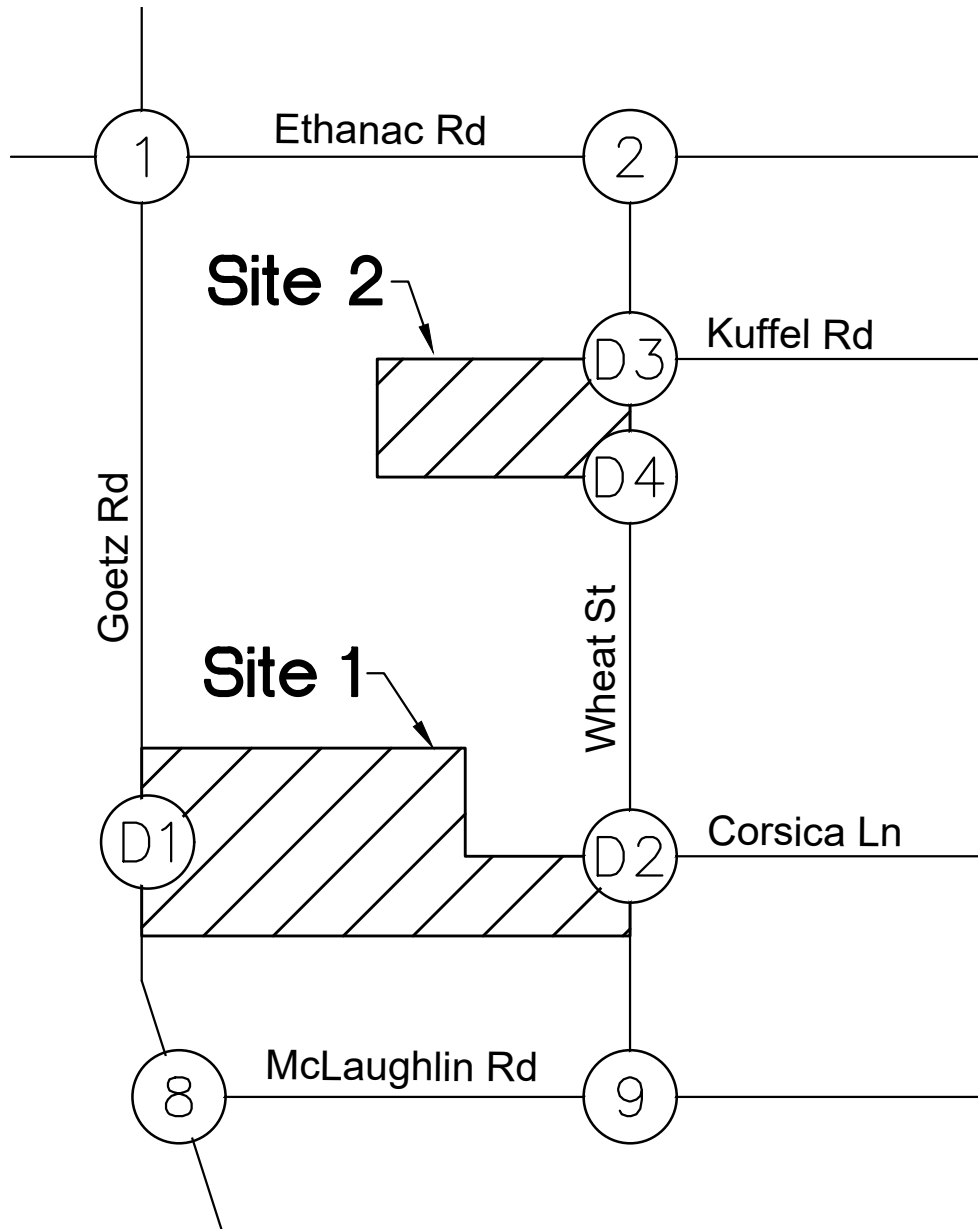
- = Project Site
- xx% = Truck Inbound Trip Distribution Percentage
- (yy%) = Truck Outbound Trip Distribution Percentage

APPENDIX D-8
SITE 1 DRIVEWAY TRUCK TRIP DISTRIBUTION



NOT TO SCALE

1. Goetz Rd at Ethanac Rd	
← 10%	← 70%
	(10%) ↑ 5%
D1. Goetz Rd at Project Driveway	
← 70%	
	(10%) ↑
8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	
← 70%	(10%) ↑
	(5%) ↑
	5%



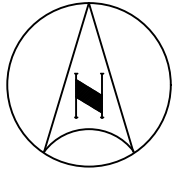
2. Wheat St at Ethanac Rd	
	← 70%
15%	(85%) ↑
D3. Wheat St at North Project Driveway	
← 15%	
	(85%) ↑
D4. Wheat St at South Project Driveway	
← 15%	(85%) ↑
(85%) ↑	(15%) ↓
	85%
D2. Wheat St at Corsica Lane/South Driveway	
← (15%)	
	85%
9. Wheat St at McLaughlin Rd	
(15%) ↓	← 15%
70%	↑

LEGEND:

- = Project Site
- xx% = Passenger Car Inbound Trip Distribution Percentage
- (yy%) = Passenger Car Outbound Trip Distribution Percentage

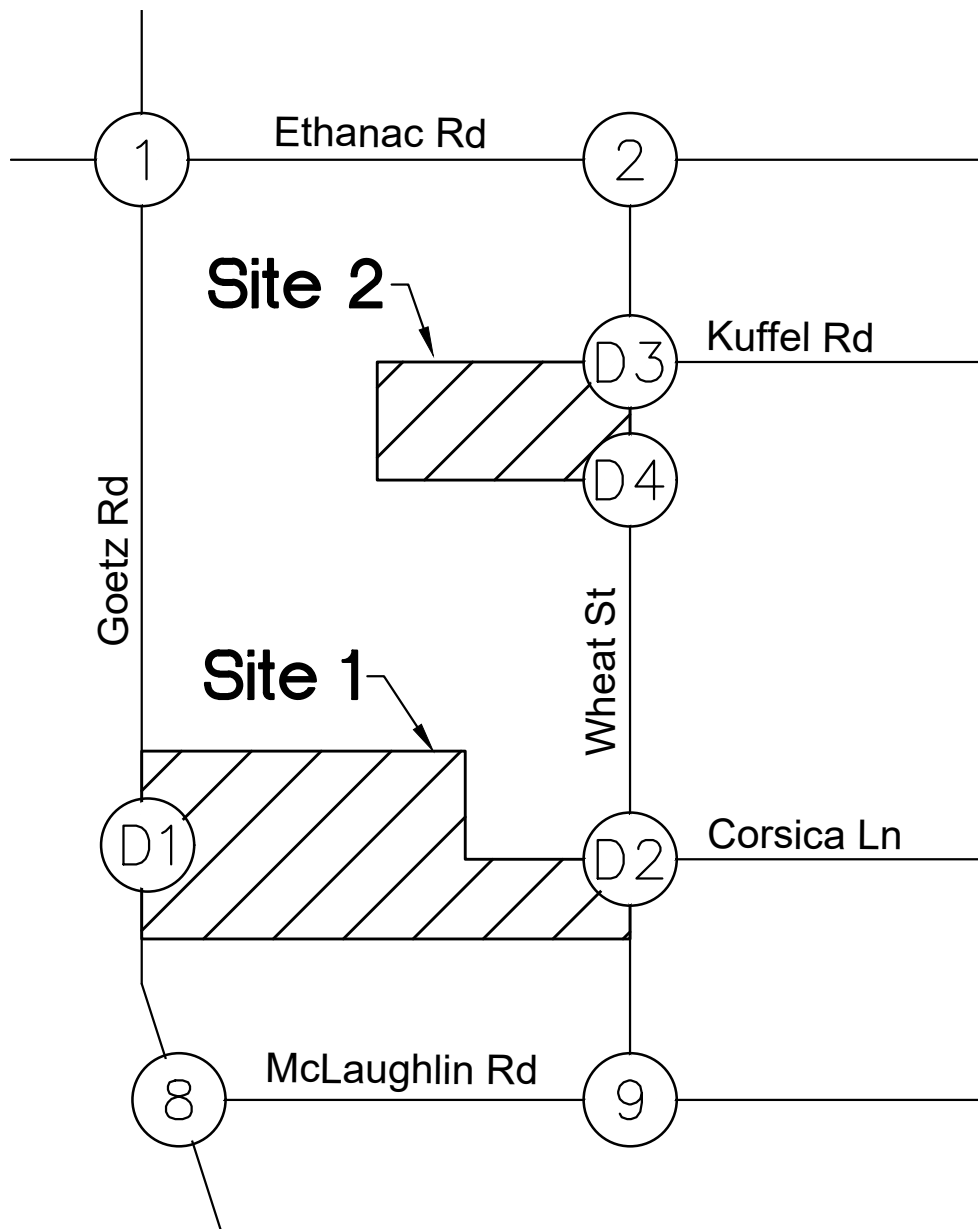
APPENDIX D-9
SITE 2 DRIVEWAY PASSENGER CAR TRIP DISTRIBUTION





NOT TO SCALE

1. Goetz Rd at Ethanac Rd	
D1. Goetz Rd at Project Driveway	
8. Goetz Rd at McLaughlin Rd/Goldenrod Ave	

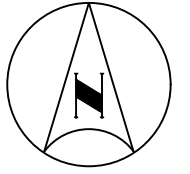


2. Wheat St at Ethanac Rd	
	(100%) ↗
D3. Wheat St at North Project Driveway	
(100%) ↗	↖ 100%
D4. Wheat St at South Project Driveway	
	↖ 100%
D2. Wheat St at Corsica Lane/South Driveway	
	↖ 100%
9. Wheat St at McLaughlin Rd	

LEGEND:

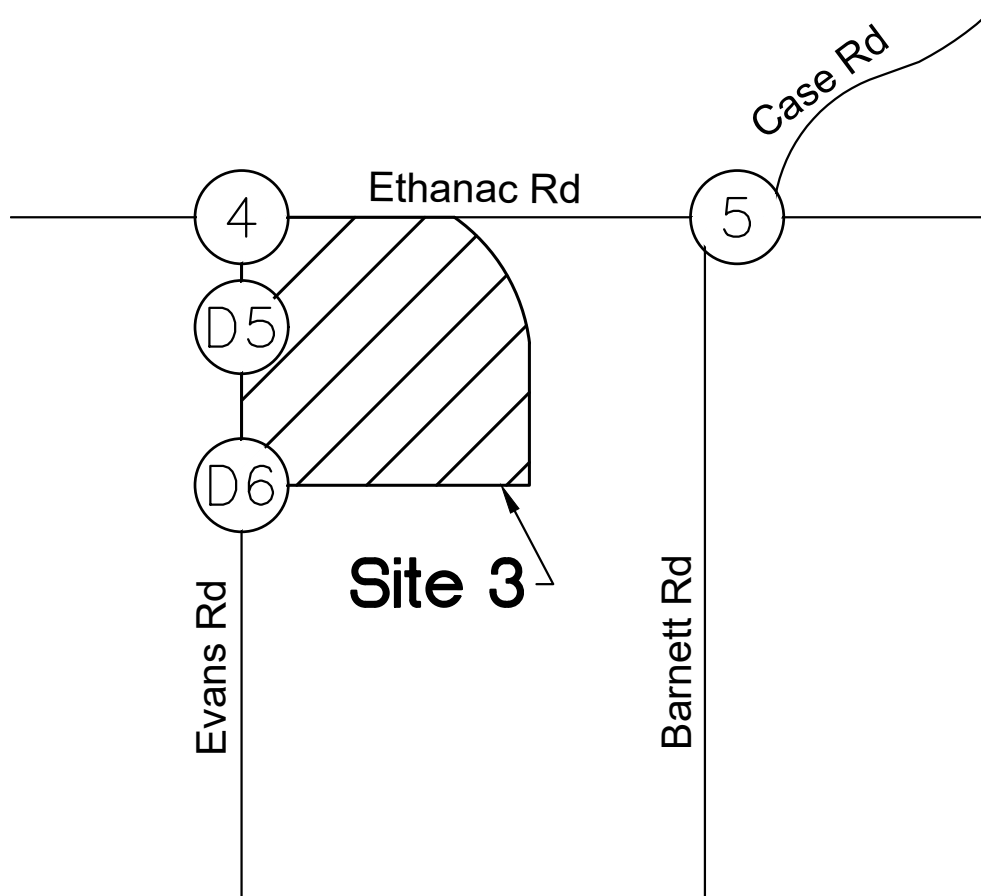
- = Project Site
- xx% = Truck Inbound Trip Distribution Percentage
- (yy%) = Truck Outbound Trip Distribution Percentage

APPENDIX D-10
SITE 2 DRIVEWAY TRUCK TRIP DISTRIBUTION



NOT TO SCALE

4. Evans Rd at Ethanac Rd	
	70%
30%	(30%) (70%)
D5. Evans Rd at North Project Driveway	
100%	(100%)
D6. Evans Rd at South Project Driveway	

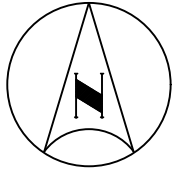


5. Barnett Rd/Case Rd at Ethanac Rd	
	← 70%
(70%) →	

LEGEND:

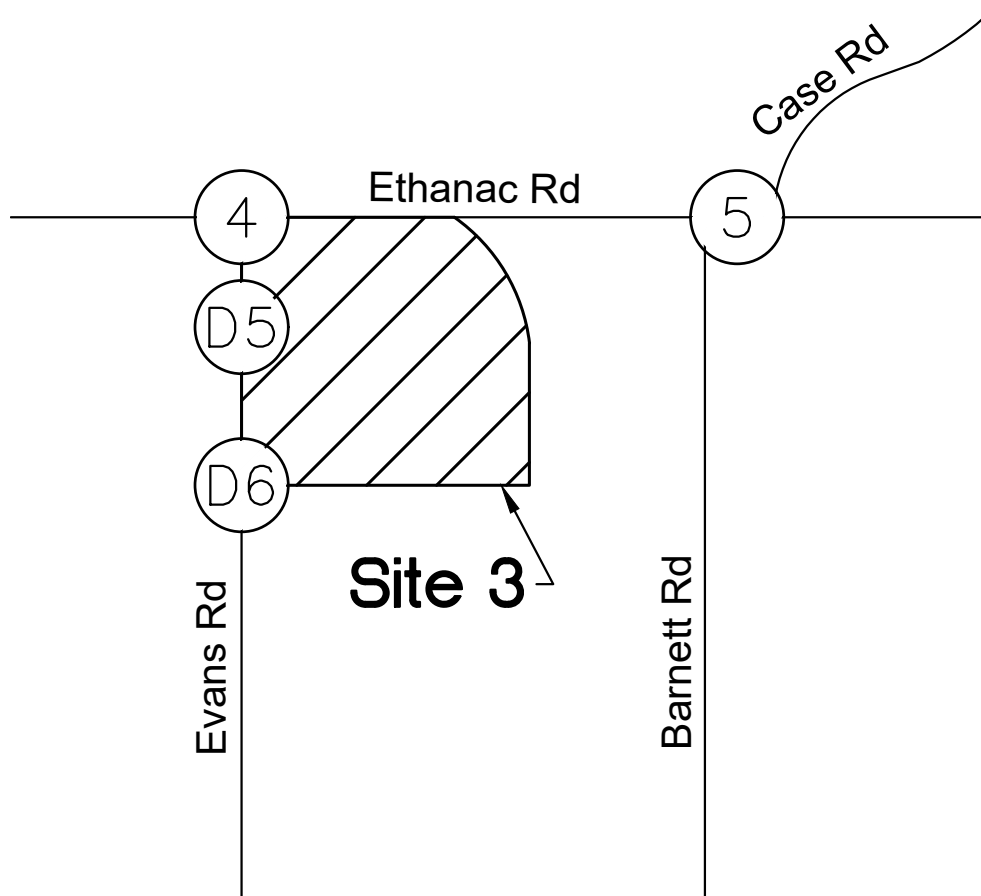
- = Project Site
- xx% = Passenger Car Inbound Trip Distribution Percentage
- (yy%) = Passenger Car Outbound Trip Distribution Percentage

APPENDIX D-11
SITE 3 DRIVEWAY PASSENGER CAR TRIP DISTRIBUTION



NOT TO SCALE

4. Evans Rd at Ethanac Rd	
	← 100%
	(100%) →
D5. Evans Rd at North Project Driveway	
← 100%	
	(100%) →
D6. Evans Rd at South Project Driveway	
← 100%	(100%) →



5. Barnett Rd/Case Rd at Ethanac Rd	
	← 100%
(100%) →	

LEGEND:

- = Project Site
- xx% = Truck Inbound Trip Distribution Percentage
- (yy%) = Truck Outbound Trip Distribution Percentage

APPENDIX D-12
SITE 3 DRIVEWAY TRUCK TRIP DISTRIBUTION

APPENDIX E

**CUMULATIVE PROJECTS
INFORMATION**

CUMULATIVE PROJECTS - DISTRIBUTION

TOTAL OF ALL CUMULATIVE PROJECTS

- 1 Goetz Rd at Ethanac Rd
- 2 Wheat St at Ethanac Rd
- 3 Murrieta Rd at Ethanac Rd
- 4 Evans Rd at Ethanac Rd
- 5 Barnett Rd/Case Rd at Ethanac Rd
- 6 I-215 SB Ramps at Ethanac Rd
- 7 I-215 NB Ramps at Ethanac Rd
- 8 Goetz Rd at McLaughlin Rd
- 9 Wheat St at McLaughlin Rd
- 16 Byers Rd at Ethanac Rd

AM Peak Hour												
0	18	13	18	6	0	0	0	0	25	0	32	
0	0	26	0	0	0	0	259	0	9	139	0	
26	13	242	3	4	0	0	348	51	90	181	5	
23	0	138	0	0	0	0	577	16	93	252	0	
0	0	69	0	0	0	0	646	0	47	299	0	
0	0	0	319	0	170	0	364	351	107	177	0	
170	0	319	0	0	0	351	332	0	0	114	107	
0	21	0	3	28	0	0	0	0	0	0	10	
0	26	0	13	9	0	0	3	0	0	10	7	
0	0	140	0	0	0	0	530	0	68	242	0	

- 1 Goetz Rd at Ethanac Rd
- 2 Wheat St at Ethanac Rd
- 3 Murrieta Rd at Ethanac Rd
- 4 Evans Rd at Ethanac Rd
- 5 Barnett Rd/Case Rd at Ethanac Rd
- 6 I-215 SB Ramps at Ethanac Rd
- 7 I-215 NB Ramps at Ethanac Rd
- 8 Goetz Rd at McLaughlin Rd
- 9 Wheat St at McLaughlin Rd
- 16 Byers Rd at Ethanac Rd

PM Peak Hour												
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0	10	28	36	20	0	0	0	0	21	0	27	
0	0	17	0	0	0	0	214	0	29	284	0	
56	5	167	5	12	0	0	283	41	273	382	4	
22	0	130	0	0	0	0	429	27	160	638	0	
0	0	65	0	0	0	0	494	0	80	718	0	
0	0	0	201	0	393	0	285	275	323	407	0	
393	0	201	0	0	0	275	211	0	0	337	323	
0	31	0	12	29	0	0	0	0	0	0	7	
0	17	0	10	29	0	0	12	0	0	7	14	
0	0	110	0	0	0	0	404	0	154	591	0	

CUMULATIVE PROJECTS - HAND ENTERED FROM TRAFFIC STUDIES

		AM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Ethanac Rd	0	0	18	46	0	0	0	6	0	4	1	10
2	Wheat St at Ethanac Rd	9	0	76	0	0	0	0	15	55	234	6	0
3	Murrieta Rd at Ethanac Rd	27	0	20	8	0	17	0	105	11	2	387	2
4	Evans Rd at Ethanac Rd	6	0	39	0	0	0	0	116	12	195	385	0
5	Barnett Rd/Case Rd at Ethanac Rd	0	0	0	0	0	9	0	155	0	0	571	0
6	I-215 SB Ramps at Ethanac Rd	0	0	0	0	0	297	0	100	55	0	274	0
7	I-215 NB Ramps at Ethanac Rd	224	0	0	0	0	0	89	11	0	0	50	0
8	Goetz Rd at McLaughlin Rd	0	0	0	0	0	0	0	0	0	0	0	0
9	Wheat St at McLaughlin Rd	0	0	0	0	0	0	0	0	0	0	0	0
16	Byers Rd at Ethanac Rd	4	0	31	0	0	0	0	85	6	194	236	0

		PM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Ethanac Rd	0	0	11	31	0	0	0	3	0	19	6	49
2	Wheat St at Ethanac Rd	44	0	327	0	0	0	0	6	39	155	31	0
3	Murrieta Rd at Ethanac Rd	18	0	6	2	0	11	0	411	54	7	264	8
4	Evans Rd at Ethanac Rd	24	0	139	0	0	0	0	477	3	74	255	0
5	Barnett Rd/Case Rd at Ethanac Rd	0	0	0	0	0	3	0	616	0	0	326	0
6	I-215 SB Ramps at Ethanac Rd	0	0	0	0	0	168	0	388	228	0	158	0
7	I-215 NB Ramps at Ethanac Rd	130	0	0	0	0	0	337	51	0	0	28	0
8	Goetz Rd at McLaughlin Rd	0	0	0	0	0	0	0	0	0	0	0	0
9	Wheat St at McLaughlin Rd	0	0	0	0	0	0	0	0	0	0	0	0
16	Byers Rd at Ethanac Rd	22	0	135	0	0	0	0	329	4	129	164	0

TOTAL CUMULATIVE PROJECTS TRAFFIC

		AM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Ethanac Rd	0	18	31	64	6	0	0	6	0	29	1	42
2	Wheat St at Ethanac Rd	9	0	102	0	0	0	0	274	55	243	145	0
3	Murrieta Rd at Ethanac Rd	53	13	262	11	4	17	0	453	62	92	568	7
4	Evans Rd at Ethanac Rd	29	0	177	0	0	0	0	693	28	288	637	0
5	Barnett Rd/Case Rd at Ethanac Rd	0	0	69	0	0	9	0	801	0	47	870	0
6	I-215 SB Ramps at Ethanac Rd	0	0	0	319	0	467	0	464	406	107	451	0
7	I-215 NB Ramps at Ethanac Rd	394	0	319	0	0	0	440	343	0	0	164	107
8	Goetz Rd at McLaughlin Rd	0	21	0	3	28	0	0	0	0	0	0	10
9	Wheat St at McLaughlin Rd	0	26	0	13	9	0	0	3	0	0	10	7
16	Byers Rd at Ethanac Rd	4	0	171	0	0	0	0	615	6	262	478	0

		PM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Goetz Rd at Ethanac Rd	0	10	39	67	20	0	0	3	0	40	6	76
2	Wheat St at Ethanac Rd	44	0	344	0	0	0	0	220	39	184	315	0
3	Murrieta Rd at Ethanac Rd	74	5	173	7	12	11	0	694	95	280	646	12
4	Evans Rd at Ethanac Rd	46	0	269	0	0	0	0	906	30	234	893	0
5	Barnett Rd/Case Rd at Ethanac Rd	0	0	65	0	0	3	0	1,110	0	80	1,044	0
6	I-215 SB Ramps at Ethanac Rd	0	0	0	201	0	561	0	673	503	323	565	0
7	I-215 NB Ramps at Ethanac Rd	523	0	201	0	0	0	612	262	0	0	365	323
8	Goetz Rd at McLaughlin Rd	0	31	0	12	29	0	0	0	0	0	0	7
9	Wheat St at McLaughlin Rd	0	17	0	10	29	0	0	12	0	0	7	14
16	Byers Rd at Ethanac Rd	22	0	245	0	0	0	0	733	4	283	755	0

Int. #: 3 Murrieta Rd at Ethanac Rd

Zone # 5 2, 8, 26, 34, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	8%										50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	8%	0%	0%	0%
AM Out												
PM In	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	8%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	330	26	0	0	0	0	0	0	0	0	0	165	0
AM Out	635	0	0	0	0	0	0	0	317	51	0	0	0
PM In	695	56	0	0	0	0	0	0	0	0	0	347	0
PM Out	516	0	0	0	0	0	0	0	258	41	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,593	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	534	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,005	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,616	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			5%	2%				3%				
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	3%	2%
AM Out												
PM In	0%	0%	5%	2%	0%	0%	0%	3%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	3%	2%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	155	0	0	8	3	0	0	0	5	0	0	0	0
AM Out	230	0	0	0	0	0	0	0	0	0	12	7	5
PM In	266	0	0	13	5	0	0	0	8	0	0	0	0
PM Out	216	0	0	0	0	0	0	0	0	0	11	6	4

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	194	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	109	0	0	0	0	0	0	0	0	0	0	0	0
PM In	172	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										45%	5%	
Y	0%	0%	45%	0%	0%	0%	0%	5%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	5%	0%
PM Out	0%	0%	45%	0%	0%	0%	0%	5%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	78	9	0
AM Out	519	0	0	234	0	0	0	0	26	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	262	29	0
PM Out	342	0	0	154	0	0	0	0	17	0	0	0	0

Int. #: 4 Evans Rd at Ethanac Rd

Zone # 5 2, 8, 26, 34, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	330	0	0	0	0	0	0	0	0	0	0	165	0
AM Out	635	0	0	0	0	0	0	0	317	0	0	0	0
PM In	695	0	0	0	0	0	0	0	0	0	0	347	0
PM Out	516	0	0	0	0	0	0	0	258	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,593	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	534	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,005	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,616	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In									10%	60%		
Y	10%	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	10%	60%	0%	0%
PM Out	10%	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	155	0	0	0	0	0	0	0	0	16	93	0	0
AM Out	230	23	0	138	0	0	0	0	0	0	0	0	0
PM In	266	0	0	0	0	0	0	0	0	27	160	0	0
PM Out	216	22	0	130	0	0	0	0	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	194	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	109	0	0	0	0	0	0	0	0	0	0	0	0
PM In	172	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	87	0
AM Out	519	0	0	0	0	0	0	0	260	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	291	0
PM Out	342	0	0	0	0	0	0	0	171	0	0	0	0

Int. #: 5 Barnett Rd/Case Rd at Ethanac Rd

Zone # 5 2, 8, 26, 34, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	330	0	0	0	0	0	0	0	0	0	0	165	0
AM Out	635	0	0	0	0	0	0	0	317	0	0	0	0
PM In	695	0	0	0	0	0	0	0	0	0	0	347	0
PM Out	516	0	0	0	0	0	0	0	258	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,593	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	534	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,005	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,616	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										30%	30%	
Y	0%	0%	30%	0%	0%	0%	0%	30%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%
PM Out	0%	0%	30%	0%	0%	0%	0%	30%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	155	0	0	0	0	0	0	0	0	0	47	47	0
AM Out	230	0	0	69	0	0	0	0	69	0	0	0	0
PM In	266	0	0	0	0	0	0	0	0	0	80	80	0
PM Out	216	0	0	65	0	0	0	0	65	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	194	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	109	0	0	0	0	0	0	0	0	0	0	0	0
PM In	172	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In											50%	
Y	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	0	87	0
AM Out	519	0	0	0	0	0	0	0	260	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	0	291	0
PM Out	342	0	0	0	0	0	0	0	171	0	0	0	0

Int. #: 6 I-215 SB Ramps at Ethanac Rd

Zone # 5 2, 8, 26, 34, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						24%					26%	
N	0%	0%	0%	0%	0%	0%	0%	26%	24%	0%	0%	0%
AM Out								26%	24%			
PM In	0%	0%	0%	0%	0%	24%	0%	0%	0%	0%	26%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	26%	24%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	330	0	0	0	0	0	79	0	0	0	0	86	0
AM Out	635	0	0	0	0	0	0	165	152	0	0	0	0
PM In	695	0	0	0	0	0	167	0	0	0	0	181	0
PM Out	516	0	0	0	0	0	0	134	124	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In				20%								
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%
AM Out										20%		
PM In	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,593	0	0	0	319	0	0	0	0	0	0	0	0
AM Out	534	0	0	0	0	0	0	0	0	0	107	0	0
PM In	1,005	0	0	0	201	0	0	0	0	0	0	0	0
PM Out	1,616	0	0	0	0	0	0	0	0	0	323	0	0

Zone # 7 '9, 14, 15, 27

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						30%					30%	
N	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%	0%	0%
AM Out								30%	30%			
PM In	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	30%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	30%	30%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	155	0	0	0	0	0	47	0	0	0	0	47	0
AM Out	230	0	0	0	0	0	0	69	69	0	0	0	0
PM In	266	0	0	0	0	0	80	0	0	0	0	80	0
PM Out	216	0	0	0	0	0	0	65	65	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	194	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	109	0	0	0	0	0	0	0	0	0	0	0	0
PM In	172	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						25%					25%	
N	0%	0%	0%	0%	0%	0%	0%	25%	25%	0%	0%	0%
AM Out								25%	25%			
PM In	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	25%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	25%	25%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	44	0	0	0	0	44	0
AM Out	519	0	0	0	0	0	0	130	130	0	0	0	0
PM In	582	0	0	0	0	0	146	0	0	0	0	146	0
PM Out	342	0	0	0	0	0	0	86	86	0	0	0	0

Int. #: 7 I-215 NB Ramps at Ethanac Rd

Zone # 5 2, 8, 26, 34, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	24%										2%	
N	0%	0%	0%	0%	0%	0%	24%	2%	0%	0%	0%	0%
AM Out							24%	2%				
PM In	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
PM Out	0%	0%	0%	0%	0%	0%	24%	2%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	330	79	0	0	0	0	0	0	0	0	0	7	0
AM Out	635	0	0	0	0	0	0	152	13	0	0	0	0
PM In	695	167	0	0	0	0	0	0	0	0	0	14	0
PM Out	516	0	0	0	0	0	0	124	10	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In			20%					20%				
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%	20%
AM Out										20%	20%	
PM In	0%	0%	20%	0%	0%	0%	0%	20%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,593	0	0	319	0	0	0	0	319	0	0	0	0
AM Out	534	0	0	0	0	0	0	0	0	0	107	107	
PM In	1,005	0	0	201	0	0	0	0	201	0	0	0	0
PM Out	1,616	0	0	0	0	0	0	0	0	0	0	323	323

Zone # 7 '9, 14, 15, 27

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	30%											
N	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%
AM Out							30%					
PM In	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	155	47	0	0	0	0	0	0	0	0	0	0	0
AM Out	230	0	0	0	0	0	0	69	0	0	0	0	0
PM In	266	80	0	0	0	0	0	0	0	0	0	0	0
PM Out	216	0	0	0	0	0	0	65	0	0	0	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
N	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	194	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	109	0	0	0	0	0	0	0	0	0	0	0	0
PM In	172	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	25%											
N	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%
AM Out							25%					
PM In	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	44	0	0	0	0	0	0	0	0	0	0	0
AM Out	519	0	0	0	0	0	0	130	0	0	0	0	0
PM In	582	146	0	0	0	0	0	0	0	0	0	0	0
PM Out	342	0	0	0	0	0	0	86	0	0	0	0	0

Int. #: 16 Byers Rd at Ethanac Rd

Zone # 5 2, 8, 26, 34, 38

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										18%	40%	
Y	0%	0%	18%	0%	0%	0%	0%	40%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	40%	0%
PM Out	0%	0%	18%	0%	0%	0%	0%	40%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	330	0	0	0	0	0	0	0	0	0	59	132	0
AM Out	635	0	0	114	0	0	0	0	254	0	0	0	0
PM In	695	0	0	0	0	0	0	0	0	0	125	278	0
PM Out	516	0	0	93	0	0	0	0	206	0	0	0	0

Zone # 6 5, '10, 28, 30, 36, 37, 40

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	1,593	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	534	0	0	0	0	0	0	0	0	0	0	0	0
PM In	1,005	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	1,616	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 7 '9, 14, 15, 27

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In								10%				
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	155	0	0	0	0	0	0	0	16	0	0	0	0
AM Out	230	0	0	0	0	0	0	0	0	0	23	0	0
PM In	266	0	0	0	0	0	0	0	27	0	0	0	0
PM Out	216	0	0	0	0	0	0	0	0	0	22	0	0

Zone # 8 3, 4, 31, 33

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	194	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	109	0	0	0	0	0	0	0	0	0	0	0	0
PM In	172	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	204	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 9 12, 13, 16, 29

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										5%	50%	
Y	0%	0%	5%	0%	0%	0%	0%	50%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	50%	0%
PM Out	0%	0%	5%	0%	0%	0%	0%	50%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	174	0	0	0	0	0	0	0	0	0	9	87	0
AM Out	519	0	0	26	0	0	0	0	260	0	0	0	0
PM In	582	0	0	0	0	0	0	0	0	0	29	291	0
PM Out	342	0	0	17	0	0	0	0	171	0	0	0	0

CUMULATIVE PROJECTS - HAND ENTERED FROM TRAFFIC STUDIES

Cumulative Project #34 - Northern Gateway Commerce Center

- 1 Goetz Rd at Ethanac Rd
- 2 Wheat St at Ethanac Rd
- 3 Murrieta Rd at Ethanac Rd
- 4 Evans Rd at Ethanac Rd
- 5 Barnett Rd/Case Rd at Ethanac Rd
- 6 I-215 SB Ramps at Ethanac Rd
- 7 I-215 NB Ramps at Ethanac Rd
- 8 Goetz Rd at McLaughlin Rd
- 9 Wheat St at McLaughlin Rd
- 16 Byers Rd at Ethanac Rd

AM Peak Hour											
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
0	0	4	4	0	0	0	1	0	1	0	1
							9			2	
0	0	20	8	0	0	0	9	0	2	2	2
6	0	39	0	0	0	0	20	12	195	0	0
0	0	0	0	0	9	0	59	0	0	186	0
0	0	0	0	0	109	0	40	19	0	77	0
66	0	0	0	0	0	37	3	0	0	11	0
0	0	0	0	0	0	0	9	0	0	2	0

- 1 Goetz Rd at Ethanac Rd
- 2 Wheat St at Ethanac Rd
- 3 Murrieta Rd at Ethanac Rd
- 4 Evans Rd at Ethanac Rd
- 5 Barnett Rd/Case Rd at Ethanac Rd
- 6 I-215 SB Ramps at Ethanac Rd
- 7 I-215 NB Ramps at Ethanac Rd
- 8 Goetz Rd at McLaughlin Rd
- 9 Wheat St at McLaughlin Rd
- 16 Byers Rd at Ethanac Rd

PM Peak Hour											
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
0	0	1	1	0	0	0	0	0	4	1	4
							2			9	
0	0	6	2	0	0	0	2	0	7	9	8
24	0	139	0	0	0	0	68	3	74	0	0
0	0	0	0	0	3	0	207	0	0	71	0
0	0	0	0	0	43	0	137	70	0	28	0
25	0	0	0	0	0	126	11	0	0	3	0
0	0	0	0	0	0	0	2	0	0	9	0

CUMULATIVE PROJECTS - HAND ENTERED FROM TRAFFIC STUDIES

Cumulative Project #8 - Capstone Warehouse

- 1 Goetz Rd at Ethanac Rd
- 2 Wheat St at Ethanac Rd
- 3 Murrieta Rd at Ethanac Rd
- 4 Evans Rd at Ethanac Rd
- 5 Barnett Rd/Case Rd at Ethanac Rd
- 6 I-215 SB Ramps at Ethanac Rd
- 7 I-215 NB Ramps at Ethanac Rd
- 8 Goetz Rd at McLaughlin Rd
- 9 Wheat St at McLaughlin Rd
- 16 Byers Rd at Ethanac Rd

AM Peak Hour											
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
0	0	14	42	0	0	0	5	0	3	1	9
9	0	76	0	0	0	0	6	55	234	4	0
27	0	0	0	0	17	0	96	11	0	385	0
0	0	0	0	0	0	0	96	0	0	385	0
0	0	0	0	0	0	0	96	0	0	385	0
0	0	0	0	0	188	0	60	36	0	197	0
158	0	0	0	0	0	52	8	0	0	39	0
4	0	31	0	0	0	0	76	6	194	234	0

- 1 Goetz Rd at Ethanac Rd
- 2 Wheat St at Ethanac Rd
- 3 Murrieta Rd at Ethanac Rd
- 4 Evans Rd at Ethanac Rd
- 5 Barnett Rd/Case Rd at Ethanac Rd
- 6 I-215 SB Ramps at Ethanac Rd
- 7 I-215 NB Ramps at Ethanac Rd
- 8 Goetz Rd at McLaughlin Rd
- 9 Wheat St at McLaughlin Rd
- 16 Byers Rd at Ethanac Rd

PM Peak Hour											
NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
0	0	10	30	0	0	0	3	0	15	5	45
44	0	327	0	0	0	0	4	39	155	22	0
18	0	0	0	0	11	0	409	54	0	255	0
0	0	0	0	0	0	0	409	0	0	255	0
0	0	0	0	0	0	0	409	0	0	255	0
0	0	0	0	0	125	0	251	158	0	130	0
105	0	0	0	0	0	211	40	0	0	25	0
22	0	135	0	0	0	0	327	4	129	155	0

APPENDIX F

**TRAFFIC SIGNAL WARRANT
ANALYSIS WORKSHEETS**

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Wheat Street NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Existing Plus Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,342	22	Y			Y			Y			Y				
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,247	58	Y			Y			Y			Y				
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,589	80	2	0	0	2	0	0	2	0	0	2	0	0	0	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Wheat Street NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Opening Year 2025 Cumulative

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	2,083	118	Y			Y	Y	Y	Y			Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	2,043	391	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	4,126	509	2	1	1	2	2	2	2	1	1	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Wheat Street NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Opening Year 2025 Cumulative Plus Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	2,111	133	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	2,054	446	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	4,165	579	2	1	1	2	2	2	2	2	2	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Evans Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Existing Plus Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,584	11	Y			Y			Y			Y				
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,498	26	Y			Y			Y			Y				
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	3,082	37	2	0	0	2	0	0	2	0	0	2	0	0	0	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Evans Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Opening Year 2025 Cumulative

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	3,194	210	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	3,534	316	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	6,728	526	2	2	2	2	2	2	2	2	2	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Evans Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Opening Year 2025 Cumulative Plus Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			600	150		900	75		480	120		720	60			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	3,289	217	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	3,617	341	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	6,906	558	2	2	2	2	2	2	2	2	2	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Byers Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Existing Plus Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53		336	84		504	42			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	1,332	6	Y			Y			Y			Y				
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	1,262	7	Y			Y			Y			Y				
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	2,594	13	2	0	0	2	0	0	2	0	0	2	0	0	0	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Byers Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Opening Year 2025 Cumulative

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53		336	84		504	42			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	2,671	181	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	3,007	274	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	5,678	455	2	2	2	2	2	2	2	2	2	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

08/31/23
 Kimley-Horn and Associates

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS (2000 MUTCD)

MAJOR STREET: Ethanac Road EB WB # OF APPROACH LANES:

MINOR STREET: Byers Road NB SB # OF APPROACH LANES:

CITY, STATE: Menifee, CA

COMMENTS: Signal Warrant Study, Opening Year 2025 Cumulative Plus Project

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53		336	84		504	42			
06:00 AM TO 07:00 AM	0	0														
07:00 AM TO 08:00 AM	2,743	181	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	0	0														
04:00 PM TO 05:00 PM	3,084	274	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
07:00 PM TO 08:00 PM	0	0														
08:00 PM TO 09:00 PM	0	0														
09:00 PM TO 10:00 PM	0	0														
	5,827	455	2	2	2	2	2	2	2	2	2	2	2	2	2	
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	SATISFIED

08/31/23
 Kimley-Horn and Associates

APPENDIX G

TUMF REGIONAL PROGRAM



TRANSPORTATION UNIFORM MITIGATION FEE
NEXUS STUDY
2016 UPDATE

FINAL REPORT

Prepared for the Western Riverside Council of Governments

In Cooperation with

The City of Banning
The City of Beaumont
The City of Calimesa
The City of Canyon Lake
The City of Corona
The City of Eastvale
The City of Hemet
The City of Jurupa Valley
The City of Lake Elsinore
The City of Menifee
The City of Moreno Valley
The City of Murrieta
The City of Norco
The City of Perris
The City of Riverside
The City of San Jacinto
The City of Temecula
The City of Wildomar
The County of Riverside
Eastern Municipal Water District
March Joint Powers Authority
Morongo Band of Mission Indians
Riverside County Superintendent of Schools
Riverside Transit Agency
Western Municipal Water District

Prepared by WSP

As adopted by the WRCOG Executive Committee, July 10, 2017



Table 4.4 - TUMF Network Cost Estimates

AREA	PLAN DIS	CITY	STREETNAME	SEGMENTFROM	SEGMENTO	MILES	TOTAL COST	MAXIMUM TUMF SHARE
Central	Menifee	Ethanac	Goetz	Murrieta		0.99	\$0	\$0
Central	Menifee	Ethanac	Murrieta	I-215		0.90	\$0	\$0
Central	Menifee	Ethanac	I-215	interchange		0.00	\$17,897,000	\$15,766,000
Central	Menifee	Ethanac	Sherman	Matthews		0.61	\$1,617,000	\$1,617,000
Central	Menifee	Ethanac	BNSF San Jacinto Branch	railroad crossing		0.00	\$36,980,000	\$33,018,000
Central	Menifee	Menifee	SR-74 (Pinacate)	Simpson		2.49	\$0	\$0
Central	Menifee	Menifee	Salt Creek	bridge		0.00	\$0	\$0
Central	Menifee	Menifee	Simpson	Aldergate		0.64	\$0	\$0
Central	Menifee	Menifee	Aldergate	Newport		0.98	\$0	\$0
Central	Menifee	Menifee	Newport	Holland		1.07	\$0	\$0
Central	Menifee	Menifee	Holland	Garbani		1.03	\$0	\$0
Central	Menifee	Menifee	Garbani	Scott		1.00	\$2,635,000	\$2,635,000
Central	Menifee	Menifee/Whitewood	Scott	Murrieta City Limit		0.53	\$0	\$0
Central	Menifee	Newport	Goetz	Murrieta		1.81	\$0	\$0
Central	Menifee	Newport	Murrieta	I-215		2.05	\$5,405,000	\$5,405,000
Central	Menifee	Newport	I-215	Menifee		0.95	\$0	\$0
Central	Menifee	Newport	Menifee	Lindenberger		0.77	\$0	\$0
Central	Menifee	Newport	Lindenberger	SR-79 (Winchester)		3.58	\$0	\$0
Central	Menifee	Scott	I-215	Briggs		2.04	\$0	\$0
Central	Menifee	Scott	I-215	interchange		0.00	\$37,060,000	\$37,060,000
Central	Menifee	Scott	Sunset	Murrieta		1.01	\$2,654,000	\$2,654,000
Central	Menifee	Scott	Murrieta	I-215		1.94	\$10,254,000	\$10,254,000
Central	Menifee	SR-74	Matthews	Briggs		1.89	\$4,994,000	\$4,994,000
Central	Moreno Valley	Alessandro	I-215	Perris		3.52	\$6,394,000	\$6,394,000
Central	Moreno Valley	Alessandro	Perris	Nason		2.00	\$22,632,000	\$22,632,000
Central	Moreno Valley	Alessandro	Nason	Moreno Beach		0.99	\$6,922,000	\$6,922,000
Central	Moreno Valley	Alessandro	Moreno Beach	Gilman Springs		4.13	\$10,902,000	\$10,902,000
Central	Moreno Valley	Gilman Springs	SR-60	Alessandro		1.67	\$4,411,000	\$3,724,000
Central	Moreno Valley	Gilman Springs	SR-60	interchange		0.00	\$17,897,000	\$17,897,000
Central	Moreno Valley	Perris	Reche Vista	Ironwood		2.09	\$0	\$0
Central	Moreno Valley	Perris	Ironwood	Sunnymead		0.52	\$0	\$0
Central	Moreno Valley	Perris	SR-60	interchange		0.00	\$17,897,000	\$0
Central	Moreno Valley	Perris	Sunnymead	Cactus		2.00	\$0	\$0
Central	Moreno Valley	Perris	Cactus	Harley Knox		3.50	\$0	\$0
Central	Moreno Valley	Reche Vista	Moreno Valley City Limit	Heacock		0.44	\$3,310,000	\$1,705,000
Central	Perris	11th/Case	Perris	Goetz		0.30	\$2,100,000	\$2,100,000
Central	Perris	Case	Goetz	I-215		2.36	\$16,486,000	\$13,538,000
Central	Perris	Case	San Jacinto River	bridge		0.00	\$1,126,000	\$495,000
Central	Perris	Ethanac	Keystone	Goetz		2.24	\$7,327,000	\$7,327,000
Central	Perris	Ethanac	San Jacinto River	bridge		0.00	\$7,378,000	\$7,378,000
Central	Perris	Ethanac	I-215	Sherman		0.35	\$2,435,000	\$1,945,000
Central	Perris	Goetz	Case	Ethanac		2.00	\$5,267,000	\$2,506,000
Central	Perris	Goetz	San Jacinto River	bridge		0.00	\$3,688,000	\$1,925,000
Central	Perris	Mid-County (Placentia)	I-215	Perris		0.87	\$13,127,000	\$12,627,000
Central	Perris	Mid-County (Placentia)	I-215	interchange		0.00	\$37,060,000	\$12,354,000
Central	Perris	Mid-County	Perris	Evans		1.57	\$32,902,000	\$32,902,000
Central	Perris	Mid-County	Perris Valley Storm Channel	bridge		0.00	\$8,299,000	\$8,299,000
Central	Perris	Perris	Harley Knox	Ramona		1.00	\$0	\$0
Central	Perris	Perris	Ramona	Citrus		2.49	\$6,578,000	\$6,578,000
Central	Perris	Perris	Citrus	Nuevo		0.50	\$0	\$0
Central	Perris	Perris	Nuevo	11th		1.75	\$12,206,000	\$9,034,000
Central	Perris	Perris	I-215 overcrossing	bridge		0.00	\$2,767,000	\$1,356,000
Central	Perris	Ramona	I-215	Perris		1.47	\$2,769,000	\$2,769,000
Central	Perris	Ramona	I-215	interchange		0.00	\$17,897,000	\$5,965,000
Central	Perris	Ramona	Perris	Evans		1.00	\$0	\$0
Central	Perris	Ramona	Evans	Mid-County (2,800 ft E of Rider)		2.62	\$0	\$0
Central	Perris	SR-74 (4th)	Ellis	I-215		2.29	\$0	\$0
Central	Unincorporated	Ethanac	SR-74	Keystone		1.07	\$5,646,000	\$5,646,000
Central	Unincorporated	Gilman Springs	Alessandro	Bridge		4.98	\$15,815,000	\$8,105,000
Central	Unincorporated	Menifee	Nuevo	SR-74 (Pinacate)		4.07	\$10,737,000	\$10,737,000
Central	Unincorporated	Mid-County	Evans	Ramona (2,800 ft E of Rider)		0.77	\$8,587,000	\$8,587,000
Central	Unincorporated	Mid-County (Ramona)	Ramona (2,800 ft E of Rider)	Pico Avenue		0.44	\$1,161,000	\$1,161,000
Central	Unincorporated	Mid-County (Ramona)	Pico Avenue	Bridge		5.95	\$31,413,000	\$25,287,000
Central	Unincorporated	Mid-County (Ramona)	San Jacinto River	bridge		0.00	\$23,978,000	\$15,835,000
Central	Unincorporated	Reche Canyon	San Bernardino County	Reche Vista		3.35	\$12,457,000	\$9,429,000
Central	Unincorporated	Reche Vista	Reche Canyon	Moreno Valley City Limit		1.22	\$9,180,000	\$4,729,000
Central	Unincorporated	Scott	Briggs	SR-79 (Winchester)		3.04	\$16,042,000	\$0
Central	Unincorporated	SR-74	Ethanac	Ellis		2.68	\$0	\$0
Northwest	Corona	Cajalco	I-15	Temescal Canyon		0.66	\$2,306,000	\$2,306,000
Northwest	Corona	Cajalco	I-15	interchange		0.00	\$72,546,000	\$44,251,000
Northwest	Corona	Foothill	Paseo Grande	Lincoln		2.60	\$19,330,000	\$7,282,000
Northwest	Corona	Foothill	Wardlow Wash	bridge		0.00	\$5,534,000	\$0
Northwest	Corona	Foothill	Lincoln	California		2.81	\$0	\$0
Northwest	Corona	Foothill	California	I-15		0.89	\$6,207,000	\$4,304,000
Northwest	Corona	Green River	SR-91	Dominguez Ranch		0.52	\$3,624,000	\$1,000
Northwest	Corona	Green River	Dominguez Ranch	Palisades		0.56	\$4,214,000	\$1,639,000
Northwest	Corona	Green River	Palisades	Paseo Grande		2.01	\$0	\$0
Northwest	Eastvale	Schleisman	San Bernardino County	600' e/o Cucamonga Creek		0.65	\$2,271,000	\$2,271,000
Northwest	Eastvale	Schleisman	Cucamonga Creek	bridge		0.00	\$923,000	\$923,000
Northwest	Eastvale	Schleisman	600' e/o Cucamonga Creek	Harrison		0.87	\$0	\$0
Northwest	Eastvale	Schleisman	Harrison	Sumner		0.50	\$0	\$0
Northwest	Eastvale	Schleisman	Sumner	Scholar		0.50	\$3,493,000	\$3,493,000
Northwest	Eastvale	Schleisman	Scholar	A Street		0.31	\$0	\$0
Northwest	Eastvale	Schleisman	A Street	Hammer		0.27	\$0	\$0
Northwest	Jurupa Valley	Van Buren	SR-60	Bellegrave		1.43	\$9,976,000	\$3,628,000
Northwest	Jurupa Valley	Van Buren	Bellegrave	Santa Ana River		3.60	\$25,115,000	\$7,444,000

DRAFT Preliminary Engineering Study Report for
Ethanac Road Gap Closure Project



Prepared for:
County of Riverside
Department of Transportation



3525 14th Street
Riverside, CA 92501

Prepared by:



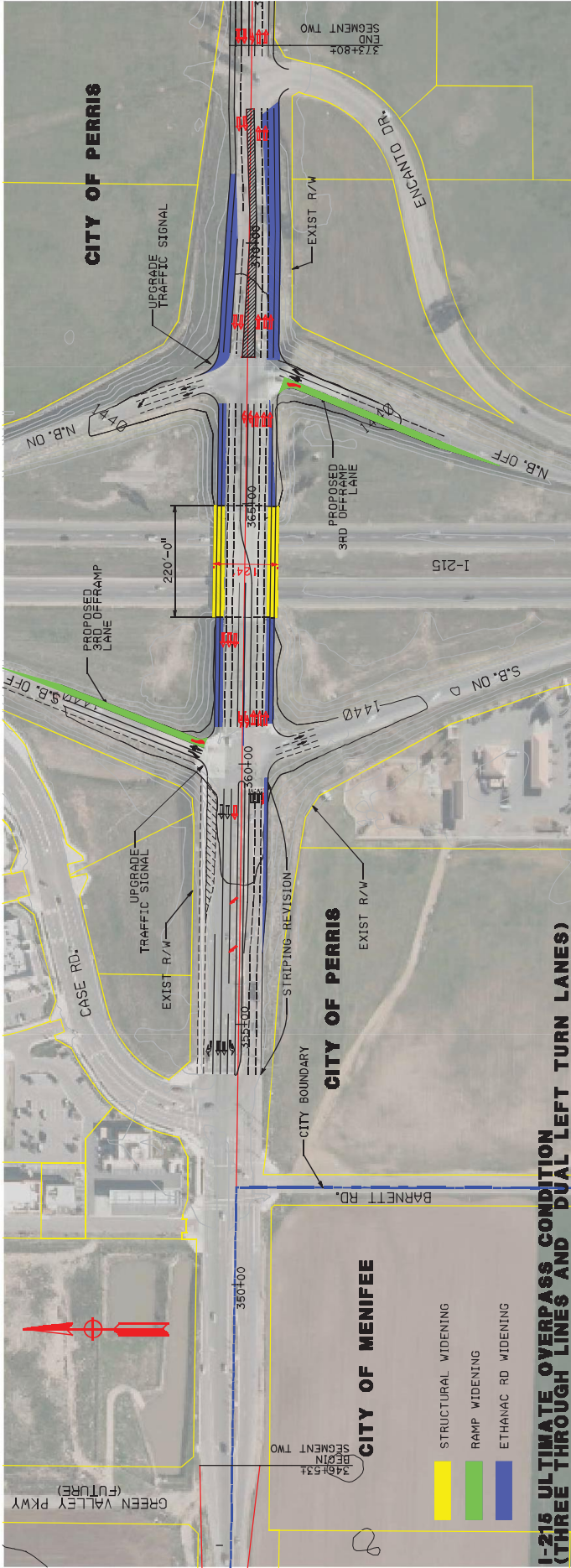
CNS Engineers, Inc.
10370 Hemet Street, Suite 230
Riverside, CA 92503

August 2014
Revised January 2016

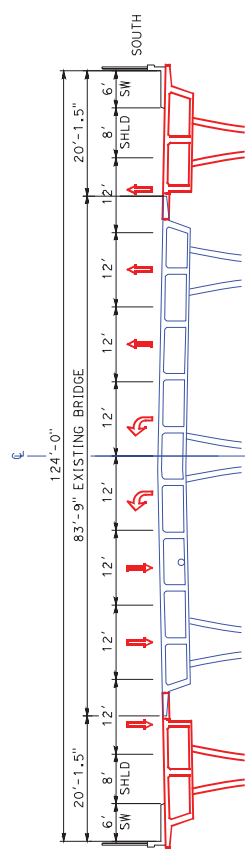


Attachment 2

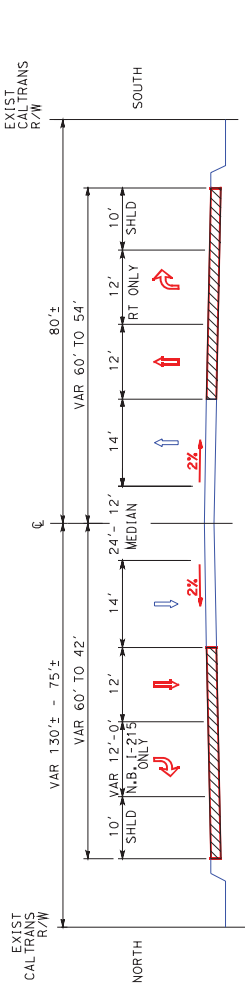
SEGMENT TWO - Preliminary Roadway Layouts



I-215 ULTIMATE OVERPASS CONDITION (THREE THROUGH LINES AND DUAL LEFT TURN LANES)



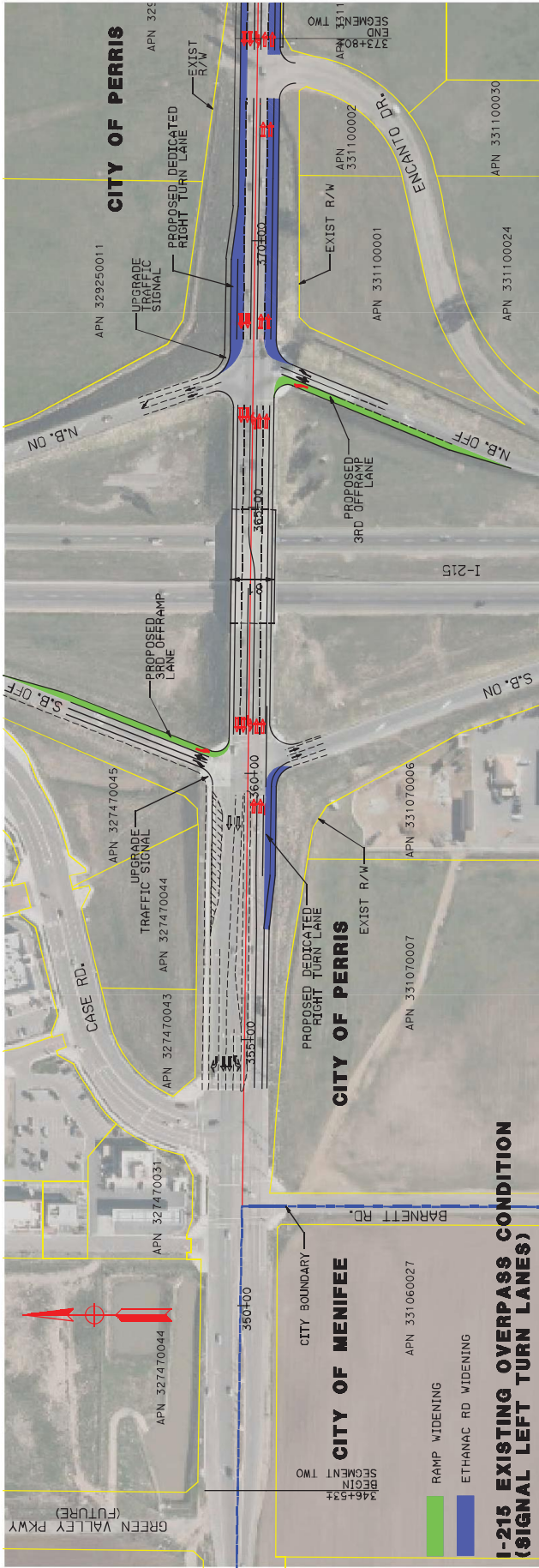
ETHANAC DRIVE AT I-215 WITH DUAL LEFT TURN ALTERNATIVE



ETHANAC DRIVE FROM NORTHBOUND I-215 RAMP TO ENCANTO DR TO SUPPORT DUAL LEFT TURN RAMP AT THE INTERCHANGE

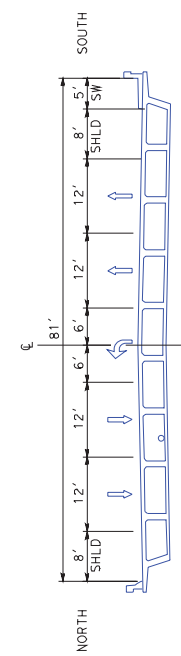
	APPROVED BY: PREPARED BY: 10370 HENRY ST., 5th FLOOR RIVERSIDE, CA 92503	DATE: _____ SHEET 1 OF 2
	CNO ENGINEERS, INC.	PLAN VIEW AND SECTIONS SEGMENT TWO ETHANAC ROAD GAP CLOSURE PROJECT ALTERNATIVE 2A - ULTIMATE INTERCHANGE

DATE: _____
 PROJECT: _____
 USER: _____
 USERNAME: _____
 DON FILE: _____
 REQUEST: _____
 RELATIVE BORDER SCALE: 1" = 100' (0, 100, 200, 300)
 PLANNING STUDY

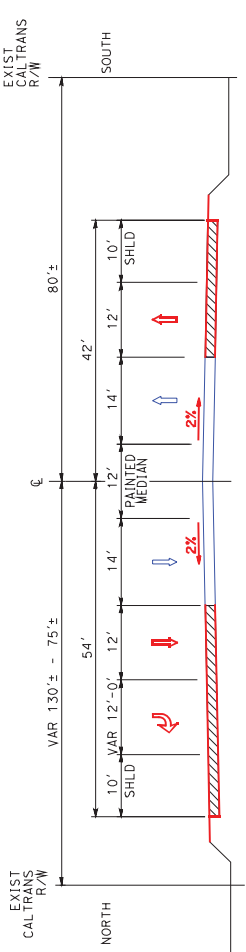


I-215 EXISTING OVERPASS CONDITION (SIGNAL LEFT TURN LANES)

- █ RAMP WIDENING
- █ ETHANAC RD WIDENING



ETHANAC ROAD OVER I-215 FROM SOUTHBOUND RAMP TO NORTHBOUND RAMP TO SUPPORT SINGLE LEFT TURN LANES CITY OF PERRIS (EXISTING CONDITION)



ETHANAC ROAD FROM NORTHBOUND RAMP TO ENCANTO DRIVE TO SUPPORT SINGLE LEFT TURN LANES AT THE INTERCHANGE CITY OF PERRIS

	APPROVED BY: _____ PREPARED BY: _____ DATE: _____	CNS ENGINEERS, INC. 10270 JEFF ST. #14-230 RIVERSIDE, CA 92503	PROJECT NO.: MO XX-XXXX COUNTY FILE NO.: _____ SHEET 2 OF 2
	PLANNING STUDY		PLAN VIEW AND SECTIONS SEGMENT TWO ETHANAC ROAD GAP CLOSURE PROJECT ALTERNATIVE 2B - EXISTING OVERPASS

PROJECT NO.: MO XX-XXXX COUNTY FILE NO.: _____ SHEET 2 OF 2	PLANNING STUDY	PLAN VIEW AND SECTIONS SEGMENT TWO ETHANAC ROAD GAP CLOSURE PROJECT ALTERNATIVE 2B - EXISTING OVERPASS
---	-----------------------	--

RELATIVE BORDER SCALE 1" = 15' IN FEET



USER NAME => BUSER
 DON FILE => REQUEST

DATE: _____
 TIME: _____
 USER: _____



SB 743 VMT Analysis
for:

Compass Northern Gateway

In the City of Menifee

Prepared by:

Kimley-Horn and Associates, Inc.
Trevor Briggs, P.E.
trevor.briggs@kimley-horn.com



August 2023

Kimley»»Horn

SB 743 VMT Analysis
Menifee Compass Northern Gateway Warehouse
August 3, 2023

BACKGROUND

In 2013, SB 743 was signed into law by California Governor Jerry Brown with a goal of reducing Greenhouse Gas (GHG) emissions, promoting the development of infill land use projects and multimodal transportation networks, and to promote a diversity of land uses within developments. One significant outcome resulting from this statute is the removal of automobile delay and congestion, commonly known as Level of Service (LOS), as a basis for determining significant transportation impacts under the California Environmental Quality Act (CEQA).

The Governor's Office of Planning and Research (OPR) selected Vehicle Miles Traveled (VMT) as the principal measure to replace LOS for determining significant transportation impacts. VMT is a measure of total vehicular travel that accounts for the number of vehicle trips and the length of those trips. OPR selected VMT, in part, because jurisdictions are already familiar with this metric. VMT is already used in CEQA to study other potential impacts such as GHG, air quality, and energy impacts and is used in planning for regional Sustainable Communities Strategies (SCS).

VMT also allows for an analysis of a project's impact throughout the jurisdiction rather than only in the vicinity of the proposed project allowing for a better understanding of the full extent of a project's transportation-related impact. It should be noted that SB 743 does not disallow an agency to use LOS for other planning purposes outside the scope of CEQA.

This section documents SB 743 VMT analysis based on City of Menifee VMT Guidelines¹

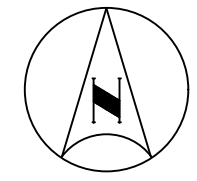
PROJECT DESCRIPTION

The Compass Northern Gateway Project consists of constructing three separate sites located on the south side of Ethanac Road in the City of Menifee. Site 1 (Corsica Lane) is approximately 13.99 acres and is generally bounded by vacant land to the north, Goetz Road to the west, Wheat Street to the east, and vacant land to the south. Site 2 (Wheat Street) is approximately 4.72 acres and is generally bounded by vacant land to the north, residential uses to the west, Wheat Street to the east, and residential uses to the south. Site 3 (Evans Road) is approximately 7.52 acres and is generally bounded by Ethanac Road to the north, Evans Road to the west, and vacant land to the east and south. The project site is shown in its regional setting on Figure 1. A copy of the project site plan is provided on Figure 2.

VMT SCREENING

A VMT screening was conducted for the proposed project. Based on the City of Menifee's VMT screening criteria, the proposed project would not screen out of a VMT analysis. The project's VMT screening scoping form is provided in *Appendix A*.

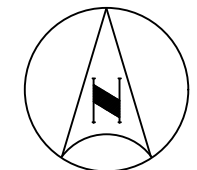
¹ *City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled, January 2022*



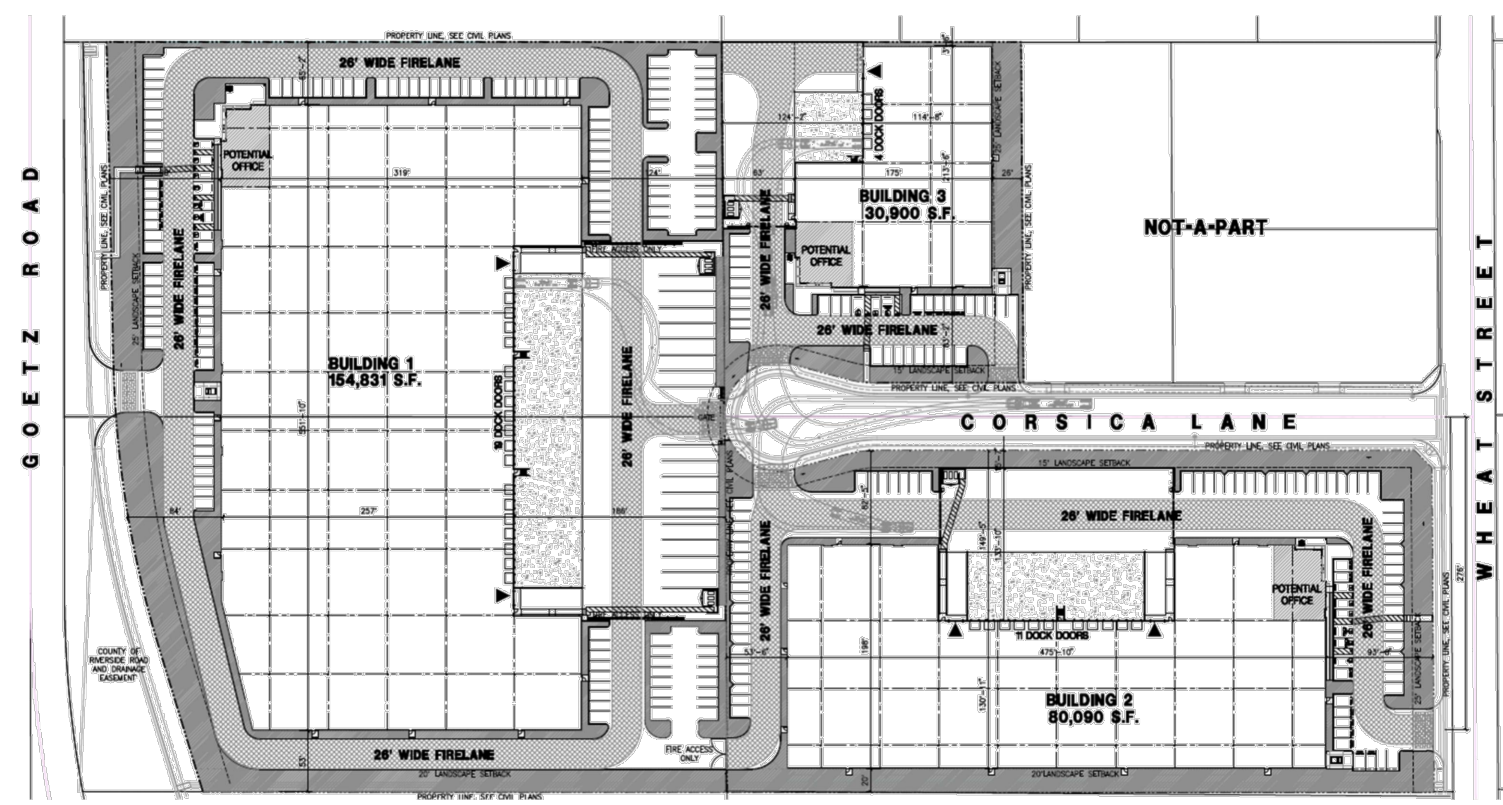
NOT TO SCALE



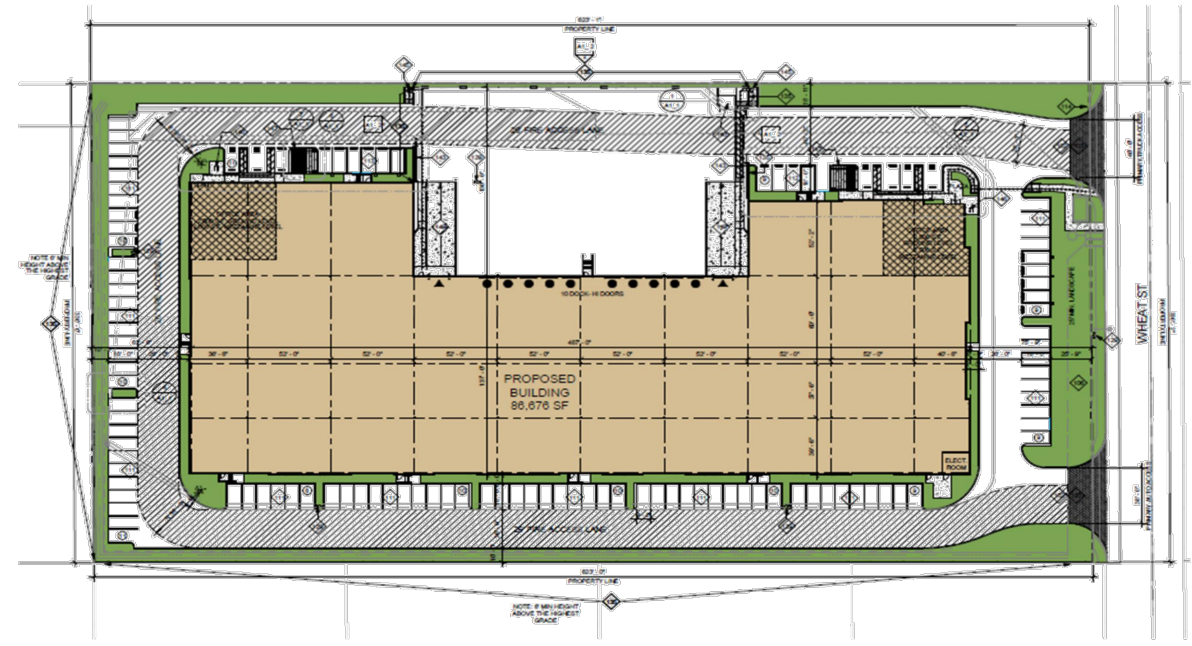
FIGURE 1
VICINITY MAP



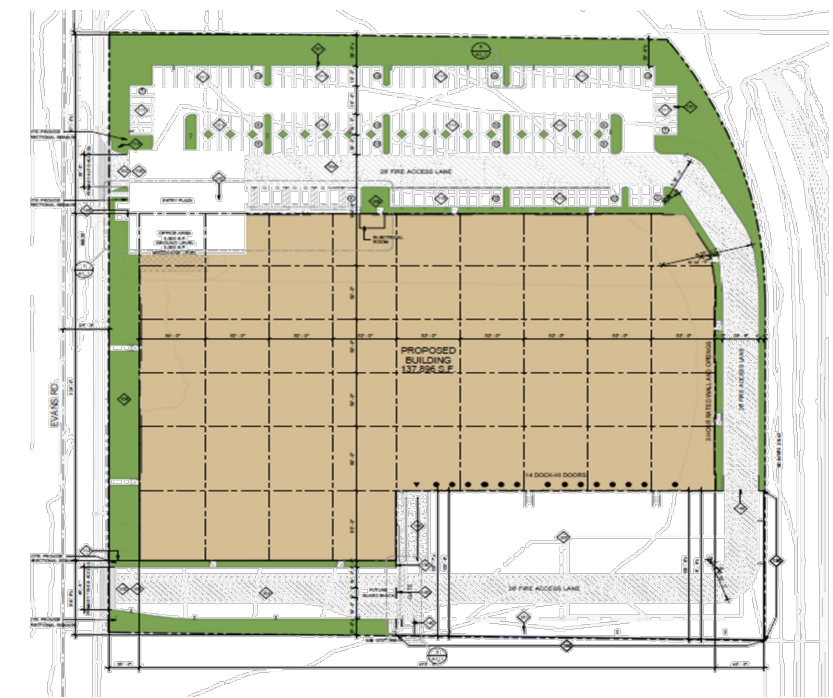
NOT TO SCALE



SITE 1 (CORSICA LANE)



SITE 2 (WHEAT STREET)



SITE 3 (EVANS ROAD)

FIGURE 2
SITE PLAN

VMT ASSESSMENT FOR ROUTINE PROJECTS

WRCOG provides a VMT Calculator as an alternative function to mimic the results of RIVCOM for VMT analysis on routine projects. Routine projects are simple in nature that are similar to other standard land uses in the City and model. The calculator can estimate the project VMT based on the project type, size, location, and average travel distance to the project site. The results can provide an expectation of the project VMT as compared to the adopted threshold to estimate if significant impact will occur without the need to run RIVCOM.

CEQA VMT Impact Thresholds

Utilizing the Origin Destination OD/VMT per service population methodology for County General Plan Buildout and utilizing RIVCOM (November 2021), a project would result in a significant project-generated VMT impact if either of the following conditions are satisfied:

- The baseline project-generated VMT per service population exceeds the County of Riverside General Plan Buildout VMT per service population, or
- The cumulative project-generated VMT per service population exceeds the County of Riverside General Plan Buildout VMT per service population

At the discretion of the City, it may be appropriate in some cases to extract the Project-generated VMT using the Production-Attraction trip matrix, which specifies VMT by trip purpose (such as home-based production (residential) VMT or home-based-work attraction (commute) VMT). This may be appropriate when a project is entirely composed of a single use, and there is a need to isolate the home-based or commute VMT. For an industrial project which will cause long-haul trips that the City does not control, the City can choose to use daily home-based work attraction VMT per employee estimates to determine the significance of impact.

A VMT Assessment for Routine Projects was conducted for the proposed project per City of Menifee's VMT Guidelines. Home-based work attraction VMT methodologies for County General Plan Buildout was selected for analysis based on discussion with City Staff. Based on the WRCOG VMT Calculator Spreadsheet, the Exhibit 1 shows the VMT results under Production Attraction (PA) methods:

Exhibit 1 – Project VMT Impact Evaluation – Production Attraction (PA) Method

Analysis Scenario	Employment-Based VMT/EMP	% change compared to City average	VMT Impact
Riverside County Average	26.6		
Baseline Plus Project			
Site 1 (Corsica Lane)	27.3	+2.63%	Yes
Site 2 (Wheat Street)	27.3	+2.63%	Yes
Site 3 (Evans Road)	23.2	-12.78%	No

Based on the results in Exhibit 1 and the City of Menifee VMT Guidelines, the following initial unmitigated results are determined:

- Site 1 (Corsica Lane) - significant VMT impact (2.63% above City Average)
- Site 2 (Wheat Street) - significant VMT impact (2.63% above City Average)
- Site 3 (Evans Road) - less-than significant VMT impact

The project's VMT Calculator Spreadsheet is provided in Appendix B.

MITIGATION MEASURES

Given the lack of specifics that are available for this level plan, it is not possible to fully account for the effect of specific design principles, policies, and improvements that will reduce VMT as part of this analysis. However, these approaches are still important considerations in evaluating the results of this VMT analysis and as appropriate they should be accounted for within the project area. The model does not account for pedestrian, bicycle, transit, and other Transportation Demand Management (TDM) related improvements. Since the project is expected to include several such elements, this section discusses potential VMT reductions from these project features that are likely to occur.

VMT Mitigation

The following mitigation measures have the potential to reduce the project's VMT. Given the lack of specifics that are available for this conceptual level plan, it is not possible to fully account for the effect of specific design principles, policies and improvements that will reduce VMT as part of this analysis. These measures are based on coordination with the City staff and the recommendations contained within the City's VMT Guidelines and the Western Riverside Council of Governments (WRCOG) TDM Strategies Evaluation Memo. An agreeable VMT mitigation program will be developed between the applicant and the City to mitigate the project VMT impacts.

Commuter Trip Reduction Program (CTR)

The project shall develop a qualifying Commute Trip Reduction (CTR)/ Transportation Demand Management (TDM) plan. The TDM plan shall be approved by the City of Menifee prior to the issuance of building permits and incorporated into the Project's Codes Covenants and Restrictions (CC&Rs). The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The following measures shall be incorporated into the TDM plan.

TDM REQUIREMENTS FOR NON-RESIDENTIAL USES

- The Project Applicant shall consult with the local transit service provider on the need to provide infrastructure to connect the Project with transit services. Evidence of compliance with this requirement may include correspondence from the local transit provider(s) regarding the potential need for installing bus turnouts, shelters, or bus stops at the site.
- The portion of the TDM plan for non-residential uses shall include, but not be limited to the following potential measures: ride-matching assistance, preferential carpool parking, flexible

work schedules for carpools, transportation coordinators, providing a web site or message board for coordinating rides, designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles, and including bicycle end of trip facilities. This list may be updated as new methods become available. Verification of this measure shall occur prior to building permit issuance for the commercial uses.

TDM REQUIREMENTS FOR RESIDENTIAL UNITS

- **Owner-Occupied Units.** Upon a residential dwelling being sold or offered for sale, the Project Applicant shall notify and offer to the buyer or prospective buyer, as soon as it may be done, materials describing public transit, ridesharing, and nonmotorized commuting opportunities available in the vicinity of the Project. Such information shall be transmitted no later than the close of escrow. This information shall be submitted to the City of Menifee Planning Department for review and approval, prior to the issuance of the first certificate of occupancy.
- **Rental Units.** Upon a residential dwelling being rented or offered for rent, the Project Applicant shall notify and offer to the tenant or prospective tenant, materials describing public transit, ridesharing, and nonmotorized commuting opportunities in the vicinity of the development. The materials shall be approved by the City of Menifee. The materials shall be provided no later than the time the rental agreement is executed. This information shall be submitted to the City of Menifee Planning Department for review and approval, prior to the issuance of the first certificate of occupancy.

VMT REDUCTION CALCULATIONS

VMT reduction calculations based on California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emissions Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity are presented below.

Voluntary Commuter Trip Reduction (CTR) Program (T-5)

This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. Voluntary implementation elements are described in this measure. The VMT reduction formula from CAPCOA for this measure is shown below:

GHG Reduction Formula

$$A = B \times C$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site employee commute VMT	0-4.0	%	calculated
User Inputs				
B	Percent of employees eligible for program	0-100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in commute VMT from eligible employees	-4	%	Boarnet et al. 2014

Based on 100% of the employees being eligible for the voluntary CTR, the potential VMT reduction from this measure is calculated to be 4%.

Implement Commuter Trip Reduction Marketing (T-7)

This measure will implement a marketing strategy to promote the project site employer’s CTR program. Information sharing and marketing promote and educate employees about their travel choices to the employment location beyond driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. The VMT reduction formula from CAPCOA for this measure is shown below:

GHG Reduction Formula
 $A = B \times C \times D$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site employee commute VMT	0-4.0	%	calculated
User Inputs				
B	Percent of employees eligible for program	0-100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in employee commute vehicle trips	-4	%	TRB 2010
D	Adjustment from vehicle trips to VMT	1	unitless	assumed

Based on 100% of the employees being eligible for the marketing program, the potential VMT reduction from this measure is calculated to be 4%.

A summary of potential reductions in VMT due to TDM measures are listed in Exhibit 2.

Exhibit 2 – TDM Measures and VMT Reductions

TDM Strategy	Potential VMT Reduction
Voluntary CTR Program (T-5)	4%
Implement Commute Trip Reduction Marketing (T-7)	4%
Total Potential VMT Reduction	8%

Source: CAPCOA Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021)

It should be noted that although the VMT mitigation measures that are listed above will ultimately potentially reduce the project VMT outlined in this evaluation, necessary details for implementation and appropriately evaluate their effect are not yet available until TDM implementation plan is developed.

New mitigation program concepts such as VMT Mitigation Exchange and VMT Mitigation Bank are not currently available in Riverside County.

VMT REDUCING DESIGN PRINCIPLES, POLICIES, AND IMPROVEMENTS

The City of Menifee provides Industrial Good Neighbor Policies for new industrial project sites, which are provided in Appendix C. The Industrial Good Neighbor Policies require Transportation Demand Management (TDM) measures for industrial uses with over 100 employees to reduce work-related vehicle trips.

CONCLUSION

Based on the results of this analysis, the following findings are made:

- The proposed project's Employment-Based VMT does exceed the threshold under Production Attraction (PA) methods for Sites 1 and 2 and as a result are determined to have a significant transportation impact based on the City's adopted thresholds.
- The mitigation measures proposed to reduce non-residential (employee) VMT will help reduce VMT associated with the project up to 8%. Therefore, the VMT impact for the proposed project is determined to not have a significant impact per City's adopted thresholds, with implementation of TDM measures.
- Based on the City's VMT Guidelines, if a project is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), then the cumulative impacts shall be considered less than significant. The proposed land use is consistent with the City's General Plan; therefore, the proposed project's cumulative VMT impact is considered less-than-significant.

APPENDIX A

VMT SCREENING SCOPING FORM

Attachment A: Project Scoping Form

This scoping form shall be completed and submitted to the City of Meniffee to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Compass Northern Gateway Project
Project Address:	
Project Opening Year:	2025
Project Description:	Site 1 (Corsica Lane): 265,821 SF Warehouse, Site 2 (Wheat Street): 86,676 SF Warehouse, Site 3 (Evans Road): 137,896 SF Warehouse
	See Attachment A

	Consultant:	Developer:
Name:	Kimley-Horn and Associates, Inc.	CDRE Holdings 20 LLC
Address:	1100 Town and Country Road, Suite 700 Orange, CA 92868	523 Main St. El Segundo, CA 90245
Telephone:	714-786-6117	(213) 929-5049
Fax/Email:	trevor.briggs@kimley-horn.com	

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual, 11th Edition

Current General Plan Land Use:
Vacant

Proposed General Plan Land Use:
Warehouse/Industrial

See Attachment E

Current Zoning:
EDC

Proposed Zoning:
EDC

	Existing Trip Generation			Proposed Trip Generation See Attachment B		
	In	Out	Total	In	Out	Total
AM Trips				89	24	113
PM Trips				32	89	121

Trip Internalization: Yes No (_____ % Trip Discount)

Pass-By Allowance: Yes No (_____ % Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses (see Page 11 of the guidelines related to LOS assessment and Pages 24-26).

Is the project screened from VMT assessment? Yes No

VMT screening justification (see Pages 24-26 of the guidelines): See Attachment C

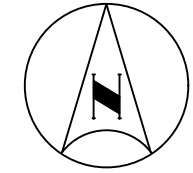
VMT Analysis Scoping

For projects that are not screened, identify the following:

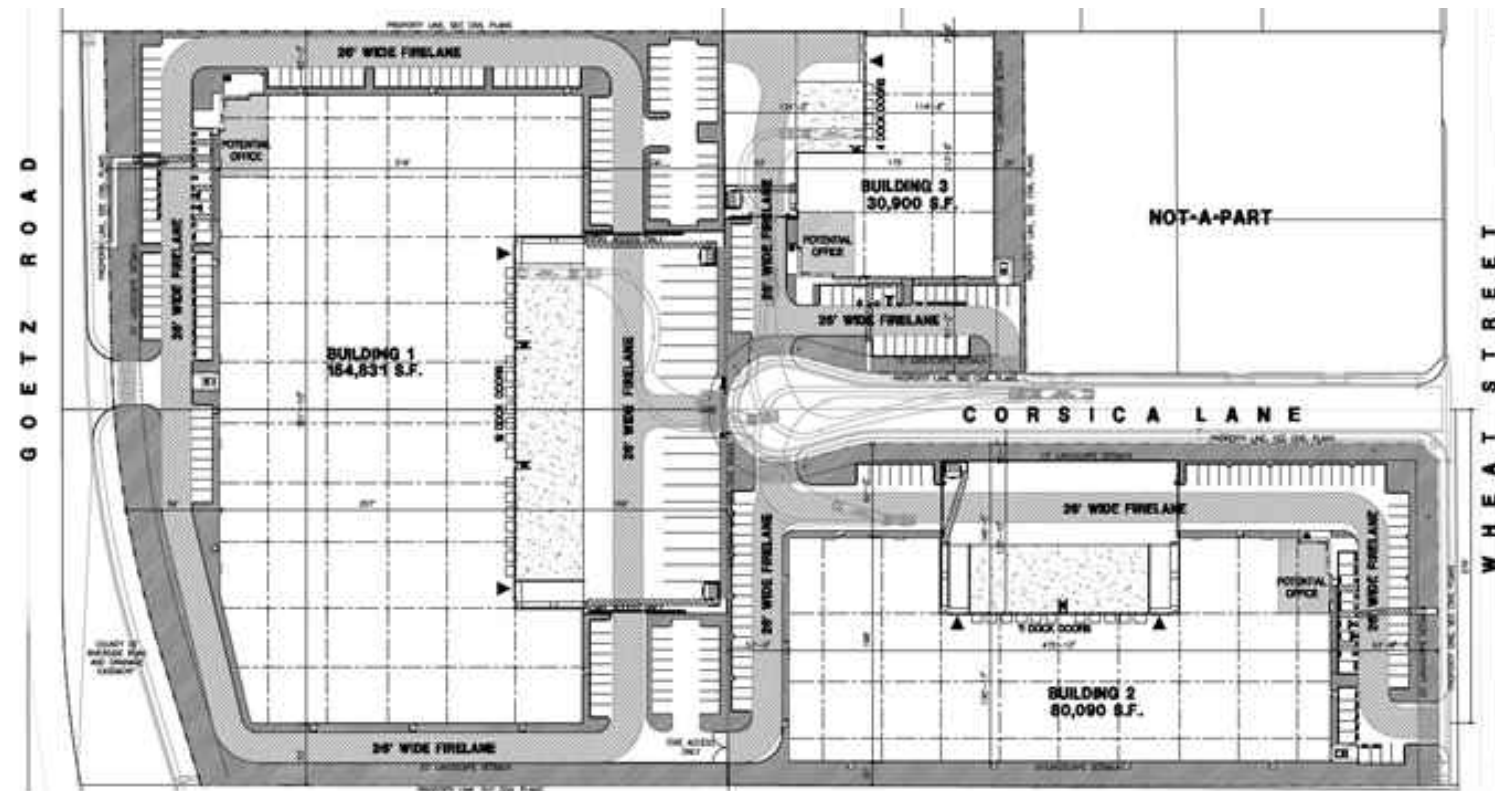
- Travel Demand Forecasting Model Used RIVCOM See Attachment D
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Signatures

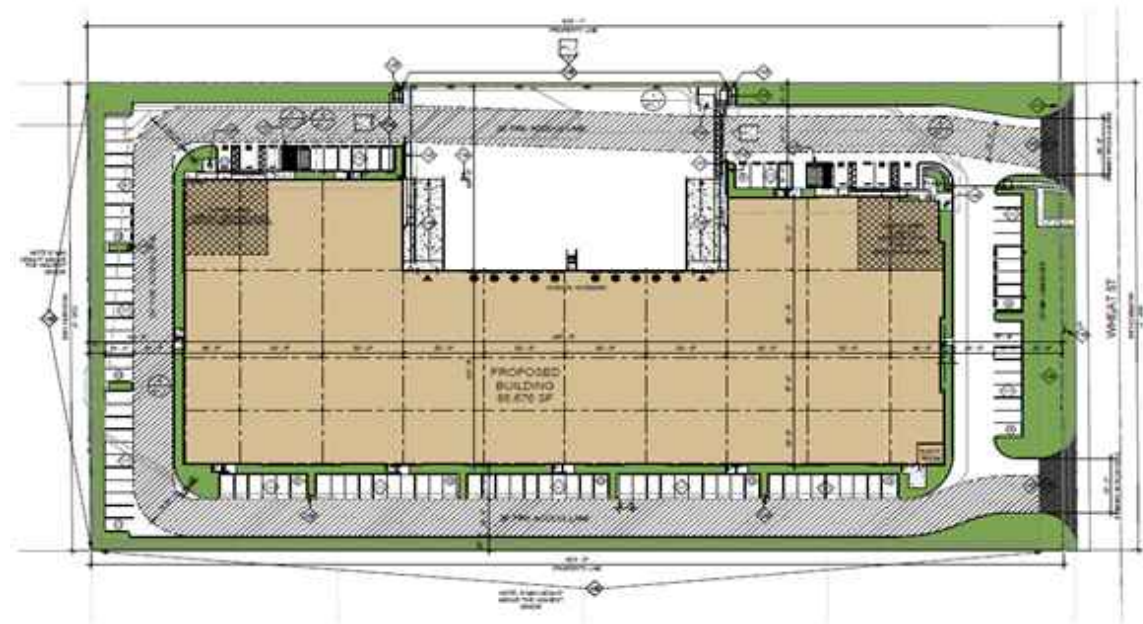
TIA Preparer:  City (Approved by): Rob Blough, PE, TE 2-2-2023



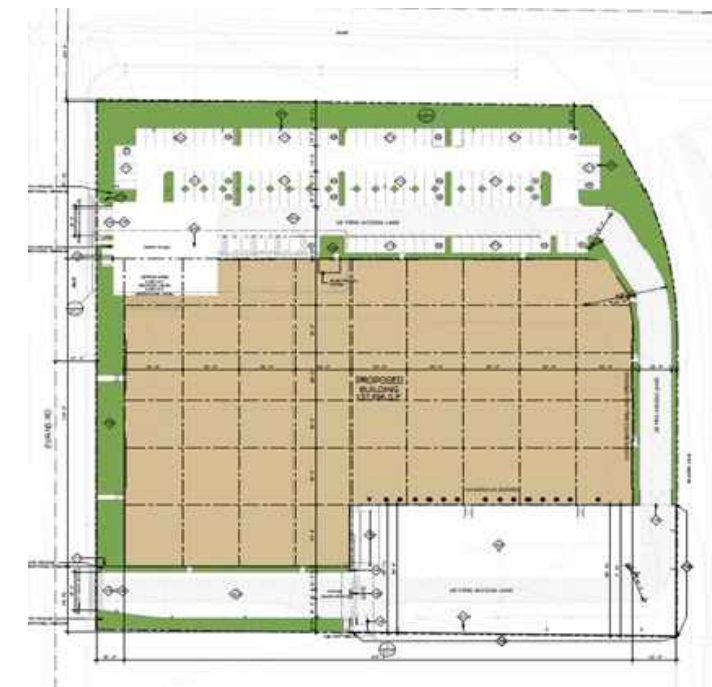
NOT TO SCALE



SITE 1 (CORSICA LANE)



SITE 2 (WHEAT STREET)



SITE 3 (EVANS ROAD)

ATTACHMENT A
SITE PLAN

**ATTACHMENT B
SUMMARY OF PROJECT TRIP GENERATION
COMPASS NORTHERN GATEWAY PROJECT**

TRIP GENERATION RATES ¹

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	150	KSF	1.71	0.131	0.039	0.170	0.050	0.130	0.180

PROJECT TRIP GENERATION

SITE 1 (Corsica Lane)

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	265.821	KSF	455	35	10	45	13	35	48
Passenger Vehicles	73.00%		332	26	7	33	9	26	35
Trucks	27.00%		123	9	3	12	4	9	13

SITE 1 (Corsica Lane) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	332	1.0	332	26	7	33	9	26	35
2-Axle Trucks	4.57%	21	1.5	32	2	1	3	1	2	3
3-Axle Trucks	6.13%	28	2.0	56	4	1	5	2	4	6
4+ Axle Trucks	16.30%	74	3.0	222	17	5	22	6	17	23
Total Site 1 (Corsica Lane) Truck PCE Trips				310	23	7	30	9	23	32
Total Site 1 (Corsica Lane) PCE Trips				642	49	14	63	18	49	67

SITE 2 (Wheat Street)

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	86.676	KSF	148	11	3	14	4	11	15
Passenger Vehicles	73.00%		108	26	7	33	9	26	35
Trucks	27.00%		40	9	3	12	4	9	13

SITE 2 (Wheat Street) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	108	1.0	108	8	2	10	3	8	11
2-Axle Trucks	4.57%	7	1.5	10	1	0	1	0	1	1
3-Axle Trucks	6.13%	9	2.0	18	1	0	1	0	1	1
4+ Axle Trucks	16.30%	24	3.0	72	5	1	6	2	5	7
Total Site 2 (Wheat Street) Truck PCE Trips				100	7	1	8	2	7	9
Total Site 2 (Wheat Street) PCE Trips				208	15	3	18	5	15	20

SITE 3 (Evans Road)

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	137.896	KSF	236	18	5	23	7	18	25
Passenger Vehicles	73.00%		172	13	4	17	5	13	18
Trucks	27.00%		64	5	1	6	2	5	7

SITE 3 (Evans Road) TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ^{2,3}	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	172	1.0	172	13	4	17	5	13	18
2-Axle Trucks	4.57%	11	1.5	17	1	0	1	0	1	1
3-Axle Trucks	6.13%	14	2.0	28	2	1	3	1	2	3
4+ Axle Trucks	16.30%	38	3.0	114	9	2	11	3	9	12
Total Site 3 (Evans Road) Truck PCE Trips				159	12	3	15	4	12	16
Total Site 3 (Evans Road) PCE Trips				331	25	7	32	9	25	34
Total Proposed Project Passenger Vehicle Trips				612	47	13	60	17	47	64
Total Proposed Project Truck PCE Trips				569	42	11	53	15	42	57
Total Proposed Project PCE Trips				1,181	89	24	113	32	89	121

¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

² Passenger Vehicles and Truck splits taken from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition Supplement.

³ Truck mix percentages were calculated based on a ratio between the ITE truck splits and the Truck Trip Generation Study - City of Fontana, August 2003

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

ATTACHMENT C

CEQA VEHICLE MILES TRAVELED (VMT) ASSESSMENT

Senate Bill 743 (SB 743) was approved by California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular "Level of Service" (LOS) for evaluating transportation projects. OPR has prepared a technical advisory ("OPR Technical Advisory") for evaluating transportation impacts in CEQA and has recommended that Vehicle Miles Traveled (VMT) replace LOS as the primary measure of transportation impacts. The Natural Resources Agency has adopted updates to CEQA Guidelines to incorporate SB 743 that requires VMT for the purposes of determining a significant transportation impact under CEQA.

The City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (June 2020) provides details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed level analysis. Screening thresholds are broken down into the following three criteria:

1. Transit Priority Area (TPA) Screening
2. Low VMT Area Screening
3. Project Type Screening

Land development projects that meet one or more of the above screening thresholds may be presumed to create a less-than-significant impact on transportation and circulation. The screening thresholds were reviewed and evaluated for this project.

Transit Priority Area (TPA) Screening

A project located within a TPA as determined by the Western Riverside Council of Governments (WRCOG) VMT Screening Tool would be considered to have a less-than-significant transportation impact. Based on the WRCOG Screening Tool, the proposed project is not located within a TPA.

The Transit Priority Area threshold is not met.

Low VMT Generating Area

A project located within a low VMT generating area as determined by the WRCOG VMT Screening Tool and the City's guidelines would be considered to have a less-than-significant transportation impact. Based on the WRCOG VMT Screening Tool and the City's guidelines, the proposed project is not located within a low VMT generating area. Results of the WRCOG VMT Screening Tool are provided in **Attachment D**.

The Low VMT Generating Area threshold is not met.

Project Type Screening

The City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* identify that the following project types would be presumed to have a less-than-significant VMT impact:

- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving retail uses less than 50,000 square feet, including:
 - Gas stations
 - Banks
 - Restaurants
 - Shopping Center
- Local-serving hotels (e.g. non-destination hotels)
- Student housing projects on or adjacent to college campuses
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (Public libraries, fire stations, local government)
- Local-serving community colleges that are consistent with the assumptions noted in the RTP/SCS Affordable or supportive housing
- Assisted living facilities
- Senior housing as defined by the U.S. Department of Housing and Urban Development (HUD)
- Projects generating less than 110 daily vehicle trips
 - This generally corresponds to the following “typical” development potentials:
 - 11 single family housing units
 - 16 multi-family, condominiums, or townhouse housing units
 - 10,000 sq. ft. of office
 - 15,000 sq. ft. of light industrial
 - 63,000 sq. ft. of warehousing
 - 79,000 sq. ft. of high cube transload and short-term storage warehouse

The project will involve the construction a 490,393 square-foot industrial building that generates more than 110 daily trips; therefore, the project would not be screened out based on project type.

The Project Type Screening threshold is not met.

ATTACHMENT D1 - Corsica Lane Site

WRCOG VMT Tool Powered by Fehr & Peers User's Guide

Find address or place

Complete #1-4, Then Click "Run"

Input Output

#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*

Parcels (Zoom in to view) [Black square icon] [Red trash icon]

#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

PA VMT Per Worker

#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*

2022

#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

Below County Future Buildout (0%)

[Help](#) **Run**

Map labels: Monument Pkwy, Way, Corsica Ln, Goetz Rd, Wheat St, McLaughlin Rd

(1 of 3)

OBJECTID	2
Assessor Parcel Number (APN)	330180010
Traffic Analysis Zone (TAZ)	1094
Community Region	MENIFEE
Inside a Transit Priority Area (TPA)	No
TAZ VMT	17.6
Jurisdiction VMT	15.8
% Difference	11.21%
VMT Metric	PA VMT Per Worker
Threshold	15.8
Community	0
Zoom to	...

ATTACHMENT D2 - Wheat Street Site

The screenshot displays the WRCOG VMT Tool interface. On the left, a sidebar contains navigation icons (home, refresh, search) and a search bar with the text "Find address or place". Below the search bar is a "Complete #1-4, Then Click 'Run'" panel with four numbered steps and a "Run" button. The main map area shows a street grid with a large orange rectangle highlighting a parcel. A popup window titled "(2 of 3)" is open over the highlighted parcel, displaying the following data:

OBJECTID	1
Assessor Parcel Number (APN)	330180012
Traffic Analysis Zone (TAZ)	1094
Community Region	MENIFEE
Inside a Transit Priority Area (TPA)	No
TAZ VMT	17.6
Jurisdiction VMT	15.8
% Difference	11.21%
VMT Metric	PA VMT Per Worker
Threshold	15.8
Community	0
Zoom to	

ATTACHMENT D3 - Evans Road Site

WRCOG VMT Tool Powered by Fehr & Peers User's Guide

Find address or place

Complete #1-4, Then Click "Run"

Input Output

#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*

Parcels (Zoom in to view)

#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

PA VMT Per Worker

#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*

2022

#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

Below County Future Buildout (0%)

[Help](#)

(2 of 3)

OBJECTID	1
Assessor Parcel Number (APN)	331060018
Traffic Analysis Zone (TAZ)	1113
Community Region	MENIFEE
Inside a Transit Priority Area (TPA)	No
TAZ VMT	17.2
Jurisdiction VMT	15.8
% Difference	8.45%
VMT Metric	PA VMT Per Worker
Threshold	15.8
Community	0

[Zoom to](#)

300ft

Attachment E

Model Land Use Inputs and Conversion Factors

ITE 150: General Warehouse: 490.393 KSF = 599 Employees (1 Employee per 819 SF¹)

The Vehicle Miles Traveled (VMT) analysis will be conducted based on the RIVCOM model using the Home-Based Work VMT per Employee metric.

¹ Source: SCAG Employment Density Survey (October 2001)

APPENDIX B

VMT ASSESSMENT FOR ROUTINE PROJECTS



Western Riverside Council of Governments VMT Tool

Project Information

Project Name
 Compass Northern Gateway Project (Site 1)

Parcel Number (RIVCOM TAZ#1094) Analysis Year
 330180010 2023

Screening Criteria for Menifee

Use the online [WRCOG VMT Tool](#) to determine the following
 Is the Project screened by Transit Priority Area or located in a low VMT generating zone?

Is the Project one of these land use types?
 (show land use types)

Does the project generate fewer than 110 daily trips?
 (enter project land use in the section below)

The Project does not meet screening criteria. Please Continue

Project Land Use Information

		Unit
Residential : Single Family Homes	<input type="text" value="0"/>	Dwelling Units
Residential : MultiFamily Homes	<input type="text" value="0"/>	Dwelling Units
Office	<input type="text" value="0"/>	1,000 Square Feet
Retail	<input type="text" value="0"/>	1,000 Square Feet
Industrial	<input type="text" value="0"/>	1,000 Square Feet
Manufacturing	<input type="text" value="0"/>	1,000 Square Feet
Warehousing	<input type="text" value="265.821"/>	1,000 Square Feet
Hotel	<input type="text" value="0"/>	Rooms
University	<input type="text" value="0"/>	Students
Private School	<input type="text" value="0"/>	Students

Project Trips, VMT, and TAZ SED Information

Project Summary
 Select VMT Methodology

Select OD Method for mixed-use projects

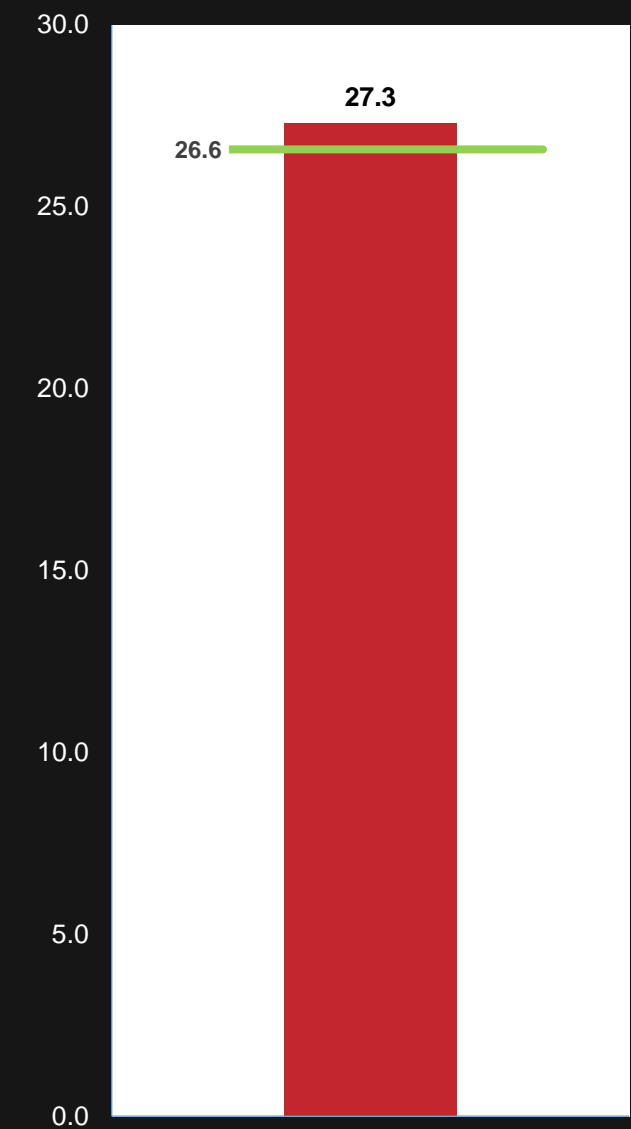
Project Location TAZ Socioeconomic Data

Land Use		Value	Unit
SFDU	- Single-Family Detached Housing	<input type="text" value="57"/>	DU
MFDU	- Multi-Family Attached Housing	<input type="text" value="4"/>	DU
K12	- Kindergarten - 12th Grade Enrollment	<input type="text" value="0"/>	STU
COLLEGE	- College Enrollment	<input type="text" value="0"/>	STU
AG	- Agricultural & Mining Employment	<input type="text" value="0"/>	EMP
CONST	- Construction Employment	<input type="text" value="178"/>	EMP
MANU	- Manufacturing Employment	<input type="text" value="66"/>	EMP
WHOLE	- Wholesale Employment	<input type="text" value="0"/>	EMP
RET	- Retail Employment	<input type="text" value="0"/>	EMP
TRANS	- Transportation, Warehousing, and Utility Employment	<input type="text" value="250"/>	EMP
INFOR	- Information Services Employment	<input type="text" value="0"/>	EMP
FIRE	- Financial Activities Employment	<input type="text" value="0"/>	EMP
PROF	- Professional and Business Services Employment	<input type="text" value="0"/>	EMP
EDUC	- Educational and Health Services Employment	<input type="text" value="0"/>	EMP
ARTENT	- Arts/Entertainment Employment	<input type="text" value="0"/>	EMP
OTHSER	- Other Services Employment	<input type="text" value="0"/>	EMP
PUBADMN	- Public Administration Employment	<input type="text" value="0"/>	EMP

Project VMT Thresholds Comparison

Select the VMT Thresholds for comparison to project VMT

- Below Existing
- Better than General Plan Buildout
- OPR Guidance (15% Below Existing)



■ N/A ■ General Plan Buildout Average



Western Riverside Council of Governments VMT Tool

Project Information

Project Name
 Compass Northern Gateway Project (Site 2)

Parcel Number (RIVCOM TAZ#1094) Analysis Year
 330180012 2023

Screening Criteria for Menifee

Use the online [WRCOG VMT Tool](#) to determine the following
 Is the Project screened by Transit Priority Area or located in a low VMT generating zone?

Is the Project one of these land use types?
 (show land use types)

Does the project generate fewer than 110 daily trips?
 (enter project land use in the section below)

The Project does not meet screening criteria. Please Continue

Project Land Use Information

		Unit
Residential : Single Family Homes	<input type="text" value="0"/>	Dwelling Units
Residential : MultiFamily Homes	<input type="text" value="0"/>	Dwelling Units
Office	<input type="text" value="0"/>	1,000 Square Feet
Retail	<input type="text" value="0"/>	1,000 Square Feet
Industrial	<input type="text" value="0"/>	1,000 Square Feet
Manufacturing	<input type="text" value="0"/>	1,000 Square Feet
Warehousing	<input type="text" value="86.676"/>	1,000 Square Feet
Hotel	<input type="text" value="0"/>	Rooms
University	<input type="text" value="0"/>	Students
Private School	<input type="text" value="0"/>	Students

Project Trips, VMT, and TAZ SED Information

Project Summary
 Select VMT Methodology

Select OD Method for mixed-use projects

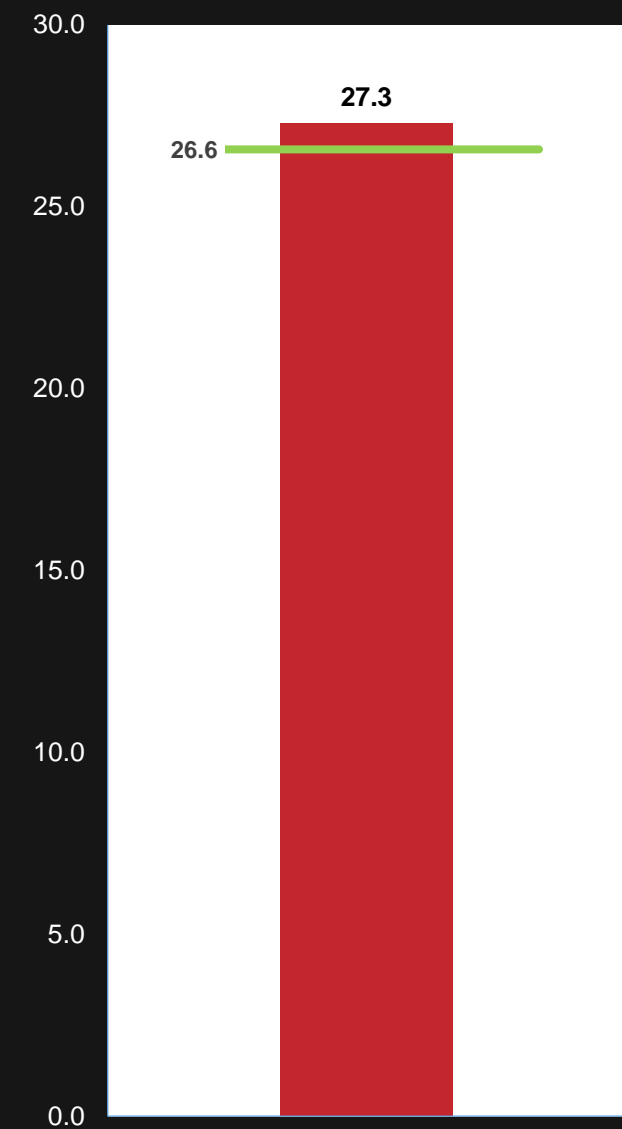
Project Location TAZ Socioeconomic Data

Land Use		Value	Unit
SFDU	- Single-Family Detached Housing	<input type="text" value="57"/>	DU
MFDU	- Multi-Family Attached Housing	<input type="text" value="4"/>	DU
K12	- Kindergarten - 12th Grade Enrollment	<input type="text" value="0"/>	STU
COLLEGE	- College Enrollment	<input type="text" value="0"/>	STU
AG	- Agricultural & Mining Employment	<input type="text" value="0"/>	EMP
CONST	- Construction Employment	<input type="text" value="178"/>	EMP
MANU	- Manufacturing Employment	<input type="text" value="66"/>	EMP
WHOLE	- Wholesale Employment	<input type="text" value="0"/>	EMP
RET	- Retail Employment	<input type="text" value="0"/>	EMP
TRANS	- Transportation, Warehousing, and Utility Employment	<input type="text" value="250"/>	EMP
INFOR	- Information Services Employment	<input type="text" value="0"/>	EMP
FIRE	- Financial Activities Employment	<input type="text" value="0"/>	EMP
PROF	- Professional and Business Services Employment	<input type="text" value="0"/>	EMP
EDUC	- Educational and Health Services Employment	<input type="text" value="0"/>	EMP
ARTENT	- Arts/Entertainment Employment	<input type="text" value="0"/>	EMP
OTHSER	- Other Services Employment	<input type="text" value="0"/>	EMP
PUBADMN	- Public Administration Employment	<input type="text" value="0"/>	EMP

Project VMT Thresholds Comparison

Select the VMT Thresholds for comparison to project VMT

- Below Existing
- Better than General Plan Buildout
- OPR Guidance (15% Below Existing)



■ N/A — General Plan Buildout Average



Western Riverside Council of Governments VMT Tool

Project Information

Project Name
 Compass Northern Gateway Project (Site 3)

Parcel Number (RIVCOM TAZ#1113) Analysis Year
 331060018 2023

Screening Criteria for Menifee

Use the online [WRCOG VMT Tool](#) to determine the following
 Is the Project screened by Transit Priority Area or located in a low VMT generating zone?

Is the Project one of these land use types?
 (show land use types)

Does the project generate fewer than 110 daily trips?
 (enter project land use in the section below)

The Project does not meet screening criteria. Please Continue

Project Land Use Information

		Unit
Residential : Single Family Homes	<input type="text" value="0"/>	Dwelling Units
Residential : MultiFamily Homes	<input type="text" value="0"/>	Dwelling Units
Office	<input type="text" value="0"/>	1,000 Square Feet
Retail	<input type="text" value="0"/>	1,000 Square Feet
Industrial	<input type="text" value="0"/>	1,000 Square Feet
Manufacturing	<input type="text" value="0"/>	1,000 Square Feet
Warehousing	<input type="text" value="137.896"/>	1,000 Square Feet
Hotel	<input type="text" value="0"/>	Rooms
University	<input type="text" value="0"/>	Students
Private School	<input type="text" value="0"/>	Students

Project Trips, VMT, and TAZ SED Information

Project Summary
 Select VMT Methodology

Select OD Method for mixed-use projects

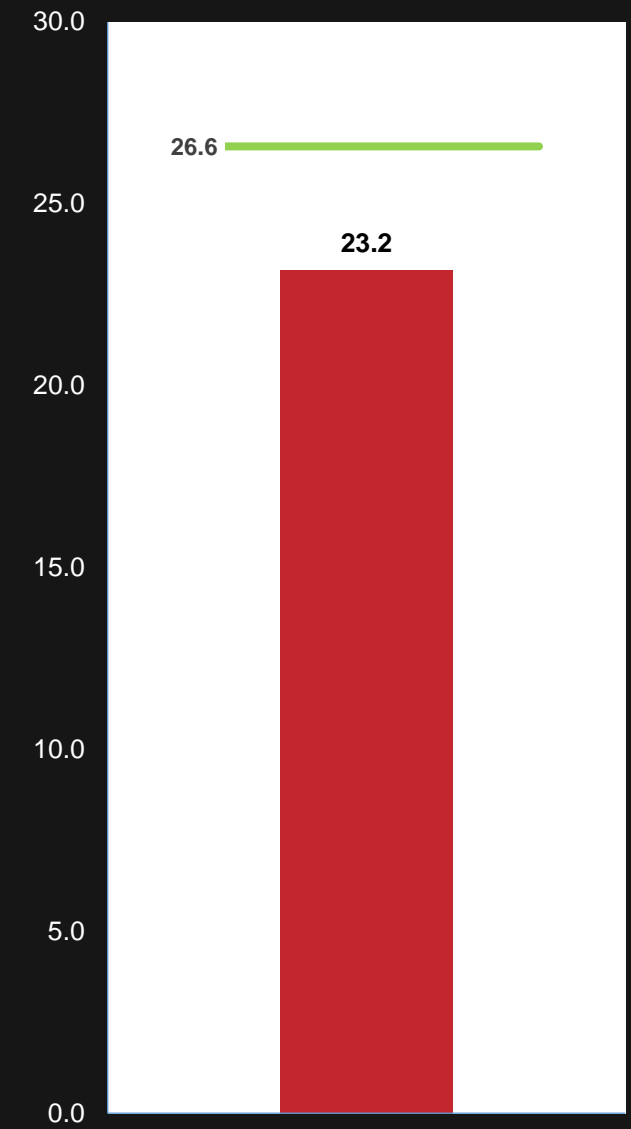
Project Location TAZ Socioeconomic Data

Land Use		Value	Unit
SFDU	- Single-Family Detached Housing	<input type="text" value="8"/>	DU
MFDU	- Multi-Family Attached Housing	<input type="text" value="1"/>	DU
K12	- Kindergarten - 12th Grade Enrollment	<input type="text" value="0"/>	STU
COLLEGE	- College Enrollment	<input type="text" value="0"/>	STU
AG	- Agricultural & Mining Employment	<input type="text" value="0"/>	EMP
CONST	- Construction Employment	<input type="text" value="190"/>	EMP
MANU	- Manufacturing Employment	<input type="text" value="68"/>	EMP
WHOLE	- Wholesale Employment	<input type="text" value="0"/>	EMP
RET	- Retail Employment	<input type="text" value="5"/>	EMP
TRANS	- Transportation, Warehousing, and Utility Employment	<input type="text" value="263"/>	EMP
INFOR	- Information Services Employment	<input type="text" value="0"/>	EMP
FIRE	- Financial Activities Employment	<input type="text" value="0"/>	EMP
PROF	- Professional and Business Services Employment	<input type="text" value="0"/>	EMP
EDUC	- Educational and Health Services Employment	<input type="text" value="0"/>	EMP
ARTENT	- Arts/Entertainment Employment	<input type="text" value="0"/>	EMP
OTHSER	- Other Services Employment	<input type="text" value="0"/>	EMP
PUBADMN	- Public Administration Employment	<input type="text" value="0"/>	EMP

Project VMT Thresholds Comparison

Select the VMT Thresholds for comparison to project VMT

- Below Existing
- Better than General Plan Buildout
- OPR Guidance (15% Below Existing)



■ N/A ■ General Plan Buildout Average

APPENDIX C

CITY OF MENIFEE'S INDUSTRIAL
GOOD NEIGHBOR POLICIES



APPENDIX A

INDUSTRIAL GOOD NEIGHBOR POLICIES

PURPOSE

The purpose of the Good Neighbor Policies (Policies) is to provide local government and developers with ways to address environmental and neighborhood compatibility issues associated with permitting warehouse, logistics and distribution facilities. These Policies are designed to promote economic vitality and sustainability of businesses, while still protecting the general health, safety, and welfare of the public and sensitive receptors. within the City of Menifee. Sensitive receptors include residential neighborhoods, schools, public parks, playgrounds, day care centers, nursing homes, hospitals, and other public places where residents are most likely to spend time.

The intent of the City of Menifee’s Good Neighbor Policies, in siting new warehouse, logistics and distribution uses, include:

1. Minimize impacts to sensitive uses
2. Protect public health, safety, and welfare by regulating the design, location and operation of facilities
3. Protect neighborhood character of adjacent communities

APPLICABILITY

The Policies apply to all new warehouse, logistics and distribution facilities (“industrial uses”), excluding pending applications that have been deemed complete as the effective day of this policy, that include any building larger than 100,000 square feet in size or any sized building with more than 10 loading bays (dock-high). These Policies apply in addition to the provisions of the Development Code, and act as a supplement to the City-wide Design Guidelines adopted by the City on April 15, 2020. Project-level review under CEQA would continue to apply to any project, regardless of the total square footage. The hearing body has the discretion and authority to approve projects that deviate from the guidance provided in this policy, subject to unique site-specific conditions such as topography and other relevant factors.

The following summarizes the Policies for the City of Menifee:

General Performance Standards

1. Truck traffic shall generally be routed to impact the least amount of sensitive receptors, (e.g. access locations, use of traffic control features, signage).
2. To the maximum extent feasible, buildings shall be designed so that truck driveways and loading docks are oriented away from sensitive receptors to minimize impacts.
3. Sufficient landscape buffers and walls shall be provided on-site to screen sensitive receptors from truck access, parking, and storage.
4. Building massing shall be consistent with the City's Industrial Design Guidelines so as to reduce visual dominance on adjacent sensitive receptors.
5. Community outreach throughout the planning process shall occur. The level of public outreach for each project shall be determined by City staff based on the project's scope and surroundings.

A. Site Design, Access, and Layout

1. Buildings shall be set back a minimum of one foot for every one foot of building height, but no less than 25 feet, when adjacent to a sensitive receptor.
2. Dock high doors shall be a minimum of 250' from the property line of adjacent sensitive receptors.
3. When not adjacent to sensitive receptors, truck courts and trailer parking should face internal to the site when feasible to avoid screen walls being the most prominent street feature. A "wing-wall" may also be installed perpendicular to the loading dock areas to further attenuate noise related to truck activities and also address aesthetics by screening the loading area.

4. Decorative walls shall be used to screen industrial uses from adjacent sensitive receptors. Landscaping (and berming for walls greater than six feet in height) shall be used to reduce the visual impact of the walls.
5. To the maximum extent feasible, truck driveways shall not be placed on any portion of the street that fronts sensitive receptors.
6. Facilities shall be designed to provide adequate on-site parking and queuing for trucks/trailers away from sensitive receptors.
7. Check-in gates and/or guard booths are required to be positioned with a minimum of 150 feet inside the property line for on-site truck queuing. An additional 75 feet of on-site queuing shall be added for every 20 loading docks beyond 40 up to 300 feet. Multiple lanes (minimum lane width of 12 feet) are permitted to achieve the required on-site truck queuing. The general queuing and spill-over of trucks onto surrounding public streets are prohibited. Commercial trucks and/or trailers shall not be parked on the public road right-of-way or adjacent to sensitive receptors.
8. Required passenger vehicle parking should be separated from enclosed truck parking/truck court, and have separate primary access.
9. Underground stormwater facilities are preferred over above-ground basins. If above-ground facilities are needed, these should be designed so that the depth (i.e. under 18") does not require perimeter fencing and can be incorporated as additional landscape buffer.
10. A minimum of 50% of site plantings shall be evergreen broadleaf tree species.
11. Front setbacks shall include a minimum 25-foot landscape planter. For property lines adjacent to a sensitive receptor, side setbacks shall include a minimum 10 foot landscape planter, and rear setbacks shall include a minimum 5 foot landscape planter.
12. No parking shall be permitted in the landscape setback area.

B. Signage and Information

1. Require on-site signage for directional guidance to trucks entering and exiting the facility to minimize potential impacts on sensitive receptors.
2. Anti-idling signs are required to be posted at warehouses to stipulate a 3-minute idling restriction.
3. Legible, durable, weather-proof signs are required at all truck exit driveways directing truck drivers to the truck route and State Highway System.
4. During construction, signs are required to be in public view with contact information for a designated representative of the building occupant and an SCAQMD representative who is designated to receive complaints about excessive dust, fumes, or odors on this site.
5. New and existing industrial uses shall provide truck drivers with information on the closest restaurants, fueling stations, truck repair facilities, and lodging (i.e. by posting in offices/breakrooms).

C. Environmental Considerations

a) Air Quality

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new logistics and warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of industrial uses and adoption of all feasible mitigation of significant impacts. As updated by South Coast Air Quality Management District (AQMD) and California Air Resource Board (CARB), the following policies apply:

1. In compliance with CEQA, conduct SCAQMD URBEMIS and EMFAC computer models to identify the significance of air quality impacts on sensitive receptors.
 - a) Require an air quality analysis to ensure air quality protection, in accordance with the Air Quality Management District (AQMD) guidelines, for both project-specific and cumulative impact analysis.

- b) Require “Health Risk Assessments” for industrial uses within 1,000 feet of sensitive receptors.
2. Minimize the air quality impacts of trucks on sensitive receptors
 - a) Design facilities with queuing of trucks on-site and away from sensitive receptors.
 - b) Prevent the queuing of trucks on streets or elsewhere outside of the facility.
 - c) The installation of on-site electric hook-ups to eliminate idling of main and auxiliary engines during loading and unloading of cargo and when trucks are not in use and required where transport refrigeration units (TRUs) are proposed to be used.
 3. Require Transportation Demand Management measures for industrial uses with over one hundred employees to reduce work-related vehicle trips.
 4. Use of electric-powered hand tools, forklifts, aerial lifts, materials lifts, hoists, pressure washers, plate compactors, and air compressors, when feasible.
 5. For buildings with 50 or more dock high doors, site plans are required to identify a planned location for future electric truck charging stations and install conduit to that location. A ratio of one charging station shall be required for every 50 dock high doors.
 6. The following environmentally responsible construction practices are required:
 - a) Use of most readily available technology (CARB Tier 3, Tier 4 Interim, and Tier 4 Compliant equipment).
 - b) Designate an area of the construction site where electric-powered construction vehicles and equipment can charge if the utility provider can feasibly provide temporary power for this purpose.
 - c) The maximum daily disturbance area (actively graded area) shall be determined by the Air Quality Study.

- d) Streets adjacent to the development site shall be swept on a regular basis as determined by the City inspector to remove any construction related debris and dirt.
- e) Construction equipment maintenance records and data sheets, which includes equipment design specifications and equipment emission control tier classifications, as well as any other records necessary to verify compliance with items listed above, shall be kept on-site and furnished to the City upon request.

b) Noise and Traffic

Noise impacts associated with industrial uses can be the most impactful to sensitive receptors and include various sources, such as unloading, truck movement, rooftop mechanical equipment, and PA systems.

1. Use of perimeter walls, buildings, and/or enhanced landscaping to reduce noise impacts as appropriate.
2. If a public address (PA) system is being used in conjunction with an industrial use, the PA system shall be oriented away from sensitive receptors and the volume set at a level not readily audible past the property line.
3. Prepare a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations to minimize impacts to sensitive receptors.
4. See B5 through B8 above in Site Design, Access and Layout section.

