Michael Baker
INTERNATIONAL

TRAFFIC IMPACT ANALYSIS

Pilgrim Rock Quarry

Prepared for: Amador County
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Jackson, CA 95642

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March 13, 2020

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1 EXECUTIVE SUMMARY

This study analyzes the forecast traffic conditions associated with the proposed Pilgrim Rock Quarry project located in Amador County. The proposed project is a new mining operation on approximately 135 acres in an area south of State Route (SR) 16 (Jackson Road) and east of Ione Road near Mariah Heights Road. Mining operations would include blasting, quarrying and crushing bedrock for construction aggregate resources. The anticipated life of the operation is 40 years, depending on market conditions. Aggregate would be transported from the processing area along a paved haul road within the project site to Highway 16.

The proposed project is forecast to generate approximately 522 vehicle trips per day, with approximately 66 AM peak hour trips and approximately 66 PM peak hour trips. Approximately 95% of project trips are anticipated to travel westbound into Sacramento County.

Existing Plus Project Conditions - Summary of Impacts and Mitigation

The results of the Existing Plus Project conditions show there are no significant impacts at study intersections with the addition of project-related traffic volumes. Therefore, no mitigation is required under Existing Plus Project conditions at any of the study intersections.

The results of the roadway segment analysis based on daily traffic volumes along Jackson Road (SR-16) show that all study segments are forecast to operate at acceptable levels of service under Existing Plus Project conditions.

Study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. SR-16, from Kiefer Boulevard to Murieta South Parkway is shown to operate at LOS E in the AM and PM peak hour. However, based on the thresholds of significance for roadway segments, the addition of project-related trips would not result in a significant traffic impact at any of the roadway segments. Therefore, no mitigation measures are required on study roadway segments under Existing Plus Project conditions.

Existing Plus Approved Projects Plus Project Conditions - Summary of Impacts and Mitigation

The results of the Existing Plus Approved Projects Plus Project conditions show there are no significant impacts at study intersections with the addition of project-related traffic volumes. The intersection of SR-16 at SR-124 is reported to operate at deficient levels of service (LOS E), however, the change in delay does not exceed the significance threshold (5 seconds). Therefore, the intersection is not considered significant and no mitigation is required under Existing Plus Approved Projects Plus Project conditions.

The results of the roadway segment analysis based on daily traffic volumes along Jackson Road (SR-16) show that all study segments are forecast to operate at acceptable levels of service under Existing Plus Project conditions except for SR-16 from Kiefer Blvd to Murieta South Parkway which operates at LOS E. The change in volume to capacity (v/c) is less than the significance threshold (0.05) and therefore considered less than significant. Therefore, no mitigation is required.

Similar to the Existing and Existing Plus Project conditions, study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. SR-16 from Kiefer Blvd to Murieta South Parkway is shown to operate at LOS E in the AM and PM peak hour. However, based on the thresholds of significance for the peak hour analysis, the addition of project-related trips would not result in a significant traffic impact at any of the roadway segments. Therefore, no mitigation measures are required on study roadway segments under Existing Plus Approved Projects Plus Project conditions.

Existing Plus Approved and Pending Projects Plus Project Conditions - Summary of Impacts and Mitigation

The results of the Existing Plus Approved and Pending Projects Plus Project conditions show there are two study intersections that are forecast to operate at deficient levels of service (LOS F) which include SR-16/Kiefer Blvd and SR-16/SR-124. The change in delay at both of these intersections does not exceed the significance threshold (5 seconds). Therefore, no mitigation is required under Existing Plus Approved and Pending Projects Plus Project conditions at any of the study intersections.

The results of the roadway segment analysis based on daily traffic volumes along Jackson Road (SR-16) show that all study segments are forecast to operate at acceptable levels of service under Existing Plus Project conditions except from Kiefer Blvd to Murieta South Parkway which operates at LOS F. The change in v/c between Existing Plus Approved and Pending Projects Without Project conditions and Existing Plus Approved and Pending Projects Plus Project conditions is 0.025 which is less than the significance threshold (0.05). Therefore, the roadway segment is considered less than significant, and no mitigation is required.

Study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. SR-16 from Kiefer Blvd to Murieta South Parkway is shown to operate at LOS E in the AM and PM peak hour. However, based on the thresholds of significance for the peak hour analysis, the addition of project-related trips would not result in a significant traffic impact at any of the roadway segments. Therefore, no mitigation measures are required on study roadway segments under Existing Plus Approved and Pending Projects Plus Project conditions.

Vehicle Miles Traveled (VMT)

Vehicle miles traveled (VMT) is the measurement of miles traveled by vehicles within a specific region or for vehicle trips generated by a specific project. Senate Bill 743 (SB 743) signed into law September 2013

shifted the measure of effectiveness for determining transportation impacts from LOS and vehicular delay to VMT. VTM analyses are required for use in all CEQA documents as of July 1, 2020. At the time this report was prepared, Amador County has not adopted VMT thresholds or guidelines. It is anticipated that Amador County will release their own VMT thresholds and VMT maps in advance of the July 2020 deadline. The estimated trip length per truck load is approximately 28 miles (one-way).

With 500 truck trips and 22 employee trips for a total of 522 project trips, the estimated VMT for the project is approximately 14,616 VMT (522 trips x 28 miles per trip).

Signal Warrant Summary

A Peak Hour Signal Warrant #3 per the California Manual on Uniform Traffic Control Devices (CA MUTCD) was evaluated at the SR-16 / Project Access intersection. Based on this analysis, a signal warrant was not satisfied under the Existing Plus Approved and Pending Projects Plus Project condition. Therefore, the installation of a traffic signal at the project access is not recommended. Signal warrant worksheets are contained in **Appendix A**.

Queuing Analysis

A queuing analysis was conducted at each study intersection for each scenario to evaluate forecast queues along SR-16. With the addition of project-related traffic along SR-16, the analysis shows there are a few locations that exceed the available storage capacity at turn lanes. However, the change in queue length is less than 25 feet (approximately 1 vehicle) compared to the "Without" project conditions. Therefore, queuing related to project traffic is considered minimal.

2 INTRODUCTION

This study analyzes the forecast traffic conditions associated with the proposed Pilgrim Rock Quarry project located in Amador County. The proposed project would be a new mining operation on approximately 135 acres in an area south of SR-16 and east of Ione Road near Mariah Heights Road. Mining operations would include blasting, quarrying and crushing bedrock for construction aggregate resources. The anticipated life of the operation is 40 years, depending on market conditions. Aggregate would be transported from the processing area along a paved haul road within the project site to SR-16.

Exhibit 1 shows the regional location of the project site.

The project proposes to construct a new driveway to access SR-16 from the project site. The engineering consultant is coordinating directly with Caltrans staff regarding on site access design at SR-16. A westbound left-turn lane and acceleration/deceleration lanes on SR-16 would also be constructed by the project in accordance with Caltrans standards. **Exhibit 2** shows the proposed site plan.

2.1 STUDY AREA

The study evaluates the following seven (7) study intersections in the vicinity of the project site as shown in **Exhibit 3**:

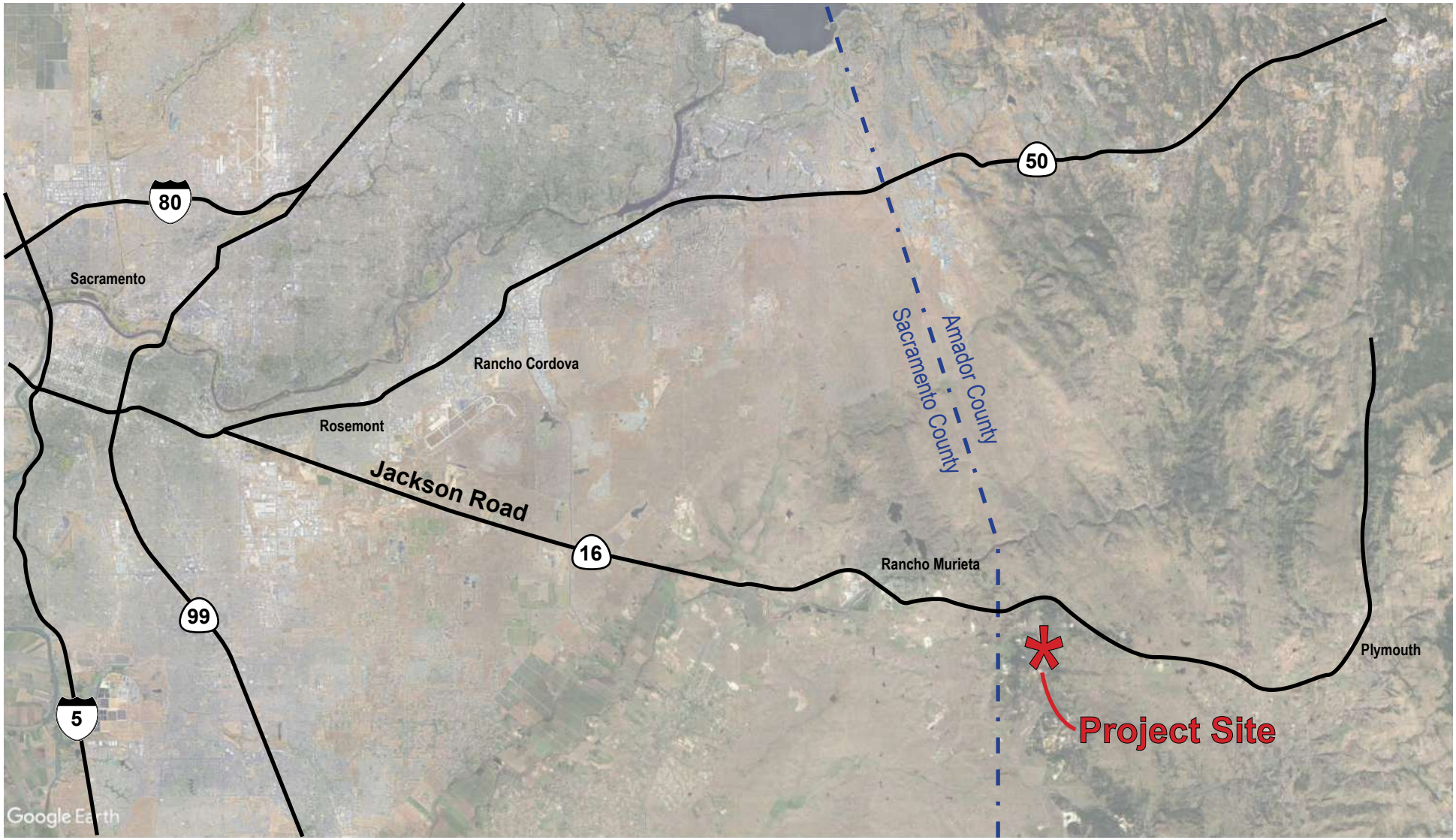
1. SR-16 / Kiefer Boulevard — Signalized
2. SR-16 / Murieta Parkway — Signalized
3. SR-16 / Murieta South Parkway — Signalized
4. SR-16 / Ione Road — Side Street Stop Control
5. SR-16 / Project Access Road — Side Street Stop Control
6. SR-16 / SR-124 — Side Street Stop Control
7. SR-16 / SR-49 — Signalized

The study evaluates the following three (3) study roadway segments:

1. SR-16 from Kiefer Boulevard to Murieta South Parkway
2. SR-16 from Murieta South Parkway to Mariah Heights Road
3. SR-16 from Mariah Heights Road to Long Gate Road

These study locations will be analyzed in the following study scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Existing Plus Approved Projects Conditions
- Existing Plus Approved Projects Plus Project Conditions
- Existing Plus Approved and Pending Projects Conditions
- Existing Plus Approved and Pending Projects Plus Project Conditions



Not to Scale

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Regional Location Map

Exhibit 1

June 2018

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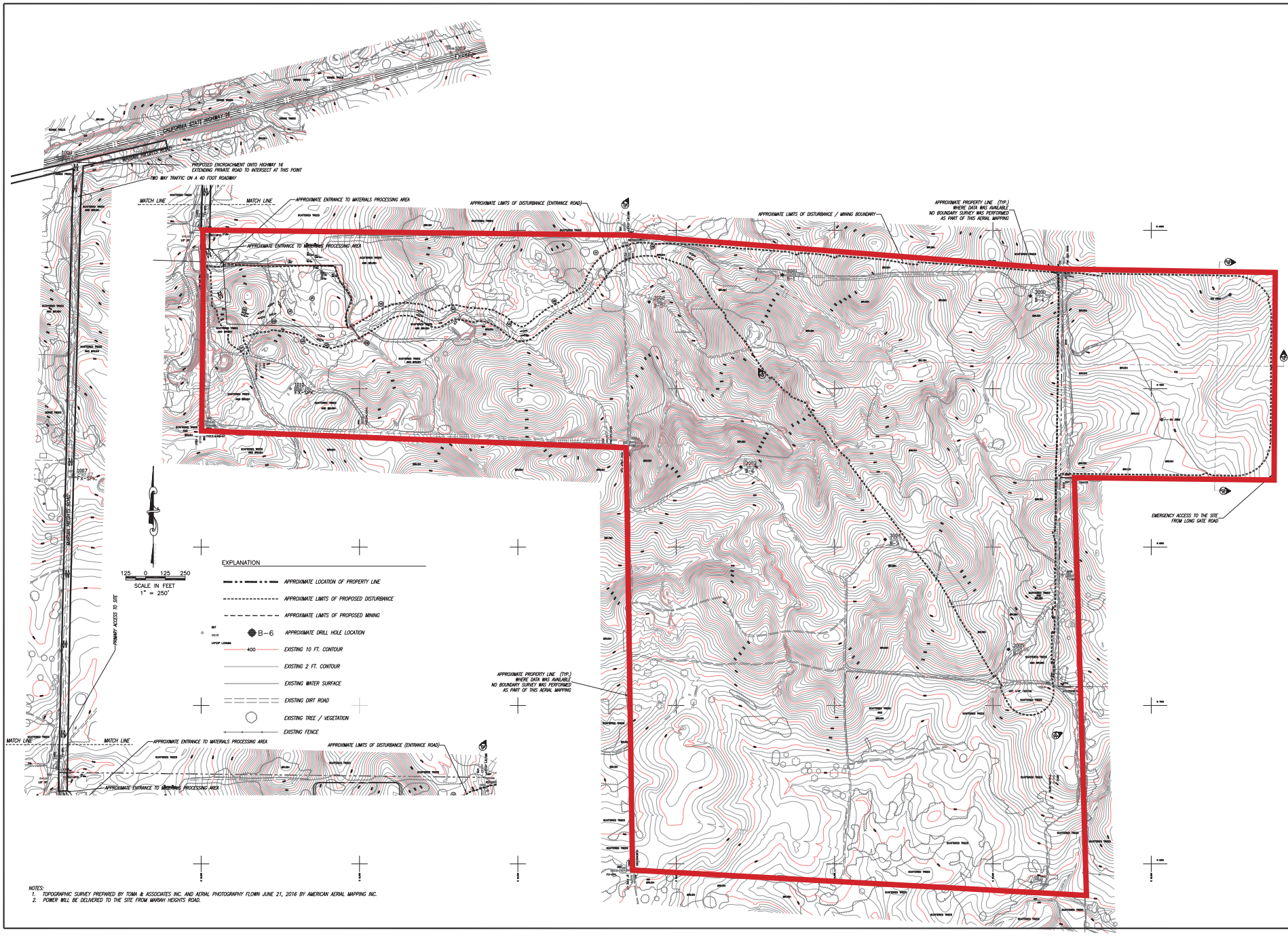

NOTES:
1. TOPOGRAPHIC SURVEY PREPARED BY TOMA & ASSOCIATES INC. AND AERIAL PHOTOGRAPHY FLOWN JUNE 21, 2016 BY AMERICAN AERIAL MAPPING INC.
2. POWER WILL BE DELIVERED TO THE SITE FROM MARIAH HEIGHTS ROAD.

PREPARED BY: K. WILLIAMS, P.G.
REVIEWED BY: D. SIEBERDUST, C.E.G, C.HG

PILGRIM ROCK QUARRY
MINE RECLAMATION PLAN
EXISTING SITE TOPOGRAPHY
AMADOR COUNTY, CALIFORNIA

DATE: FEBRUARY 2018
SCALE: 1" = 250'
FIGURE 5
JOB NO. E15056.001

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1234 Glenhaven Court
El Dorado Hills, CA 95762
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Project Site Plan

June 2018
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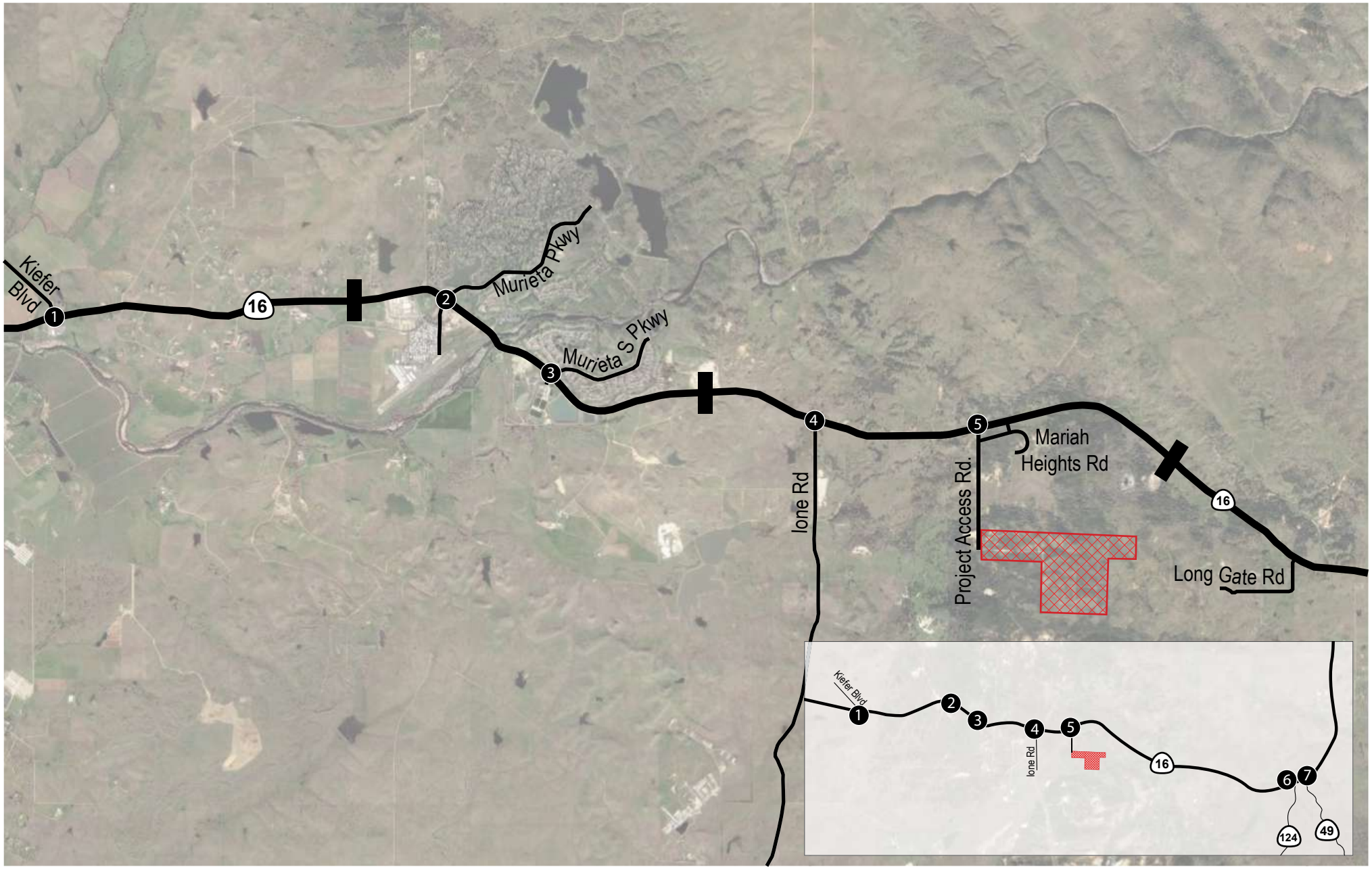
Exhibit 2



Not to Scale

Legend:

= Project Site

= Study Intersection

= Study Roadway Segment

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July 2019

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Project Study Area

Exhibit 3

2.2 ANALYSIS METHODOLOGY

This study has been prepared in accordance with the *Amador County Traffic Impact Study Guidelines* (July 2006), the *County of Sacramento Traffic Impact Analysis Guidelines* (July 2004), as well as *Caltrans Guide for the Preparation of Traffic Impact Studies* (December 2002). The following study scenarios were analyzed in this study:

- **Existing Conditions** – Analysis of existing traffic count volumes, intersection geometry and existing roadway network.

- **Existing Plus Project Conditions** – Analysis of existing traffic volumes overlaid with traffic generated by the proposed project. The existing intersection geometry and roadway network were used in this analysis.

- **Existing Plus Approved Projects Without Project Conditions** – Analysis of existing traffic volumes overlaid with traffic from approved development projects without the proposed project. The existing intersection geometry and roadway network were used in this analysis.

- **Existing Plus Approved Projects Plus Project Conditions** – Analysis of existing traffic volumes overlaid with traffic from approved development projects and traffic associated with the proposed project. The existing intersection geometry and roadway network were used in this analysis.

- **Existing Plus Approved and Pending Projects Without Project Conditions** – Analysis of existing traffic volumes overlaid with traffic from approved and pending development projects without the proposed project. The existing intersection geometry and roadway network were used in this analysis.

- **Existing Plus Approved and Pending Projects Plus Project Conditions** – Analysis of existing traffic volumes overlaid with traffic from approved and pending development projects and traffic associated with the proposed project. The existing intersection geometry and roadway network were used in this analysis.

2.2.1 Intersection Analysis Methodology

Level of Service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Highway Capacity Manual 6th Edition (HCM 6) analysis methodology is utilized to determine the operation LOS of the study intersections. The *HCM* 6 analysis methodology describes the operation of an intersection using a range of level of service from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding stopped delay experienced per vehicle for study intersections as shown in **Table 1**.

TABLE 1, LEVEL OF SERVICE AND DELAY RANGE – INTERSECTIONS

LOS	Delay (seconds/vehicle)	
	Signalized Intersections	Un-signalized Intersections
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: HCM 6

Level of service is based on the average stopped delay per vehicle for all movements of signalized intersections and all-way stop-controlled intersections; for two-way and one-way stop-controlled intersections, LOS is based on the worst stop-controlled approach.

A computer software program called *Synchro* v. 10.0 is a direct application of HCM 6 methodology and was used to analyze the study intersections.

2.2.2 Roadway Segment Analysis Methodology

Roadway segments are evaluated by comparing average daily traffic (ADT) volumes to roadway capacity. The roadway classifications are based on the roadway type and number of lanes on the roadway. **Table 2** presents the daily traffic volumes LOS thresholds specified in the *County of Sacramento Traffic Impact Analysis Guidelines* dated July 2004. Amador County does not have roadway classifications and the majority of roadway segments analyzed are within the County of Sacramento.

TABLE 2, LEVEL OF SERVICE CRITERIA FOR ROADWAY SEGMENTS

Facility Type	# of Lanes	Maximum Volume for Given Service Level				
		LOS A	LOS B	LOS C	LOS D	LOS E
Residential	2	600	1,200	2,000	3,000	4,500
Residential collector with frontage	2	1,600	3,200	4,800	6,400	8,000
Residential collector without frontage	2	6,000	7,000	8,000	9,000	10,000
Arterial, low access control	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	3,600	40,500	45,000
Arterial, moderate access control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial, high access control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	42,000	48,000	54,000	60,000
Rural, 2-lane highway	2	2,400	4,800	7,900	13,500	22,900
Rural, 2-lane road, 24'-36' of pavement, paved shoulders	2	2,200	4,300	7,100	12,200	20,000
Rural, 2-lane road, 24'-36' of pavement, no shoulders	2	1,800	3,600	5,900	10,100	17,000

Facility Type	Stops/Mile	Driveway	Speed
Arterial, low access control	4+	Frequent	25-35 MPH
Arterial, moderate access control	2 to 4	Limited	35-45 MPH
Arterial, high access control	1 to 2	None	45-55 MPH

Roadway segments along SR-16 within the study area were also analyzed using the Highway Capacity Software Version 7.0 which is based on the HCM 6 methodology for analyzing two-lane highways. SR-16 is a two-lane highway and functionally classified as a Class I Highway. In accordance with HCM 6 methodology, a capacity of 1,700 vehicles per hour per lane (VPHPL) was utilized in the analysis. Average travel speed and percent time-spent-following are used to define LOS. **Table 3** shows the average travel speed and percent time-spent-following and corresponding levels of service for a two-lane highway.

TABLE 3, TWO-LANE HIGHWAY LOS

LOS	Class I Highway Average Travel Speed (mph)	Class I Highway Percent Time-Spent-Following (%)
A	>55	≤ 40
B	> 50 - 55	> 40 - 55
C	> 45 - 50	> 55 - 70
D	> 40 - 45	> 70 - 85
E	≤ 40	>85

Source: HCM 6

2.3 THRESHOLDS OF SIGNIFICANCE

2.3.1 Amador County

The proposed project is located in Amador County. The Amador County General Plan Circulation Element has established a level of service standard of LOS "C" or better as acceptable operating conditions for intersections and roadway segments. Intersections 5 through 7 are within Amador County and therefore, the level of service standards apply to these intersections and roadway segments east of the project access.

In accordance with the *Amador County Traffic Impact Study Guidelines*, the project is considered to have a significant impact and requires mitigation if the addition of project related traffic causes any of the following conditions to occur for each facility type:

- **Signalized Intersection** –
  - Cause an intersection that is operating at an acceptable level of service (LOS "C" or better) to deteriorate to an unacceptable level of service (LOS "D" or worse); **OR**
  - Cause an average delay to increase by more than 5.0 seconds with the addition of project-related traffic at a signalized intersection that is operating at unacceptable level of service (LOS "D" or worse) without the project.
- **Unsignalized Intersection** –
  - Cause a movement or approach that is operating at an acceptable level of service (LOS "C" or better) to deteriorate to an unacceptable level of service (LOS "D" or worse), and cause the intersection to meet a traffic signal; **OR**
  - At an intersection that already meets a signal warrant, cause an increase in delay with the addition of project related traffic by more than 5.0 seconds for a movement or approach that is already operating at an unacceptable level of service (LOS "D" or worse) without the project.

- **Roadway Segments** –
  - Cause a roadway that is operating at an acceptable level of service (LOS "C" or better) to deteriorate to an unacceptable level of service (LOS "D" or worse); **OR**
  - Cause the V/C ratio (on a daily basis) to increase by more than 0.05 **OR** the change in percent time-spent-following is greater than 5% with the addition of project related traffic on a roadway that is operating at an unacceptable level of service (LOS "D" or worse) without the project.

2.3.2 Sacramento County

Most of the truck trips from the project would travel westbound on SR-16 into Sacramento County (see Section 4.2, Project Trip Distribution, below). The Sacramento County General Plan Circulation Element has established a level of service standard of LOS "D" or better as acceptable operating conditions on rural roadways and LOS "E" or better for urban roadways for intersections and roadway segments. The project study area falls outside of the Urban Service Boundary and is therefore considered rural. Study intersections 1 through 4 are within Sacramento County and therefore, the level of service standards apply to these intersections and roadway segments west of Ione Road.

In accordance with the *Sacramento County Traffic Impact Analysis Guidelines*, the project is considered to have a significant impact and requires mitigation if the addition of project related traffic causes any of the following conditions to occur for each facility type:

- **Roadways/Signalized Intersection** –
  - Cause a roadway or signalized intersection operating at an acceptable level of service (LOS "D" or better) to deteriorate to an unacceptable level of service (LOS "E" or worse); **OR**
  - Increase the V/C ratio by more than 0.05 **OR** the change in percent time-spent-following is greater than 5% with the addition of project related traffic at a roadway or signalized intersection that is operating at an unacceptable level of service (LOS "E" or worse) without the project.
- **Unsignalized Intersection** –
  - Cause a roadway that is operating at an acceptable level of service (LOS "D" or better) to deteriorate to an unacceptable level of service (LOS "E" or worse); **OR**
  - Cause the V/C ratio (on a peak hour or daily basis) to increase by more than 0.05 with the addition of project related traffic on a roadway that is operating at an unacceptable level of service (LOS "E" or worse) without the project.

2.3.3 Caltrans

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State Highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing facility is operating at less than the appropriate target LOS, the existing LOS should be maintained. Caltrans does not provide any significance criteria. For purposes of this analysis, the thresholds of significance for this project are based on the local jurisdiction. For example, LOS D or better is considered acceptable operating conditions for study intersections and roadways segments within Sacramento County and LOS C or better is considered acceptable operation conditions within Amador County.

3 EXISTING CONDITIONS

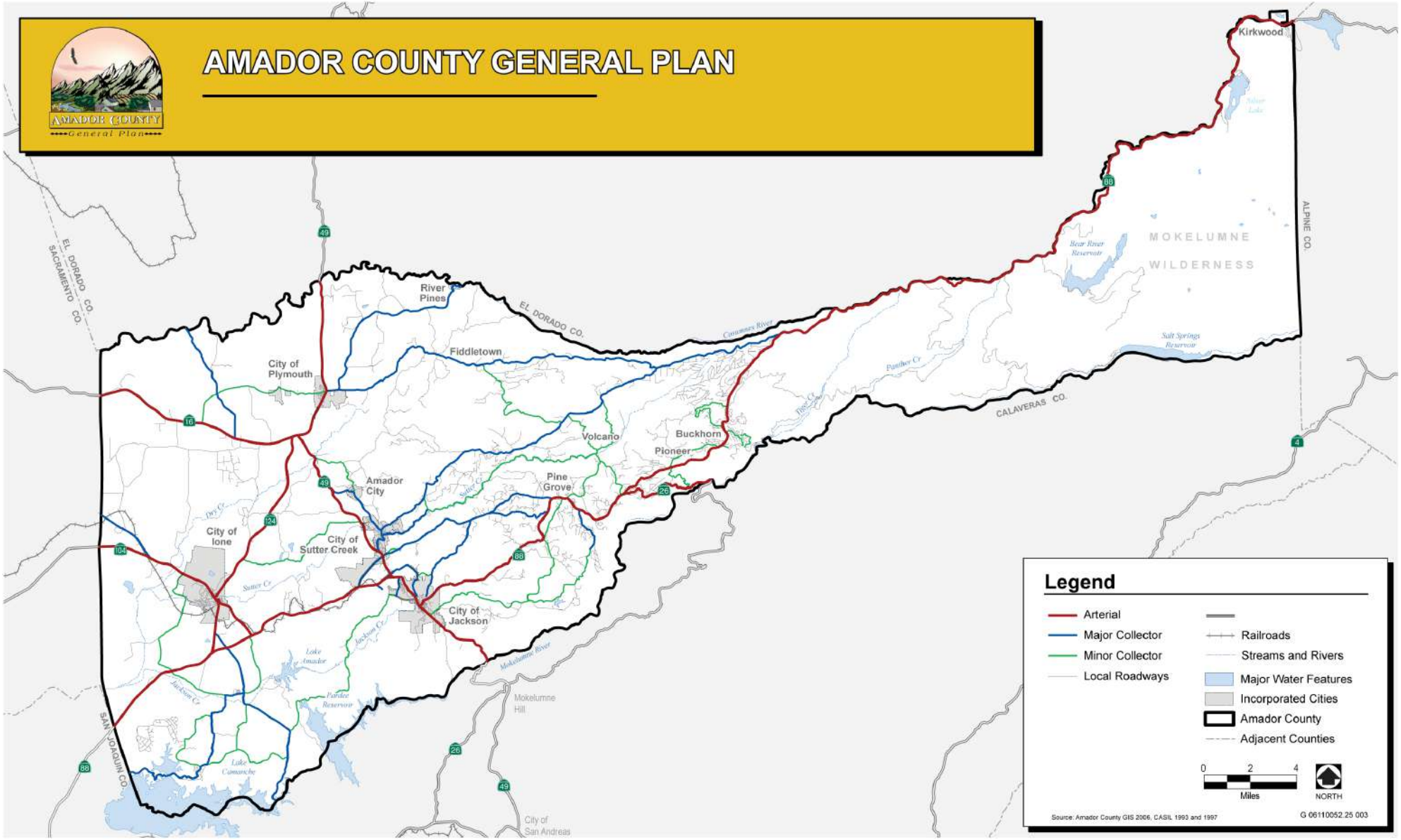
3.1 SURROUNDING ROADWAY NETWORK

The characteristics of the roadway system in the vicinity of the project site are described below:

Jackson Road (SR-16) is a two-lane Arterial oriented in the east-west direction and serves as a regional connection between Howe Avenue/Power Inn Road in Sacramento and SR-49 near the City of Plymouth in Amador County. There are auxiliary turn lanes at major intersections. From Kiefer Boulevard to the Sacramento County/Amador County border (approximately 1 mile east of Ione Rd), Jackson Road (SR-16) is functionally classified as two-lane Arterial according to the Sacramento County General Plan. From the Sacramento County/Amador County border, Jackson Road (SR-16) is classified as a two-lane Arterial per the Amador County General Plan. Bicycle and pedestrian facilities are not provided along SR-16 within the study area. The posted speed limit is 55 mph within the study area.

3.2 EXISTING AMADOR COUNTY CIRCULATION PLAN

Exhibit 4 shows the current Amador County General Plan Circulation Element Roadway System. **Exhibit 5** shows the current Sacramento County General Plan Circulation Element Roadway System. These show the classification and configuration of arterial highways planned to serve the ultimate development defined by the land use element of the respective General Plans.



Source: Amador County General Plan
Circulation and Mobility, Fig. CM-1

Amador County
General Plan Circulation Element

Exhibit 4

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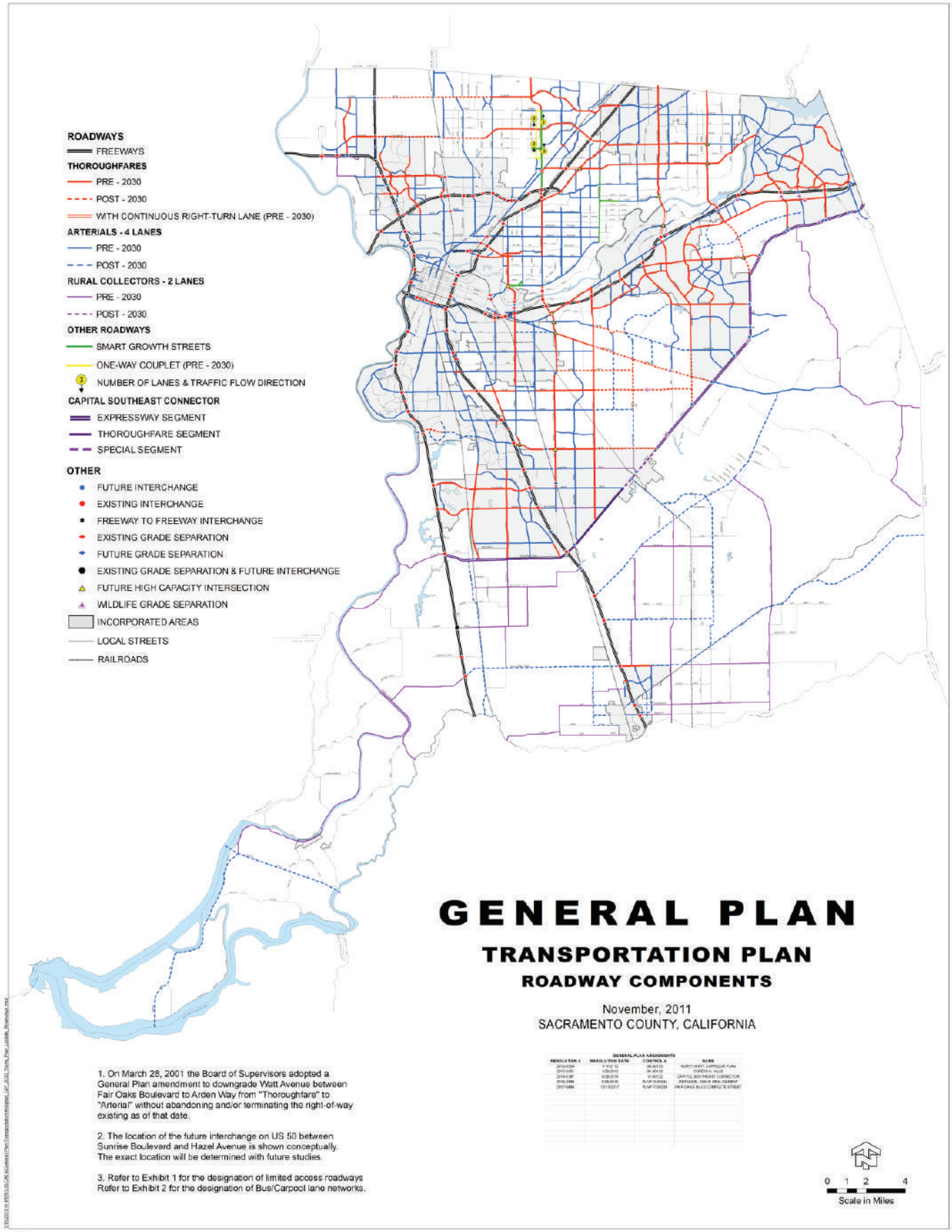

SACRAMENTO COUNTY

Source:
County of Sacramento General Plan
Circulation Element, Fig. 12

Sacramento County
General Plan Circulation Element

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Exhibit 5

3.3 EXISTING CONDITIONS TRAFFIC VOLUMES

To determine the existing operations of the study intersections, AM peak hour and PM peak hour intersection movement counts were collected on Thursday, May 17, 2018 and Thursday, May 30, 2019. AM peak period intersections counts were collected from 7:00 AM to 9:00 AM and PM peak period counts were collected from 4:00 PM to 6:00 PM. The counts used in this analysis were taken from the highest hour within the peak period counted. The traffic counts collected at the study intersections include vehicle classifications such as passenger cars, 2-axle trucks, 3-axle trucks, and 4+ axle trucks. Detailed traffic count data is contained in **Appendix A**.

For purposes of this analysis, the percentage of truck traffic along SR-16 was calculated using the existing classification counts collected and then input into the intersection analysis (SimTraffic) and roadway segment analysis (HCS 7) to account for truck traffic in the area.

Exhibit 6 shows the Existing conditions study intersection lane geometry. **Exhibit 7** shows the AM and PM peak hour volumes at the study intersections.

3.4 EXISTING CONDITIONS PEAK HOUR STUDY INTERSECTION LOS

Table 4 summarizes existing conditions AM and PM peak hour level of service for all study intersections. Detailed analysis sheets are contained in **Appendix B**.

TABLE 4, EXISTING CONDITIONS AM/PM PEAK HOUR INTERSECTION LOS

Study Intersection	Traffic Control	Existing Conditions	
		AM Delay[1] - LOS	PM Delay[1] - LOS
1 - Jackson Rd (SR-16) / Kiefer Blvd	Signal	29.2 - C	22.5 - C
2 - Jackson Rd (SR-16) / Murieta Parkway	Signal	35.7 - D	39.7 - D
3 - Jackson Rd (SR-16) / Murieta S Parkway	Signal	18.6 - B	19.6 - B
4 - Jackson Rd (SR-16) / Ione Rd	OWSC	13.0 - B	14.1 - B
5 - Jackson Rd (SR-16) / Project Access Rd	OWSC	DNE Without Project	
6 - Jackson Rd (SR-16) / E. Plymouth Hwy (SR-124)	OWSC	**25.5 - D**	**55.8 - F**
7 - Jackson Rd (SR-16) / Golden Chain Hwy (SR-49)	Signal	12.3 - B	17.2 - B

Note: Deficient intersection operation indicated in **bold**.
[1] Average seconds of delay per vehicle. DNE = Does Not Exist.
LOS = Level of Service.
OWSC = One-Way Stop Control (worst approach delay and LOS reported).

As shown in **Table 4**, all study intersections are currently operating at an acceptable level of service except for the following intersection:

- Jackson Road (SR-16) / E. Plymouth Hwy (SR-124) (LOS D in AM and LOS F in PM peak hour)

It may be noted that the intersection of Jackson Road (SR-16)/Murieta Parkway is located within Sacramento County and currently operates at LOS D which is considered acceptable LOS standards.

3.5 EXISTING CONDITIONS ROADWAY SEGMENT LOS

A roadway segment level of service analysis was conducted using the methodologies discussed in Section 2.2.2 of this report.

Table 5 presents the results of the existing conditions roadway segment level of service analysis. As shown, all of the roadway segments currently operate at acceptable levels of service based on daily capacity thresholds.

TABLE 5, EXISTING CONDITIONS ROADWAY SEGMENT LOS - DAILY

SR-16 Roadway Segment	Classification (No. Lanes)	LOS E Capacity	Existing Conditions		
			ADT	V/C	LOS
Kiefer Blvd to Murieta South Parkway	Arterial-High Access (2)	20,000	15,592	0.78	C
Murieta South Parkway to Mariah Heights Rd	Arterial-High Access (2)	20,000	9,917	0.50	A
Mariah Heights Road to Long Gate Rd	Arterial-High Access (2)	20,000	6,566	0.33	A

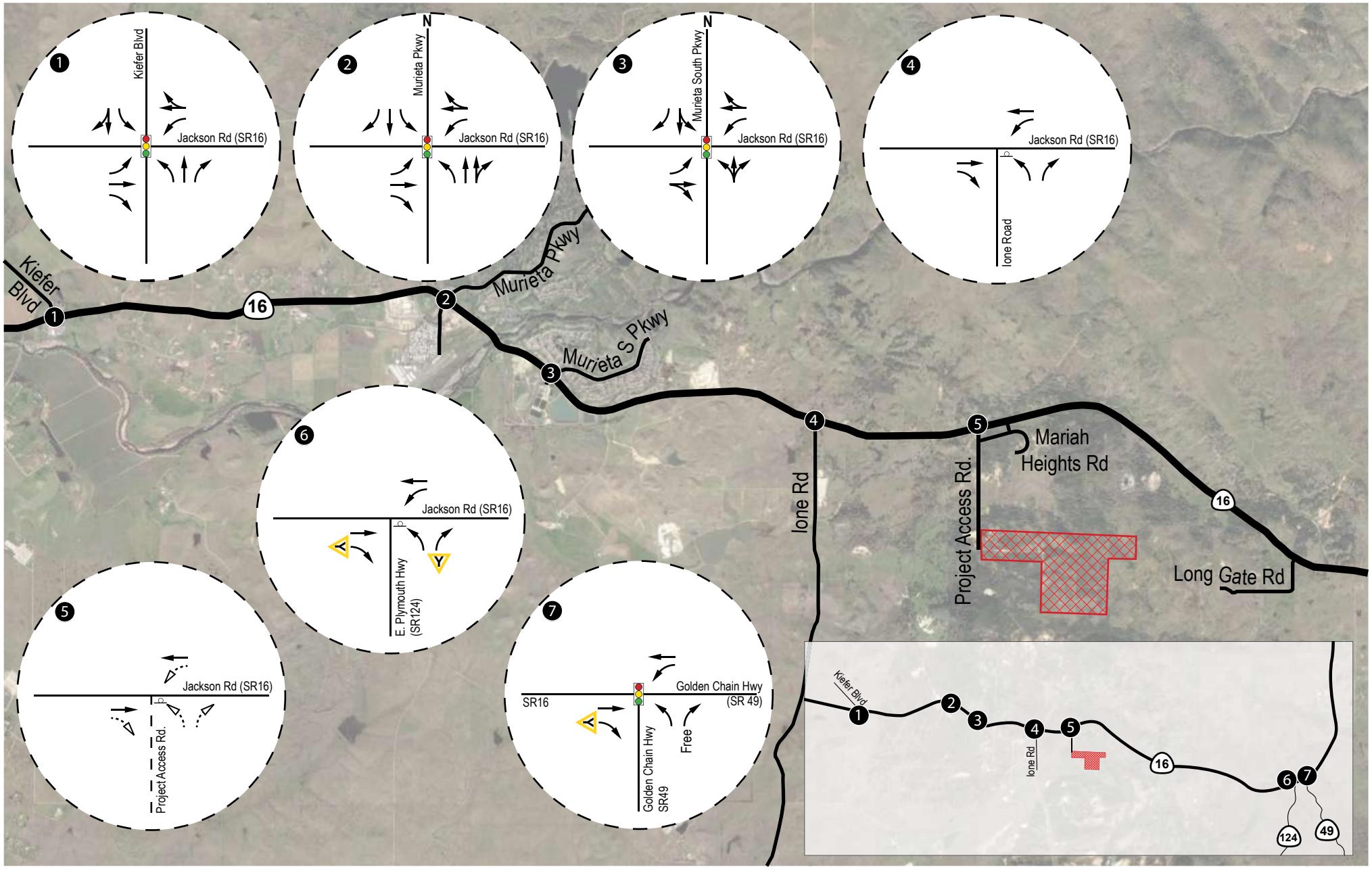
Note: Deficient roadway segment operations shown in **bold.**
ADT= Average Daily Traffic
LOS= Level of Service
V/C= Volume to Capacity Ratio

The study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. **Table 6** shows the peak hour segment analysis by direction along Jackson Road (SR-16). As shown, all study roadway segments are currently operating at acceptable levels of service during the AM and PM peak hours except for SR-16 from Kiefer Blvd to Murieta South Parkway which operates at LOS E.

TABLE 6, EXISTING CONDITIONS ROADWAY SEGMENT LOS – PEAK HOUR

Jackson Road (SR-16)	No. of Lanes by Direction	Roadway Segment Capacity (VPHPL)	Existing Conditions							
			Peak Hour Volume		ATS (mph)		PTSF (%)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
Kiefer Blvd to Murieta South Parkway	EB: 1	1,700	608	964	59.1	58.5	61.6	73.1	C	**E**
	WB: 1	1,700	1,243	586	58.0	59.3	79.0	60.6	**E**	C
Murieta South Parkway to Mariah Heights Road	EB: 1	1,700	428	522	60.0	60.0	47.8	52.0	B	C
	WB: 1	1,700	460	348	60.2	60.4	48.5	42.3	B	B
Mariah Heights Road to Long Gate Road	EB: 1	1,700	209	373	59.8	60.4	29.3	41.8	A	B
	WB: 1	1,700	289	269	60.7	60.1	35.5	35.8	A	A

Note: Deficient roadway segment operations shown in **bold.**
VPHPL = Vehicles per hour per lane
LOS= Level of Service
ATS= Average Travel Speed (mph)
PTSF=Percent Time-Spent-Following (%)



Not to Scale

Michael Baker INTERNATIONAL

Legend:

- = Project Site
- # = Study Intersection
- N = Assumed North
- — — = Future Project Driveway
- = Proposed Lane Improvements
- = Signal Control
- = Stop Control
- Y = Yield Movement

Existing Lane Configurations

Exhibit 6

September 2019

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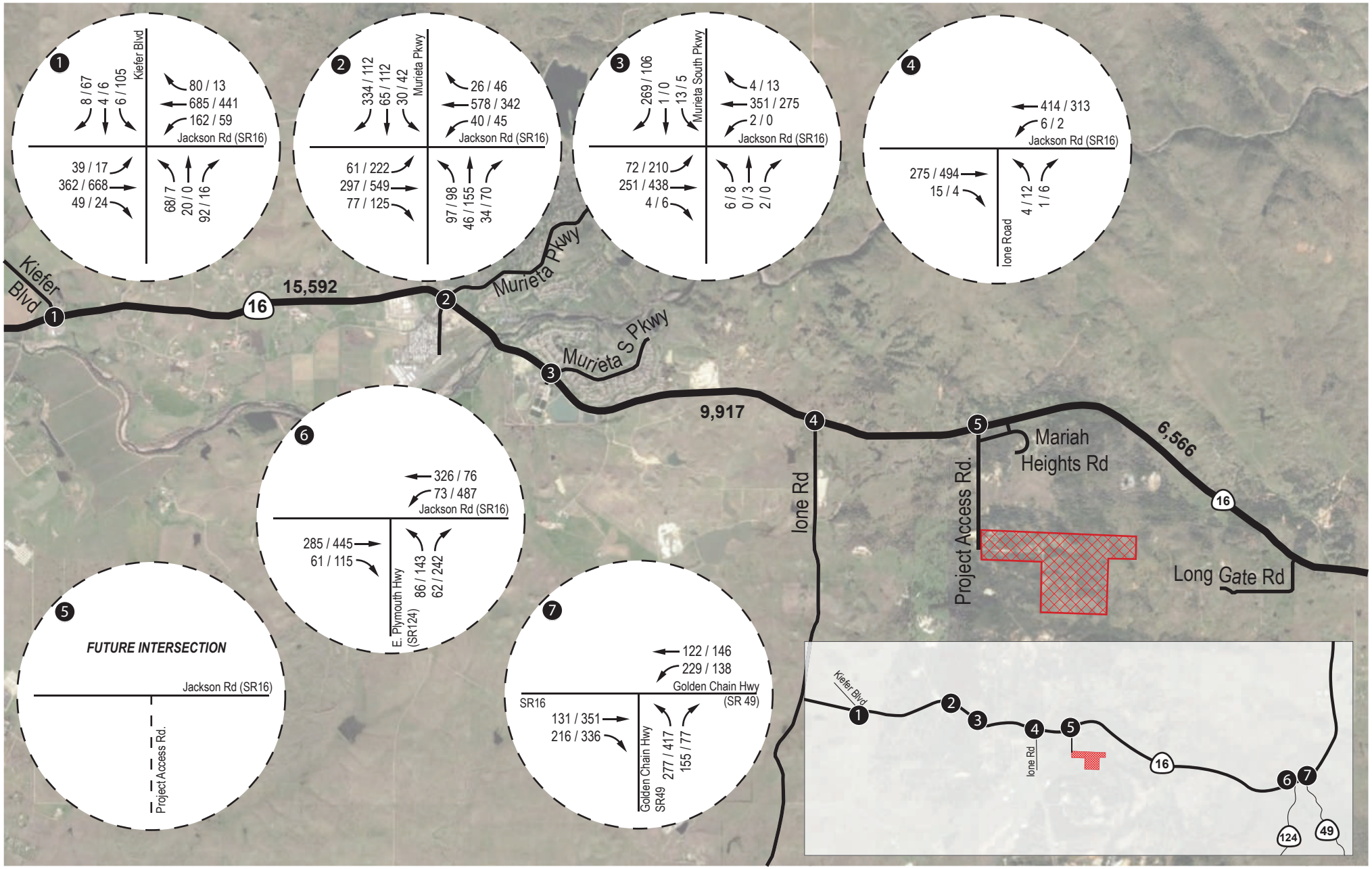

Not to Scale

Legend:

- = Project Site
- # = Study Intersection
- ## / ## = AM / PM Peak Hour Volumes
- #,### = Daily Traffic Volumes

Existing AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 7

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March 2020

H:\pdata\166371_Pilgrim Rock Quarry\Traffic\Exhibits

4 PROPOSED PROJECT

The project proposes to construct a 135-acre mining operation in an area south of SR-16 and east of Ione Road near Mariah Heights Road in Amador County. Mining operations would include blasting, quarrying and crushing bedrock for construction aggregate resources. The anticipated life of the operation is 40 years, depending on market conditions. Aggregate would be transported from the processing area along a paved haul road within the project site to SR-16 where material will be distributed to various construction sites throughout Amador County and Sacramento County.

4.1 PROJECT FORECAST TRIP GENERATION

In order to calculate vehicle trips forecast to be generated by the proposed project, trip generation rates were estimated using information on the maximum daily deliveries provided by the applicant. Trip rates for employees and trucks are presented in **Table 7**. As shown, employees and visitors are assumed to generate 2.2 trips (2.0 trips/employee and 0.2 trips for visitors) per day with one inbound trip in the AM peak hour and one outbound trip in the PM peak hour. This analysis assumes up to 250 truck-loads carrying crushed aggregate would leave the site each day and then 250 empty truck-loads would return to the mining site for another load. The total number of truck trips per day is not anticipated to exceed 500 (250 trucks inbound and 250 trucks outbound). Based on 9 hours of travel time per day per truck with a roundtrip delivery time of approximately one hour, the analysis assumes 28 (250 trucks/9 hours) trucks enter and exit the site each day. The daily trip rate for the 28 trucks is calculated to be 17.86 (500 trips /28 trucks) trips per day per truck.

Table 8 shows the vehicular trip generation forecast to be generated by the proposed project utilizing the trip generation rates shown in **Table 7**.

As shown in **Table 8**, the proposed project is forecast to generate 522 daily trips with 66 (38 inbound and 28 outbound) trips occurring during the AM peak hour and 66 (28 inbound and 38 outbound) trips occurring during the PM peak hour.

TABLE 7, TRIP GENERATION RATES

Units	Daily Trip Rate	AM Peak Hour Rate			PM Peak Hour Rate		
		Total	In : Out		Total	In : Out	
Employees [1]	2.2	1	100% : 0%		1	0% : 100%	
Trucks	17.86	2	50% : 50%		2	50% : 50%	

[1] Employee rate includes employee and visitors.

TABLE 8, PROPOSED PROJECT TRIP GENERATION IN VEHICLES

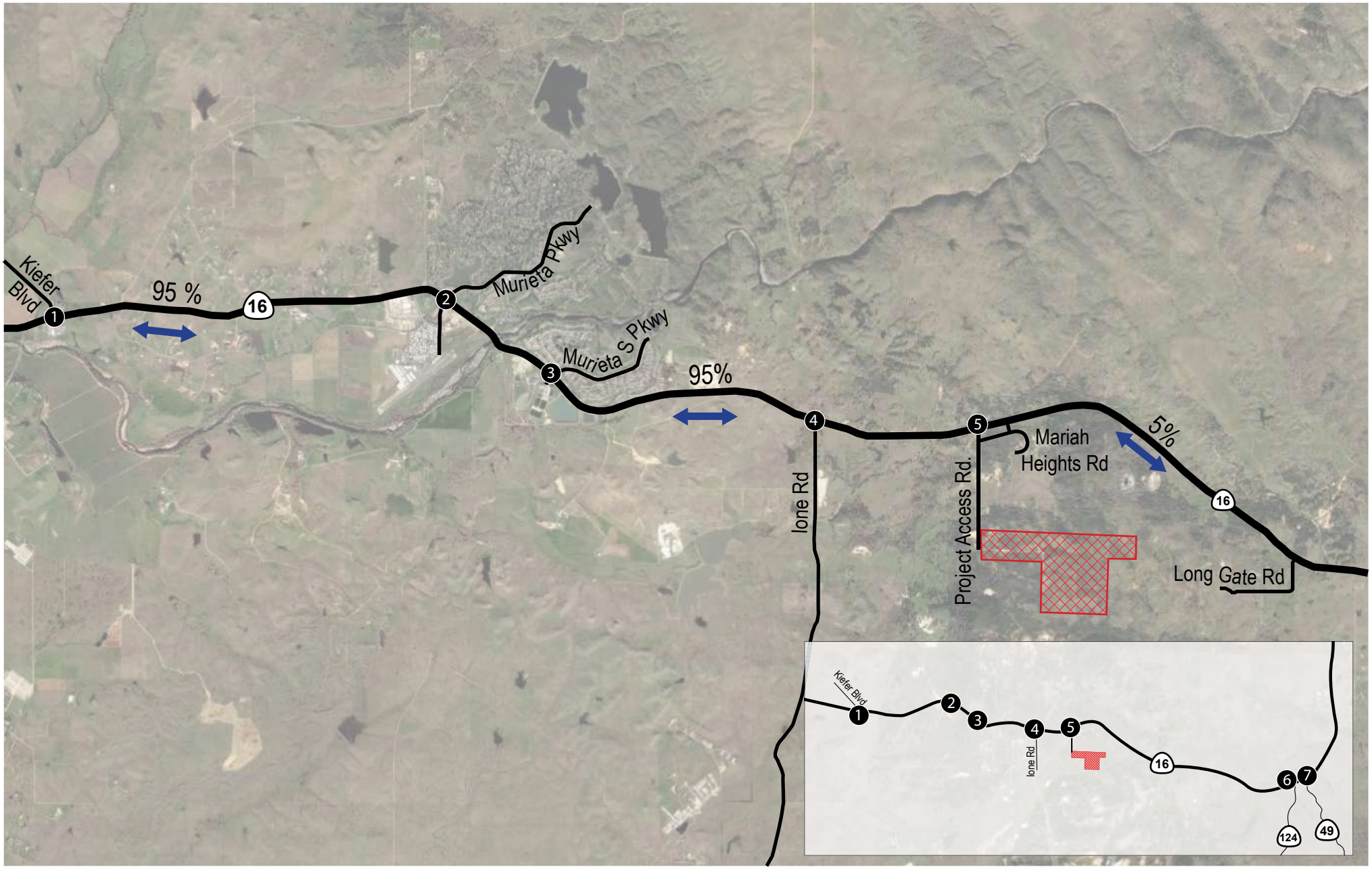
Intensity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
		Total	In	Out	Total	In	Out
10 Employees	22	10	10 :	0	10	0 :	10
28 Trucks [1]	500	56	28 :	28	56	28 :	28
Total Vehicles	**522**	**66**	**38 :**	**28**	**66**	**28 :**	**38**

[1] Assumes 250 deliveries per day with 1 hour per delivery per truck based on 9 hours of travel time per day.

4.2 TRIP DISTRIBTION AND TRIP ASSIGNMENT OF PROPOSED PROJECT

Exhibit 8 shows the project's forecast trip distribution of inbound and outbound traffic. As shown, 95% of trucks are expected to travel to/from the west on SR-16 towards Sacramento and only 5% are assumed to travel to/from the east. This distribution assumes the majority of material will be hauled to construction sites within Sacramento County.

Exhibit 9 shows the corresponding forecast assignment of AM and PM peak hour project-generated trips assuming the trip percent distribution shown for cars and trucks.



Not to Scale

Michael Baker INTERNATIONAL

Legend:

= Project Site

= Study Intersection

XX% = Project Distibution

July 2019

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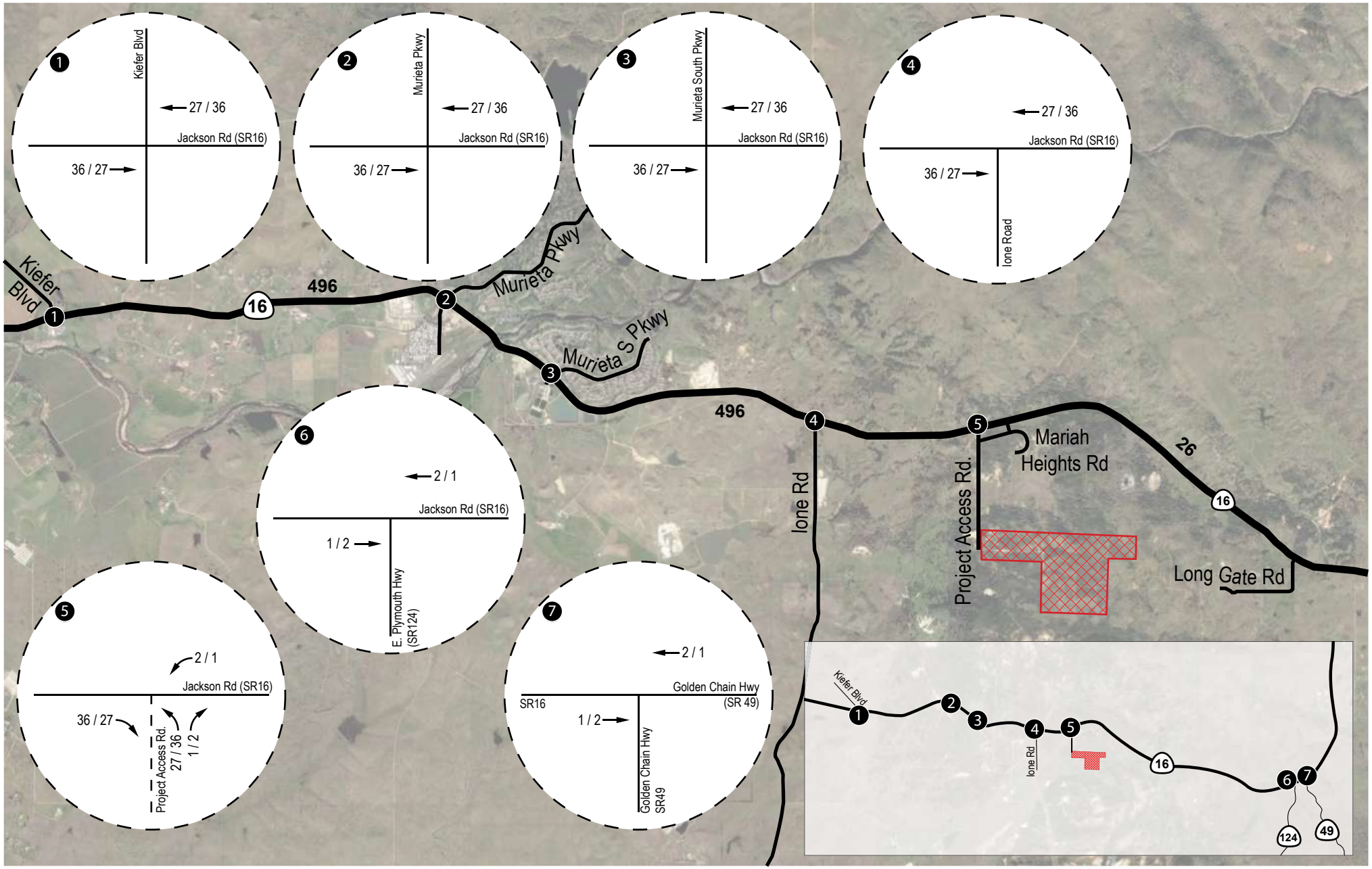
Project Distribution

Exhibit 8



Not to Scale

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Legend:

- = Project Site
- # = Study Intersection
- ## / ## = AM / PM Peak Hour Volumes
- #,### = Daily Traffic Volumes

Project Only AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 9

March 2020

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4.3 PROJECT ACCESS

Vehicular access to the project site will be provided via a new driveway on Jackson Road (SR-16) to be constructed by the proposed Pilgrim Rock Quarry project. **Exhibit 10** shows the location of the new driveway that connects to SR-16 and is approximately 850 feet west of Moriah Heights Road. The new driveway at SR-16 will be side-street stop controlled and has been analyzed in this report as an unsignalized intersection. Results of the analysis show the intersection operates at an acceptable level of service (C or better) in all study scenarios.

The existing Moriah Heights Road access will be abandoned after the new access to the Pilgrim Rock Quarry is constructed. The new access will serve both the Pilgrim Rock Quarry and existing traffic previously using Moriah Heights Road. The existing paved gravel road that currently runs parallel to SR-16 on the south side will connect the new project driveway to Moriah Heights Road as shown in **Exhibit 10.**

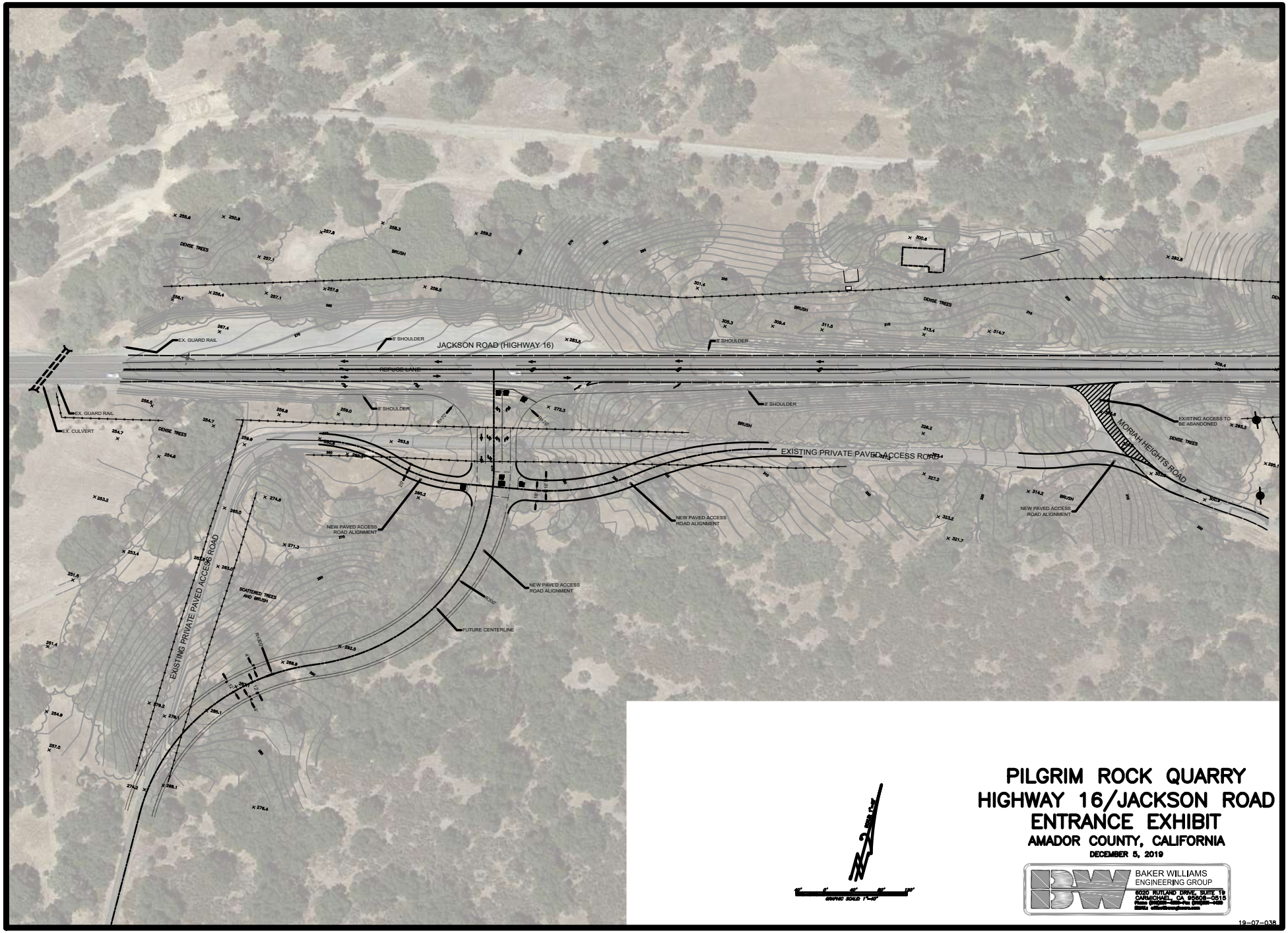
In order to determine if a signal is warranted at the new driveway, a Peak Hour Signal Warrant #3 per the California Manual on Uniform Traffic Control Devices (CA MUTCD) was evaluated. Based on this evaluation, a signal warrant was not satisfied under any of the study scenarios analyzed in this report. Therefore, a signal is not recommended at this location. Signal warrant worksheets are contained in **Appendix A**.

The new driveway has been designed in accordance to Caltrans Highway Design Manual, 6th Edition standards and delivery truck turning movements. As shown in **Exhibit 10**, an approximately 500-foot westbound left-turn lane and acceleration/deceleration lanes on SR-16 are incorporated into the design of the proposed driveway. A center refuge lane will also be provided on SR-16 for vehicles making a northbound left-turn out of the driveway.

In addition, an off-tracking analysis (truck turning templates) was performed for all inbound and outbound turn movements at the proposed driveway using a WB-67 vehicle. Baker Williams Engineering Group prepared the off-tracking analysis for the various truck turning movements entering and exiting the new driveway. **Exhibit 11** through **Exhibit 14** illustrate the different turn movements of trucks entering and exiting the new driveway. Based on the off-tracking analysis, truck turning movements will be adequately accommodated by the proposed driveway design.

4.4 SIGHT DISTANCE

This section documents the minimum corner sight distance requirements at the proposed driveway for the Pilgrim Rock Quarry site. The new driveway will be stop controlled in the northbound approach and free flowing in the eastbound and westbound approaches along SR-16. SR-16 is a two-lane highway. The sight distance analysis was conducted by Baker Williams Engineering Group and based on the Caltrans Highway Design Manual sight distance methodology. The minimum corner sight distance required for a truck turning left onto SR-16 is 838 feet based on a speed of 60 miles per hour on SR-16. The project driveway will provide a clear line of sight to satisfy the corner sight distance requirements. **Appendix A** includes the sight distance exhibit prepared by Baker Williams Engineering Group.



Project Access Design Concept

Exhibit 10

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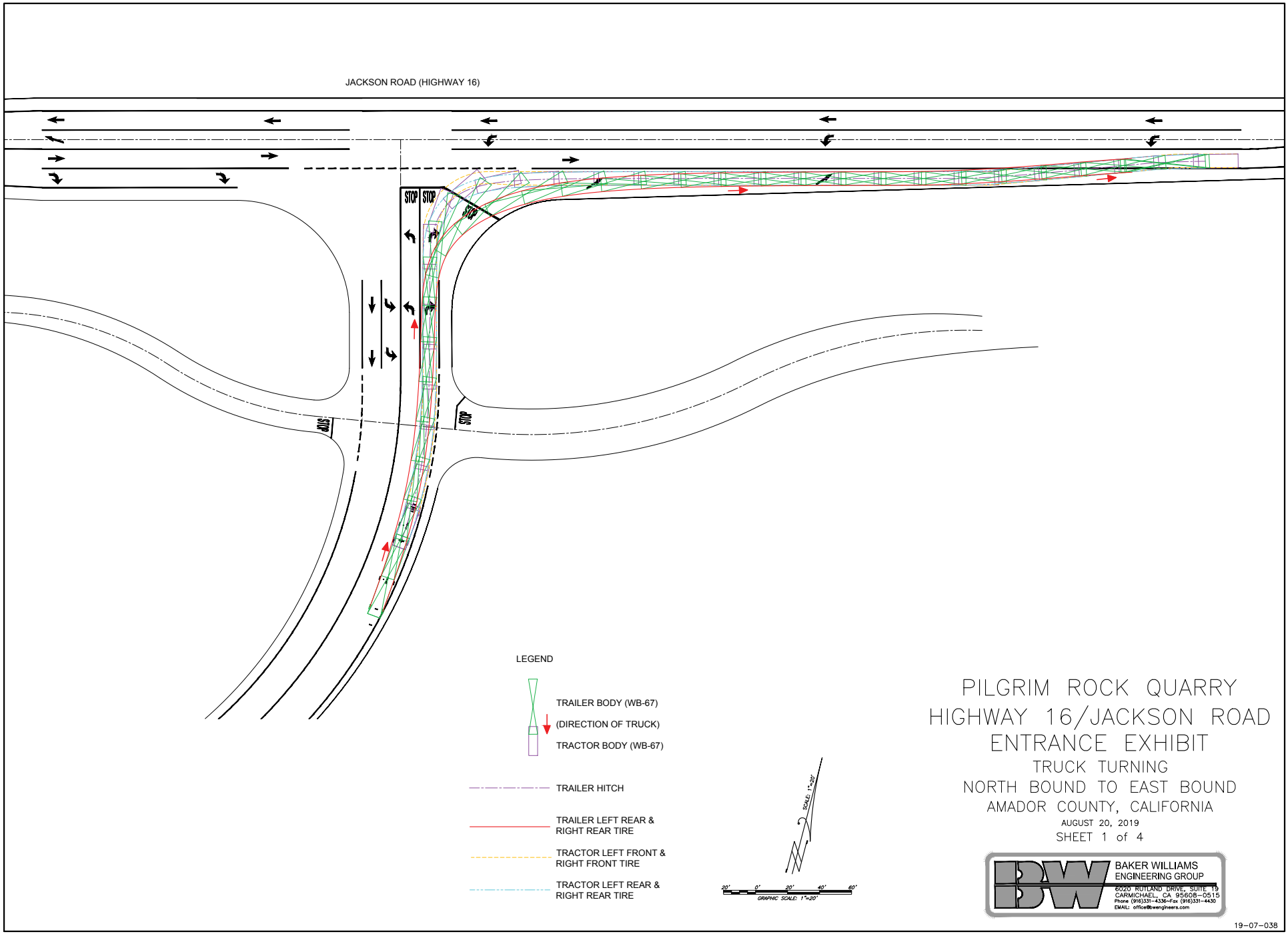

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Northbound to Eastbound Truck Turns

September 2019

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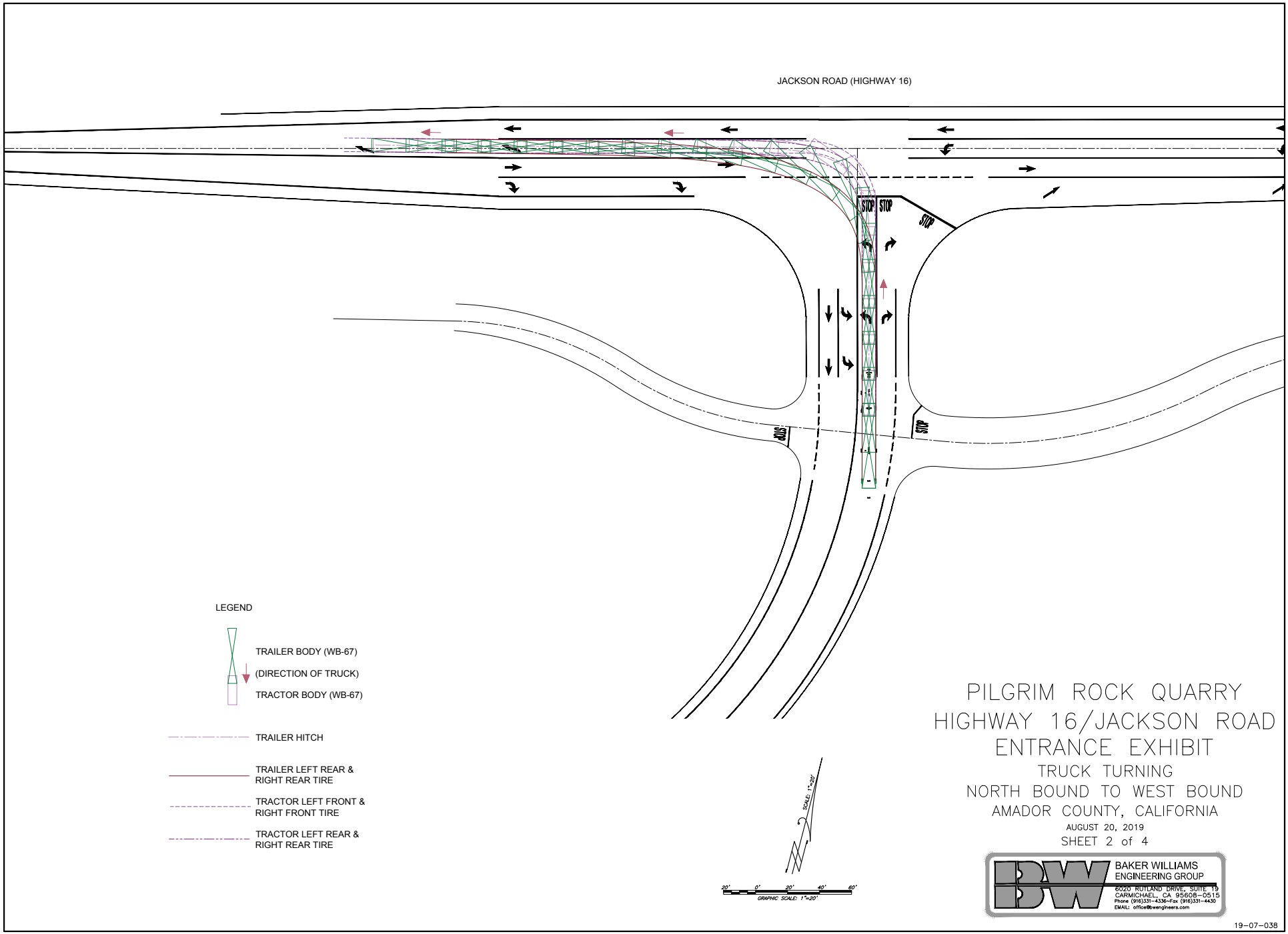
Exhibit 11



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Northbound to Westbound Truck Turns

September 2019

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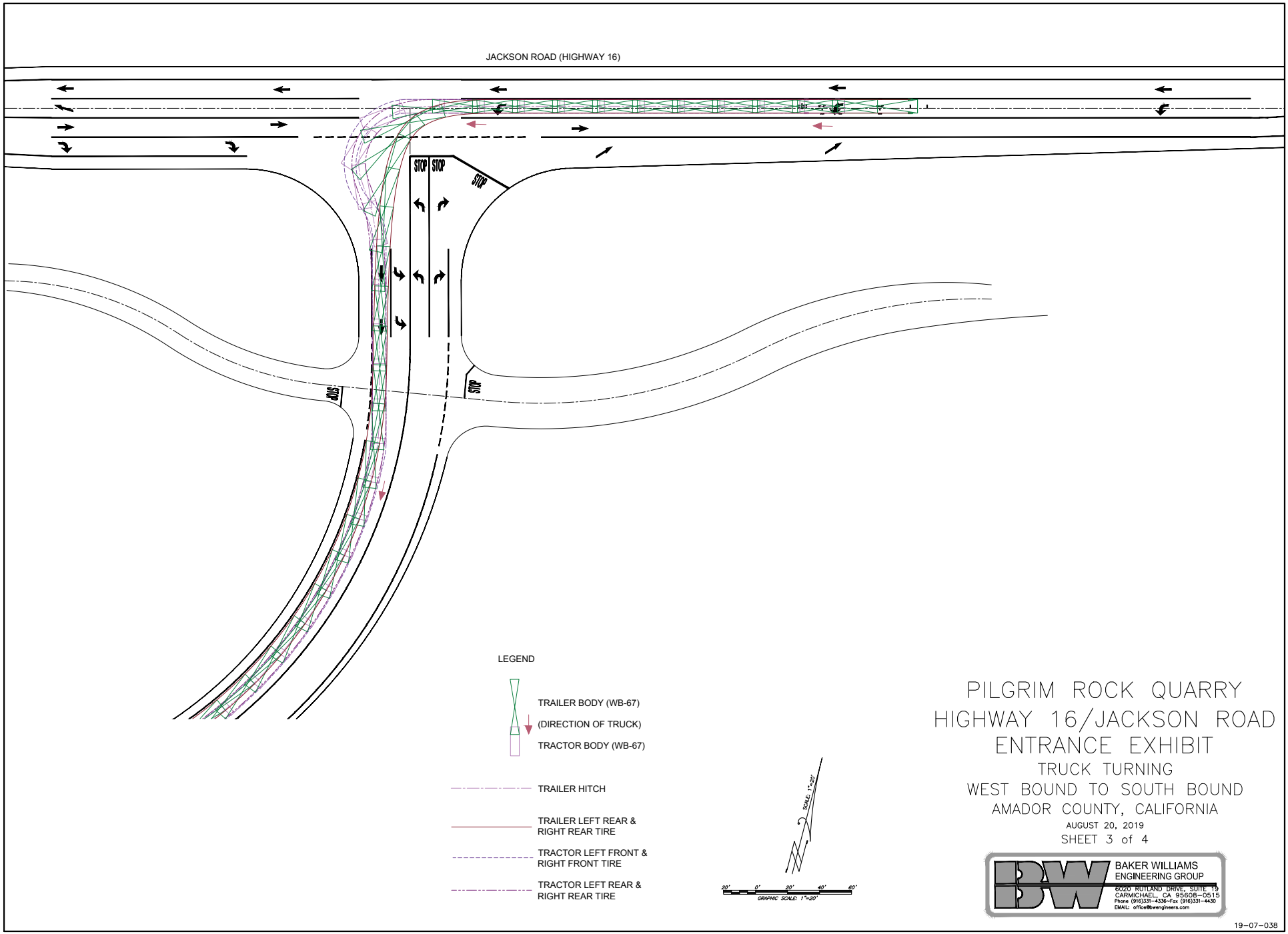
Exhibit 12



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Westbound to Southbound Truck Turns

September 2019

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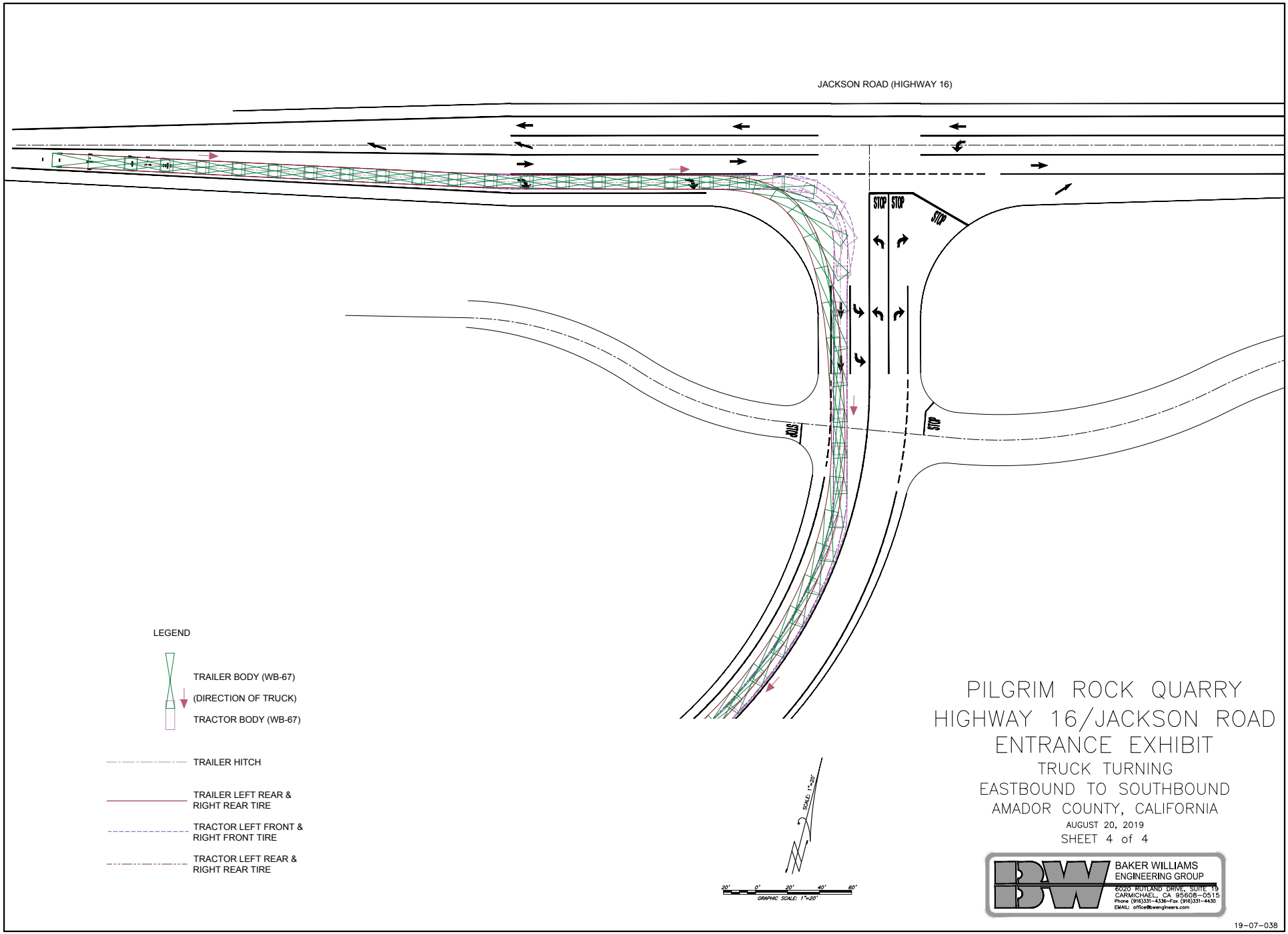
Exhibit 13



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Eastbound to Southbound Truck Turns

September 2019

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Exhibit 14

5 EXISTING PLUS PROJECT CONDITIONS

5.1 EXISTING PLUS PROJECT CONDITIONS TRAFFIC VOLUMES

Existing Plus Project conditions traffic volumes are derived by adding trips forecast to be generated by the proposed project to existing conditions traffic volumes. **Exhibit 15** shows the Existing Plus Project conditions AM and PM peak hour and daily volumes at study intersections.

At the project's main access, a left-turn lane and acceleration/deceleration lanes on SR-16 will be constructed by the project to accommodate trucks and passenger vehicles entering and exiting the site. The analysis assumes these improvements at the projects main entrance (study intersection #5) for the Existing Plus Project condition.

5.2 EXISTING PLUS PROJECT CONDITIONS PEAK HOUR STUDY INTERSECTION LOS

Table 9 summarizes Existing Plus Project conditions AM and PM peak hour level of service for all study intersections. Detailed analysis sheets are contained in **Appendix C**. As shown in **Table 9**, all study intersections are forecast to operate at acceptable levels of service during the AM and PM peak hours with the addition of project-related traffic to existing traffic volumes with the exception of the following intersection:

- Jackson Road (SR-16) / E. Plymouth Hwy (SR-124) (LOS D in the AM and LOS F in PM peak hour)

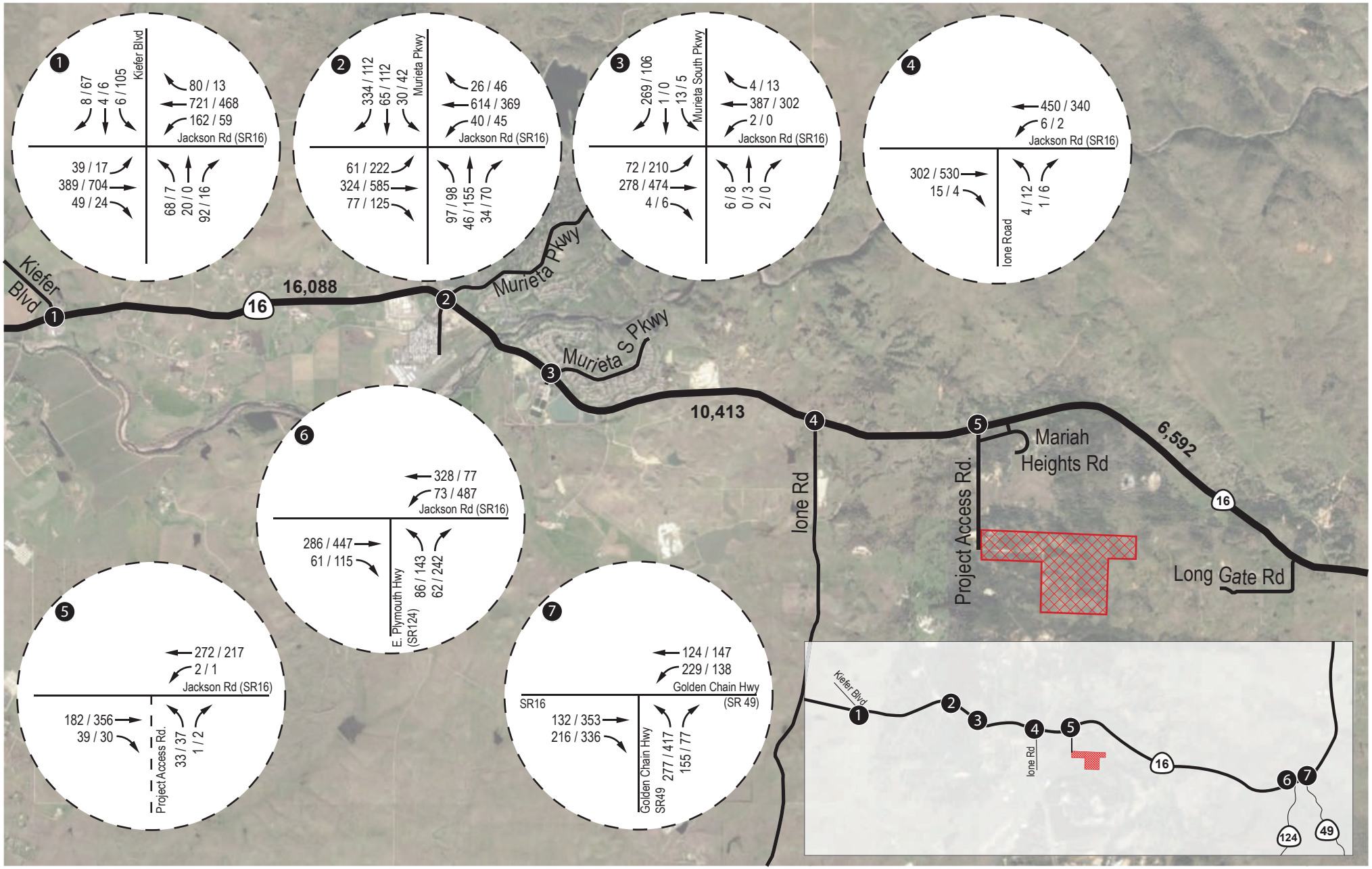
Jackson Road (SR-16) / Murieta Parkway is shown to operate at LOS D which is considered acceptable operating conditions in Sacramento County.

TABLE 9, EXISTING PLUS PROJECT CONDITIONS AM/PM PEAK HOUR INTERSECTION LOS

Study Intersection	Traffic Control	Existing Conditions		Existing Plus Project Conditions		Change in Delay (sec.)		Significant Impact?	
		AM Delay[1] - LOS	PM Delay[1] - LOS	AM Delay[1] - LOS	PM Delay[1] - LOS	AM	PM	AM	PM
1 - Jackson Rd (SR-16) / Kiefer Blvd	Signal	29.2 - C	22.5 - C	30.4 - C	23.6 - C	1.2	1.1	No	No
2 - Jackson Rd (SR-16) / Murieta Pkwy	Signal	35.7 - D	39.7 - D	37.9 - D	41.3 - D	2.2	1.6	No	No
3 - Jackson Rd (SR-16) / Murieta S Pkwy	Signal	18.6 - B	19.6 - B	19.3 - B	20.5 - C	0.7	0.9	No	No
4 - Jackson Rd (SR-16) / Ione Rd	OWSC	13.0 - B	14.1 - B	13.5 - B	14.9 - B	0.5	0.8	No	No
5 - Jackson Rd (SR-16) / Project Access Rd	OWSC	Does Not Exist Without Project		18.5 - C	19.6 - C	–	–	No	No
6 - Jackson Rd (SR-16) / E. Plymouth Hwy (SR-124)	OWSC	**25.5 - D**	**55.8 - F**	**26.0 - D**	**55.0 - F**	0.5	-0.8	No	No
7 - Jackson Rd (SR-16) / Golden Chain Hwy (SR-49)	Signal	12.3 - B	17.2 - B	12.4 - B	17.0 - B	0.1	-0.2	No	No

Note: Deficient intersection operation indicated in **bold**.
LOS = level of service.
[1] Seconds of delay per vehicle.
OWSC = One-Way Stop Control (worst approach delay/LOS reported)

In accordance with the *Amador County Traffic Impact Study Guidelines* significance criteria, there are no significant impacts at the study intersections in Amador County as a result of project-related traffic and therefore, no mitigation is required.



Not to Scale

Legend:

- = Project Site
- # = Study Intersection
- ## / ## = AM / PM Peak Hour Volumes
- #,### = Daily Traffic Volumes

Existing Plus Project AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 15

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5.3 EXISTING PLUS PROJECT CONDITIONS ROADWAY SEGMENT LOS

Table 10 presents the results of the Existing Plus Project conditions roadway segment level of service analysis compared to the Existing conditions. As shown, all of the study roadway segments are forecast to operate at acceptable levels of service based on daily capacity thresholds with the addition of project-related traffic. SR-16 from Kiefer Blvd to Murieta South Parkway is located within Sacramento County where LOS D is considered acceptable level of service operating conditions. Therefore, this segment is considered less than significant and not mitigation is required.

TABLE 10, EXISTING PLUS PROJECT CONDITIONS ROADWAY SEGMENT LOS - DAILY

SR-16 Roadway Segment	Classification (No. Lanes)	LOS E Capacity	Existing			Existing Plus Project			Δ V/C	Significant Impact?
			ADT	V/C	LOS	ADT	V/C	LOS		
Kiefer Blvd to Murieta South Pkwy	Arterial-High Access (2)	20,000	15,592	0.78	C	16,088	0.80	D	0.025	No
Murieta South Pkwy to Mariah Heights Road	Arterial-High Access (2)	20,000	9,917	0.50	A	10,413	0.52	A	0.025	No
Mariah Heights Road to Long Gate Road	Arterial-High Access (2)	20,000	6,566	0.33	A	6,592	0.33	A	0.001	No

Note: Deficient roadway segment operations shown in **bold.**
LOS= Level of Service
V/C= Volume to Capacity Ratio
Δ= Difference

The study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. **Table 11** shows the peak hour segment analysis by direction along Jackson Road (SR-16) under Existing and Existing Plus Project conditions. As shown, all study roadway segments are operating at acceptable levels of service during the AM and PM peak hours except on SR-16 from Kiefer Blvd to Murieta South Parkway which is shown to operate at LOS E under Existing and Existing Plus Project conditions.

TABLE 11, EXISTING PLUS PROJECT CONDITIONS ROADWAY SEGMENT LOS – PEAK HOUR

Jackson Road (SR-16)	No. of Lanes by Direction	Roadway Segment Capacity (VPHPL)	Existing						Existing Plus Project						Δ PTSF (%)		S?
			ATS (mph)		PTSF (%)		LOS		ATS (mph)		PTSF (%)		LOS				
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Kiefer Blvd to Murieta South Pkwy	EB: 1	1,700	59.1	58.5	61.6	73.1	C	**E**	59.0	58.4	63.1	74.1	C	**E**	1.5	1.0	No
	WB: 1	1,700	58.0	59.3	79.0	60.6	**E**	C	58.0	59.2	79.8	61.9	**E**	C	0.8	1.3	No
Murieta South Pkwy to Mariah Heights	EB: 1	1,700	60.0	60.0	47.8	52.0	B	C	59.8	59.9	53.2	54.4	C	C	5.4	2.4	No
	WB: 1	1,700	60.2	60.4	48.5	42.3	B	B	60.1	60.3	51.1	44.5	C	B	2.6	2.2	No
Mariah Heights Road to Long Gate Road	EB: 1	1,700	59.8	60.4	29.3	41.8	A	B	59.8	60.4	29.5	41.9	A	B	0.2	0.1	No
	WB: 1	1,700	60.7	60.1	35.5	35.8	A	A	60.6	60.1	35.7	36.9	A	A	0.2	1.1	No

Note: Deficient roadway segment operations shown in **bold.**
S? = Is the roadway segment signficantly impacted by the project?
VPHPL = Vehicles per hour per lane
ATS = Average Travel Speed (mph)
LOS = Level of Service
PTSF = Percent Time-Spent-Following (%)
Δ = Difference in Percent Time-Spent-Following between the With and Without Project scenarios.

From Kiefer Blvd to Murieta South Parkway, the change in Percent Time-Spent-Following is 0.8% in the AM and 1.0% in the PM peak hour which is less than the significance threshold (5%). Therefore, no significant impacts on study roadway segments occur as a result of project traffic and no mitigation is required.

6 EXISTING PLUS APPROVED PROJECTS WITHOUT PROJECT CONDITIONS

This section of the report evaluates the Existing Plus Approved Projects conditions without the proposed project traffic volumes. The existing intersection geometry and roadway network were used in this analysis.

6.1 APPROVED AND PENDING PROJECTS

Approved projects within Amador County, Sacramento County and the City of Ione were researched. From these areas, three (3) approved projects were found to contribute traffic to the project's study area. **Table 12** presents the list of approved projects identified to contribute traffic the project's study area and the forecast trip generation estimated for each approved project.

Additionally, pending projects within Amador County, Sacramento County and the City of Ione that are anticipated to be completed prior to project opening and forecast to contribute traffic to the project's study area were identified. As shown in **Table 12**, a total of three (3) pending projects were found to contribute traffic to the project's study area. The following study scenario (Existing Plus Approved and Pending Projects) includes traffic from these pending projects in addition to the traffic generated by the approved projects. **Exhibit 16** shows the location of the approved and pending projects that are anticipated to contribute traffic to the project's study area. **Exhibit 17** shows the AM and PM peak hour and daily traffic volumes of the approved and pending projects identified in **Table 12**.

6.2 EXISTING PLUS APPROVED PROJECTS WITHOUT PROJECT CONDITIONS TRAFFIC VOLUMES

To derive Existing Plus Approved Projects Without Project conditions traffic volumes, the existing traffic volumes were overlaid with traffic from approved development projects within the vicinity of the project site.

Only traffic from the approved projects were added to existing traffic volumes to evaluate the Existing Plus Approved Project Without Project condition. **Exhibit 18** shows the Existing Plus Approved Projects Without Project conditions AM and PM peak hour and daily traffic volumes at study intersections and roadway segments.

TABLE 12, APPROVED AND PENDING PROJECTS TRIP GENERATION

ID	Project Name	Application Number	Land Use	Size	ADT	AM Peak Hour			PM Peak Hour		
						Total	Inbound	Outbound	Total	Inbound	Outbound
APPROVED PROJECTS											
1	Rancho Murieta South Riverview	PLNP 2017-00182	SFDU	140 DU	1,322	104	26	78	139	88	51
2	Murieta Hills East	PLNP 2017-00183	SFDU	99 DU	935	73	18	55	98	62	36
3	Murieta Hills West	PLNP 2017-00151	SFDU	99 DU	935	73	18	55	98	62	36
PENDING PROJECTS											
4	Murieta Gardens Circle K	PLNP 2017-00342	Gas Station w/ Convenience Store	12 VFP	2,464	150	77	74	168	86	82
5	Rancho Murieta North	PLNP 2014-00206	SFDU[1]	795 DU	6,668	500	65	435	685	474	211
			General Commercial[2]	451.3 KSF	4,499	482	420	62	552	135	417
			Subtotal Murieta Hills North		11,167	982	485	497	1,237	609	628
6	Rancho Murieta Community Church	PLNP 2017-00160	Church[3]	240 Seats[3]	106	2	1	1	7	3	4
Total Cumulative Project's Trip Generation					**16,929**	**1,384**	**625**	**760**	**1,747**	**910**	**837**

Notes:

[1] Trip generation includes internal trip reduction and mixed-use trip reduction to/from the commercial within the project site.

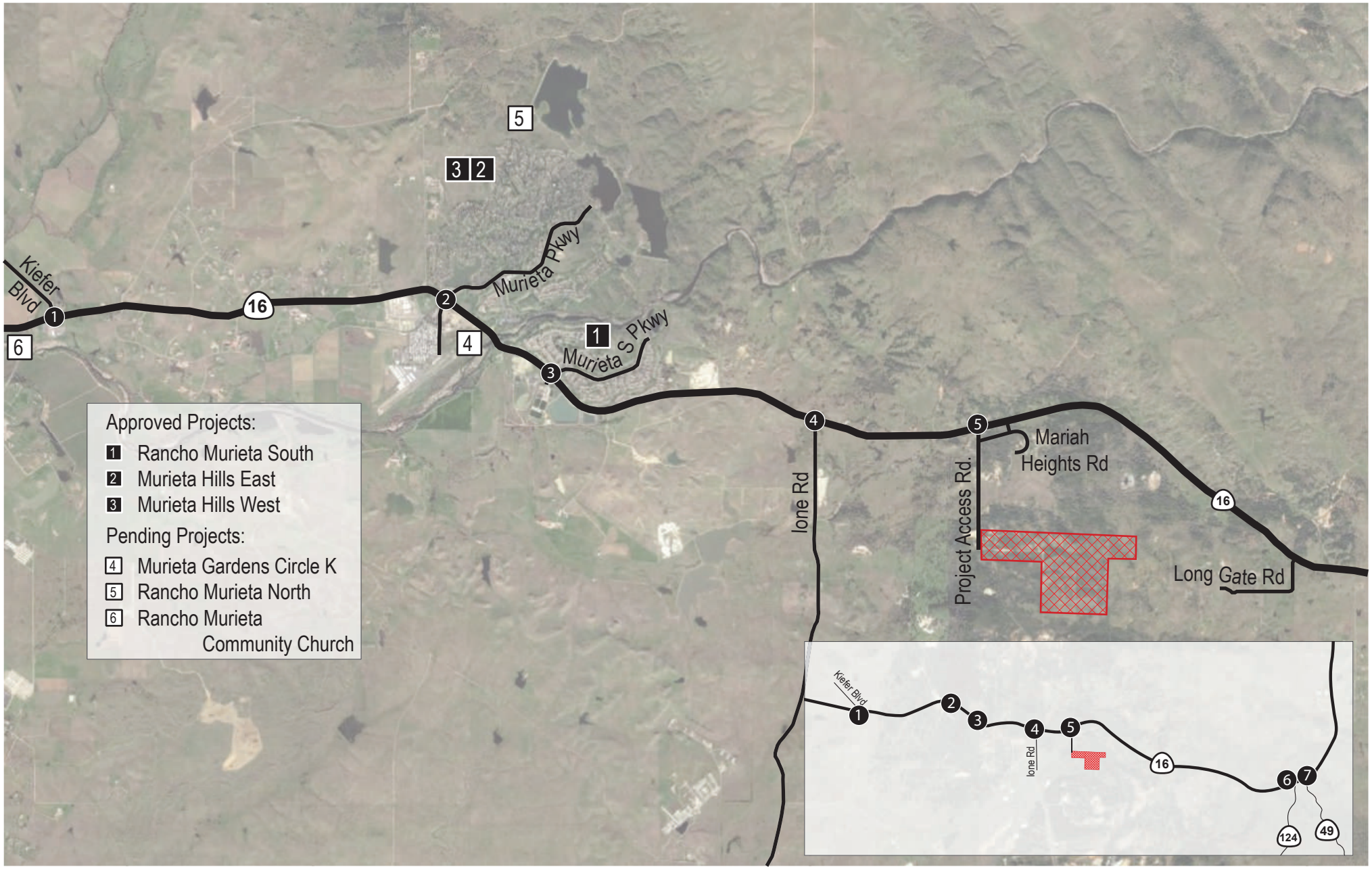
[2] Trip generation assumes commercial site A and B along with the pass-by trip reductions and internal shopping trip reductions (between site A and B).

[3] Assumes net difference in seats (400 proposed - 160 existing = 240 seats)

SFDU = Single Family Dwelling Units

KSF = 1,000 Square Feet

VFP = Vehicle Fueling Pump Stations



Not to Scale

Legend:
= Project Site
= Study Intersection

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Approved & Pending Projects Location Map

March 2020
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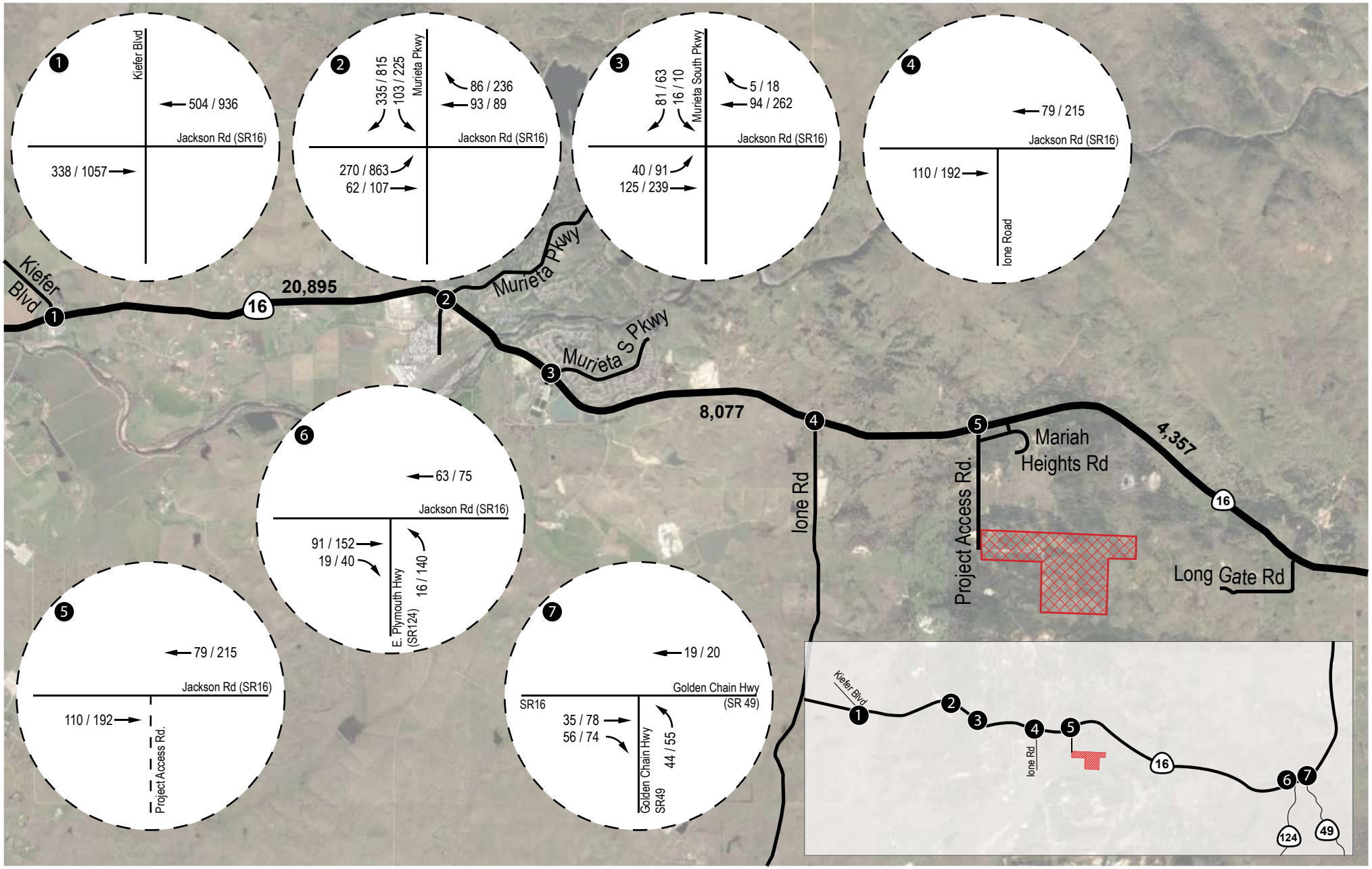
Exhibit 16



Not to Scale

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Legend:

- = Project Site
- # = Study Intersection
- ## / ## = AM / PM Peak Hour Volumes
- #,### = Daily Traffic Volumes

Approved & Pending Projects AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 17

March 2020

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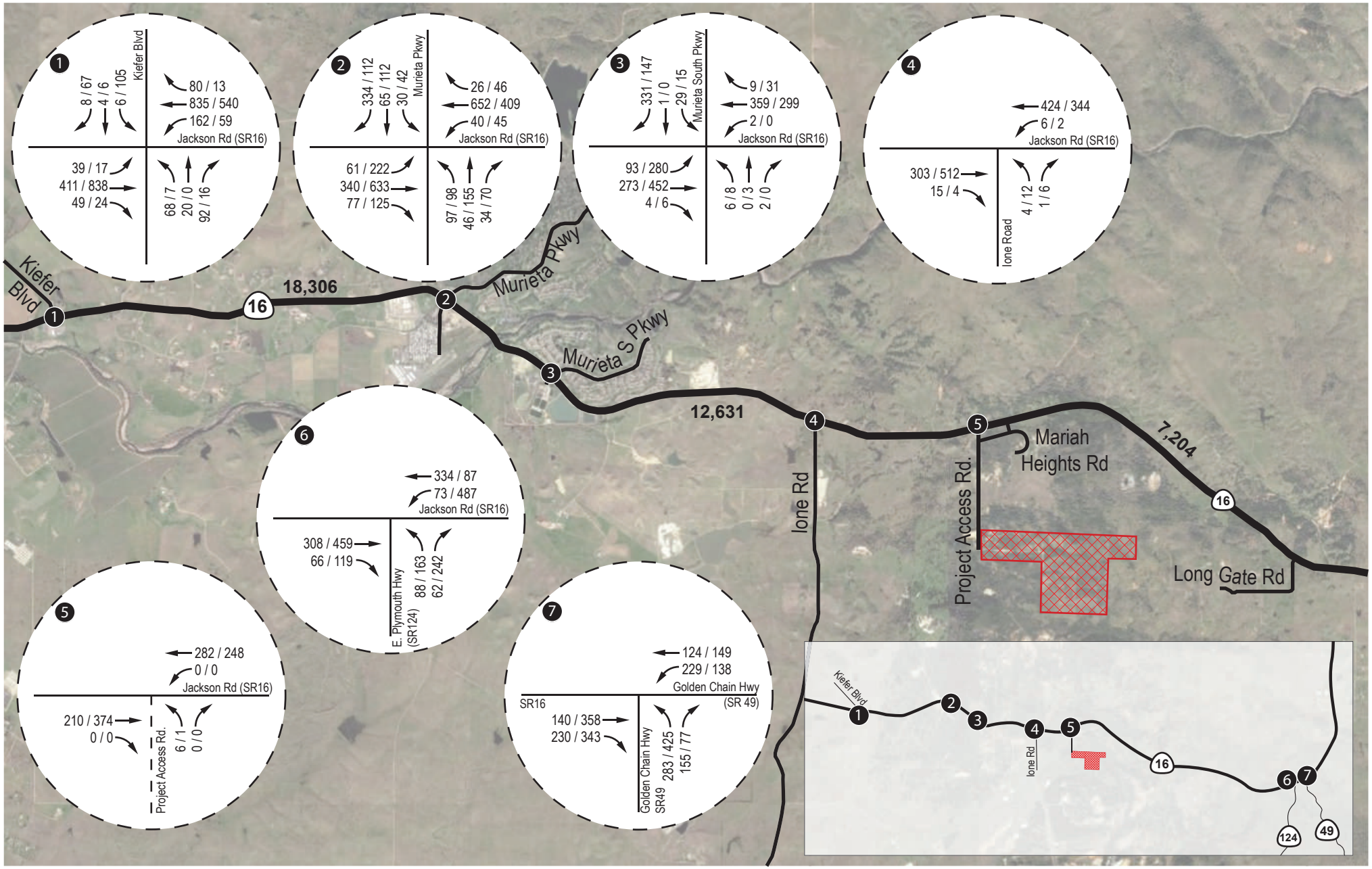

Not to Scale

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Legend:

- = Project Site
- # = Study Intersection
- ## / ## = AM / PM Peak Hour Volumes
- #,### = Daily Traffic Volumes

Existing Plus Approved Projects AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 18

March 2020

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6.3 EXISTING PLUS APPROVED PROJECTS WITHOUT PROJECT CONDITIONS PEAK HOUR STUDY INTERSECTION LOS

Table 13 summarizes Existing Plus Approved Projects Without Project conditions AM and PM peak hour level of service for all study intersections. Detailed analysis sheets are contained in **Appendix D**.

As shown in **Table 13**, all study intersections are forecast to operate at acceptable levels of service during the peak hours under Existing Plus Approved Projects Without Project conditions except for the intersection of Jackson Road (SR-16) / E. Plymouth Hwy (SR-124) which is shown to operate at LOS D in the AM peak hour and LOS E in the PM peak hour. It may be noted that Jackson Road at Kiefer Blvd and Jackson Road at Murieta Parkway are both within Sacramento County and therefore, LOS D is considered acceptable operating conditions.

TABLE 13, EXISTING PLUS APPROVED PROJECTS WITHOUT PROJECT CONDITIONS AM/PM PEAK HOUR INTERSECTION LOS

Study Intersection	Traffic Control	Existing Plus Approved Project Conditions	
		AM Delay[1] - LOS	PM Delay[1] - LOS
1 - Jackson Rd (SR-16) / Kiefer Blvd	Signal	35.6 - D	28.8 - C
2 - Jackson Rd (SR-16) / Murieta Parkway	Signal	39.4 - D	45.8 - D
3 - Jackson Rd (SR-16) / Murieta S Parkway	Signal	20.7 - C	23.8 - C
4 - Jackson Rd (SR-16) / Ione Rd	OWSC	13.5 - B	14.3 - B
5 - Jackson Rd (SR-16) / Project Access Rd	OWSC	Does Not Exist Without Project	
6 - Jackson Rd (SR-16) / E. Plymouth Hwy (SR-124)	OWSC	**27.6 - D**	**38.9 - E**
7 - Jackson Rd (SR-16) / Golden Chain Hwy (SR-49)	Signal	12.2 - B	17.3 - B

Note: Deficient intersection operation indicated in **bold**.
[1] Average seconds of delay per vehicle.
LOS = level of service.
OWSC = One-Way Stop Control (worst approach delay/LOS reported).

6.4 EXISTING PLUS APPROVED PROJECTS WITHOUT PROJECT ROADWAY SEGMENT LOS

Table 14 presents the results of the Existing Plus Approved Projects Without Project conditions roadway segment level of service analysis based on the daily traffic volumes.

TABLE 14, EXISTING PLUS APPROVED PROJECTS WITHOUT PROJECT CONDITIONS ROADWAY SEGMENT LOS - DAILY

SR-16 Roadway Segment	Classification (No. Lanes)	LOS E Capacity	Existing Plus Approved Projects Without Project Conditions		
			ADT	V/C	LOS
Kiefer Blvd to Murieta South Pkwy	Arterial-High Access (2)	20,000	18,306	0.92	**E**
Murieta South Pkwy to Moriah Heights Road	Arterial-High Access (2)	20,000	12,631	0.63	B
Mariah Heights Road to Long Gate Road	Arterial-High Access (2)	20,000	7,204	0.36	A

Note: Deficient roadway segment operations shown in **bold.**
LOS= Level of Service
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio

As shown, all of the roadway segments are forecast to operate at acceptable levels of service based on daily capacity thresholds except for SR-16 from Kiefer Blvd to Murieta South Parkway which is forecast to operate at LOS E.

The study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. **Table 15** shows the peak hour segment analysis by direction along Jackson Road (SR-16). As shown, all study roadway segments are currently operating at acceptable levels of service during the AM and PM peak hours except for SR-16 from Kiefer Blvd to Murieta South Parkway which is shown to operate at LOS E.

TABLE 15, EXISTING PLUS APPROVED PROJECTS WITHOUT PROJECT CONDITIONS ROADWAY SEGMENT LOS – PEAK HOUR

Jackson Road (SR-16)	No. of Lanes by Direction	Roadway Segment Capacity (VPHPL)	Existing Plus Approved Projects Without Project							
			Peak Hour Volume		ATS (mph)		PTSF (%)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
Kiefer Blvd to Murieta South Parkway	EB: 1	1,700	673	1,700	58.9	58.3	64.2	75.3	C	**E**
	WB: 1	1,700	1,334	657	57.9	59.1	80.6	63.5	**E**	C
Murieta South Parkway to Mariah Heights Road	EB: 1	1,700	470	541	59.9	60.0	50.3	53.1	B	C
	WB: 1	1,700	470	381	60.2	60.3	49.3	44.7	B	B
Mariah Heights Road to Long Gate Road	EB: 1	1,700	241	392	59.5	60.3	32.3	43.3	A	B
	WB: 1	1,700	299	307	60.6	59.9	36.6	39.0	A	B

Note: Deficient roadway segment operations shown in **bold.**

VPHPL = Vehicles per hour per lane

LOS= Level of Service

ATS= Average Travel Speed (mph)

PTSF=Percent Time-Spent-Following (%)

7 EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS

7.1 EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS TRAFFIC VOLUMES

Existing Plus Approved Projects Plus Project conditions traffic volumes are derived by adding trips forecast to be generated by the proposed project to Existing Plus Approved Projects Without Project conditions traffic volumes.

At the project's main access, a left-turn lane and acceleration/deceleration lanes on SR-16 would be constructed by the project to accommodate trucks entering and exiting the site. The analysis assumes these improvements at the projects main entrance (study intersection #5) for the Existing Plus Approved Projects Plus Project condition.

Exhibit 19 shows the Existing Plus Approved Projects Plus Project conditions AM and PM peak hour and daily traffic volumes at study intersections and roadway segments.

7.2 EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS PEAK HOUR STUDY INTERSECTION LOS

Table 16 summarizes Existing Plus Approved Projects Plus Project conditions AM and PM peak hour level of service for all study intersections. Detailed analysis sheets are contained in **Appendix E**.

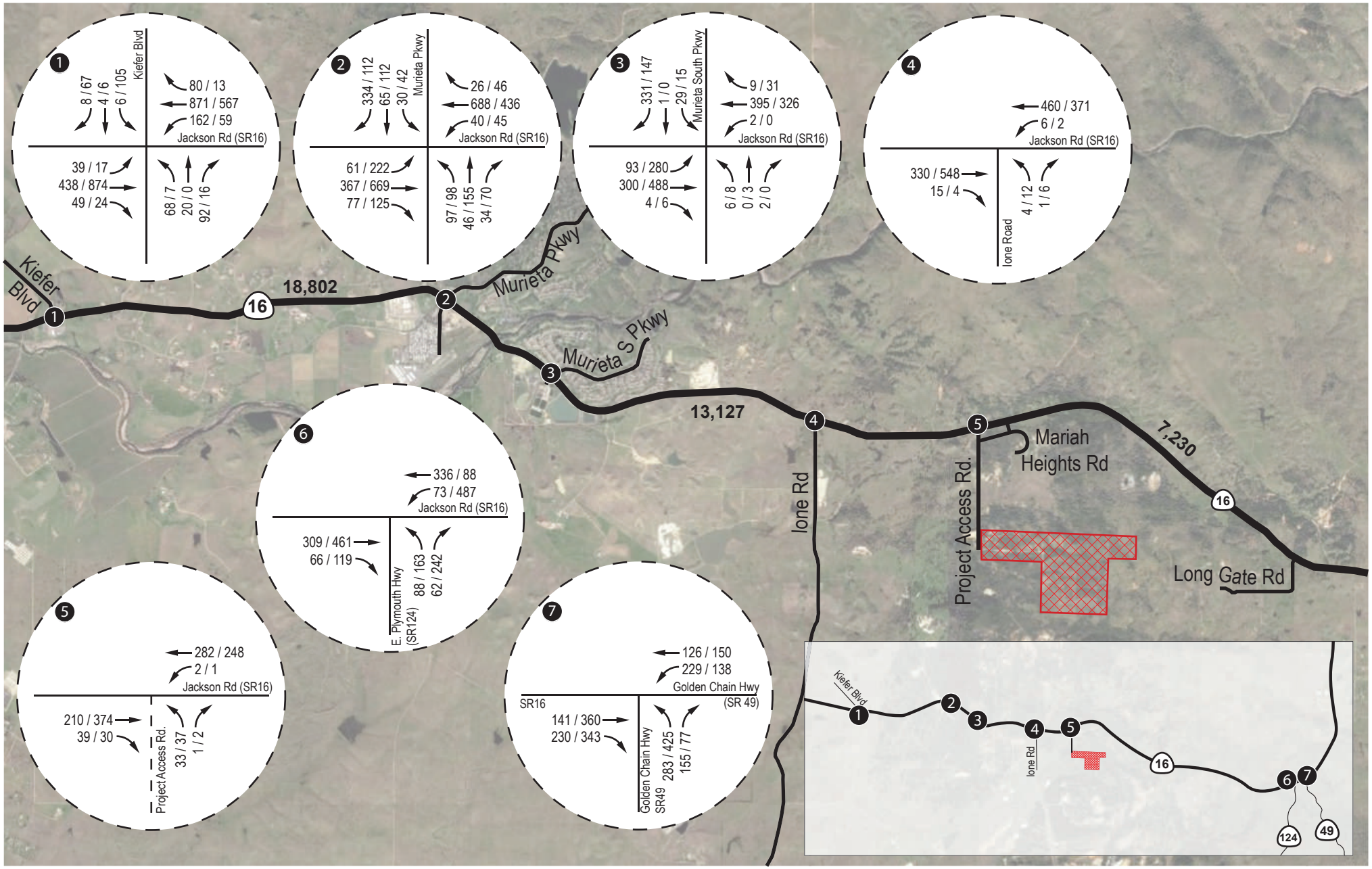
TABLE 16, EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS AM/PM PEAK HOUR INTERSECTION LOS

Study Intersection	Traffic Control	Existing Plus Approved Project Without Project Conditions		Existing Plus Approved Projects Plus Project Conditions		Change in Delay (sec.)		Significant Impact?	
		AM Delay[1] - LOS	PM Delay[1] - LOS	AM Delay[1] - LOS	PM Delay[1] - LOS	AM	PM	AM	PM
1 - Jackson Rd (SR-16) / Kiefer Blvd	Signal	35.9 - D	28.8 - C	36.5 - D	30.9 - C	0.6	2.1	No	No
2 - Jackson Rd (SR-16) / Murieta Pkwy	Signal	42.4 - D	45.8 - D	46.2 - D	48.6 - D	3.8	2.8	No	No
3 - Jackson Rd (SR-16) / Murieta S Pkwy	Signal	20.7 - C	23.8 - C	21.8 - C	24.4 - C	1.1	0.6	No	No
4 - Jackson Rd (SR-16) / Ione Rd	OWSC	13.5 - B	14.3 - B	14.3 - B	15.5 - C	0.8	1.2	No	No
5 - Jackson Rd (SR-16) / Project Access Rd[2]	OWSC	Does Not Exist Without Project		18.9 - C	20.6 - C	–	–	No	No
6 - Jackson Rd (SR-16) / E. Plymouth Hwy (SR-124)	OWSC	**28.1 - D**	**38.9 - E**	**27.8 - D**	**38.2 - E**	-0.3	-0.7	No	No
7 - Jackson Rd (SR-16) / Golden Chain Hwy (SR-49)	Signal	12.5 - B	17.3 - B	12.7 - B	17.6 - B	0.2	0.3	No	No

Note: Deficient intersection operation indicated in **bold**. LOS = level of service.

[1] Seconds of delay per vehicle. OWSC = One-Way Stop Control (worst approach delay/LOS reported)

As shown in **Table 16**, all study intersections are forecast to operate at an acceptable level of service during the peak hours with the addition of project-related traffic with the exception of Jackson Road (SR-16) / E. Plymouth Hwy (SR-124) which operates at LOS D in the AM peak hour and LOS E in the PM peak hour. However, the change in delay does not exceed the significance threshold (i.e. 5.0 seconds). Therefore, the intersection is considered less than significant and no mitigation is required.



Not to Scale

Legend:

- = Project Site
- # = Study Intersection
- ## / ## = AM / PM Peak Hour Volumes
- #,### = Daily Traffic Volumes

Existing Plus Approved Projects Plus Project AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 19

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7.3 EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS ROADWAY SEGMENT LOS

Table 17 presents the results of the Existing Plus Approved Projects Plus Project conditions roadway segment level of service analysis compared to the Existing Plus Approved Projects Without Project conditions. As shown, all of the study roadway segments are forecast to operate at acceptable levels of service based on daily capacity thresholds with the addition of project-related traffic with the exception of SR-16 from Kiefer Blvd to Murieta South Parkway which is forecast to operate at LOS E.

TABLE 17, EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS ROADWAY SEGMENT LOS - DAILY

SR-16 Roadway Segment	Classification (No. Lanes)	LOS E Capacity	Existing Plus Approved Projects Without Project Conditions			Existing Plus Approved Projects Plus Project			Δ V/C	Significant Impact?
			ADT	V/C	LOS	ADT	V/C	LOS		
Kiefer Blvd to Murieta South Pkwy	Arterial-High Access (2)	20,000	18,306	0.92	**E**	18,802	0.94	**E**	0.025	No
Murieta South Pkwy to Moriah Heights Road	Arterial-High Access (2)	20,000	12,631	0.63	B	13,127	0.66	B	0.025	No
Mariah Heights Road to Long Gate Road	Arterial-High Access (2)	20,000	7,204	0.36	A	7,230	0.36	A	0.001	No

Note: Deficient roadway segment operations shown in **bold.**
LOS= Level of Service
V/C= Volume to Capacity Ratio
Δ= Difference

The study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. **Table 18** shows the peak hour segment analysis by direction along Jackson Road (SR-16) under Existing Plus Approved Projects Without and With Project conditions.

TABLE 18, EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS ROADWAY SEGMENT LOS – PEAK HOUR

Jackson Road (SR-16)	No. of Lanes by Direction	Roadway Segment Capacity (VPHPL)	Existing Plus Approved Projects						Existing Plus Approved Projects Plus Project						Δ PTSF (%)		S?
			ATS (mph)		PTSF (%)		LOS		ATS (mph)		PTSF (%)		LOS				
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Kiefer Blvd to Murieta South Pkwy	EB: 1	1,700	58.9	58.3	64.2	75.3	C	**E**	58.8	58.3	65.5	76.1	C	**E**	1.3	0.8	N
	WB: 1	1,700	57.9	59.1	80.6	63.5	**E**	C	57.8	59.0	81.3	64.6	**E**	C	0.7	1.1	N
Murieta South Pkwy to Mariah Heights	EB: 1	1,700	59.9	60.0	50.3	53.1	B	C	59.8	59.9	52.7	55.2	C	C	2.4	2.1	N
	WB: 1	1,700	60.2	60.3	49.3	44.7	B	B	60.1	60.2	51.7	45.7	C	B	2.4	1.0	N
Mariah Heights Road to Long Gate Road	EB: 1	1,700	59.5	60.3	32.3	43.3	A	B	59.5	60.3	32.4	43.5	A	B	0.1	0.2	N
	WB: 1	1,700	60.6	59.9	36.6	39.0	A	B	60.6	59.9	36.8	39.1	A	B	0.2	0.1	N

Note: Deficient roadway segment operations shown in **bold.**
S? = Is the roadway segment signficantly impacted by the project?
VPHPL = Vehicles per hour per lane
ATS = Average Travel Speed (mph)
LOS = Level of Service
PTSF = Percent Time-Spent-Following (%)
Δ = Difference in Percent Time-Spent-Following between the With and Without Project scenarios.

As shown, all study roadway segments are forecast to operate at acceptable levels of service during the AM and PM peak hours for Existing Plus Approved Projects Without and With Project conditions except from Keifer Blvd to Murieta South Parkway which operates at LOS E. In accordance with the *Sacramento County Traffic Impact Study Guidelines* significance criteria, there are no significant impacts on study roadway segments in Sacramento County based on project-related traffic during the peak hours and therefore, no mitigation is required.

8 EXISTING PLUS APPROVED and PENDING PROJECTS WITHOUT PROJECT CONDITIONS

This section analyzes the potential traffic impacts associated with the Existing Plus Approved and Pending Projects Without Project conditions at the study intersections and roadway segments.

8.1 EXISTING PLUS APPROVED AND PENDING PROJECTS WITHOUT PROJECT CONDITIONS TRAFFIC VOLUMES

Existing Plus Approved and Pending Projects Without Project traffic volumes were based on existing traffic volumes overlaid with traffic from approved and pending projects. As previously discussed, three approved projects and three pending projects were found to add traffic to the project's study area. **Exhibit 20** shows the Existing Plus Approved and Pending Projects Without Project conditions AM and PM peak hour and daily traffic volumes at study intersections and roadway segments.

8.2 EXISTING PLUS APPROVED AND PENDING PROJECTS WITHOUT PROJECT CONDITIONS PEAK HOUR STUDY INTERSECTION LOS

Intersection improvements were assumed at the intersection of Murieta Parkway and Murieta South Parkway along SR-16 as a result of the Rancho Murieta North project. At SR-16/Murieta Parkway, an additional eastbound left-turn lane, southbound right-turn lane and an eastbound through lane was assumed. At SR-16/Murieta South Parkway, a dedicated northbound left-turn lane and a dedicated eastbound right-turn lane was assumed. **Table 19** summarizes Existing Plus Approved and Pending Projects Without Project conditions AM and PM peak hour level of service for all study intersections. Two study intersections are shown to operate at deficient levels of service. Detailed analysis sheets are contained in **Appendix F**.

TABLE 19, EXISTING PLUS APPROVED AND PENDING PROJECTS WITHOUT PROJECT CONDITIONS AM/PM PEAK HOUR INTERSECTION LOS

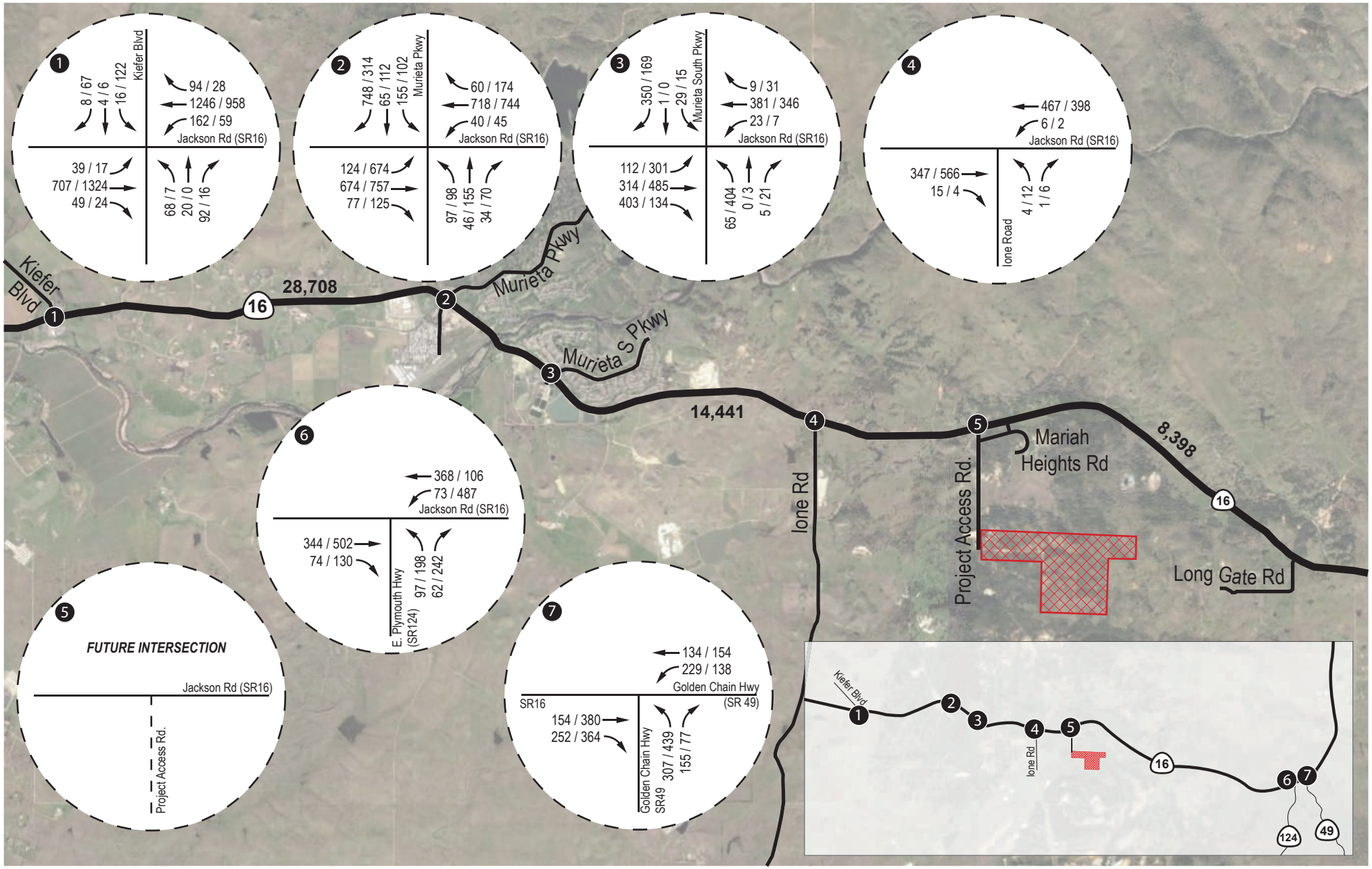
Study Intersection	Traffic Control	Existing Plus Approved & Pending Projects Conditions	
		AM Delay[1] - LOS	PM Delay[1] - LOS
1 - Jackson Rd (SR-16) / Kiefer Blvd	Signal	**161.7 - F**	**124.9 - F**
2 - Jackson Rd (SR-16) / Murieta Pkwy	Signal	29.4 - C	33.8 - C
3 - Jackson Rd (SR-16) / Murieta S Pkwy	Signal	25.2 - C	46.0 - D
4 - Jackson Rd (SR-16) / Ione Rd	OWSC	14.3 - B	16.4 - C
5 - Jackson Rd (SR-16) / Project Access Rd	OWSC	Does Not Exist Without Project	
6 - Jackson Rd (SR-16) / E. Plymouth Hwy (SR-124)	OWSC	**30.2 - D**	**158.0 - F**
7 - Jackson Rd (SR-16) / Golden Chain Hwy (SR-49)	Signal	12.8 - B	17.4 - B

Note: Deficient intersection operation indicated in **bold**.

[1] Average seconds of delay per vehicle.

LOS = level of service.

OWSC = One-Way Stop Control (worst approach delay/LOS reported)



Not to Scale

Legend:

- = Project Site
- # = Study Intersection
- ## / ## = AM / PM Peak Hour Volumes
- #,### = Daily Traffic Volumes

Existing Plus Approved & Pending Projects AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 20

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8.3 EXISTING PLUS APPROVED AND PENDING PROJECTS WITHOUT PROJECT ROADWAY SEGMENT LOS

Table 20 presents the results of Existing Plus Approved and Pending Projects Without Project conditions roadway segment level of service analysis. As shown, all of the roadway segment is forecast to operate at acceptable levels of service based on daily capacity thresholds except for the following segment:

- SR-16 from Kiefer Blvd to Murieta South Parkway (LOS F)

TABLE 20, EXISTING PLUS APPROVED AND PENDING PROJECTS WITHOUT PROJECT ROADWAY SEGMENT LOS - DAILY

SR-16 Roadway Segment	Classification (No. Lanes)	LOS E Capacity	Existing Plus Approved & Pending Projects Without Project		
			ADT	V/C	LOS
Kiefer Blvd to Murieta South Pkwy	Arterial-High Access (2)	20,000	28,708	1.44	**F**
Murieta South Pkwy to Moriah Heights Road	Arterial-High Access (2)	20,000	14,441	0.72	C
Mariah Heights Road to Long Gate Road	Arterial-High Access (2)	20,000	8,398	0.42	A

Note: Deficient roadway segment operations shown in **bold.**
LOS= Level of Service
ADT= Average Daily Traffic
V/C= Volume to Capacity Ratio

The study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. **Table 21** shows the peak hour segment analysis by direction along Jackson Road (SR-16). As shown, all study roadway segments are currently operating at acceptable levels of service during the AM and PM peak hours except on SR-16 from Kiefer Blvd to Murieta South Parkway which operates at deficient levels of service (LOS E and F) in both directions.

TABLE 21, EXISTING PLUS APPROVED AND PENDING PROJECTS WITHOUT PROJECT CONDITIONS ROADWAY SEGMENT LOS – PEAK HOUR

Jackson Road (SR-16)	No. of Lanes by Direction	Roadway Segment Capacity (VPHPL)	Existing Plus Approved & Pending Projects Without Project							
			Peak Hour Volume		ATS (mph)		PTSF (%)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
Kiefer Blvd to Murieta South Pkwy	EB: 1	1,700	1,078	1,675	58.1	57.4	75.8	85.3	**E**	**E**
	WB: 1	1,700	1,925	1,227	57.8	58.0	81.3	78.8	**F**	**E**
Murieta South Pkwy to Mariah Heights	EB: 1	1,700	535	597	59.7	59.8	54.0	56.1	C	C
	WB: 1	1,700	518	439	60.0	60.1	52.2	48.5	C	B
Mariah Heights Road to Long Gate Road	EB: 1	1,700	292	448	59.2	60.1	36.9	47.3	A	B
	WB: 1	1,700	345	374	60.3	59.5	40.4	44.2	B	B

Note: Deficient roadway segment operations shown in **bold.**
ATS= Average Travel Speed (mph)
VPHPL = Vehicles per hour per lane
PTSF=Percent Time-Spent-Following (%)
LOS= Level of Service

9 EXISTING PLUS APPROVED and PENDING PROJECTS PLUS PROJECT CONDITIONS

9.1 EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT CONDITIONS TRAFFIC VOLUMES

Existing Plus Approved and Pending Projects Plus Project conditions traffic volumes were derived by adding trips forecast to be generated by the proposed project to Existing Plus Approved and Pending Projects Without Project conditions traffic volumes.

The analysis assumes these improvements at the projects main entrance (study intersection #5) for the Existing Plus Approved and Pending Projects Plus Project conditions. **Exhibit 21** shows the Existing Plus Approved and Pending Projects Plus Project conditions AM and PM peak hour and daily traffic volumes at study intersections and roadway segments.

9.2 EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT CONDITIONS PEAK HOUR STUDY INTERSECTION LOS

Table 22 summarizes Existing Plus Approved and Pending Projects Plus Project conditions AM and PM peak hour level of service for all study intersections. Detailed analysis sheets are found in **Appendix G**.

TABLE 22, EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT CONDITIONS AM/PM PEAK HOUR INTERSECTION LOS

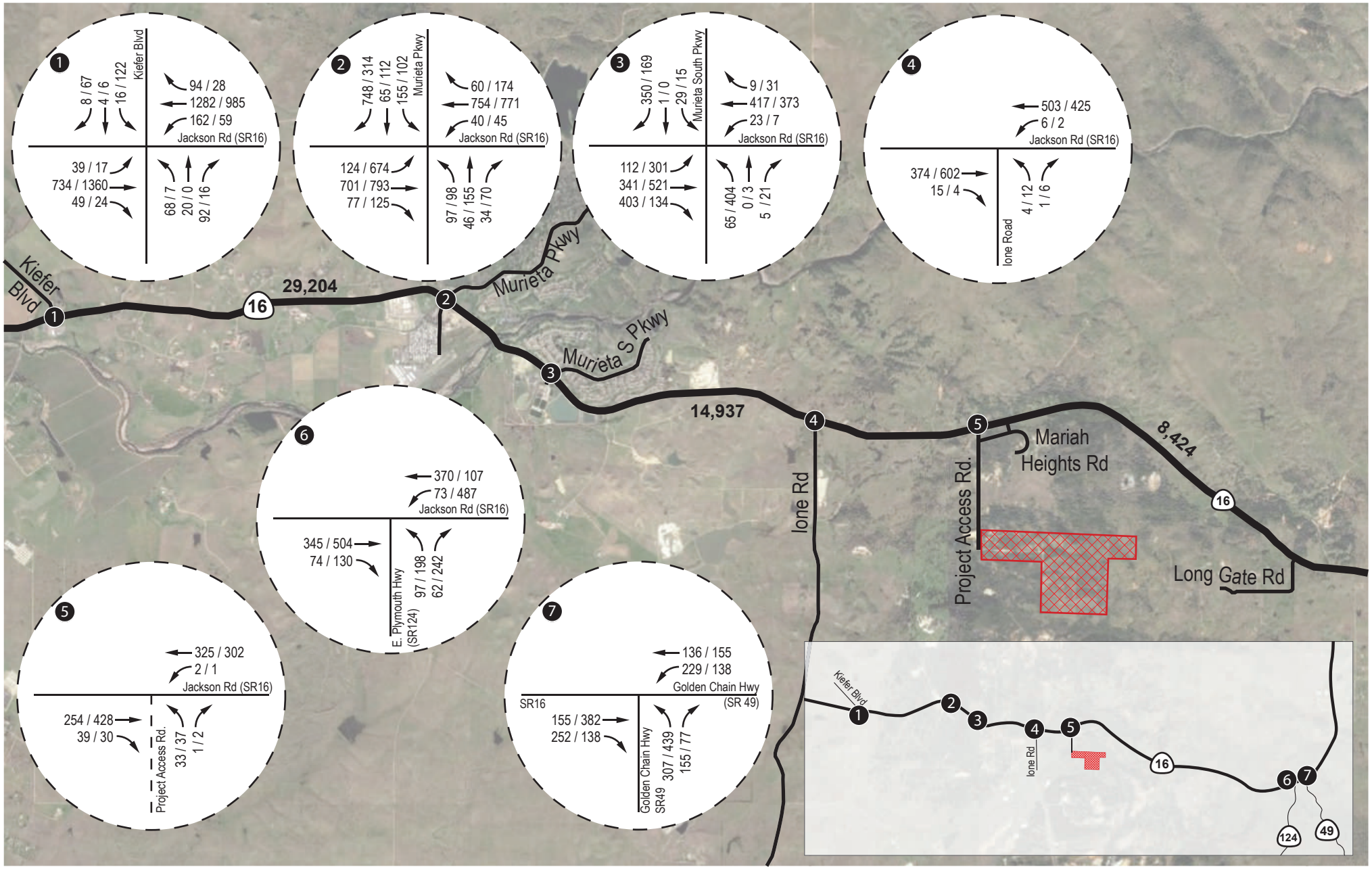
Study Intersection	Traffic Control	Existing Plus Approved & Pending Projects Conditions		Existing Plus Approved & Pending Projects Plus Project Conditions		Change in Delay (sec.)		Significant Impact?	
		AM Delay[1] - LOS	PM Delay[1] - LOS	AM Delay[1] - LOS	PM Delay[1] - LOS	AM	PM	AM	PM
1 - Jackson Rd (SR-16) / Kiefer Blvd	Signal	**161.7 - F**	**124.9 - F**	**163.3 - F**	**123.8 - F**	1.6	-1.1	No	No
2 - Jackson Rd (SR-16) / Murieta Pkwy	Signal	29.4 - C	33.8 - C	32.4 - C	34.2 - C	3.0	0.4	No	No
3 - Jackson Rd (SR-16) / Murieta S Pkwy	Signal	25.2 - C	46.0 - D	26.0 - C	40.1 - D	0.8	-5.9	No	No
4 - Jackson Rd (SR-16) / Ione Rd	OWSC	14.3 - B	16.4 - C	14.7 - B	17.1 - C	0.4	0.7	No	No
5 - Jackson Rd (SR-16) / Project Access Rd[2]	OWSC	Does Not Exist Without Project		19.7 - C	21.6 - C	–	–	No	No
6 - Jackson Rd (SR-16) / E. Plymouth Hwy (SR-124)	OWSC	**30.2 - D**	**158.0 - F**	**30.2 - D**	**159.4 - F**	0.0	1.4	No	No
7 - Jackson Rd (SR-16) / Golden Chain Hwy (SR-49)	Signal	12.8 - B	17.4 - B	13.0 - B	18.0 - B	0.2	0.6	No	No

Note: Deficient intersection operation indicated in **bold**. LOS = level of service.

[1] Seconds of delay per vehicle. OWSC = One-Way Stop Control (worst approach delay/LOS reported)

[2] Project access includes existing traffic from Moriah Heights Road due to the removal of Moriah Heights Road.

As shown in **Table 22**, two study intersections are forecast to operate at deficient levels of service without or with project conditions. However, significance thresholds were not exceeded at SR-16/Kiefer Blvd or SR-16/SR-124. Therefore, the intersection impacts by the project are not considered significant and mitigation is not required. It may also be noted a signal warrant (Warrant #3- Peak Hour Warrant) was evaluated at the project access (Int. #5) using 2014 CA MUTCD and was not satisfied. Therefore, a signal is not recommended at the project access.



Not to Scale

Legend:

= Project Site

= Study Intersection

/ ## = AM / PM Peak Hour Volumes

#,### = Daily Traffic Volumes

Existing Plus Approved & Pending Projects Plus Project AM / PM Peak Hour & Daily Traffic Volumes

Exhibit 21

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9.3 EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT ROADWAY SEGMENT LOS

Table 23 presents the results of the Existing Plus Approved and Pending Projects Plus Project conditions roadway segment level of service analysis. As shown, the following roadway segment is forecast to operate at unacceptable levels of service (E or F) based on daily capacity thresholds:

- SR-16 from Kiefer Blvd to Murieta South Parkway (LOS F)

TABLE 23, EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT ROADWAY SEGMENT LOS - DAILY

SR-16 Roadway Segment	Classification (No. Lanes)	LOS E Capacity	Existing Plus Approved & Pending Projects Without Project			Existing Plus Approved & Pending Projects Plus Project			Δ V/C	Significant Impact?
			ADT	V/C	LOS	ADT	V/C	LOS		
Kiefer Blvd to Murieta South Pkwy	Arterial-High Access (2)	20,000	28,708	1.44	**F**	29,204	1.46	**F**	0.025	No
Murieta South Pkwy to Moriah Heights Road	Arterial-High Access (2)	20,000	14,441	0.72	C	14,937	0.75	C	0.025	No
Mariah Heights Road to Long Gate Road	Arterial-High Access (2)	20,000	8,398	0.42	A	8,424	0.42	A	0.001	No

Note: Deficient roadway segment operations shown in **bold.**
LOS= Level of Service
V/C= Volume to Capacity Ratio
Δ= Difference

The study roadway segments along SR-16 were also analyzed under AM and PM peak hour conditions to determine average travel speed (mph) and percent time-spent-following during the critical AM and PM peak hours. **Table 24** shows the peak hour segment analysis by direction along Jackson Road (SR-16) under Existing Plus Approved and Pending Projects Without and With Project conditions. As shown, all study roadway segments are operating at acceptable levels of service during the AM and PM peak hours except for SR-16 from Kiefer Blvd to Murieta South Parkway which is forecast to operate at LOS E and F during AM and PM peak hours.

TABLE 24, EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT CONDITIONS ROADWAY SEGMENT LOS – PEAK HOUR

Jackson Road (SR-16)	No. of Lanes by Direction	Roadway Segment Capacity (VPHPL)	Existing Plus Approved & Pending Projects						Existing Plus Approved & Pending Projects Plus Project						Δ PTSF (%)		S?
			ATS (mph)		PTSF (%)		LOS		ATS (mph)		PTSF (%)		LOS				
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Kiefer Blvd to Murieta South Pkwy	EB: 1	1,700	58.1	57.4	75.8	85.3	**E**	**E**	58.1	57.4	76.6	85.4	**E**	**E**	0.8	0.1	N
	WB: 1	1,700	57.8	58.0	81.3	78.8	**F**	**E**	75.0	58.0	82.0	79.3	**F**	**E**	0.7	0.5	N
Murieta South Pkwy to Mariah Heights	EB: 1	1,700	59.7	59.8	54.0	56.1	C	C	59.6	59.7	56.1	58.0	C	C	2.1	1.9	N
	WB: 1	1,700	60.0	60.1	52.2	48.5	C	B	59.9	60.0	54.3	50.4	C	B	2.1	1.9	N
Mariah Heights Road to Long Gate Road	EB: 1	1,700	59.2	60.1	36.9	47.3	A	B	59.2	60.0	37.0	47.5	A	B	0.1	0.2	N
	WB: 1	1,700	60.3	59.5	40.4	44.2	B	B	60.3	59.5	40.6	44.3	B	B	0.2	0.1	N

Note: Deficient roadway segment operations shown in **bold.**
S? = Is the roadway segment signficantly impacted by the project?
VPHPL = Vehicles per hour per lane
ATS = Average Travel Speed (mph)
LOS = Level of Service
PTSF = Percent Time-Spent-Following (%)
Δ = Difference in Percent Time-Spent-Following between the With and Without Project scenarios.

In accordance with the *Sacramento County Traffic Impact Study Guidelines* significance criteria, there are no significant impacts on study roadway segments based on project-related traffic during the peak hours and therefore, no mitigation is required.

10 QUEUING ANALYSIS

A queuing analysis was performed for all of the study intersections within the study area. Utilizing the Synchro analysis software, the 95th percentile queue lengths are reported. The 95th percentile queue is the queue length (in vehicles) that has only a 5-percent probability of being exceeded during the peak hour. Detailed queuing analysis worksheets are located in the Appendix identified for each study scenario.

10.1 EXISTING QUEUING ANALYSIS

Utilizing the peak hour volumes shown in **Exhibit 7**, a queuing analysis was conducted at all study intersections. As shown in **Table 25**, the queuing needs are currently being met by the existing turn pockets with the exception of a few turn movements at the SR-16/Murieta Parkway and SR-16/Murieta South Parkway intersections.

TABLE 25, EXISTING QUEUING ANALYSIS

Movement	No. Lanes	Storage Length Per Lane (ft)	Peak Hour Volume		95% Queue (ft)		Adequate Storage?
			AM	PM	AM	PM	
1 - SR-16 / Kiefer Boulevard							
NBL	1	300	68	7	64	30	Yes
NBR	1	140	92	16	44	20	Yes
SBL	1	180	6	105	21	87	Yes
EBL	1	470	39	17	49	30	Yes
EBR	1	490	49	24	18	11	Yes
WBL	1	720	162	59	112	63	Yes
2 - SR-16 / Murieta Parkway							
NBL	1	90	97	98	113	109	**NO**
SBL	1	85	30	42	63	85	Yes
SBR	1	85	334	112	202	76	**NO**
EBL	1	455	61	222	86	233	Yes
EBR	1	55	77	125	81	94	**NO**
WBL	1	145	40	45	140	131	Yes
3 - SR-16 / Murieta South Parkway							
SBR	1	620	269	106	115	73	Yes
EBL	1	435	72	210	66	124	Yes
WBL	1	200	2	0	5	0	Yes
4 - SR-16 / Ione Road							
NBR	1	70	1	6	8	6	Yes
WBL	1	430	6	2	9	5	Yes
5 - SR-16 / Project Access							
Intersection Does Not Exist Without Project							
6 - SR-16 / SR-124							
NBL	1	240	86	143	57	232	Yes
NBR	1	420	62	242	22	172	Yes
EBR	1	270	61	115	12	74	Yes
WBL	1	260	73	487	37	168	Yes
7 - SR-16 / SR-49							
NBL	1	280	277	417	125	195	Yes
NBR	1	NA	155	77	NA	30	NA
EB**T**	1	1,400	131	351	115	186	Yes
EBR	1	860	216	336	77	57	Yes
WBL	1	260	229	138	128	100	Yes

10.2 EXISTING PLUS PROJECT QUEUING ANALYSIS

Utilizing the peak hour volumes shown in **Exhibit 15**, a queuing analysis was conducted at all study intersections including the project access. As shown in **Table 26**, queuing needs are currently being met by the existing turn pockets with the exception of a few turn movements at SR-16/Murieta Parkway. With the addition of project-related traffic at SR-16/Murieta Parkway, the change in queue length is less than 25 feet (approximately 1 vehicle) compared to the Existing conditions. Therefore, queuing related to project traffic is considered minimal.

TABLE 26, EXISTING PLUS PROJECT QUEUING ANALYSIS

Movement	No. Lanes	Storage Length Per Lane (ft)	Peak Hour Volume		95% Queue (ft)		Adequate Storage?
			AM	PM	AM	PM	
1 - SR-16 / Kiefer Boulevard							
NBL	1	300	68	7	71	28	Yes
NBR	1	140	92	16	47	21	Yes
SBL	1	180	6	105	20	88	Yes
EBL	1	470	39	17	48	31	Yes
EBR	1	490	49	24	17	41	Yes
WBL	1	720	162	59	113	59	Yes
2 - SR-16 / Murieta Parkway							
NBL	1	90	97	98	121	113	**NO**
SBL	1	85	30	42	62	84	Yes
SBR	1	85	334	112	208	76	**NO**
EBL	1	455	61	222	98	228	Yes
EBR	1	55	77	125	80	92	**NO**
WBL	1	145	40	45	139	141	Yes
3 - SR-16 / Murieta South Parkway							
SBR	1	620	269	106	120	73	Yes
EBL	1	435	72	210	67	127	Yes
WBL	1	200	2	0	5	0	Yes
4 - SR-16 / Ione Road							
NBR	1	70	1	6	15	46	Yes
WBL	1	430	6	2	9	6	Yes
5 - SR-16 / Project Access							
NBL	1	150	33	37	35	36	Yes
NBR	1	150	1	2	6	9	Yes
WBL	1	450	2	1	5	0	Yes
6 - SR-16 / SR-124							
NBL	1	240	86	143	57	208	Yes
NBR	1	420	62	242	17	161	Yes
EBR	1	270	61	115	14	78	Yes
WBL	1	260	73	487	37	161	Yes
7 - SR-16 / SR-49							
NBL	1	280	277	417	135	184	Yes
NBR	1	NA	155	77	29	18	NA
EBT	1	1,400	132	353	116	180	Yes
EBR	1	860	216	336	69	54	Yes
WBL	1	260	229	138	131	100	Yes

10.3 EXISTING PLUS APPROVED PROJECTS QUEUING ANALYSIS

Utilizing the peak hour volumes shown in **Exhibit 17**, a queuing analysis was conducted at all study intersections. As shown in **Table 27**, the queuing needs are currently being met by the existing turn pockets with the exception of a few turn movements at SR-16/Murieta Parkway.

TABLE 27, EXISTING PLUS APPROVED PROJECTS QUEUING ANALYSIS

Movement	No. Lanes	Storage Length Per Lane (ft)	Peak Hour Volume		95% Queue (ft)		Adequate Storage?
			AM	PM	AM	PM	
1 - SR-16 / Kiefer Boulevard							
NBL	1	300	68	7	74	27	Yes
NBR	1	140	92	16	46	21	Yes
SBL	1	180	6	105	21	94	Yes
EBL	1	470	39	17	48	65	Yes
EBR	1	490	49	24	19	42	Yes
WBL	1	720	162	59	116	68	Yes
2 - SR-16 / Murieta Parkway							
NBL	1	90	97	98	118	110	**NO**
SBL	1	85	30	42	57	83	Yes
SBR	1	85	334	112	231	77	**NO**
EBL	1	455	61	222	89	290	Yes
EBR	1	55	77	125	84	91	**NO**
WBL	1	145	40	45	149	143	**NO**
3 - SR-16 / Murieta South Parkway							
SBR	1	620	331	147	147	102	Yes
EBL	1	435	93	280	82	169	Yes
WBL	1	200	2	0	17	0	Yes
4 - SR-16 / Ione Road							
NBR	1	70	1	6	17	31	Yes
WBL	1	430	6	2	9	6	Yes
5 - SR-16 / Project Access							
Intersection Does Not Exist Without Project							
6 - SR-16 / SR-124							
NBL	1	240	88	163	61	210	Yes
NBR	1	420	62	242	21	207	Yes
EBR	1	270	66	119	18	77	Yes
WBL	1	260	73	487	40	169	Yes
7 - SR-16 / SR-49							
NBL	1	280	283	425	146	196	Yes
NBR	1	NA	155	77	30	15	NA
EBT	1	1,400	140	358	115	183	Yes
EBR	1	860	230	343	77	58	Yes
WBL	1	260	229	138	130	107	Yes

10.4 EXISTING PLUS APPROVED PROJECTS PLUS PROJECT QUEUING ANALYSIS

Utilizing the peak hour volumes shown in **Exhibit 18**, a queuing analysis was conducted at all study intersections. As shown in **Table 28**, the queuing needs are currently being met by the existing turn pockets with the exception of a few turn movements at SR-16/Murieta Parkway. With the addition of project-related traffic at SR-16/Murieta Parkway, the change in queue length is less than 25 feet (approximately 1 vehicle) compared to the Existing Plus Approved Projects Without Project condition. Therefore, queuing related to project traffic is considered minimal.

TABLE 28, EXISTING PLUS APPROVED PROJECTS PLUS PROJECT QUEUING ANALYSIS

Movement	No. Lanes	Storage Length Per Lane (ft)	Peak Hour Volume		95% Queue (ft)		Adequate Storage?
			AM	PM	AM	PM	
1 - SR-16 / Kiefer Boulevard							
NBL	1	300	68	7	72	24	Yes
NBR	1	140	92	16	48	22	Yes
SBL	1	180	6	105	19	100	Yes
EBL	1	470	39	17	52	108	Yes
EBR	1	490	49	24	18	133	Yes
WBL	1	720	162	59	189	63	Yes
2 - SR-16 / Murieta Parkway							
NBL	1	90	97	98	115	116	**NO**
SBL	1	85	30	42	58	88	**NO**
SBR	1	85	334	112	223	81	**NO**
EBL	1	455	61	222	93	376	Yes
EBR	1	55	77	125	83	93	**NO**
WBL	1	145	40	45	153	144	**NO**
3 - SR-16 / Murieta South Parkway							
SBR	1	620	331	147	147	101	Yes
EBL	1	435	93	280	82	180	Yes
WBL	1	200	2	0	17	0	Yes
4 - SR-16 / Ione Road							
NBR	1	70	1	6	13	34	Yes
WBL	1	430	6	2	9	5	Yes
5 - SR-16 / Project Access							
NBL	1	150	33	37	32	30	Yes
NBR	1	150	1	2	5	6	Yes
WBL	1	450	2	1	2	4	Yes
6 - SR-16 / SR-124							
NBL	1	240	88	163	59	218	Yes
NBR	1	420	62	242	24	178	Yes
EBR	1	270	66	119	8	79	Yes
WBL	1	260	73	487	38	167	Yes
7 - SR-16 / SR-49							
NBL	1	280	283	425	139	197	Yes
NBR	1	NA	155	77	22	35	NA
EBT	1	1,400	141	360	119	190	Yes
EBR	1	860	230	343	78	62	Yes
WBL	1	260	229	138	132	110	Yes

10.5 EXISTING PLUS APPROVED AND PENDING PROJECTS QUEUING ANALYSIS

Utilizing the peak hour volumes shown in **Exhibit 20**, a queuing analysis was conducted at all study intersections. **Table 29** shows the results of the queuing analysis. As shown, there are a few turn movements where the 95th percentile queue exceeds the current storage lengths as a result of approved and pending project traffic added to study locations.

TABLE 29, EXISTING PLUS APPROVED AND PENDING PROJECTS QUEUING ANALYSIS

Movement	No. Lanes	Storage Length Per Lane (ft)	Peak Hour Volume		95% Queue (ft)		Adequate Storage?
			AM	PM	AM	PM	
1 - SR-16 / Kiefer Boulevard							
NBL	1	300	68	7	97	26	Yes
NBR	1	140	92	16	63	26	Yes
SBL	1	180	16	122	37	140	Yes
EBL	1	470	39	17	65	336	Yes
EBR	1	490	49	24	44	467	Yes
WBL	1	720	162	59	1022	148	**NO**
2 - SR-16 / Murieta Parkway							
NBL	1	90	97	98	107	124	**NO**
SBL	1	85	155	102	118	118	**NO**
SBR	1	85	748	314	250	122	**NO**
EBL	1	455	124	674	280	224	Yes
EBR	1	55	77	125	79	88	**NO**
WBL	1	145	40	45	138	177	**NO**
3 - SR-16 / Murieta South Parkway							
SBR	1	620	350	169	210	190	Yes
EBL	1	435	112	301	106	272	Yes
WBL	1	200	23	7	80	70	Yes
4 - SR-16 / Ione Road							
NBR	1	70	1	6	16	30	Yes
WBL	1	430	6	2	10	5	Yes
5 - SR-16 / Project Access							
Intersection Does Not Exist Without Project							
6 - SR-16 / SR-124							
NBL	1	240	97	198	66	937	**NO**
NBR	1	420	62	242	25	323	Yes
EBR	1	270	74	130	18	78	Yes
WBL	1	260	73	487	39	169	Yes
7 - SR-16 / SR-49							
NBL	1	280	307	439	144	199	Yes
NBR	1	NA	155	77	24	20	NA
EBT	1	1,400	154	380	123	192	Yes
EBR	1	860	252	364	80	60	Yes
WBL	1	260	229	138	134	105	Yes

10.6 EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT QUEUING ANALYSIS

Utilizing the peak hour volumes shown in **Exhibit 21**, a queuing analysis was conducted at all study intersections. **Table 30** shows the results of the queuing analysis. With the addition of project-related traffic at SR-16/Kiefer Blvd, SR-16/Murieta Parkway, and SR-16/SR-124, the change in queue length is less than 25 feet (approximately 1 vehicle) compared to the Existing Plus Approved and Pending Projects Without Project conditions. Therefore, queuing related to project traffic is considered minimal.

TABLE 30, EXISTING PLUS APPROVED AND PENDING PROJECTS PLUS PROJECT QUEUING ANALYSIS

Movement	No. Lanes	Storage Length Per Lane (ft)	Peak Hour Volume		95% Queue (ft)		Adequate Storage?
			AM	PM	AM	PM	
1 - SR-16 / Kiefer Boulevard							
NBL	1	300	68	7	86	30	Yes
NBR	1	140	92	16	69	28	Yes
SBL	1	180	16	122	37	128	Yes
EBL	1	470	39	17	71	344	Yes
EBR	1	490	49	24	43	481	Yes
WBL	1	720	162	59	1009	159	**NO**
2 - SR-16 / Murieta Parkway							
NBL	1	90	97	98	108	121	**NO**
SBL	1	85	155	102	117	117	**NO**
SBR	1	85	748	314	254	142	**NO**
EBL	1	455	124	674	313	300	Yes
EBR	1	55	77	125	81	88	**NO**
WBL	1	145	40	45	150	180	**NO**
3 - SR-16 / Murieta South Parkway							
SBR	1	620	350	169	213	96	Yes
EBL	1	435	112	301	116	254	Yes
WBL	1	200	23	7	63	64	Yes
4 - SR-16 / Ione Road							
NBR	1	70	1	6	17	32	Yes
WBL	1	430	6	2	9	8	Yes
5 - SR-16 / Project Access							
NBL	1	150	33	37	35	0	Yes
NBR	1	150	1	2	5	0	Yes
WBL	1	450	2	1	6	4	Yes
6 - SR-16 / SR-124							
NBL	1	240	97	198	69	916	**NO**
NBR	1	420	62	242	22	316	Yes
EBR	1	270	74	130	22	79	Yes
WBL	1	260	73	487	40	173	Yes
7 - SR-16 / SR-49							
NBL	1	280	307	439	146	216	Yes
NBR	1	NA	155	77	28	28	NA
EBT	1	1,400	155	382	126	204	Yes
EBR	1	860	252	364	80	62	Yes
WBL	1	260	229	138	131	106	Yes

11 FINDINGS AND RECOMMENDATIONS

This study analyzes the forecast traffic conditions associated with the proposed Pilgrim Rock Quarry project located in Amador County. The proposed project would be a new mining operation on approximately 135 acres in an area south of State Route (SR) 16 (Jackson Road) and east of Ione Road near Mariah Heights Road. Mining operations would include blasting, quarrying and crushing bedrock for construction aggregate resources. The anticipated life of the operation is 40 years, depending on market conditions. Aggregate would be transported from the processing area along a paved haul road within the project site to Highway 16.

The proposed project is forecast to generate approximately 522 vehicle trips per day, with approximately 66 AM peak hour trips and approximately 66 PM peak hour trips. Approximately 95% of project trips are anticipated to travel westbound into Sacramento County.

Existing Plus Project Conditions - Summary of Impacts and Mitigation

The results of the Existing Plus Project conditions show there are no significant impacts at study intersections with the addition of project-related traffic volumes. Therefore, no mitigation is required under Existing Plus Project conditions at any of the study intersections in either Amador or Sacramento County.

The results of the roadway segment analysis based on daily traffic volumes along Jackson Road (SR-16) show that all study segments are forecast to operate at acceptable levels of service under Existing Plus Project conditions.

Roadway segments were further analyzed under peak hour conditions and by direction. SR-16 from Kiefer Blvd to Murieta South Parkway is shown to operate at LOS E in the AM and PM peak hour. However, based on the thresholds of significance for roadway segments, the addition of project-related trips would not result in a significant traffic impact at any of the roadway segments in Sacramento County. Therefore, no mitigation measures are required on study roadway segments under Existing Plus Project conditions.

Existing Plus Approved Projects Plus Project Conditions - Summary of Impacts and Mitigation

The results of the Existing Plus Approved Projects Plus Project conditions show there are no significant impacts at study intersections with the addition of project-related traffic volumes. The intersection of SR-16 at SR-124 is reported to operate at deficient levels of service (LOS E), however, the change in delay does not exceed the significance threshold (5 seconds). Therefore, the intersection is not considered significant and no mitigation is required under Existing Plus Approved Projects Plus Project conditions.

The results of the roadway segment analysis based on daily traffic volumes along Jackson Road (SR-16) show that all study segments are forecast to operate at acceptable levels of service under Existing Plus Project conditions except for SR-16 from Kiefer Blvd to Murieta South Parkway which operates at LOS E.

The change in volume to capacity (v/c) is less than the significance threshold (0.05) and therefore considered less than significant. Therefore, no mitigation is required.

Similar to the Existing and Existing Plus Project conditions, roadway segments were further analyzed under peak hour conditions and by direction. SR-16 from Kiefer Blvd to Murieta South Parkway is shown to operate at LOS E in the AM and PM peak hour. However, based on the thresholds of significance for the peak hour analysis, the addition of project-related trips would not result in a significant traffic impact at any of the roadway segments in Sacramento County. Therefore, no mitigation measures are required on study roadway segments under Existing Plus Approved Projects Plus Project conditions.

Existing Plus Approved and Pending Projects Plus Project Conditions - Summary of Impacts and Mitigation

The results of the Existing Plus Approved and Pending Projects Plus Project conditions show there are two study intersections that are forecast to operate at deficient levels of service (LOS D & E): SR-16/Kiefer Blvd and SR-16/SR-124. The change in delay at both of these intersections does not exceed the significance threshold (i.e. 5.0 seconds). Therefore, no mitigation is required under Existing Plus Approved and Pending Projects Plus Project conditions at any of the study intersections.

The results of the roadway segment analysis based on daily traffic volumes along Jackson Road (SR-16) show that all study segments are forecast to operate at acceptable levels of service under Existing Plus Project conditions except from Kiefer Blvd to Murieta South Parkway which operates at LOS F. The change in v/c between Existing Plus Approved and Pending Projects Without Project conditions and Existing Plus Approved and Pending Projects Plus Project conditions is 0.025 which is less than the significance threshold (0.05). Therefore, the roadway segment impact is considered less than significant and no mitigation is required.

Roadway segments were further analyzed under peak hour conditions and by direction. SR-16 from Kiefer Blvd to Murieta South Parkway is shown to operate at LOS E in the AM and PM peak hour. However, based on the thresholds of significance for the peak hour analysis, the addition of project-related trips would not result in a significant traffic impact at any of the roadway segments in Sacramento County. Therefore, no mitigation measures are required on study roadway segments under Existing Plus Approved and Pending Projects Plus Project conditions.

Vehicle Miles Traveled (VMT)

Vehicle miles traveled (VMT) is the measurement of miles traveled by vehicles within a specific region or for vehicle trips generated by a specific project. Senate Bill 743 (SB 743) signed into law September 2013 shifted the measure of effectiveness for determining transportation impacts from LOS and vehicular delay to VMT. VMT analyses are required for use in all CEQA documents as of July 1, 2020. At the time this report was prepared, Amador County has not adopted VMT thresholds or guidelines. It is anticipated that Amador County will release their own VMT thresholds and VMT maps in advance of the July 2020 deadline. The estimated trip length per truck load is approximately 28 miles (one-way). With 500 truck

trips and 22 employee trips for a total of 522 project trips, the estimated VMT for the project is approximately 14,616 VMT (522 trips x 28 miles per trip).

Signal Warrant Summary

A Peak Hour Signal Warrant #3 per the California Manual on Uniform Traffic Control Devices (CA MUTCD) was evaluated at the SR-16 / Project Access intersection. Based on this analysis, a signal warrant was not satisfied under the Existing Plus Approved and Pending Projects Plus Project condition. Therefore, the installation of a traffic signal at the project access is not recommended. Signal warrant worksheets are contained in **Appendix A**.

Queuing Analysis

A queuing analysis was conducted at each study intersection for each scenario to evaluate forecast queues along SR-16. With the addition of project-related traffic along SR-16, the analysis shows there are a few locations that exceed the available storage capacity at turn lanes. However, the change in queue length is less than 25 feet (approximately 1 vehicle) compared to the "Without" project conditions. Therefore, queuing related to project traffic is considered minimal.

Michael Baker
INTERNATIONAL

Appendix A:
Count Data &
Signal Warrants &
Sight Distance Exhibit

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Kiefer Blvd & Murrieta South Pkwy

Day: Thursday
Date: 5/17/2018

City: Sloughhouse
Project #: CA18_7199_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	44	6	0	3	0	0	2	0	0	0	0	0	55
01:00	0	12	0	0	3	0	0	1	0	0	0	0	0	16
02:00	0	9	1	1	1	0	0	0	0	0	0	0	0	12
03:00	0	13	3	0	5	1	0	0	0	0	0	0	0	22
04:00	0	30	8	1	4	2	0	4	0	0	0	0	0	49
05:00	0	118	20	3	30	0	0	3	0	0	1	0	0	175
06:00	0	163	53	11	54	1	0	11	1	0	0	0	0	294
07:00	2	241	75	4	53	3	0	6	0	0	1	0	0	385
08:00	0	211	49	5	61	1	0	7	0	0	0	0	0	334
09:00	0	208	63	6	63	1	0	8	0	0	0	0	0	349
10:00	1	191	57	5	61	0	0	13	2	0	0	0	0	330
11:00	2	242	44	3	71	0	0	5	0	0	0	0	0	367
12:00 PM	2	280	65	4	55	2	0	10	2	0	1	0	0	421
13:00	0	302	58	3	64	0	0	6	2	0	0	0	0	435
14:00	0	397	71	4	63	1	0	9	1	0	0	0	0	546
15:00	1	413	87	3	79	2	0	6	2	0	0	0	0	593
16:00	4	547	92	5	103	1	0	3	0	0	0	0	0	755
17:00	3	545	71	2	90	0	0	4	0	0	0	0	0	715
18:00	0	494	70	1	66	0	0	3	0	0	0	0	0	634
19:00	0	337	43	0	47	0	0	3	0	0	0	0	0	430
20:00	0	261	24	0	31	0	0	2	0	0	0	0	0	318
21:00	0	198	23	0	19	0	0	2	0	0	0	0	0	242
22:00	0	123	18	0	15	0	0	2	0	0	0	0	0	158
23:00	0	59	7	0	10	0	0	0	0	0	0	0	0	76
Totals	15	5438	1008	61	1051	15		110	10		3			7711
% of Totals	0%	71%	13%	1%	14%	0%		1%	0%		0%			100%

AM Volumes	5	1482	379	39	409	9	0	60	3	0	2	0	0	2388
% AM	0%	19%	5%	1%	5%	0%		1%	0%		0%			31%
AM Peak Hour	07:00	11:00	07:00	06:00	11:00	07:00		10:00	10:00		05:00			07:00
Volume	2	242	75	11	71	3		13	2		1			385
PM Volumes	10	3956	629	22	642	6	0	50	7	0	1	0	0	5323
% PM	0%	51%	8%	0%	8%	0%		1%	0%		0%			69%
PM Peak Hour	16:00	16:00	16:00	16:00	16:00	12:00		12:00	12:00		12:00			16:00
Volume	4	547	92	5	103	2		10	2		1			755

Directional Peak Periods	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
All Classes	Volume	%	Volume	%	Volume	%	Volume	%
	719	9%	856	11%	1470	19%	4666	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Kiefer Blvd & Murrieta South Pkwy

Day: Thursday
Date: 5/17/2018

City: Sloughhouse
Project #: CA18_7199_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	18	3	0	1	0	0	0	0	0	0	0	0	22
01:00	0	19	4	0	1	0	0	0	1	0	0	0	0	25
02:00	0	25	2	0	2	0	0	0	0	0	0	0	0	29
03:00	0	32	5	0	2	0	0	0	1	0	0	0	0	40
04:00	0	73	18	0	31	1	0	1	1	0	0	0	0	125
05:00	0	231	63	1	75	1	0	0	0	0	0	0	0	371
06:00	0	547	81	5	106	5	0	4	1	0	0	0	0	749
07:00	1	648	73	3	111	5	0	0	0	0	0	0	0	841
08:00	0	451	62	7	77	6	0	4	3	0	1	0	0	611
09:00	1	366	62	6	70	0	0	2	4	0	0	0	0	511
10:00	0	303	68	5	42	4	0	4	9	0	1	0	0	436
11:00	2	282	54	8	54	4	0	6	3	0	1	0	0	414
12:00 PM	2	324	52	3	58	0	0	6	3	0	2	0	0	450
13:00	1	291	60	6	78	4	1	5	3	0	2	0	0	451
14:00	5	419	73	10	83	6	5	8	9	0	3	0	0	621
15:00	0	310	58	7	58	5	0	4	8	0	1	0	0	451
16:00	0	289	60	2	66	0	0	2	0	0	0	0	0	419
17:00	3	300	57	1	55	2	0	0	0	0	2	0	0	420
18:00	0	190	37	3	45	2	0	1	0	0	0	0	0	278
19:00	0	147	32	1	25	0	0	1	1	0	1	0	0	208
20:00	0	108	17	0	15	1	0	0	1	0	0	0	0	142
21:00	0	91	10	0	14	0	0	1	1	0	1	0	0	118
22:00	0	94	13	0	8	0	0	1	0	0	0	0	0	116
23:00	0	30	1	0	0	0	0	0	2	0	0	0	0	33
Totals	15	5588	965	68	1077	46	6	50	51		15			7881
% of Totals	0%	71%	12%	1%	14%	1%	0%	1%	1%		0%			100%

AM Volumes	4	2995	495	35	572	26	0	21	23	0	3	0	0	4174
% AM	0%	38%	6%	0%	7%	0%		0%	0%		0%			53%
AM Peak Hour	11:00	07:00	06:00	11:00	07:00	08:00		11:00	10:00		08:00			07:00
Volume	2	648	81	8	111	6		6	9		1			841
PM Volumes	11	2593	470	33	505	20	6	29	28	0	12	0	0	3707
% PM	0%	33%	6%	0%	6%	0%	0%	0%	0%		0%			47%
PM Peak Hour	14:00	14:00	14:00	14:00	14:00	14:00	14:00	14:00	14:00		14:00			14:00
Volume	5	419	73	10	83	6	5	8	9		3			621

Directional Peak Periods	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
All Classes	Volume	%	Volume	%	Volume	%	Volume	%
	1452	18%	901	11%	839	11%	4689	59%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Kiefer Blvd & Murrieta South Pkwy

Day: Thursday
Date: 5/17/2018

City: Sloughhouse
Project #: CA18_7199_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	62	9	0	4	0	0	2	0	0	0	0	0	77
01:00	0	31	4	0	4	0	0	1	1	0	0	0	0	41
02:00	0	34	3	1	3	0	0	0	0	0	0	0	0	41
03:00	0	45	8	0	7	1	0	0	1	0	0	0	0	62
04:00	0	103	26	1	35	3	0	5	1	0	0	0	0	174
05:00	0	349	83	4	105	1	0	3	0	0	1	0	0	546
06:00	0	710	134	16	160	6	0	15	2	0	0	0	0	1043
07:00	3	889	148	7	164	8	0	6	0	0	1	0	0	1226
08:00	0	662	111	12	138	7	0	11	3	0	1	0	0	945
09:00	1	574	125	12	133	1	0	10	4	0	0	0	0	860
10:00	1	494	125	10	103	4	0	17	11	0	1	0	0	766
11:00	4	524	98	11	125	4	0	11	3	0	1	0	0	781
12:00 PM	4	604	117	7	113	2	0	16	5	0	3	0	0	871
13:00	1	593	118	9	142	4	1	11	5	0	2	0	0	886
14:00	5	816	144	14	146	7	5	17	10	0	3	0	0	1167
15:00	1	723	145	10	137	7	0	10	10	0	1	0	0	1044
16:00	4	836	152	7	169	1	0	5	0	0	0	0	0	1174
17:00	6	845	128	3	145	2	0	4	0	0	2	0	0	1135
18:00	0	684	107	4	111	2	0	4	0	0	0	0	0	912
19:00	0	484	75	1	72	0	0	4	1	0	1	0	0	638
20:00	0	369	41	0	46	1	0	2	1	0	0	0	0	460
21:00	0	289	33	0	33	0	0	3	1	0	1	0	0	360
22:00	0	217	31	0	23	0	0	3	0	0	0	0	0	274
23:00	0	89	8	0	10	0	0	0	2	0	0	0	0	109
Totals	30	11026	1973	129	2128	61	6	160	61		18			15592
% of Totals	0%	71%	13%	1%	14%	0%	0%	1%	0%		0%			100%

AM Volumes	9	4477	874	74	981	35	0	81	26	0	5	0	0	6562
% AM	0%	29%	6%	0%	6%	0%		1%	0%		0%			42%
AM Peak Hour	11:00	07:00	07:00	06:00	07:00	07:00		10:00	10:00		05:00			07:00
Volume	4	889	148	16	164	8		17	11		1			1226
PM Volumes	21	6549	1099	55	1147	26	6	79	35	0	13	0	0	9030
% PM	0%	42%	7%	0%	7%	0%	0%	1%	0%		0%			58%
PM Peak Hour	17:00	17:00	16:00	14:00	16:00	14:00	14:00	14:00	14:00		12:00			16:00
Volume	6	845	152	14	169	7	5	17	10		3			1174

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	2171		14%	1757		11%	2309		15%	9355		60%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	7,711	7,881	15,5

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOT
00:00	0	0	12		7		19		12:00	0	0	103		121		224
00:15	0	0	16		6		22		12:15	0	0	104		124		228
00:30	0	0	19		3		22		12:30	0	0	111		105		216
00:45	0	0	8	55	6	22	14	77	12:45	0	0	103	421	100	450	203
01:00	0	0	5		11		16		13:00	0	0	107		95		202
01:15	0	0	4		5		9		13:15	0	0	101		97		198
01:30	0	0	4		3		7		13:30	0	0	120		119		239
01:45	0	0	3	16	6	25	9	41	13:45	0	0	107	435	140	451	247
02:00	0	0	3		3		6		14:00	0	0	123		147		270
02:15	0	0	4		5		9		14:15	0	0	159		218		377
02:30	0	0	1		11		12		14:30	0	0	131		136		267
02:45	0	0	4	12	10	29	14	41	14:45	0	0	133	546	120	621	253
03:00	0	0	3		7		10		15:00	0	0	126		105		231
03:15	0	0	7		9		16		15:15	0	0	160		124		284
03:30	0	0	6		14		20		15:30	0	0	149		121		270
03:45	0	0	6	22	10	40	16	62	15:45	0	0	158	593	101	451	259
04:00	0	0	10		21		31		16:00	0	0	197		105		302
04:15	0	0	8		29		37		16:15	0	0	178		105		283
04:30	0	0	16		38		54		16:30	0	0	204		92		296
04:45	0	0	15	49	37	125	52	174	16:45	0	0	176	755	117	419	293
05:00	0	0	30		50		80		17:00	0	0	200		94		294
05:15	0	0	53		91		144		17:15	0	0	172		115		287
05:30	0	0	49		108		157		17:30	0	0	169		115		284
05:45	0	0	43	175	122	371	165	546	17:45	0	0	174	715	96	420	270
06:00	0	0	55		181		236		18:00	0	0	172		82		254
06:15	0	0	59		197		256		18:15	0	0	179		72		251
06:30	0	0	100		189		289		18:30	0	0	171		67		238
06:45	0	0	80	294	182	749	262	1043	18:45	0	0	112	634	57	278	169
07:00	0	0	64		216		280		19:00	0	0	108		43		151
07:15	0	0	91		214		305		19:15	0	0	122		58		180
07:30	0	0	132		259		391		19:30	0	0	111		56		167
07:45	0	0	98	385	152	841	250	1226	19:45	0	0	89	430	51	208	140
08:00	0	0	78		189		267		20:00	0	0	85		44		129
08:15	0	0	81		182		263		20:15	0	0	78		35		113
08:30	0	0	84		131		215		20:30	0	0	74		33		107
08:45	0	0	91	334	109	611	200	945	20:45	0	0	81	318	30	142	111
09:00	0	0	78		126		204		21:00	0	0	63		26		89
09:15	0	0	103		141		244		21:15	0	0	58		41		99
09:30	0	0	81		107		188		21:30	0	0	60		23		83
09:45	0	0	87	349	137	511	224	860	21:45	0	0	61	242	28	118	89
10:00	0	0	71		116		187		22:00	0	0	57		30		87
10:15	0	0	77		104		181		22:15	0	0	34		28		62
10:30	0	0	103		110		213		22:30	0	0	34		35		69
10:45	0	0	79	330	106	436	185	766	22:45	0	0	33	158	23	116	56
11:00	0	0	88		114		202		23:00	0	0	20		10		30
11:15	0	0	96		90		186		23:15	0	0	21		6		27
11:30	0	0	99		102		201		23:30	0	0	20		7		27
11:45	0	0	84	367	108	414	192	781	23:45	0	0	15	76	10	33	25
TOTALS				2388		4174		6562	TOTALS				5323		3707	
SPLIT %				36.4%		63.6%		42.1%	SPLIT %				58.9%		41.1%	

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	7,711	7,881	15,5

AM Peak Hour			11:45	06:45	06:45	PM Peak Hour			16:15	13:45	
AM Pk Volume			402	871	1238	PM Pk Volume			758	641	
Pk Hr Factor			0.905	0.841	0.792	Pk Hr Factor			0.929	0.735	
7 - 9 Volume	0	0	719	1452	2171	4 - 6 Volume	0	0	1470	839	
7 - 9 Peak Hour			07:15	07:00	07:00	4 - 6 Peak Hour			16:15	16:45	
7 - 9 Pk Volume	0	0	399	841	1226	4 - 6 Pk Volume	0	0	758	441	
Pk Hr Factor	0.000	0.000	0.756	0.812	0.784	Pk Hr Factor	0.000	0.000	0.929	0.942	

Prepared by NDS/ATD

Project #: CA18_7199_001 **City:** Sloughhouse

Location: SR-16 Bet. Kiefer Blvd & Murrieta South **Date:** 5/17/2018

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Murrieta South Pkwy & Mariah Heights Rd

Day: Thursday
Date: 5/17/2018

City: Sloughhouse
Project #: CA18_7199_002e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	25	8	0	2	0	0	2	0	0	0	0	0	37
01:00	0	9	0	0	1	0	0	2	0	0	0	0	0	12
02:00	0	8	1	1	1	0	0	0	0	0	0	0	0	11
03:00	0	8	3	0	3	1	0	0	0	0	0	0	0	15
04:00	0	17	2	0	2	3	0	3	0	0	0	0	0	27
05:00	0	104	20	3	35	0	0	2	0	0	0	0	0	164
06:00	0	136	44	5	42	1	0	10	0	0	0	0	0	238
07:00	0	198	55	4	50	1	0	3	2	0	1	0	0	314
08:00	0	140	24	4	44	2	0	6	0	0	0	0	0	220
09:00	2	131	43	5	51	0	0	5	0	0	0	0	0	237
10:00	0	131	29	1	48	1	0	9	1	0	0	0	0	220
11:00	2	136	24	1	45	0	0	3	1	0	2	0	0	214
12:00 PM	1	177	50	2	52	0	0	8	3	0	0	0	0	293
13:00	3	266	39	6	60	0	0	10	1	0	2	0	0	387
14:00	1	258	69	3	63	2	0	6	0	0	1	0	0	403
15:00	0	237	60	1	49	1	0	6	3	0	0	0	0	357
16:00	3	316	55	0	87	2	0	1	1	0	0	0	0	465
17:00	1	319	44	1	51	0	0	6	0	0	0	0	0	422
18:00	1	250	42	1	37	0	0	3	0	0	0	0	0	334
19:00	0	146	17	0	21	0	0	2	1	0	0	0	0	187
20:00	0	122	13	0	12	0	0	1	0	0	0	0	0	148
21:00	0	115	16	0	15	0	0	1	0	0	0	0	0	147
22:00	0	93	13	0	10	0	0	4	0	0	0	0	0	120
23:00	0	41	4	0	7	0	0	0	0	0	0	0	0	52
Totals	14	3383	675	38	788	14		93	13		6			5024
% of Totals	0%	67%	13%	1%	16%	0%		2%	0%		0%			100%

AM Volumes	4	1043	253	24	324	9	0	45	4	0	3	0	0	1709
% AM	0%	21%	5%	0%	6%	0%		1%	0%		0%			34%
AM Peak Hour	09:00	07:00	07:00	06:00	09:00	04:00		06:00	07:00		11:00			07:00
Volume	2	198	55	5	51	3		10	2		2			314
PM Volumes	10	2340	422	14	464	5	0	48	9	0	3	0	0	3315
% PM	0%	47%	8%	0%	9%	0%		1%	0%		0%			66%
PM Peak Hour	13:00	17:00	14:00	13:00	16:00	14:00		13:00	12:00		13:00			16:00
Volume	3	319	69	6	87	2		10	3		2			465

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	534	11%	680	14%	887	18%	2923	58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Murrieta South Pkwy & Mariah Heights Rd

Day: Thursday
Date: 5/17/2018

City: Sloughhouse
Project #: CA18_7199_002w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	18	2	0	1	0	0	1	0	0	0	0	0	22
01:00	0	14	2	0	0	0	0	0	0	0	0	0	0	16
02:00	0	20	0	0	2	0	0	0	0	0	0	0	0	22
03:00	0	25	3	0	2	0	0	2	1	0	0	0	0	33
04:00	0	54	21	1	18	1	0	2	0	0	0	0	0	97
05:00	0	170	49	1	49	0	0	2	0	0	0	0	0	271
06:00	0	313	56	2	57	1	0	5	3	0	0	0	0	437
07:00	0	283	39	1	56	1	0	3	1	0	0	0	0	384
08:00	0	221	44	3	35	0	0	5	2	0	1	0	0	311
09:00	1	189	41	6	31	0	0	4	1	0	2	0	0	275
10:00	1	184	44	4	31	0	0	8	2	0	0	0	0	274
11:00	3	159	47	5	30	1	0	7	3	2	1	0	0	258
12:00 PM	1	194	34	2	34	0	0	6	1	0	1	0	0	273
13:00	3	191	42	2	44	1	0	2	3	0	2	0	0	290
14:00	5	305	59	6	45	2	0	9	2	0	1	0	0	434
15:00	0	222	44	4	36	0	0	11	1	0	1	0	0	319
16:00	0	225	47	0	40	0	0	2	0	0	0	0	0	314
17:00	0	168	46	4	30	0	0	5	0	0	0	0	0	253
18:00	0	108	22	1	28	0	0	2	0	0	0	0	0	161
19:00	0	115	27	1	15	0	0	4	0	0	0	0	0	162
20:00	0	66	7	0	6	0	0	2	0	0	0	0	0	81
21:00	0	75	6	0	8	0	0	0	0	0	0	0	0	89
22:00	0	79	10	0	4	0	0	1	0	0	0	0	0	94
23:00	0	19	1	0	0	0	0	3	0	0	0	0	0	23
Totals	14	3417	693	43	602	7		86	20	2	9			4893
% of Totals	0%	70%	14%	1%	12%	0%		2%	0%	0%	0%			100%

AM Volumes	5	1650	348	23	312	4	0	39	13	2	4	0	0	2400
% AM	0%	34%	7%	0%	6%	0%		1%	0%	0%	0%			49%
AM Peak Hour	11:00	06:00	06:00	09:00	06:00	04:00		10:00	06:00	11:00	09:00			06:00
Volume	3	313	56	6	57	1		8	3	2	2			437
PM Volumes	9	1767	345	20	290	3	0	47	7	0	5	0	0	2493
% PM	0%	36%	7%	0%	6%	0%		1%	0%		0%			51%
PM Peak Hour	14:00	14:00	14:00	14:00	14:00	14:00		15:00	13:00		13:00			14:00
Volume	5	305	59	6	45	2		11	3		2			434

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	695		14%	563		12%	567		12%	3068		63%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Murrieta South Pkwy & Mariah Heights Rd

Day: Thursday
Date: 5/17/2018

City: Sloughhouse
Project #: CA18_7199_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	43	10	0	3	0	0	3	0	0	0	0	0	59
01:00	0	23	2	0	1	0	0	2	0	0	0	0	0	28
02:00	0	28	1	1	3	0	0	0	0	0	0	0	0	33
03:00	0	33	6	0	5	1	0	2	1	0	0	0	0	48
04:00	0	71	23	1	20	4	0	5	0	0	0	0	0	124
05:00	0	274	69	4	84	0	0	4	0	0	0	0	0	435
06:00	0	449	100	7	99	2	0	15	3	0	0	0	0	675
07:00	0	481	94	5	106	2	0	6	3	0	1	0	0	698
08:00	0	361	68	7	79	2	0	11	2	0	1	0	0	531
09:00	3	320	84	11	82	0	0	9	1	0	2	0	0	512
10:00	1	315	73	5	79	1	0	17	3	0	0	0	0	494
11:00	5	295	71	6	75	1	0	10	4	2	3	0	0	472
12:00 PM	2	371	84	4	86	0	0	14	4	0	1	0	0	566
13:00	6	457	81	8	104	1	0	12	4	0	4	0	0	677
14:00	6	563	128	9	108	4	0	15	2	0	2	0	0	837
15:00	0	459	104	5	85	1	0	17	4	0	1	0	0	676
16:00	3	541	102	0	127	2	0	3	1	0	0	0	0	779
17:00	1	487	90	5	81	0	0	11	0	0	0	0	0	675
18:00	1	358	64	2	65	0	0	5	0	0	0	0	0	495
19:00	0	261	44	1	36	0	0	6	1	0	0	0	0	349
20:00	0	188	20	0	18	0	0	3	0	0	0	0	0	229
21:00	0	190	22	0	23	0	0	1	0	0	0	0	0	236
22:00	0	172	23	0	14	0	0	5	0	0	0	0	0	214
23:00	0	60	5	0	7	0	0	3	0	0	0	0	0	75
Totals	28	6800	1368	81	1390	21		179	33	2	15			9917
% of Totals	0%	69%	14%	1%	14%	0%		2%	0%	0%	0%			100%

AM Volumes	9	2693	601	47	636	13	0	84	17	2	7	0	0	4109
% AM	0%	27%	6%	0%	6%	0%		1%	0%	0%	0%			41%
AM Peak Hour	11:00	07:00	06:00	09:00	07:00	04:00		10:00	11:00	11:00	11:00			07:00
Volume	5	481	100	11	106	4		17	4	2	3			698
PM Volumes	19	4107	767	34	754	8	0	95	16	0	8	0	0	5808
% PM	0%	41%	8%	0%	8%	0%		1%	0%		0%			59%
PM Peak Hour	13:00	14:00	14:00	14:00	16:00	14:00		15:00	12:00		13:00			14:00
Volume	6	563	128	9	127	4		17	4		4			837

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	1229		12%	1243		13%	1454		15%	5991		60%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	5,024	4,893	9,9

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOT
00:00	0	0	7		6		13		12:00	0	0	71		82		153
00:15	0	0	10		4		14		12:15	0	0	68		68		136
00:30	0	0	12		4		16		12:30	0	0	86		62		148
00:45	0	0	8	37	8	22	16	59	12:45	0	0	68	293	61	273	129
01:00	0	0	2		2		4		13:00	0	0	80		66		146
01:15	0	0	6		5		11		13:15	0	0	93		61		154
01:30	0	0	1		5		6		13:30	0	0	115		78		193
01:45	0	0	3	12	4	16	7	28	13:45	0	0	99	387	85	290	184
02:00	0	0	3		1		4		14:00	0	0	80		194		274
02:15	0	0	2		5		7		14:15	0	0	74		93		167
02:30	0	0	2		7		9		14:30	0	0	135		72		207
02:45	0	0	4	11	9	22	13	33	14:45	0	0	114	403	75	434	189
03:00	0	0	1		8		9		15:00	0	0	83		75		158
03:15	0	0	2		8		10		15:15	0	0	89		81		170
03:30	0	0	7		7		14		15:30	0	0	101		86		187
03:45	0	0	5	15	10	33	15	48	15:45	0	0	84	357	77	319	161
04:00	0	0	6		13		19		16:00	0	0	106		80		186
04:15	0	0	7		26		33		16:15	0	0	119		83		202
04:30	0	0	8		26		34		16:30	0	0	124		84		208
04:45	0	0	6	27	32	97	38	124	16:45	0	0	116	465	67	314	183
05:00	0	0	26		37		63		17:00	0	0	116		62		178
05:15	0	0	33		76		109		17:15	0	0	109		74		183
05:30	0	0	66		82		148		17:30	0	0	105		56		161
05:45	0	0	39	164	76	271	115	435	17:45	0	0	92	422	61	253	153
06:00	0	0	46		108		154		18:00	0	0	79		38		117
06:15	0	0	52		115		167		18:15	0	0	99		45		144
06:30	0	0	88		114		202		18:30	0	0	89		42		131
06:45	0	0	52	238	100	437	152	675	18:45	0	0	67	334	36	161	103
07:00	0	0	60		98		158		19:00	0	0	62		50		112
07:15	0	0	82		105		187		19:15	0	0	41		45		86
07:30	0	0	116		80		196		19:30	0	0	38		44		82
07:45	0	0	56	314	101	384	157	698	19:45	0	0	46	187	23	162	69
08:00	0	0	50		90		140		20:00	0	0	45		27		72
08:15	0	0	52		79		131		20:15	0	0	31		16		47
08:30	0	0	56		67		123		20:30	0	0	35		18		53
08:45	0	0	62	220	75	311	137	531	20:45	0	0	37	148	20	81	57
09:00	0	0	55		70		125		21:00	0	0	37		24		61
09:15	0	0	58		74		132		21:15	0	0	42		17		59
09:30	0	0	63		65		128		21:30	0	0	33		22		55
09:45	0	0	61	237	66	275	127	512	21:45	0	0	35	147	26	89	61
10:00	0	0	45		95		140		22:00	0	0	38		21		59
10:15	0	0	55		63		118		22:15	0	0	24		30		54
10:30	0	0	62		54		116		22:30	0	0	32		30		62
10:45	0	0	58	220	62	274	120	494	22:45	0	0	26	120	13	94	39
11:00	0	0	54		64		118		23:00	0	0	24		7		31
11:15	0	0	58		55		113		23:15	0	0	9		5		14
11:30	0	0	53		68		121		23:30	0	0	9		7		16
11:45	0	0	49	214	71	258	120	472	23:45	0	0	10	52	4	23	14
TOTALS				1709		2400		4109	TOTALS				3315		2493	
SPLIT %				41.6%		58.4%		41.4%	SPLIT %				57.1%		42.9%	

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	5,024	4,893	9,9

AM Peak Hour			07:00	06:00	06:30	PM Peak Hour	16:15	13:30
AM Pk Volume			314	437	699	PM Pk Volume	475	450
Pk Hr Factor			0.677	0.950	0.865	Pk Hr Factor	0.958	0.580
7 - 9 Volume	0	0	534	695	1229	4 - 6 Volume	0 0	887	567
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour	16:15	16:00
7 - 9 Pk Volume	0	0	314	384	698	4 - 6 Pk Volume	0 0	475	314
Pk Hr Factor	0.000	0.000	0.677	0.914	0.890	Pk Hr Factor	0.000 0.000	0.958	0.935

Prepared by NDS/ATD

Project #: CA18_7199_002 **City:** Sloughhouse

Location: SR-16 Bet. Murrieta South Pkwy & Mariah **Date:** 5/17/2018

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Mariah Heights Rd & Long Gate Rd

Day: Thursday
Date: 5/17/2018

City: Plymouth
Project #: CA18_7199_003e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	17	7	0	5	0	0	1	0	0	0	0	0	30
01:00	0	7	1	0	3	0	0	0	0	0	0	0	0	11
02:00	0	7	1	1	1	0	0	0	0	0	0	0	0	10
03:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	10	0	0	2	0	0	2	0	0	0	0	0	14
05:00	0	27	10	2	17	0	0	2	0	0	0	0	0	58
06:00	0	56	16	3	30	0	0	6	0	0	0	0	0	111
07:00	0	97	27	7	41	1	0	1	0	0	0	0	0	174
08:00	0	84	14	2	27	0	0	2	0	0	0	0	0	129
09:00	1	91	35	4	40	0	0	5	0	0	0	0	0	176
10:00	0	79	27	1	45	0	0	7	0	0	1	0	0	160
11:00	1	106	15	1	44	2	0	4	0	0	0	0	0	173
12:00 PM	0	126	31	2	37	0	0	7	3	0	0	0	0	206
13:00	0	131	31	0	26	2	0	8	0	0	1	0	0	199
14:00	2	172	45	0	43	1	0	2	1	0	1	0	0	267
15:00	0	177	42	2	46	0	0	4	0	0	0	0	0	271
16:00	2	203	41	1	48	1	0	0	0	0	0	0	0	296
17:00	0	241	30	1	35	0	0	1	1	0	0	0	0	309
18:00	0	198	32	2	33	1	0	1	0	0	0	0	0	267
19:00	0	115	15	0	16	0	0	0	0	0	0	0	0	146
20:00	0	96	10	0	7	1	0	0	0	0	0	0	0	114
21:00	0	73	10	0	11	0	0	1	0	0	0	0	0	95
22:00	0	63	10	1	9	0	0	1	0	0	0	0	0	84
23:00	0	46	4	0	6	0	0	1	0	0	0	0	0	57
Totals	6	2224	455	30	572	9		56	5		3			3360
% of Totals	0%	66%	14%	1%	17%	0%		2%	0%		0%			100%

AM Volumes	2	583	154	21	255	3	0	30	0	0	1	0	0	1049
% AM	0%	17%	5%	1%	8%	0%		1%			0%			31%
AM Peak Hour	09:00	11:00	09:00	07:00	10:00	11:00		10:00			10:00			09:00
Volume	1	106	35	7	45	2		7			1			176
PM Volumes	4	1641	301	9	317	6	0	26	5	0	2	0	0	2311
% PM	0%	49%	9%	0%	9%	0%		1%	0%		0%			69%
PM Peak Hour	14:00	17:00	14:00	12:00	16:00	13:00		13:00	12:00		13:00			17:00
Volume	2	241	45	2	48	2		8	3		1			309

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	303	9%	405	12%	605	18%	2047	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Mariah Heights Rd & Long Gate Rd

Day: Thursday
Date: 5/17/2018

City: Plymouth
Project #: CA18_7199_003w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	13	3	0	0	0	0	0	0	0	0	0	0	16
01:00	0	13	3	0	0	0	0	0	0	0	0	0	0	16
02:00	0	16	0	0	1	0	0	0	0	0	0	0	0	17
03:00	0	20	2	0	1	1	0	1	0	0	0	0	0	25
04:00	0	57	11	0	12	0	0	0	0	0	0	0	0	80
05:00	0	137	33	0	32	0	0	1	0	0	0	0	0	203
06:00	0	211	35	1	35	0	0	2	1	0	0	0	0	285
07:00	0	206	25	1	42	0	0	1	0	0	0	0	0	275
08:00	1	171	21	2	27	0	1	0	1	0	0	0	0	224
09:00	0	147	27	4	18	0	0	3	0	0	0	0	0	199
10:00	0	135	22	0	23	1	0	2	1	0	0	0	0	184
11:00	0	121	28	2	16	1	0	2	0	0	2	0	0	172
12:00 PM	2	106	19	3	17	4	0	2	0	0	1	0	0	154
13:00	1	152	19	3	40	2	0	1	1	0	0	0	0	219
14:00	3	119	27	2	23	3	1	0	2	0	1	0	0	181
15:00	3	132	19	2	28	2	1	0	3	0	1	0	0	191
16:00	3	136	19	0	28	0	0	1	0	0	0	0	0	187
17:00	1	112	20	2	25	3	0	0	1	0	0	0	0	164
18:00	0	78	12	3	20	4	0	1	0	0	0	0	0	118
19:00	0	83	14	0	9	0	0	0	0	0	2	0	0	108
20:00	0	56	3	0	4	3	0	0	0	0	1	0	0	67
21:00	0	45	4	0	7	2	0	0	0	0	0	0	0	58
22:00	0	34	6	1	3	1	0	0	0	0	0	0	0	45
23:00	0	16	1	0	0	0	0	0	0	0	1	0	0	18
Totals	14	2316	373	26	411	27	3	17	10		9			3206
% of Totals	0%	72%	12%	1%	13%	1%	0%	1%	0%		0%			100%

AM Volumes	1	1247	210	10	207	3	1	12	3	0	2	0	0	1696
% AM	0%	39%	7%	0%	6%	0%	0%	0%	0%		0%			53%
AM Peak Hour	08:00	06:00	06:00	09:00	07:00	03:00	08:00	09:00	06:00		11:00			06:00
Volume	1	211	35	4	42	1	1	3	1		2			285
PM Volumes	13	1069	163	16	204	24	2	5	7	0	7	0	0	1510
% PM	0%	33%	5%	0%	6%	1%	0%	0%	0%		0%			47%
PM Peak Hour	14:00	13:00	14:00	12:00	13:00	12:00	14:00	12:00	15:00		19:00			13:00
Volume	3	152	27	3	40	4	1	2	3		2			219

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	499	16%	373	12%	351	11%	1983	62%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

SR-16 Bet. Mariah Heights Rd & Long Gate Rd

Day: Thursday
Date: 5/17/2018

City: Plymouth
Project #: CA18_7199_003

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	30	10	0	5	0	0	1	0	0	0	0	0	46
01:00	0	20	4	0	3	0	0	0	0	0	0	0	0	27
02:00	0	23	1	1	2	0	0	0	0	0	0	0	0	27
03:00	0	22	3	0	1	1	0	1	0	0	0	0	0	28
04:00	0	67	11	0	14	0	0	2	0	0	0	0	0	94
05:00	0	164	43	2	49	0	0	3	0	0	0	0	0	261
06:00	0	267	51	4	65	0	0	8	1	0	0	0	0	396
07:00	0	303	52	8	83	1	0	2	0	0	0	0	0	449
08:00	1	255	35	4	54	0	1	2	1	0	0	0	0	353
09:00	1	238	62	8	58	0	0	8	0	0	0	0	0	375
10:00	0	214	49	1	68	1	0	9	1	0	1	0	0	344
11:00	1	227	43	3	60	3	0	6	0	0	2	0	0	345
12:00 PM	2	232	50	5	54	4	0	9	3	0	1	0	0	360
13:00	1	283	50	3	66	4	0	9	1	0	1	0	0	418
14:00	5	291	72	2	66	4	1	2	3	0	2	0	0	448
15:00	3	309	61	4	74	2	1	4	3	0	1	0	0	462
16:00	5	339	60	1	76	1	0	1	0	0	0	0	0	483
17:00	1	353	50	3	60	3	0	1	2	0	0	0	0	473
18:00	0	276	44	5	53	5	0	2	0	0	0	0	0	385
19:00	0	198	29	0	25	0	0	0	0	0	2	0	0	254
20:00	0	152	13	0	11	4	0	0	0	0	1	0	0	181
21:00	0	118	14	0	18	2	0	1	0	0	0	0	0	153
22:00	0	97	16	2	12	1	0	1	0	0	0	0	0	129
23:00	0	62	5	0	6	0	0	1	0	0	1	0	0	75
Totals	20	4540	828	56	983	36	3	73	15		12			6566
% of Totals	0%	69%	13%	1%	15%	1%	0%	1%	0%		0%			100%

AM Volumes	3	1830	364	31	462	6	1	42	3	0	3	0	0	2745
% AM	0%	28%	6%	0%	7%	0%	0%	1%	0%		0%			42%
AM Peak Hour	08:00	07:00	09:00	07:00	07:00	11:00	08:00	10:00	06:00		11:00			07:00
Volume	1	303	62	8	83	3	1	9	1		2			449
PM Volumes	17	2710	464	25	521	30	2	31	12	0	9	0	0	3821
% PM	0%	41%	7%	0%	8%	0%	0%	0%	0%		0%			58%
PM Peak Hour	14:00	17:00	14:00	12:00	16:00	18:00	14:00	12:00	12:00		14:00			16:00
Volume	5	353	72	5	76	5	1	9	3		2			483

Directional Peak Periods All Classes	AM 7-9 Volume		%	NOON 12-2 Volume		%	PM 4-6 Volume		%	Off Peak Volumes Volume		%
	802	⟷	12%	778	⟷	12%	956	⟷	15%	4030	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	3,360	3,206	6,5

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOT
00:00	0	0	6		3		9		12:00	0	0	49		39		88
00:15	0	0	8		3		11		12:15	0	0	55		39		94
00:30	0	0	10		6		16		12:30	0	0	52		37		89
00:45	0	0	6	30	4	16	10	46	12:45	0	0	50	206	39	154	89
01:00	0	0	3		3		6		13:00	0	0	45		58		103
01:15	0	0	5		4		9		13:15	0	0	55		54		109
01:30	0	0	1		5		6		13:30	0	0	75		50		125
01:45	0	0	2	11	4	16	6	27	13:45	0	0	24	199	57	219	81
02:00	0	0	3		0		3		14:00	0	0	26		47		73
02:15	0	0	0		6		6		14:15	0	0	61		41		102
02:30	0	0	4		5		9		14:30	0	0	93		44		137
02:45	0	0	3	10	6	17	9	27	14:45	0	0	87	267	49	181	136
03:00	0	0	0		8		8		15:00	0	0	64		36		100
03:15	0	0	0		6		6		15:15	0	0	71		58		129
03:30	0	0	1		5		6		15:30	0	0	65		49		114
03:45	0	0	2	3	6	25	8	28	15:45	0	0	71	271	48	191	119
04:00	0	0	2		13		15		16:00	0	0	63		44		107
04:15	0	0	5		22		27		16:15	0	0	72		41		113
04:30	0	0	4		18		22		16:30	0	0	79		61		140
04:45	0	0	3	14	27	80	30	94	16:45	0	0	82	296	41	187	123
05:00	0	0	9		31		40		17:00	0	0	86		46		132
05:15	0	0	17		52		69		17:15	0	0	77		49		126
05:30	0	0	19		62		81		17:30	0	0	76		38		114
05:45	0	0	13	58	58	203	71	261	17:45	0	0	70	309	31	164	101
06:00	0	0	23		72		95		18:00	0	0	73		29		102
06:15	0	0	22		79		101		18:15	0	0	65		27		92
06:30	0	0	34		70		104		18:30	0	0	74		35		109
06:45	0	0	32	111	64	285	96	396	18:45	0	0	55	267	27	118	82
07:00	0	0	38		71		109		19:00	0	0	42		35		77
07:15	0	0	50		68		118		19:15	0	0	30		28		58
07:30	0	0	49		64		113		19:30	0	0	36		27		63
07:45	0	0	37	174	72	275	109	449	19:45	0	0	38	146	18	108	56
08:00	0	0	28		64		92		20:00	0	0	34		14		48
08:15	0	0	25		50		75		20:15	0	0	19		13		32
08:30	0	0	28		49		77		20:30	0	0	25		17		42
08:45	0	0	48	129	61	224	109	353	20:45	0	0	36	114	23	67	59
09:00	0	0	40		51		91		21:00	0	0	21		14		35
09:15	0	0	41		52		93		21:15	0	0	19		11		30
09:30	0	0	45		38		83		21:30	0	0	24		13		37
09:45	0	0	50	176	58	199	108	375	21:45	0	0	31	95	20	58	51
10:00	0	0	35		55		90		22:00	0	0	22		18		40
10:15	0	0	31		47		78		22:15	0	0	23		8		31
10:30	0	0	42		40		82		22:30	0	0	22		15		37
10:45	0	0	52	160	42	184	94	344	22:45	0	0	17	84	4	45	21
11:00	0	0	40		40		80		23:00	0	0	26		5		31
11:15	0	0	48		37		85		23:15	0	0	13		6		19
11:30	0	0	48		49		97		23:30	0	0	8		5		13
11:45	0	0	37	173	46	172	83	345	23:45	0	0	10	57	2	18	12
TOTALS				1049		1696		2745	TOTALS				2311		1510	
SPLIT %				38.2%		61.8%		41.8%	SPLIT %				60.5%		39.5%	

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	3,360	3,206	6,5

AM Peak Hour			11:45	06:00	07:00	PM Peak Hour	16:30	13:00
AM Pk Volume			193	285	449	PM Pk Volume	324	219
Pk Hr Factor			0.877	0.902	0.951	Pk Hr Factor	0.942	0.944
7 - 9 Volume	0	0	303	499	802	4 - 6 Volume	0 0	605	351
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour	16:30	16:30
7 - 9 Pk Volume	0	0	174	275	449	4 - 6 Pk Volume	0 0	324	197
Pk Hr Factor	0.000	0.000	0.870	0.955	0.951	Pk Hr Factor	0.000 0.000	0.942	0.807

Prepared by NDS/ATD

Project #: CA18_7199_003 **City:** Plymouth

Location: SR-16 Bet. Mariah Heights Rd & Long Gate **Date:** 5/17/2018

National Data & Surveying Services

Intersection Turning Movement Count

Location: Kiefer Blvd & SR-16
City: Sloughhouse
Control: Signalized

Project ID: 18-07198-001
Date: 5/17/2018

Total

NS/EW Streets:	Kiefer Blvd				Kiefer Blvd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	0	2	0	0	0	1	0	8	80	3	0	10	194	17	0	318
7:15 AM	11	7	11	0	1	3	0	0	9	99	12	0	45	154	21	0	373
7:30 AM	32	11	57	0	2	1	4	0	15	110	29	0	95	170	30	0	556
7:45 AM	22	2	22	0	3	0	3	0	7	73	5	0	12	167	12	0	328
8:00 AM	0	0	2	0	1	0	0	0	8	78	1	0	0	193	11	0	294
8:15 AM	0	0	0	0	1	0	1	0	3	103	0	0	2	172	11	0	293
8:30 AM	1	0	0	0	2	0	0	0	4	75	2	0	1	135	6	0	226
8:45 AM	2	0	1	0	1	0	0	0	2	99	0	0	1	117	2	0	225
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	71	20	95	0	11	4	9	0	56	717	52	0	166	1302	110	0	2613
APPROACH %'s :	38.17%	10.75%	51.08%	0.00%	45.83%	16.67%	37.50%	0.00%	6.79%	86.91%	6.30%	0.00%	10.52%	82.51%	6.97%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	68	20	92	0	6	4	8	0	39	362	49	0	162	685	80	0	1575
PEAK HR FACTOR :	0.531	0.455	0.404	0.000	0.500	0.333	0.500	0.000	0.650	0.823	0.422	0.000	0.426	0.883	0.667	0.000	0.708
	0.450				0.643				0.731				0.786				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	0	7	0	22	0	7	0	1	176	5	0	4	110	2	0	337
4:15 PM	5	2	8	0	15	0	18	0	4	172	3	0	8	106	3	0	344
4:30 PM	4	0	17	0	20	0	13	0	2	167	4	0	5	93	3	0	328
4:45 PM	2	0	8	0	29	0	27	0	2	169	1	0	2	117	6	0	363
5:00 PM	0	0	1	0	23	0	14	0	7	182	4	0	0	119	1	0	351
5:15 PM	2	0	3	0	26	2	12	0	5	172	7	0	9	110	4	0	352
5:30 PM	3	0	4	0	27	4	14	0	3	145	12	0	48	95	2	0	357
5:45 PM	3	0	2	0	17	0	13	0	1	184	7	0	21	91	0	0	339
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	22	2	50	0	179	6	118	0	25	1367	43	0	97	841	21	0	2771
APPROACH %'s :	29.73%	2.70%	67.57%	0.00%	59.08%	1.98%	38.94%	0.00%	1.74%	95.26%	3.00%	0.00%	10.11%	87.70%	2.19%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	7	0	16	0	105	6	67	0	17	668	24	0	59	441	13	0	1423
PEAK HR FACTOR :	0.583	0.000	0.500	0.000	0.905	0.375	0.620	0.000	0.607	0.918	0.500	0.000	0.307	0.926	0.542	0.000	0.980
	0.575				0.795				0.918				0.884				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Kiefer Blvd & SR-16
City: Sloughhouse
Control: Signalized

Project ID: 18-07198-001
Date: 5/17/2018

Cars

NS/EW Streets:	Kiefer Blvd				Kiefer Blvd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	0	2	0	0	0	1	0	8	68	3	0	10	194	17	0	306
7:15 AM	11	7	11	0	1	3	0	0	9	89	12	0	44	151	21	0	359
7:30 AM	32	11	57	0	2	1	4	0	15	106	29	0	94	164	30	0	545
7:45 AM	21	2	21	0	3	0	3	0	7	70	5	0	12	165	12	0	321
8:00 AM	0	0	2	0	1	0	0	0	8	69	1	0	0	184	11	0	276
8:15 AM	0	0	0	0	1	0	1	0	3	96	0	0	2	163	11	0	277
8:30 AM	1	0	0	0	2	0	0	0	4	64	2	0	1	132	6	0	212
8:45 AM	2	0	1	0	1	0	0	0	2	89	0	0	1	106	2	0	204
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	70	20	94	0	11	4	9	0	56	651	52	0	164	1259	110	0	2500
APPROACH %'s :	38.04%	10.87%	51.09%	0.00%	45.83%	16.67%	37.50%	0.00%	7.38%	85.77%	6.85%	0.00%	10.70%	82.13%	7.18%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	67	20	91	0	6	4	8	0	39	333	49	0	160	674	80	0	1531
PEAK HR FACTOR :	0.52	0.455	0.399	0.000	0.500	0.333	0.500	0.000	0.650	0.785	0.422	0.000	0.426	0.869	0.667	0.000	0.702
	0.445				0.643				0.702				0.793				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	0	7	0	21	0	7	0	1	169	5	0	4	105	2	0	324
4:15 PM	5	2	8	0	15	0	18	0	4	169	3	0	8	99	3	0	334
4:30 PM	4	0	17	0	20	0	13	0	2	164	3	0	5	91	3	0	322
4:45 PM	1	0	8	0	29	0	26	0	2	168	1	0	2	114	6	0	357
5:00 PM	0	0	1	0	23	0	14	0	7	180	4	0	0	113	1	0	343
5:15 PM	2	0	3	0	26	2	12	0	5	170	7	0	9	106	4	0	346
5:30 PM	3	0	4	0	27	4	14	0	3	141	12	0	48	93	2	0	351
5:45 PM	3	0	2	0	16	0	13	0	1	183	7	0	21	86	0	0	332
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	21	2	50	0	177	6	117	0	25	1344	42	0	97	807	21	0	2709
APPROACH %'s :	28.77%	2.74%	68.49%	0.00%	59.00%	2.00%	39.00%	0.00%	1.77%	95.25%	2.98%	0.00%	10.49%	87.24%	2.27%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	6	0	16	0	105	6	66	0	17	659	24	0	59	426	13	0	1397
PEAK HR FACTOR :	0.50	0.000	0.500	0.000	0.905	0.375	0.635	0.000	0.607	0.915	0.500	0.000	0.307	0.934	0.542	0.000	0.978
	0.611				0.805				0.916				0.871				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Kiefer Blvd & SR-16
City: Sloughhouse
Control: Signalized

Project ID: 18-07198-001
Date: 5/17/2018

2axle

NS/EW Streets:	Kiefer Blvd				Kiefer Blvd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	4
7:45 AM	1	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	3	0	0	9
8:15 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	11
8:30 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	3	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	0	0	0	34	0	0	2	18	0	0	56
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	100.00%	0.00%	0.00%	10.00%	90.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	1	0	1	0	0	0	0	0	0	11	0	0	2	5	0	0	20
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.000	0.500	0.625	0.000	0.000	0.833
	0.250				0.000				0.550				0.583				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	5	0	0	0	5	0	0	11
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	0	10
4:30 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	2	0	0	5
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	2	0	0	0	0	14	1	0	0	30	0	0	48
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	93.33%	6.67%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	4	0	0	0	11	0	0	16
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.550	0.000	0.000	0.667
	0.250				0.000				0.500				0.550				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Kiefer Blvd & SR-16
City: Sloughhouse
Control: Signalized

Project ID: 18-07198-001
Date: 5/17/2018

3axle

NS/EW Streets:	Kiefer Blvd				Kiefer Blvd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	11	0	0	0	9	0	0	20
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	7	0	0	0	2	0	0	9
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.500	0.000	0.000	0.750
										0.583				0.500			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Kiefer Blvd & SR-16
City: Sloughhouse
Control: Signalized

Project ID: 18-07198-001
Date: 5/17/2018

4axle

NS/EW Streets:	Kiefer Blvd				Kiefer Blvd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
7:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	21	0	0	0	16	0	0	37
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	11	0	0	0	4	0	0	15
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.000	0.000	0.333	0.000	0.000	0.750
									0.550				0.333				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	1	1	0	1	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	7	0	0	0	4	0	0	12
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	5	0	0	0	4	0	0	10
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.625	0.000	0.000	0.000	0.333	0.000	0.000	0.625
							0.250			0.625				0.333			

Prepared by National Data & Surveying Services

Kiefer Blvd & SR-16

Peak Hour Turning Movement Count

ID: 18-07198-001
City: Sloughhouse

Day: Thursday
Date: 05/17/2018

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	07:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	04:00 PM - 06:00 PM

SOUTHBOUND — Kiefer Blvd

AM	8	4	6	0	139	AM
NOON	0	0	0	0	0	NOON
PM	67	6	105	0	30	PM

EASTBOUND — SR-16

AM	NOON	PM	
761	0	515	
0	0	0	0
39	0	17	1
362	0	668	1
49	0	24	1

WESTBOUND — SR-16

PM	NOON	AM	
13	0	80	0.5
441	0	685	0.5
59	0	162	1
0	0	0	0
789	0	460	

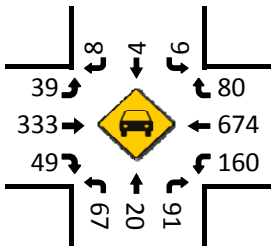
NORTHBOUND — Kiefer Blvd

PM	89	0	7	0	16	PM
NOON	0	0	0	0	0	NOON
AM	215	0	68	20	92	AM

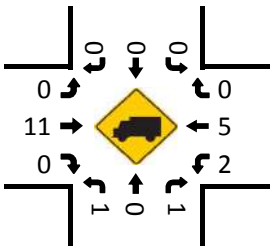
	0	1	1	0
	0	1	1	1

CONTROL			
Signalized			
TEV	1575 AM	0 NOON	1423 PM
PHF	0.71		0.98

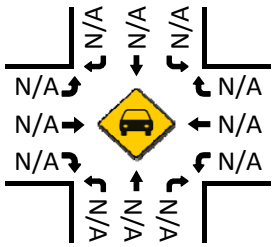
Cars (AM)



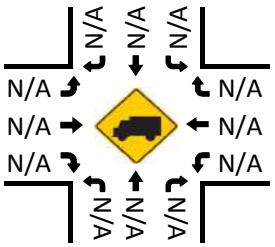
2axle (AM)



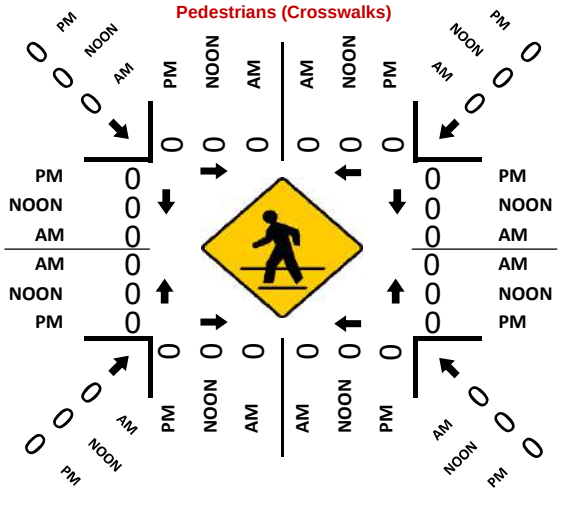
Cars (NOON)



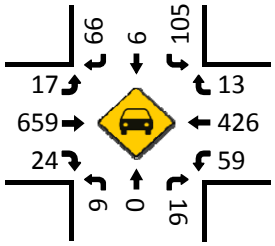
2axle (NOON)



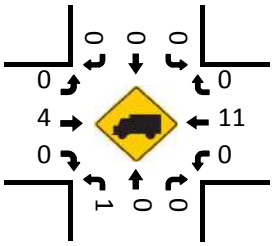
Pedestrians (Crosswalks)



Cars (PM)



2axle (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-002
Date: 5/17/2018

Total

NS/EW Streets:	Murieta Pkwy				Murieta Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	26	10	7	0	8	24	85	0	8	53	20	0	12	141	3	0	397
7:15 AM	27	13	7	0	5	14	91	0	11	69	18	0	13	143	3	0	414
7:30 AM	27	7	4	0	11	15	92	0	17	112	19	0	9	167	8	0	488
7:45 AM	17	16	16	0	6	12	66	0	25	63	20	0	6	127	12	0	386
8:00 AM	32	10	6	0	6	24	82	0	19	52	13	0	10	115	6	0	375
8:15 AM	27	11	10	0	4	21	65	0	22	59	16	0	17	112	5	0	369
8:30 AM	19	17	6	0	8	14	54	0	24	53	11	0	16	71	3	0	296
8:45 AM	15	7	7	0	12	27	43	0	19	51	13	0	8	90	9	0	301
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	190	91	63	0	60	151	578	0	145	512	130	0	91	966	49	0	3026
APPROACH %'s :	55.23%	26.45%	18.31%	0.00%	7.60%	19.14%	73.26%	0.00%	18.42%	65.06%	16.52%	0.00%	8.23%	87.34%	4.43%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	97	46	34	0	30	65	334	0	61	297	77	0	40	578	26	0	1685
PEAK HR FACTOR :	0.898	0.719	0.531	0.000	0.682	0.677	0.908	0.000	0.610	0.663	0.963	0.000	0.769	0.865	0.542	0.000	0.863
	0.903				0.909				0.735				0.875				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	28	35	23	0	15	24	25	0	59	116	35	0	11	102	12	0	485
4:15 PM	21	54	16	0	8	28	29	0	56	147	25	0	12	86	17	0	499
4:30 PM	22	27	19	0	12	35	26	0	48	145	37	0	9	92	6	0	478
4:45 PM	27	39	12	0	7	25	32	0	59	141	28	0	13	62	11	0	456
5:00 PM	28	32	19	0	12	21	32	0	63	132	29	0	8	73	16	0	465
5:15 PM	21	34	23	0	12	23	31	0	66	134	32	0	12	82	18	0	488
5:30 PM	23	29	19	0	9	22	34	0	47	124	30	0	8	80	12	0	437
5:45 PM	21	36	10	0	5	17	28	0	61	109	32	0	10	60	10	0	399
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	191	286	141	0	80	195	237	0	459	1048	248	0	83	637	102	0	3707
APPROACH %'s :	30.91%	46.28%	22.82%	0.00%	15.63%	38.09%	46.29%	0.00%	26.15%	59.72%	14.13%	0.00%	10.10%	77.49%	12.41%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	98	155	70	0	42	112	112	0	222	549	125	0	45	342	46	0	1918
PEAK HR FACTOR :	0.875	0.718	0.761	0.000	0.700	0.800	0.875	0.000	0.941	0.934	0.845	0.000	0.865	0.838	0.676	0.000	0.961
	0.887				0.911				0.974				0.866				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-002
Date: 5/17/2018

Cars

NS/EW Streets:	Murieta Pkwy				Murieta Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	26	9	6	0	8	24	85	0	7	46	18	0	12	140	3	0	384
7:15 AM	26	12	7	0	5	14	89	0	11	62	17	0	13	138	3	0	397
7:30 AM	26	7	4	0	10	15	92	0	17	105	19	0	9	166	8	0	478
7:45 AM	15	16	14	0	6	12	66	0	25	61	18	0	6	124	12	0	375
8:00 AM	31	10	5	0	6	24	81	0	18	48	12	0	9	111	6	0	361
8:15 AM	26	11	10	0	4	21	64	0	22	52	16	0	17	107	4	0	354
8:30 AM	19	17	6	0	8	14	54	0	23	46	9	0	16	69	2	0	283
8:45 AM	15	7	6	0	12	27	42	0	19	42	12	0	8	83	9	0	282
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	184	89	58	0	59	151	573	0	142	462	121	0	90	938	47	0	2914
APPROACH %'s :	55.59%	26.89%	17.52%	0.00%	7.54%	19.28%	73.18%	0.00%	19.59%	63.72%	16.69%	0.00%	8.37%	87.26%	4.37%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	93	44	31	0	29	65	332	0	60	274	72	0	40	568	26	0	1634
PEAK HR FACTOR :	0.89	0.688	0.554	0.000	0.725	0.677	0.902	0.000	0.600	0.652	0.947	0.000	0.769	0.855	0.542	0.000	0.855
	0.933				0.910				0.720				0.866				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	27	35	22	0	14	24	23	0	58	112	33	0	11	98	12	0	469
4:15 PM	20	54	15	0	8	28	29	0	55	145	24	0	11	84	17	0	490
4:30 PM	21	27	19	0	10	35	26	0	47	142	37	0	8	89	6	0	467
4:45 PM	27	39	12	0	7	25	32	0	59	141	28	0	11	60	11	0	452
5:00 PM	27	32	19	0	12	21	32	0	63	130	29	0	8	69	15	0	457
5:15 PM	21	34	22	0	12	23	31	0	66	132	32	0	12	78	18	0	481
5:30 PM	23	28	19	0	8	22	34	0	47	121	30	0	8	80	11	0	431
5:45 PM	19	36	10	0	5	17	27	0	60	108	32	0	9	56	10	0	389
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	185	285	138	0	76	195	234	0	455	1031	245	0	78	614	100	0	3636
APPROACH %'s :	30.43%	46.88%	22.70%	0.00%	15.05%	38.61%	46.34%	0.00%	26.29%	59.56%	14.15%	0.00%	9.85%	77.53%	12.63%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	95	155	68	0	39	112	110	0	219	540	122	0	41	331	46	0	1878
PEAK HR FACTOR :	0.88	0.718	0.773	0.000	0.696	0.800	0.859	0.000	0.928	0.931	0.824	0.000	0.932	0.844	0.676	0.000	0.958
	0.893				0.919				0.966				0.864				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-002
Date: 5/17/2018

2axle

NS/EW Streets:	Murieta Pkwy				Murieta Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
7:15 AM	1	1	0	0	0	0	1	0	0	0	1	0	0	2	0	0	6
7:30 AM	1	0	0	0	1	0	0	0	0	4	0	0	0	1	0	0	7
7:45 AM	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	4
8:00 AM	0	0	1	0	0	0	0	0	1	2	0	0	1	0	0	0	5
8:15 AM	1	0	0	0	0	0	1	0	0	6	0	0	0	2	1	0	11
8:30 AM	0	0	0	0	0	0	0	0	0	2	2	0	0	2	1	0	7
8:45 AM	0	0	1	0	0	0	0	0	0	5	1	0	0	2	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	1	2	0	1	0	2	0	1	24	5	0	1	10	2	0	53
APPROACH %'s :	57.14%	14.29%	28.57%	0.00%	33.33%	0.00%	66.67%	0.00%	3.33%	80.00%	16.67%	0.00%	7.69%	76.92%	15.38%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	3	1	0	0	1	0	1	0	0	9	2	0	0	4	0	0	21
PEAK HR FACTOR :	0.750	0.250	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.563	0.500	0.000	0.000	0.500	0.000	0.000	0.750
	0.500				0.500				0.688				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	0	0	1	0	2	0	1	3	0	0	0	4	0	0	12
4:15 PM	1	0	0	0	0	0	0	0	1	1	1	0	0	2	0	0	6
4:30 PM	1	0	0	0	2	0	0	0	1	2	0	0	1	3	0	0	10
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
5:30 PM	0	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	4
5:45 PM	2	0	0	0	0	0	1	0	1	0	0	0	1	3	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	1	0	0	4	0	3	0	4	8	1	0	3	18	2	0	50
APPROACH %'s :	85.71%	14.29%	0.00%	0.00%	57.14%	0.00%	42.86%	0.00%	30.77%	61.54%	7.69%	0.00%	13.04%	78.26%	8.70%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	3	0	0	0	3	0	2	0	3	6	1	0	2	11	0	0	31
PEAK HR FACTOR :	0.75	0.000	0.000	0.000	0.375	0.000	0.250	0.000	0.750	0.500	0.250	0.000	0.500	0.688	0.000	0.000	0.646
	0.750				0.417				0.625				0.813				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-002
Date: 5/17/2018

3axle

NS/EW Streets:	Murieta Pkwy				Murieta Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	1	0	2	0	0	0	0	0	0	0	1	0	0	2	0	0	6
8:00 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	2	0	0	0	2	0	2	7	3	0	0	5	0	0	23
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	16.67%	58.33%	25.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	1	0	2	0	0	0	1	0	1	3	3	0	0	2	0	0	13
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.375	0.375	0.000	0.000	0.250	0.000	0.000	0.542
	0.250				0.250				0.583				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	4
4:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	2	2	0	1	0	0	0	7
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	50.00%	50.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	2	2	0	1	0	0	0	7
PEAK HR FACTOR :	0.00	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.250	0.000	0.000	0.000	0.438
	0.500								0.333				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-002
Date: 5/17/2018

4axle

NS/EW Streets:	Murieta Pkwy				Murieta Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	1	0	0	0	0	0	0	3	0	0	0	1	0	0	6
7:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	0	8
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	2	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	1	0	0	0	1	0	0	19	1	0	0	13	0	0	36
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	95.00%	5.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	1	1	0	0	0	0	0	0	11	0	0	0	4	0	0	17
PEAK HR FACTOR :	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.000	0.000	0.333	0.000	0.000	0.531
		0.250								0.550				0.333			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1.5	0.5	0	1	1	1	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	7	0	0	1	5	0	0	14
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	16.67%	83.33%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.500
										0.250				0.250			

Prepared by National Data & Surveying Services

Murieta Pkwy & SR-16

Peak Hour Turning Movement Count

ID: 18-07198-002
City: Rancho Murieta

Day: Thursday
Date: 05/17/2018

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Murieta Pkwy — SOUTHBOUND

AM	334	65	30	0	133	AM
NOON	0	0	0	0	0	NOON
PM	112	112	42	0	423	PM

EASTBOUND — SR-16

AM	NOON	PM	
1009	0	552	⇦
0	0	0	0
61	0	222	1
297	0	549	1
77	0	125	1

WESTBOUND — SR-16

PM	NOON	AM	
46	0	26	0
342	0	578	1
45	0	40	1
0	0	0	0
661	0	361	⇨

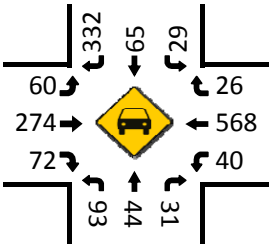
NORTHBOUND — Murieta Pkwy

PM	282	0	98	155	70	PM
NOON	0	0	0	0	0	NOON
AM	182	0	97	46	34	AM

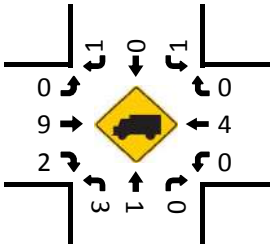
	AM	NOON	PM
⇩	1	1	1
↰	0	0	0
↶	0	1	1
↑	1.5	1.5	1.5
↱	0.5	0.5	0.5

CONTROL			
Signalized			
TEV	1685	0	1918
	AM	NOON	PM
PHF	0.86		0.96

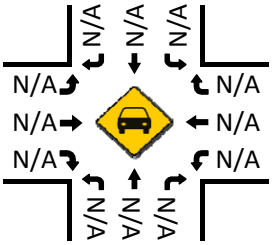
Cars (AM)



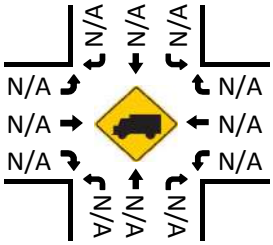
2axle (AM)



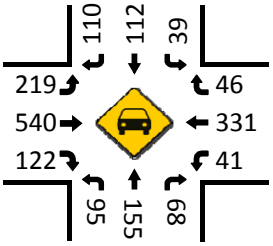
Cars (NOON)



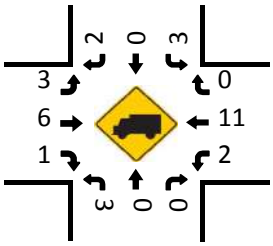
2axle (NOON)



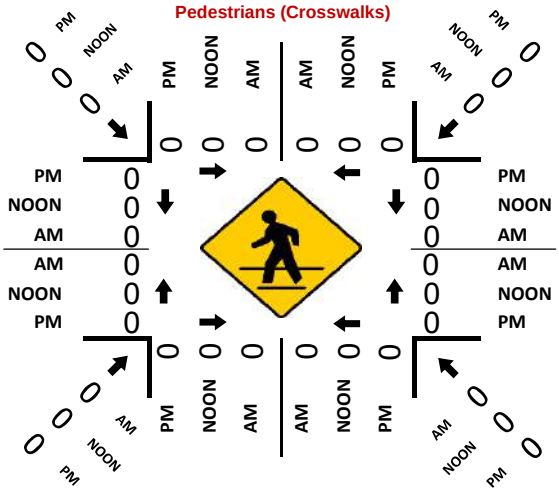
Cars (PM)



2axle (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta South Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-003
Date: 5/17/2018

Total

NS/EW Streets:	Murieta South Pkwy				Murieta South Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	0	0	59	0	4	52	2	0	0	89	0	0	207
7:15 AM	2	0	0	0	7	0	94	0	10	67	0	0	0	99	2	0	281
7:30 AM	2	0	1	0	4	0	78	0	31	87	0	0	0	86	0	0	289
7:45 AM	1	0	1	0	2	1	38	0	27	45	2	0	2	77	2	0	198
8:00 AM	3	0	0	0	3	0	32	0	20	30	1	0	0	77	1	0	167
8:15 AM	0	0	0	0	1	0	49	0	15	42	0	0	1	70	0	0	178
8:30 AM	0	0	1	0	0	0	33	0	20	59	2	0	2	62	1	0	180
8:45 AM	1	0	0	0	0	0	36	0	11	50	0	0	0	72	3	0	173
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	0	3	0	17	1	419	0	138	432	7	0	5	632	9	0	1673
APPROACH %'s :	76.92%	0.00%	23.08%	0.00%	3.89%	0.23%	95.88%	0.00%	23.92%	74.87%	1.21%	0.00%	0.77%	97.83%	1.39%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	6	0	2	0	13	1	269	0	72	251	4	0	2	351	4	0	975
PEAK HR FACTOR :	0.750	0.000	0.500	0.000	0.464	0.250	0.715	0.000	0.581	0.721	0.500	0.000	0.250	0.886	0.500	0.000	0.843
	0.667				0.700				0.693				0.884				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	5	0	1	0	2	0	29	0	40	105	1	0	0	72	1	0	256
4:15 PM	3	0	0	0	1	0	25	0	54	108	1	0	0	64	1	0	257
4:30 PM	0	0	0	0	0	0	22	0	45	116	2	0	0	82	5	0	272
4:45 PM	3	3	0	0	3	0	26	0	53	93	3	0	0	64	4	0	252
5:00 PM	2	0	0	0	1	0	33	0	58	121	0	0	0	65	3	0	283
5:15 PM	0	0	0	0	1	1	29	0	50	103	0	0	0	56	3	0	243
5:30 PM	1	0	0	0	0	0	25	0	55	85	0	0	0	65	2	0	233
5:45 PM	1	0	0	0	2	0	33	0	58	84	1	0	0	52	3	0	234
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	15	3	1	0	10	1	222	0	413	815	8	0	0	520	22	0	2030
APPROACH %'s :	78.95%	15.79%	5.26%	0.00%	4.29%	0.43%	95.28%	0.00%	33.41%	65.94%	0.65%	0.00%	0.00%	95.94%	4.06%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	8	3	0	0	5	0	106	0	210	438	6	0	0	275	13	0	1064
PEAK HR FACTOR :	0.667	0.250	0.000	0.000	0.417	0.000	0.803	0.000	0.905	0.905	0.500	0.000	0.000	0.838	0.650	0.000	0.940
	0.458				0.816				0.913				0.828				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta South Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-003
Date: 5/17/2018

Cars

NS/EW Streets:	Murieta South Pkwy				Murieta South Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	0	0	59	0	4	45	2	0	0	84	0	0	195
7:15 AM	2	0	0	0	7	0	93	0	9	58	0	0	0	98	2	0	269
7:30 AM	2	0	1	0	4	0	78	0	31	81	0	0	0	85	0	0	282
7:45 AM	1	0	1	0	2	1	38	0	27	43	2	0	2	73	2	0	192
8:00 AM	3	0	0	0	3	0	32	0	19	26	1	0	0	73	1	0	158
8:15 AM	0	0	0	0	1	0	48	0	15	34	0	0	1	62	0	0	161
8:30 AM	0	0	1	0	0	0	33	0	20	48	2	0	2	57	1	0	164
8:45 AM	1	0	0	0	0	0	36	0	10	46	0	0	0	71	3	0	167
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	0	3	0	17	1	417	0	135	381	7	0	5	603	9	0	1588
APPROACH %'s :	76.92%	0.00%	23.08%	0.00%	3.91%	0.23%	95.86%	0.00%	25.81%	72.85%	1.34%	0.00%	0.81%	97.73%	1.46%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	6	0	2	0	13	1	268	0	71	227	4	0	2	340	4	0	938
PEAK HR FACTOR :	0.75	0.000	0.500	0.000	0.464	0.250	0.720	0.000	0.573	0.701	0.500	0.000	0.250	0.867	0.500	0.000	0.832
	0.667				0.705				0.674				0.865				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	5	0	1	0	2	0	27	0	36	104	1	0	0	70	1	0	247
4:15 PM	3	0	0	0	1	0	23	0	53	106	1	0	0	62	0	0	249
4:30 PM	0	0	0	0	0	0	20	0	43	115	2	0	0	79	5	0	264
4:45 PM	3	3	0	0	3	0	26	0	53	92	3	0	0	59	4	0	246
5:00 PM	2	0	0	0	1	0	32	0	58	117	0	0	0	62	3	0	275
5:15 PM	0	0	0	0	1	1	29	0	50	100	0	0	0	52	3	0	236
5:30 PM	1	0	0	0	0	0	24	0	54	83	0	0	0	65	2	0	229
5:45 PM	1	0	0	0	2	0	33	0	58	82	1	0	0	49	3	0	229
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	15	3	1	0	10	1	214	0	405	799	8	0	0	498	21	0	1975
APPROACH %'s :	78.95%	15.79%	5.26%	0.00%	4.44%	0.44%	95.11%	0.00%	33.42%	65.92%	0.66%	0.00%	0.00%	95.95%	4.05%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	8	3	0	0	5	0	101	0	207	430	6	0	0	262	12	0	1034
PEAK HR FACTOR :	0.67	0.250	0.000	0.000	0.417	0.000	0.789	0.000	0.892	0.919	0.500	0.000	0.000	0.829	0.600	0.000	0.940
	0.458				0.803				0.919				0.815				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta South Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-003
Date: 5/17/2018

2axle

NS/EW Streets:	Murieta South Pkwy				Murieta South Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
7:15 AM	0	0	0	0	0	0	1	0	1	3	0	0	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	5
8:15 AM	0	0	0	0	0	0	1	0	0	6	0	0	0	2	0	0	9
8:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	2	0	3	22	0	0	0	11	0	0	38
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	12.00%	88.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	1	8	0	0	0	5	0	0	15
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.667	0.000	0.000	0.000	0.313	0.000	0.000	0.625
							0.250				0.563				0.313		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	2	0	4	0	0	0	0	2	0	0	8
4:15 PM	0	0	0	0	0	0	2	0	1	0	0	0	0	2	1	0	6
4:30 PM	0	0	0	0	0	0	2	0	2	0	0	0	0	2	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
5:00 PM	0	0	0	0	0	0	1	0	0	2	0	0	0	1	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
5:30 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	8	0	8	4	0	0	0	16	1	0	37
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	94.12%	5.88%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	5	0	3	2	0	0	0	9	1	0	20
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.375	0.250	0.000	0.000	0.000	0.563	0.250	0.000	0.833
							0.625				0.625				0.625		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta South Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-003
Date: 5/17/2018

3axle

NS/EW Streets:	Murieta South Pkwy				Murieta South Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	10	0	0	0	5	0	0	15
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500
										1.000				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.500
										0.375				0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Murieta South Pkwy & SR-16
City: Rancho Murieta
Control: Signalized

Project ID: 18-07198-003
Date: 5/17/2018

4axle

NS/EW Streets:	Murieta South Pkwy				Murieta South Pkwy				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
7:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	6
8:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	19	0	0	0	13	0	0	32
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	12	0	0	0	4	0	0	16
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.000	0.000	0.000	1.000	0.000	0.000	0.667
										0.600				1.000			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0.5	0.5	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	8	0	0	0	5	0	0	13
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.375	0.000	0.000	0.375
										0.375				0.375			

Prepared by National Data & Surveying Services

Murieta South Pkwy & SR-16

Peak Hour Turning Movement Count

ID: 18-07198-003
City: Rancho Murieta

Day: Thursday
Date: 05/17/2018

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	04:15 PM - 05:15 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Murieta South Pkwy — SOUTHBOUND

AM	269	1	13	0	76	AM
NOON	0	0	0	0	0	NOON
PM	106	0	5	0	226	PM

SR-16 — EASTBOUND

AM	NOON	PM	
626	0	389	
0	0	0	0
72	0	210	1
251	0	438	1
4	0	6	0
AM	NOON	PM	

SR-16 — WESTBOUND

PM	NOON	AM	
13	0	4	0
275	0	351	1
0	0	2	1
0	0	0	0
443	0	266	
PM	NOON	AM	

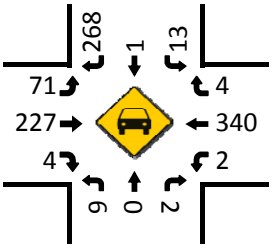
Murieta South Pkwy — NORTHBOUND

PM	6	0	8	3	0	PM
NOON	0	0	0	0	0	NOON
AM	7	0	6	0	2	AM

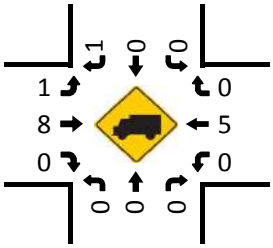
	1	0.5	0.5	0
	0	0	1	0

CONTROL			
Signalized			
TEV	975 AM	0 NOON	1064 PM
PHF	0.84		0.94

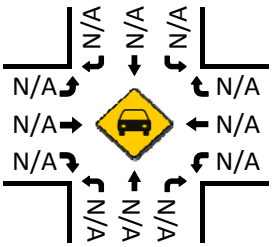
Cars (AM)



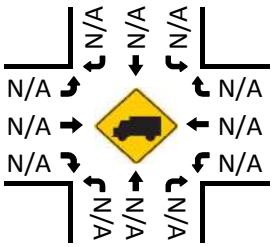
2axle (AM)



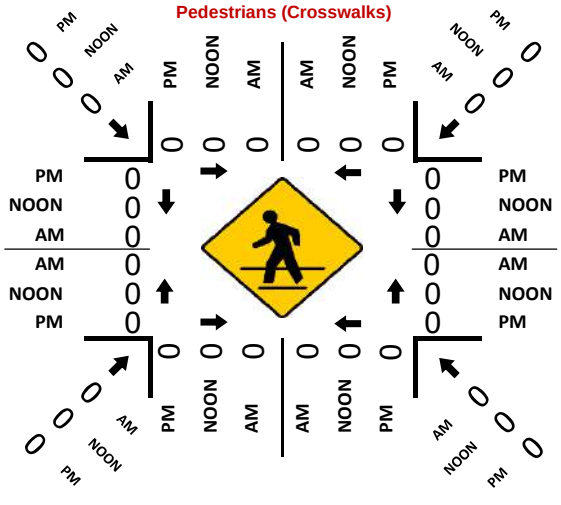
Cars (NOON)



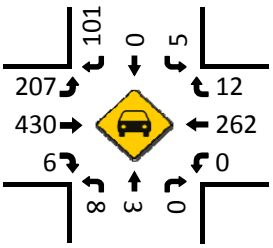
2axle (NOON)



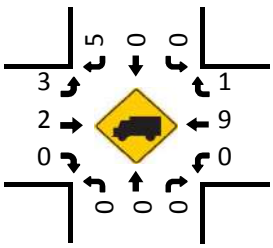
Pedestrians (Crosswalks)



Cars (PM)



2axle (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Ione Rd & SR-16
City: Rancho Murieta
Control: 1-Way Stop (NB)

Project ID: 19-07216-001
Date: 5/30/2019

Total

NS/EW Streets:	Ione Rd				Ione Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	0	0	0	0	0	0	0	62	5	0	1	128	0	1	199
7:15 AM	1	0	0	0	0	0	0	0	0	82	4	0	1	94	0	0	182
7:30 AM	1	0	0	0	0	0	0	0	0	50	3	0	2	94	0	0	150
7:45 AM	0	0	1	0	0	0	0	0	0	81	3	0	1	98	0	0	184
8:00 AM	0	0	1	0	0	0	0	0	0	46	5	0	1	77	0	0	130
8:15 AM	1	0	1	0	0	0	0	0	0	64	1	0	0	97	0	0	164
8:30 AM	3	0	0	0	0	0	0	0	0	83	5	0	0	85	0	0	176
8:45 AM	0	0	1	0	0	0	0	0	0	68	4	0	0	75	0	0	148
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	0	4	0	0	0	0	0	0	536	30	0	6	748	0	1	1333
APPROACH %'s :	66.67%	0.00%	33.33%	0.00%					0.00%	94.70%	5.30%	0.00%	0.79%	99.07%	0.00%	0.13%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	4	0	1	0	0	0	0	0	0	275	15	0	5	414	0	1	715
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.838	0.750	0.000	0.625	0.809	0.000	0.250	0.898
	0.625								0.843				0.808				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	1	0	0	0	0	0	0	108	1	0	1	79	0	0	191
4:15 PM	5	0	2	0	0	0	0	0	0	131	1	0	0	88	0	0	227
4:30 PM	4	0	2	0	0	0	0	0	0	125	1	0	0	60	0	0	192
4:45 PM	2	0	1	0	0	0	0	0	0	130	1	0	1	86	0	0	221
5:00 PM	1	0	1	0	0	0	0	0	0	109	1	0	0	51	0	0	163
5:15 PM	0	0	1	0	0	0	0	0	0	153	1	0	0	26	0	0	181
5:30 PM	1	0	1	0	0	0	0	0	0	133	4	0	0	37	0	0	176
5:45 PM	1	0	1	0	0	0	0	0	0	128	0	0	0	57	0	0	187
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	15	0	10	0	0	0	0	0	0	1017	10	0	2	484	0	0	1538
APPROACH %'s :	60.00%	0.00%	40.00%	0.00%					0.00%	99.03%	0.97%	0.00%	0.41%	99.59%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	12	0	6	0	0	0	0	0	0	494	4	0	2	313	0	0	831
PEAK HR FACTOR :	0.600	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.943	1.000	0.000	0.500	0.889	0.000	0.000	0.915
	0.643								0.943				0.895				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ione Rd & SR-16
City: Rancho Murieta
Control: 1-Way Stop (NB)

Project ID: 19-07216-001
Date: 5/30/2019

Cars

NS/EW Streets:	Ione Rd				Ione Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	0	0	0	0	0	0	0	57	5	0	1	126	0	1	192
7:15 AM	1	0	0	0	0	0	0	0	0	76	4	0	1	90	0	0	172
7:30 AM	1	0	0	0	0	0	0	0	0	46	3	0	2	91	0	0	143
7:45 AM	0	0	1	0	0	0	0	0	0	76	2	0	1	95	0	0	175
8:00 AM	0	0	0	0	0	0	0	0	0	43	5	0	1	73	0	0	122
8:15 AM	1	0	1	0	0	0	0	0	0	53	1	0	0	87	0	0	143
8:30 AM	3	0	0	0	0	0	0	0	0	77	5	0	0	81	0	0	166
8:45 AM	0	0	1	0	0	0	0	0	0	60	4	0	0	69	0	0	134
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	0	3	0	0	0	0	0	0	488	29	0	6	712	0	1	1247
APPROACH %'s :	72.73%	0.00%	27.27%	0.00%					0.00%	94.39%	5.61%	0.00%	0.83%	99.03%	0.00%	0.14%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	4	0	1	0	0	0	0	0	0	255	14	0	5	402	0	1	682
PEAK HR FACTOR :	0.50	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.839	0.700	0.000	0.625	0.798	0.000	0.250	0.888
	0.625								0.841				0.797				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	1	0	0	0	0	0	0	107	1	0	1	75	0	0	186
4:15 PM	5	0	2	0	0	0	0	0	0	128	1	0	0	84	0	0	220
4:30 PM	4	0	2	0	0	0	0	0	0	119	1	0	0	57	0	0	183
4:45 PM	2	0	1	0	0	0	0	0	0	125	1	0	1	81	0	0	211
5:00 PM	1	0	1	0	0	0	0	0	0	107	1	0	0	48	0	0	158
5:15 PM	0	0	1	0	0	0	0	0	0	149	1	0	0	25	0	0	176
5:30 PM	1	0	1	0	0	0	0	0	0	133	4	0	0	35	0	0	174
5:45 PM	1	0	1	0	0	0	0	0	0	127	0	0	0	56	0	0	185
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	15	0	10	0	0	0	0	0	0	995	10	0	2	461	0	0	1493
APPROACH %'s :	60.00%	0.00%	40.00%	0.00%					0.00%	99.00%	1.00%	0.00%	0.43%	99.57%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	12	0	6	0	0	0	0	0	0	479	4	0	2	297	0	0	800
PEAK HR FACTOR :	0.60	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.936	1.000	0.000	0.500	0.884	0.000	0.000	0.909
	0.643								0.936				0.890				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ione Rd & SR-16
City: Rancho Murieta
Control: 1-Way Stop (NB)

Project ID: 19-07216-001
Date: 5/30/2019

2axle

NS/EW Streets:	Ione Rd				Ione Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
8:00 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	2	0	0	10
8:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	27	1	0	0	10	0	0	39
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	96.43%	3.57%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	10	1	0	0	3	0	0	14
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.833	0.250	0.000	0.000	0.750	0.000	0.000	0.875
										0.917				0.750			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	14	0	0	0	16	0	0	30
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	9	0	0	0	10	0	0	19
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.833	0.000	0.000	0.792
										0.750				0.833			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ione Rd & SR-16
City: Rancho Murieta
Control: 1-Way Stop (NB)

Project ID: 19-07216-001
Date: 5/30/2019

3axle

NS/EW Streets:	Ione Rd				Ione Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	10
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.750
										0.500				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ione Rd & SR-16
City: Rancho Murieta
Control: 1-Way Stop (NB)

Project ID: 19-07216-001
Date: 5/30/2019

4axle

NS/EW Streets:	Ione Rd				Ione Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0	0	8
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	16	0	0	0	21	0	0	37
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0	0	16
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.667	0.000	0.000	0.667
										0.500				0.667			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	8	0	0	0	6	0	0	14
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	11
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.625	0.000	0.000	0.688
										0.500				0.625			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ione Rd & SR-16
City: Rancho Murieta
Control: 1-Way Stop (NB)

Project ID: 19-07216-001
Date: 5/30/2019

Bikes

NS/EW Streets:	Ione Rd				Ione Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0.5	0.5	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ione Rd & SR-16 **Project ID:** 19-07216-001
City: Rancho Murieta **Date:** 5/30/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Ione Rd		Ione Rd		SR-16		SR-16		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:00 AM - 08:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**04:00 PM - 05:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Ione Rd & SR-16

Peak Hour Turning Movement Count

ID: 19-07216-001
City: Rancho Murieta

Day: Thursday
Date: 05/30/2019

PEAK HOURS

AM: 07:00 AM - 08:00 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Ione Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

SR-16 — EASTBOUND

AM	NOON	PM		
418	0	325	⇦	
0	0	0	↶	0
0	0	0	↱	0
275	0	494	→	1
15	0	4	↴	0
AM	NOON	PM		

SR-16 — WESTBOUND

PM	NOON	AM		
0	0	0	↰	0
313	0	414	←	1
2	0	5	↰	1
0	0	1	↰	0
500	0	277	⇨	
PM	NOON	AM		

CONTROL: 1-Way Stop (NB)

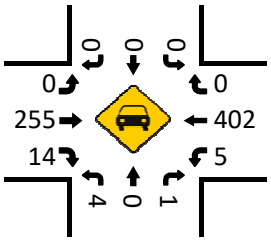
	AM	NOON	PM
TEV	715	0	831
PHF	0.90	NOON	0.92

0 0 0 0 | 0 0 0.5 0.5

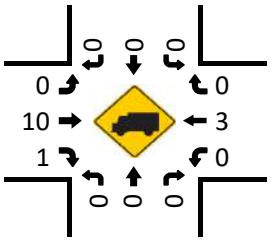
Ione Rd — NORTHBOUND

PM	6	0	12	0	6	PM
NOON	0	0	0	0	0	NOON
AM	20	0	4	0	1	AM

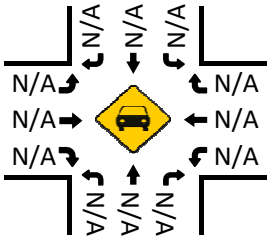
Cars (AM)



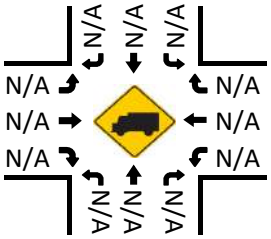
2axle (AM)



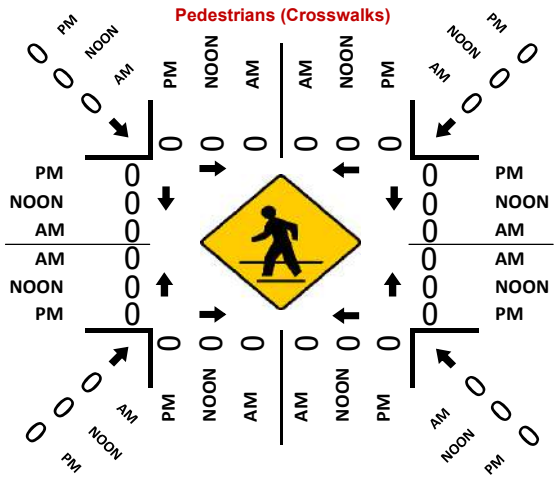
Cars (NOON)



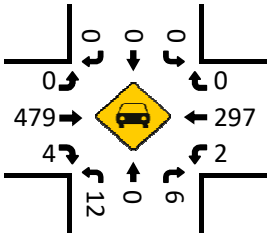
2axle (NOON)



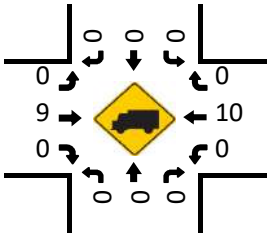
Pedestrians (Crosswalks)



Cars (PM)



2axle (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Mariah Heights Rd & SR-16
City: Plymouth
Control: No Control

Project ID: 18-07198-004
Date: 5/17/2018

Total

NS/EW Streets:	Mariah Heights Rd				Mariah Heights Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	42	0	0	0	71	0	0	113
7:15 AM	2	0	0	0	0	0	0	0	0	50	2	0	0	71	0	0	125
7:30 AM	2	0	0	0	0	0	0	0	0	62	0	0	0	66	0	0	130
7:45 AM	2	0	0	0	0	0	0	0	0	37	1	0	0	68	0	0	108
8:00 AM	0	0	0	0	0	0	0	0	0	29	1	0	0	77	0	0	107
8:15 AM	1	0	0	0	0	0	0	0	0	26	3	0	0	52	0	0	82
8:30 AM	0	0	0	0	0	0	0	0	0	36	7	0	0	52	0	0	95
8:45 AM	0	0	1	0	0	0	0	0	0	38	0	0	2	59	0	0	100
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	0	1	0	0	0	0	0	0	320	14	0	2	516	0	0	860
APPROACH %'s :	87.50%	0.00%	12.50%	0.00%					0.00%	95.81%	4.19%	0.00%	0.39%	99.61%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	6	0	0	0	0	0	0	0	0	191	3	0	0	276	0	0	476
PEAK HR FACTOR :	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.770	0.375	0.000	0.000	0.972	0.000	0.000	0.915
	0.750								0.782				0.972				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	0	80	0	0	0	54	0	0	135
4:15 PM	1	0	0	0	0	0	0	0	0	83	1	0	0	43	0	0	128
4:30 PM	0	0	0	0	0	0	0	0	0	88	1	0	0	57	0	0	146
4:45 PM	0	0	0	0	0	0	0	0	0	78	0	0	0	46	0	0	124
5:00 PM	1	0	0	0	0	0	0	0	0	95	0	0	0	50	0	0	146
5:15 PM	0	0	0	0	0	0	0	0	0	85	2	0	0	51	0	0	138
5:30 PM	0	0	0	0	0	0	0	0	0	71	0	0	0	36	0	0	107
5:45 PM	2	0	0	0	0	0	0	0	0	73	0	0	0	41	0	0	116
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	0	0	0	0	0	0	0	653	4	0	0	378	0	0	1040
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	99.39%	0.61%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	346	3	0	0	204	0	0	554
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.911	0.375	0.000	0.000	0.895	0.000	0.000	0.949
	0.250								0.918				0.895				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mariah Heights Rd & SR-16
City: Plymouth
Control: No Control

Project ID: 18-07198-004
Date: 5/17/2018

Cars

NS/EW Streets:	Mariah Heights Rd				Mariah Heights Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	35	0	0	0	70	0	0	105
7:15 AM	2	0	0	0	0	0	0	0	0	40	2	0	0	68	0	0	112
7:30 AM	2	0	0	0	0	0	0	0	0	53	0	0	0	64	0	0	119
7:45 AM	2	0	0	0	0	0	0	0	0	37	1	0	0	65	0	0	105
8:00 AM	0	0	0	0	0	0	0	0	0	26	1	0	0	73	0	0	100
8:15 AM	1	0	0	0	0	0	0	0	0	24	3	0	0	47	0	0	75
8:30 AM	0	0	0	0	0	0	0	0	0	29	4	0	0	47	0	0	80
8:45 AM	0	0	1	0	0	0	0	0	0	30	0	0	2	54	0	0	87
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	0	1	0	0	0	0	0	0	274	11	0	2	488	0	0	783
APPROACH %'s :	87.50%	0.00%	12.50%	0.00%					0.00%	96.14%	3.86%	0.00%	0.41%	99.59%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	6	0	0	0	0	0	0	0	0	165	3	0	0	267	0	0	441
PEAK HR FACTOR :	0.75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.778	0.375	0.000	0.000	0.954	0.000	0.000	0.926
	0.750								0.792				0.954				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	0	79	0	0	0	54	0	0	134
4:15 PM	1	0	0	0	0	0	0	0	0	81	1	0	0	41	0	0	124
4:30 PM	0	0	0	0	0	0	0	0	0	87	1	0	0	55	0	0	143
4:45 PM	0	0	0	0	0	0	0	0	0	76	0	0	0	44	0	0	120
5:00 PM	1	0	0	0	0	0	0	0	0	93	0	0	0	45	0	0	139
5:15 PM	0	0	0	0	0	0	0	0	0	83	2	0	0	47	0	0	132
5:30 PM	0	0	0	0	0	0	0	0	0	68	0	0	0	35	0	0	103
5:45 PM	2	0	0	0	0	0	0	0	0	72	0	0	0	35	0	0	109
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	0	0	0	0	0	0	0	639	4	0	0	356	0	0	1004
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	99.38%	0.62%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	339	3	0	0	191	0	0	534
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.911	0.375	0.000	0.000	0.868	0.000	0.000	0.934
	0.250								0.919				0.868				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mariah Heights Rd & SR-16
City: Plymouth
Control: No Control

Project ID: 18-07198-004
Date: 5/17/2018

2axle

NS/EW Streets:	Mariah Heights Rd				Mariah Heights Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	2	3	0	0	2	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	19	3	0	0	11	0	0	33
APPROACH %'s :									0.00%	86.36%	13.64%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	11	0	0	0	3	0	0	14
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.688	0.000	0.000	0.000	0.750	0.000	0.000	0.700
									0.688				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	4	0	0	0	17	0	0	21
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	0	0	0	9	0	0	12
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.750	0.000	0.000	0.750
									0.375				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mariah Heights Rd & SR-16
City: Plymouth
Control: No Control

Project ID: 18-07198-004
Date: 5/17/2018

3axle

NS/EW Streets:	Mariah Heights Rd				Mariah Heights Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	0	14
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.500
										0.500				0.500			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mariah Heights Rd & SR-16
City: Plymouth
Control: No Control

Project ID: 18-07198-004
Date: 5/17/2018

4axle

NS/EW Streets:	Mariah Heights Rd				Mariah Heights Rd				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	18	0	0	0	12	0	0	30
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	11	0	0	0	4	0	0	15
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.000	0.000	0.500	0.000	0.000	0.536
									0.550				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	7	0	0	0	5	0	0	12
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.500
									0.500				0.500				

Prepared by National Data & Surveying Services

Mariah Heights Rd & SR-16

Peak Hour Turning Movement Count

ID: 18-07198-004
City: Plymouth

Day: Thursday
Date: 05/17/2018

PEAK HOURS	
AM	07:00 AM - 08:00 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS	
AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Mariah Heights Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

SR-16 — EASTBOUND

AM	NOON	PM	
282	0	205	⇦
0	0	0	↶ 0
0	0	0	↱ 0
191	0	346	→ 1
3	0	3	↷ 0
AM	NOON	PM	

SR-16 — WESTBOUND

PM	NOON	AM	
0	0	0	0 ↷
204	0	276	1 ←
0	0	0	0 ↶
0	0	0	0 ↩
346	0	191	⇨
PM	NOON	AM	

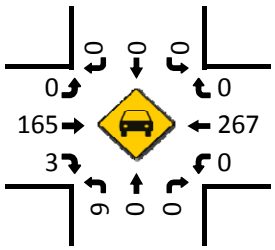
Mariah Heights Rd — NORTHBOUND

PM	3	0	1	0	0	PM
NOON	0	0	0	0	0	NOON
AM	3	0	6	0	0	AM

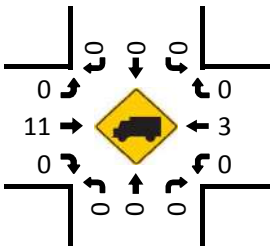
	0	0	1	0
	↶	↰	↑	↱

CONTROL			
No Control			
TEV	476 AM	0 NOON	554 PM
PHF	0.92		0.95

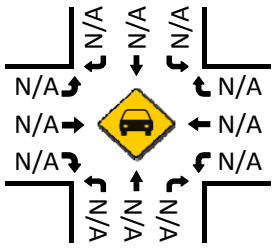
Cars (AM)



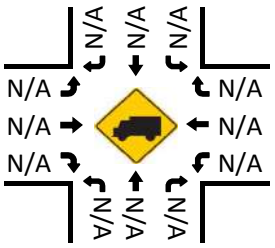
2axle (AM)



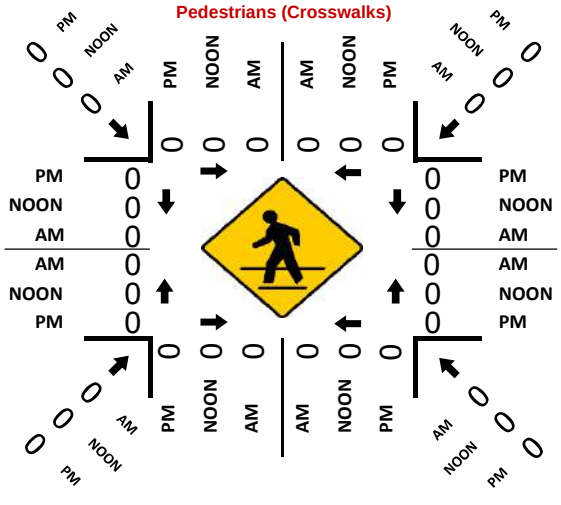
Cars (NOON)



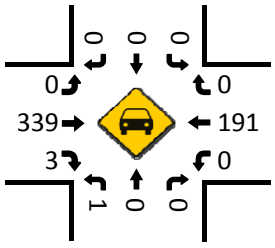
2axle (NOON)



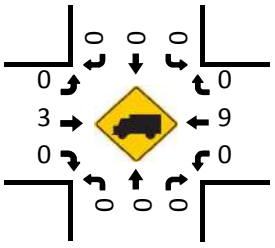
Pedestrians (Crosswalks)



Cars (PM)



2axle (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-124 & SR-16
City: Drytown
Control: 1-Way Stop (NB)

Project ID: 19-07216-002
Date: 5/30/2019

Total

NS/EW Streets:	SR-124				SR-124				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	27	0	18	0	0	0	0	0	0	47	15	0	9	98	0	0	214
7:15 AM	22	0	11	0	0	0	0	0	0	56	10	0	25	85	0	0	209
7:30 AM	17	0	14	0	0	0	0	0	0	63	20	0	24	96	0	0	234
7:45 AM	20	0	19	0	0	0	0	0	0	76	16	0	15	72	0	0	218
8:00 AM	16	0	17	0	0	0	0	0	0	72	3	0	13	87	0	0	208
8:15 AM	12	0	23	0	0	0	0	0	0	70	8	0	8	90	0	0	211
8:30 AM	18	0	8	0	0	0	0	0	0	60	14	0	14	79	0	0	193
8:45 AM	17	0	21	0	0	0	0	0	0	57	14	0	15	74	0	0	198
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	149	0	131	0	0	0	0	0	0	501	100	0	123	681	0	0	1685
APPROACH %'s :	53.21%	0.00%	46.79%	0.00%					0.00%	83.36%	16.64%	0.00%	15.30%	84.70%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	86	0	62	0	0	0	0	0	0	242	61	0	73	351	0	0	875
PEAK HR FACTOR :	0.796	0.000	0.816	0.000	0.000	0.000	0.000	0.000	0.000	0.796	0.763	0.000	0.730	0.895	0.000	0.000	0.935
	0.822								0.823				0.883				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	22	0	23	0	0	0	0	0	0	112	15	0	41	72	0	0	285
4:15 PM	18	0	33	0	0	0	0	0	0	98	19	0	27	100	0	0	295
4:30 PM	17	0	23	0	0	0	0	0	0	129	26	0	24	69	0	0	288
4:45 PM	20	0	23	0	0	0	0	0	0	136	17	0	20	50	0	0	266
5:00 PM	14	0	26	0	0	0	0	0	0	104	30	0	115	20	0	0	309
5:15 PM	26	0	46	0	0	0	0	0	0	119	19	0	150	14	0	0	374
5:30 PM	35	0	62	0	0	0	0	0	0	115	36	0	117	16	0	0	381
5:45 PM	68	0	108	0	0	0	0	0	0	111	30	0	105	16	0	0	438
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	220	0	344	0	0	0	0	0	0	924	192	0	599	357	0	0	2636
APPROACH %'s :	39.01%	0.00%	60.99%	0.00%					0.00%	82.80%	17.20%	0.00%	62.66%	37.34%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	143	0	242	0	0	0	0	0	0	449	115	0	487	66	0	0	1502
PEAK HR FACTOR :	0.526	0.000	0.560	0.000	0.000	0.000	0.000	0.000	0.000	0.943	0.799	0.000	0.812	0.825	0.000	0.000	0.857
	0.547								0.934				0.843				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-124 & SR-16
City: Drytown
Control: 1-Way Stop (NB)

Project ID: 19-07216-002
Date: 5/30/2019

Cars

NS/EW Streets:	SR-124				SR-124				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	26	0	17	0	0	0	0	0	0	46	15	0	8	95	0	0	207
7:15 AM	22	0	8	0	0	0	0	0	0	49	8	0	25	83	0	0	195
7:30 AM	17	0	14	0	0	0	0	0	0	57	20	0	23	95	0	0	226
7:45 AM	19	0	18	0	0	0	0	0	0	72	16	0	13	66	0	0	204
8:00 AM	15	0	17	0	0	0	0	0	0	67	1	0	11	82	0	0	193
8:15 AM	12	0	19	0	0	0	0	0	0	61	8	0	7	84	0	0	191
8:30 AM	16	0	8	0	0	0	0	0	0	57	14	0	13	74	0	0	182
8:45 AM	17	0	20	0	0	0	0	0	0	53	10	0	13	69	0	0	182
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	144	0	121	0	0	0	0	0	0	462	92	0	113	648	0	0	1580
APPROACH %'s :	54.34%	0.00%	45.66%	0.00%					0.00%	83.39%	16.61%	0.00%	14.85%	85.15%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	84	0	57	0	0	0	0	0	0	224	59	0	69	339	0	0	832
PEAK HR FACTOR :	0.81	0.000	0.792	0.000	0.000	0.000	0.000	0.000	0.000	0.778	0.738	0.000	0.690	0.892	0.000	0.000	0.920
	0.820								0.804				0.864				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	22	0	22	0	0	0	0	0	0	109	15	0	40	66	0	0	274
4:15 PM	18	0	33	0	0	0	0	0	0	97	19	0	27	94	0	0	288
4:30 PM	17	0	23	0	0	0	0	0	0	125	26	0	24	64	0	0	279
4:45 PM	18	0	22	0	0	0	0	0	0	130	17	0	20	48	0	0	255
5:00 PM	14	0	26	0	0	0	0	0	0	101	30	0	114	20	0	0	305
5:15 PM	26	0	46	0	0	0	0	0	0	118	19	0	143	14	0	0	366
5:30 PM	34	0	60	0	0	0	0	0	0	113	35	0	116	16	0	0	374
5:45 PM	67	0	106	0	0	0	0	0	0	109	30	0	102	14	0	0	428
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	216	0	338	0	0	0	0	0	0	902	191	0	586	336	0	0	2569
APPROACH %'s :	38.99%	0.00%	61.01%	0.00%					0.00%	82.53%	17.47%	0.00%	63.56%	36.44%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	141	0	238	0	0	0	0	0	0	441	114	0	475	64	0	0	1473
PEAK HR FACTOR :	0.53	0.000	0.561	0.000	0.000	0.000	0.000	0.000	0.000	0.934	0.814	0.000	0.830	0.800	0.000	0.000	0.860
	0.548								0.938				0.858				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-124 & SR-16
City: Drytown
Control: 1-Way Stop (NB)

Project ID: 19-07216-002
Date: 5/30/2019

2axle

NS/EW Streets:	SR-124				SR-124				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	5	1	0	0	0	0	0	7
7:30 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
7:45 AM	1	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	2	0	0	5
8:15 AM	0	0	1	0	0	0	0	0	0	8	0	0	1	0	0	0	10
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	2	0	0	0	0	0	0	25	2	0	5	9	0	0	45
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	92.59%	7.41%	0.00%	35.71%	64.29%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	2	0	1	0	0	0	0	0	0	11	1	0	2	1	0	0	18
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.250	0.000	0.250	0.250	0.000	0.000	0.643
	0.750								0.500				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	4	0	0	7
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
4:45 PM	1	0	1	0	0	0	0	0	0	5	0	0	0	2	0	0	9
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	7	0	0	0	8
5:30 PM	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	4
5:45 PM	1	0	0	0	0	0	0	0	0	2	0	0	3	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	2	0	0	0	0	0	0	14	1	0	12	14	0	0	46
APPROACH %'s :	60.00%	0.00%	40.00%	0.00%					0.00%	93.33%	6.67%	0.00%	46.15%	53.85%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	0	0	0	0	0	0	0	0	5	1	0	12	0	0	0	20
PEAK HR FACTOR :	0.50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.250	0.000	0.429	0.000	0.000	0.000	0.625
	0.500								0.750				0.429				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-124 & SR-16
City: Drytown
Control: 1-Way Stop (NB)

Project ID: 19-07216-002
Date: 5/30/2019

3axle

NS/EW Streets:	SR-124				SR-124				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
8:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	4	0	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
8:45 AM	0	0	1	0	0	0	0	0	0	0	2	0	0	1	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	7	0	0	0	0	0	0	3	2	0	3	5	0	0	20
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	60.00%	40.00%	0.00%	37.50%	62.50%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.625
	0.750								0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%													
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
	0.375																

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-124 & SR-16
City: Drytown
Control: 1-Way Stop (NB)

Project ID: 19-07216-002
Date: 5/30/2019

4axle

NS/EW Streets:	SR-124				SR-124				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0	0	5
7:15 AM	0	0	1	0	0	0	0	0	0	2	1	0	0	2	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	6
8:00 AM	1	0	0	0	0	0	0	0	0	2	1	0	1	3	0	0	8
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
8:30 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	2	2	0	0	2	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	1	0	0	0	0	0	0	11	4	0	2	19	0	0	40
APPROACH %'s :	75.00%	0.00%	25.00%	0.00%					0.00%	73.33%	26.67%	0.00%	9.52%	90.48%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	6	1	0	1	11	0	0	20
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.250	0.000	0.250	0.550	0.000	0.000	0.833
	0.250								0.583				0.600				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
4:45 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	0	0	0	8	0	0	1	7	0	0	18
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	100.00%	0.00%	0.00%	12.50%	87.50%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	3	0	0	0	2	0	0	6
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.500
	0.250								0.375				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-124 & SR-16
City: Drytown
Control: 1-Way Stop (NB)

Project ID: 19-07216-002
Date: 5/30/2019

Bikes

NS/EW Streets:	SR-124				SR-124				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-124 & SR-16
City: Drytown
Project ID: 19-07216-002
Date: 5/30/2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR-124		SR-124		SR-16		SR-16		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:00 AM - 08:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**05:00 PM - 06:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

SR-124 & SR-16

Peak Hour Turning Movement Count

ID: 19-07216-002
City: Drytown

Day: Thursday
Date: 05/30/2019

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

SR-124 SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

SR-16 EASTBOUND

AM	NOON	PM	
437	0	209	
0	0	0	0
0	0	0	0
242	0	449	1
61	0	115	1
AM	NOON	PM	

SR-16 WESTBOUND

PM	NOON	AM	
0	0	0	0
66	0	351	1
487	0	73	1
0	0	0	0
691	0	304	
PM	NOON	AM	

CONTROL

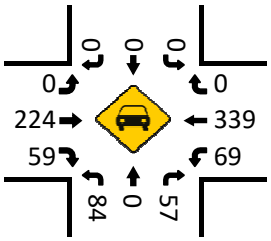
1-Way Stop (NB)

TEV	875 AM	0 NOON	1502 PM
PHF	0.93		0.86

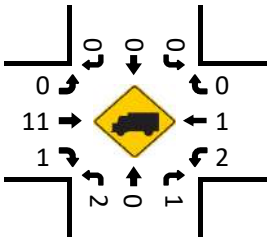
SR-124 NORTHBOUND

PM	602	0	143	0	242	PM
NOON	0	0	0	0	0	NOON
AM	134	0	86	0	62	AM

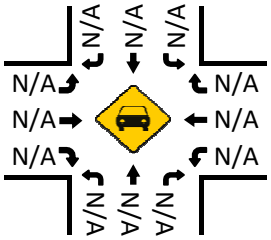
Cars (AM)



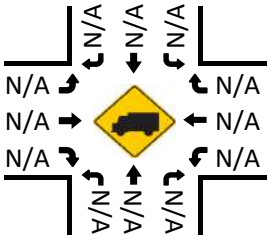
2axle (AM)



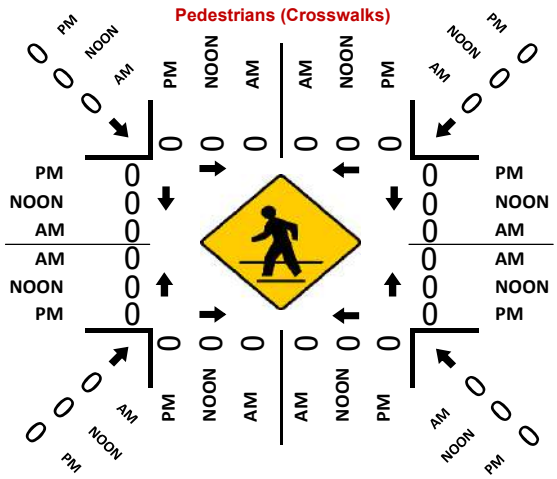
Cars (NOON)



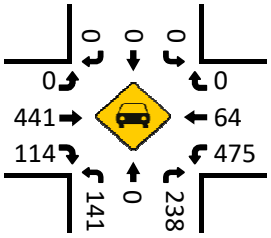
2axle (NOON)



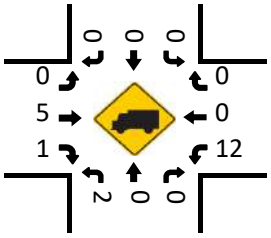
Pedestrians (Crosswalks)



Cars (PM)



2axle (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-49 & SR-16
City: Drytown
Control: Signalized

Project ID: 19-07216-003
Date: 5/30/2019

Total

NS/EW Streets:	SR-49				SR-49				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	76	0	34	0	0	0	0	0	0	24	36	0	28	37	0	0	235
7:15 AM	75	0	35	0	0	0	0	0	0	28	49	0	40	38	0	0	265
7:30 AM	73	0	17	0	0	0	0	0	0	28	51	0	68	38	0	0	275
7:45 AM	53	0	44	0	0	0	0	0	0	31	66	0	47	28	0	0	269
8:00 AM	72	0	40	0	0	0	0	0	0	37	46	0	57	30	0	0	282
8:15 AM	79	0	54	0	0	0	0	0	0	35	53	0	57	26	0	0	304
8:30 AM	59	0	35	0	0	0	0	0	0	20	50	0	48	26	0	0	238
8:45 AM	63	0	32	0	0	0	0	0	0	24	56	0	35	29	0	0	239
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	550	0	291	0	0	0	0	0	0	227	407	0	380	252	0	0	2107
APPROACH %'s :	65.40%	0.00%	34.60%	0.00%					0.00%	35.80%	64.20%	0.00%	60.13%	39.87%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	277	0	155	0	0	0	0	0	0	131	216	0	229	122	0	0	1130
PEAK HR FACTOR :	0.877	0.000	0.718	0.000	0.000	0.000	0.000	0.000	0.000	0.885	0.818	0.000	0.842	0.803	0.000	0.000	0.929
	0.812								0.894				0.828				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	67	0	49	0	0	0	0	0	0	41	87	0	55	53	0	0	352
4:15 PM	62	0	44	0	0	0	0	0	0	54	82	0	50	50	0	0	342
4:30 PM	73	0	52	0	0	0	0	0	0	46	117	0	46	26	0	0	360
4:45 PM	25	0	13	0	0	0	0	0	0	47	105	0	58	42	0	0	290
5:00 PM	100	0	23	0	0	0	0	0	0	36	86	0	31	40	0	0	316
5:15 PM	129	0	15	0	0	0	0	0	0	70	91	0	50	39	0	0	394
5:30 PM	104	0	20	0	0	0	0	0	0	97	87	0	20	38	0	0	366
5:45 PM	84	0	19	0	0	0	0	0	0	148	72	0	37	29	0	0	389
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	644	0	235	0	0	0	0	0	0	539	727	0	347	317	0	0	2809
APPROACH %'s :	73.27%	0.00%	26.73%	0.00%					0.00%	42.58%	57.42%	0.00%	52.26%	47.74%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	417	0	77	0	0	0	0	0	0	351	336	0	138	146	0	0	1465
PEAK HR FACTOR :	0.808	0.000	0.837	0.000	0.000	0.000	0.000	0.000	0.000	0.593	0.923	0.000	0.690	0.913	0.000	0.000	0.930
	0.858								0.781				0.798				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-49 & SR-16
City: Drytown
Control: Signalized

Project ID: 19-07216-003
Date: 5/30/2019

Cars

NS/EW Streets:	SR-49				SR-49				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	73	0	33	0	0	0	0	0	0	22	34	0	27	37	0	0	226
7:15 AM	72	0	35	0	0	0	0	0	0	21	45	0	39	38	0	0	250
7:30 AM	72	0	17	0	0	0	0	0	0	28	48	0	65	37	0	0	267
7:45 AM	50	0	43	0	0	0	0	0	0	29	63	0	44	23	0	0	252
8:00 AM	66	0	39	0	0	0	0	0	0	36	43	0	53	28	0	0	265
8:15 AM	74	0	50	0	0	0	0	0	0	27	48	0	54	25	0	0	278
8:30 AM	54	0	35	0	0	0	0	0	0	19	50	0	44	24	0	0	226
8:45 AM	57	0	30	0	0	0	0	0	0	23	49	0	31	28	0	0	218
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	518	0	282	0	0	0	0	0	0	205	380	0	357	240	0	0	1982
APPROACH %'s :	64.75%	0.00%	35.25%	0.00%					0.00%	35.04%	64.96%	0.00%	59.80%	40.20%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	262	0	149	0	0	0	0	0	0	120	202	0	216	113	0	0	1062
PEAK HR FACTOR :	0.89	0.000	0.745	0.000	0.000	0.000	0.000	0.000	0.000	0.833	0.802	0.000	0.831	0.764	0.000	0.000	0.955
	0.829								0.875				0.806				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	62	0	47	0	0	0	0	0	0	41	84	0	54	50	0	0	338
4:15 PM	57	0	41	0	0	0	0	0	0	54	80	0	48	50	0	0	330
4:30 PM	68	0	50	0	0	0	0	0	0	44	113	0	45	26	0	0	346
4:45 PM	25	0	13	0	0	0	0	0	0	44	103	0	55	40	0	0	280
5:00 PM	98	0	23	0	0	0	0	0	0	36	83	0	31	40	0	0	311
5:15 PM	125	0	15	0	0	0	0	0	0	69	90	0	48	37	0	0	384
5:30 PM	103	0	19	0	0	0	0	0	0	94	87	0	20	37	0	0	360
5:45 PM	82	0	19	0	0	0	0	0	0	145	71	0	36	27	0	0	380
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	620	0	227	0	0	0	0	0	0	527	711	0	337	307	0	0	2729
APPROACH %'s :	73.20%	0.00%	26.80%	0.00%					0.00%	42.57%	57.43%	0.00%	52.33%	47.67%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	408	0	76	0	0	0	0	0	0	344	331	0	135	141	0	0	1435
PEAK HR FACTOR :	0.82	0.000	0.826	0.000	0.000	0.000	0.000	0.000	0.000	0.593	0.919	0.000	0.703	0.881	0.000	0.000	0.934
	0.864								0.781				0.812				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-49 & SR-16
City: Drytown
Control: Signalized

Project ID: 19-07216-003
Date: 5/30/2019

2axle

NS/EW Streets:	SR-49				SR-49				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	4	3	0	1	0	0	0	8
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3
7:45 AM	0	0	1	0	0	0	0	0	0	1	1	0	2	3	0	0	8
8:00 AM	2	0	1	0	0	0	0	0	0	0	3	0	3	1	0	0	10
8:15 AM	0	0	4	0	0	0	0	0	0	4	4	0	2	0	0	0	14
8:30 AM	4	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	8
8:45 AM	2	0	1	0	0	0	0	0	0	0	4	0	3	0	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	0	8	0	0	0	0	0	0	10	17	0	16	6	0	0	65
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	37.04%	62.96%	0.00%	72.73%	27.27%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	2	0	6	0	0	0	0	0	0	5	9	0	9	4	0	0	35
PEAK HR FACTOR :	0.250	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.313	0.563	0.000	0.750	0.333	0.000	0.000	0.625
	0.500								0.438				0.650				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	0	0	0	0	0	0	0	0	0	2	0	1	2	0	0	8
4:15 PM	3	0	3	0	0	0	0	0	0	0	2	0	1	0	0	0	9
4:30 PM	4	0	0	0	0	0	0	0	0	2	1	0	1	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	3	1	0	3	2	0	0	9
5:00 PM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
5:15 PM	4	0	0	0	0	0	0	0	0	1	0	0	2	2	0	0	9
5:30 PM	1	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	4
5:45 PM	2	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	0	4	0	0	0	0	0	0	9	7	0	9	7	0	0	55
APPROACH %'s :	82.61%	0.00%	17.39%	0.00%					0.00%	56.25%	43.75%	0.00%	56.25%	43.75%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	9	0	1	0	0	0	0	0	0	4	1	0	3	3	0	0	21
PEAK HR FACTOR :	0.56	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.375	0.375	0.000	0.000	0.583
	0.625								0.625				0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-49 & SR-16
City: Drytown
Control: Signalized

Project ID: 19-07216-003
Date: 5/30/2019

3axle

NS/EW Streets:	SR-49				SR-49				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	4	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	9
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	3
8:45 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	0	0	0	0	0	0	0	9	1	0	2	4	0	0	21
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	90.00%	10.00%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	4	0	0	0	0	0	0	0	0	5	1	0	0	3	0	0	13
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.313	0.250	0.000	0.000	0.750	0.000	0.000	0.361
	0.250								0.375				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	2	1	0	0	0	0	0	5
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	66.67%	33.33%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.375
									0.375								

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-49 & SR-16
City: Drytown
Control: Signalized

Project ID: 19-07216-003
Date: 5/30/2019

4axle

NS/EW Streets:	SR-49				SR-49				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
7:15 AM	3	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	6
7:30 AM	1	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	4
7:45 AM	3	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	7
8:00 AM	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	6
8:15 AM	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	3
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	3	0	1	0	0	0	0	0	0	0	3	0	1	0	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	0	1	0	0	0	0	0	0	3	9	0	5	2	0	0	39
APPROACH %'s :	95.00%	0.00%	5.00%	0.00%					0.00%	25.00%	75.00%	0.00%	71.43%	28.57%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	9	0	0	0	0	0	0	0	0	1	4	0	4	2	0	0	20
PEAK HR FACTOR :	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	1.000	0.250	0.000	0.000	0.714
	0.563								0.625				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	4
4:15 PM	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
4:30 PM	1	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	2	0	0	0	0	0	0	1	8	0	1	3	0	0	20
APPROACH %'s :	71.43%	0.00%	28.57%	0.00%					0.00%	11.11%	88.89%	0.00%	25.00%	75.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	3	0	0	2	0	0	6
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.375	0.000	0.000	0.250	0.000	0.000	0.500
									0.500				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-49 & SR-16
City: Drytown
Control: Signalized

Project ID: 19-07216-003
Date: 5/30/2019

Bikes

NS/EW Streets:	SR-49				SR-49				SR-16				SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-49 & SR-16 **Project ID:** 19-07216-003
City: Drytown **Date:** 5/30/2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR-49		SR-49		SR-16		SR-16		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:30 AM - 08:30 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**05:00 PM - 06:00 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

SR-49 & SR-16

Peak Hour Turning Movement Count

ID: 19-07216-003
City: Drytown

Day: Thursday
Date: 05/30/2019

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SR-49 SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

SR-16 EASTBOUND

AM	NOON	PM	
399	0	563	
0	0	0	0
0	0	0	0
131	0	351	1
216	0	336	1
AM	NOON	PM	

SR-16 WESTBOUND

PM	NOON	AM	
0	0	0	0
146	0	122	1
138	0	229	1
0	0	0	0
428	0	286	
PM	NOON	AM	

CONTROL: Signalized

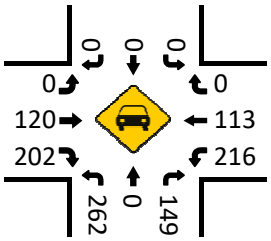
TEV	1130 AM	0 NOON	1465 PM
PHF	0.93		0.93

SR-49 NORTHBOUND

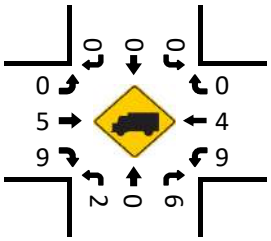
PM	474	0	417	0	77	PM
NOON	0	0	0	0	0	NOON
AM	445	0	277	0	155	AM

0 0 1 1

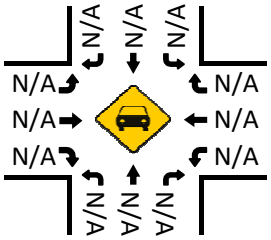
Cars (AM)



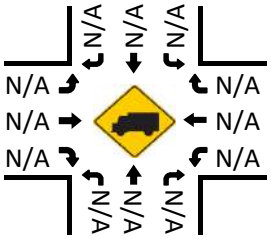
2axle (AM)



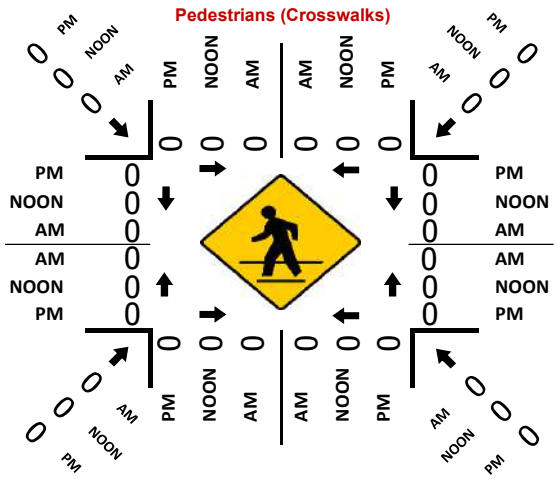
Cars (NOON)



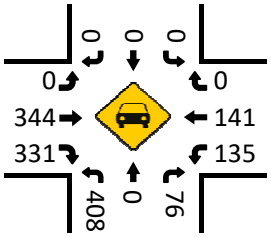
2axle (NOON)



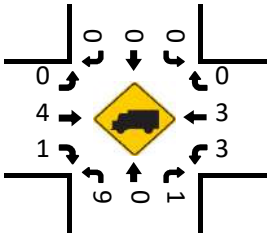
Pedestrians (Crosswalks)



Cars (PM)



2axle (PM)



EXISTING PLUS APPROVED + PENDING PROJECTS PLUS PROPOSED PROJECT CONDITIONS
PEAK HOUR VOLUME WARRANT
RURAL CONDITIONS

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h (40 mph) ON MAJOR STREET)

Peak Hour: AM

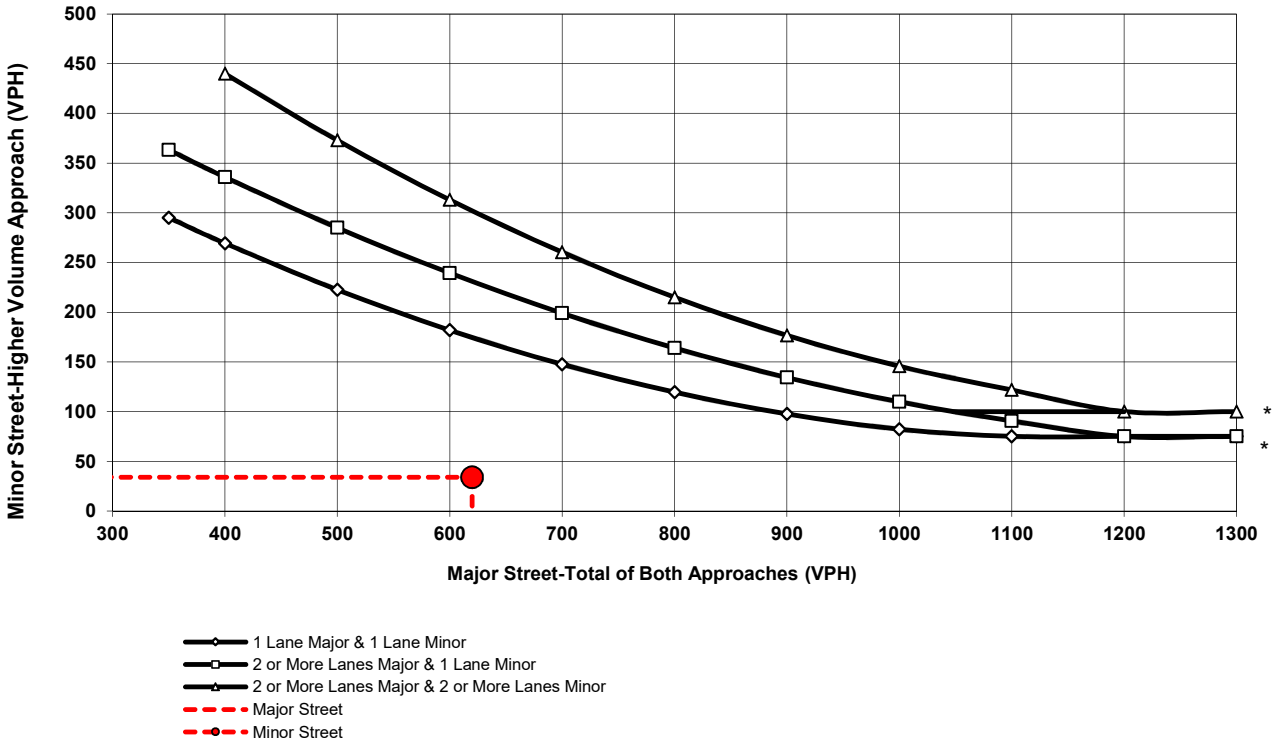
Major Street: Jackson Road (SR-16)

Minor Street: Project Access

Total of Both Approaches (VPH):	620	Higher Volume Approach (VPH):	34
Number of Approach Lanes:	1	Number of Approach Lanes:	1

SIGNAL WARRANT NOT SATISFIED

Figure 4C-4. Peak Hour Warrant (Rural)



* Note:
100 vph Applies as the Lower Threshold Volume for a Minor Street Approach with Two or More Lanes and 75 vph Applies as the Lower Threshold Volume for a Minor Street Approach with One Lane.

Source: California MUTCD 2014 Revision 1

EXISTING PLUS APPROVED + PENDING PROJECTS PLUS PROPOSED PROJECT CONDITIONS
PEAK HOUR VOLUME WARRANT
RURAL CONDITIONS

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 km/h (40 mph) ON MAJOR STREET)

Peak Hour: PM

Major Street: Jackson Road (SR-16)

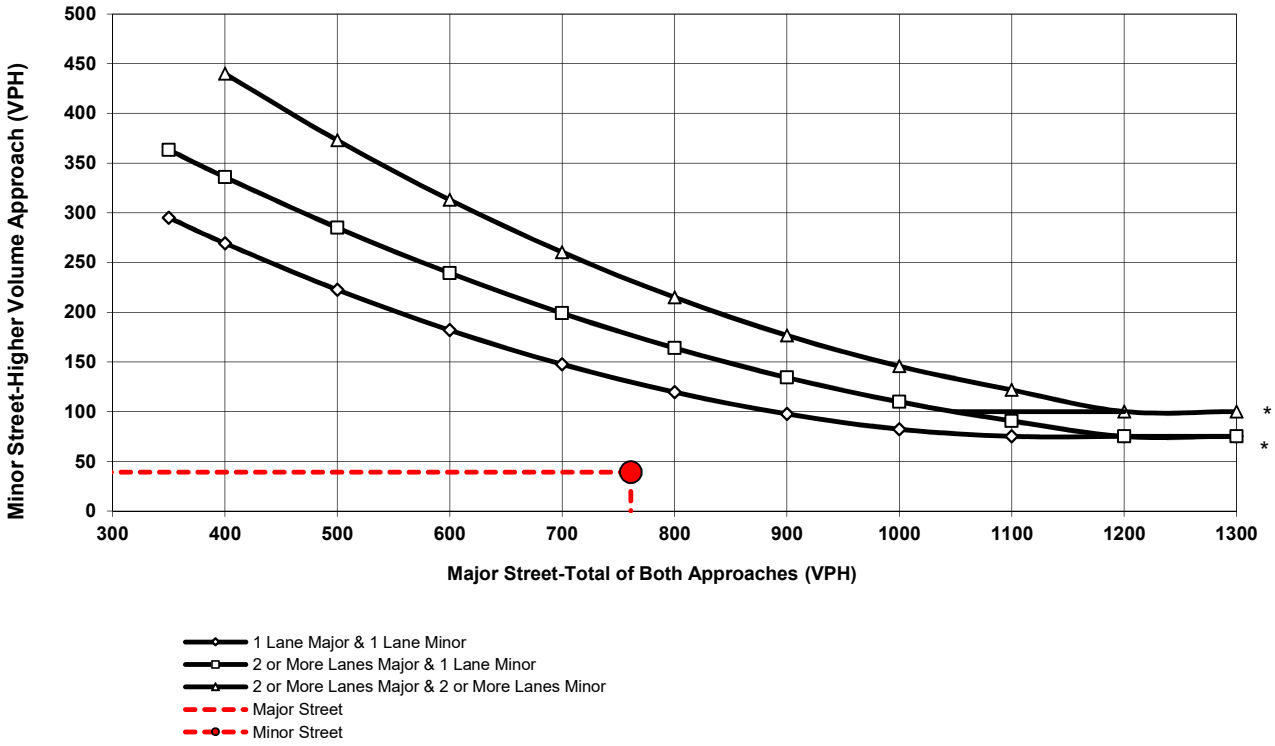
Total of Both Approaches (VPH): 761
Number of Approach Lanes: 1

Minor Street: Project Access

Higher Volume Approach (VPH): 39
Number of Approach Lanes: 1

SIGNAL WARRANT NOT SATISFIED

Figure 4C-4. Peak Hour Warrant (Rural)



* Note:
100 vph Applies as the Lower Threshold Volume for a Minor Street Approach with Two or More Lanes and 75 vph Applies as the Lower Threshold Volume for a Minor Street Approach with One Lane.

Source: California MUTCD 2014 Revision 1

838' LINE OF SIGHT

838' LINE OF SIGHT

360' MIN.

220'

580' MIN. (DECELERATION PLUS STORAGE)

360' MIN.

90' TAPER

END TAPER

BEGIN TAPER

EX. GUARD RAIL

8' SHOULDER

JACKSON ROAD (HIGHWAY 16)

8' SHOULDER

REFUGE LANE

8' SHOULDER

8' SHOULDER

LINE OF SIGHT

LINE OF SIGHT

EXISTING ACCESS TO BE ABANDONED

MORIAH HEIGHTS ROAD

EX. GUARD RAIL

EX. CULVERT

DENSE TREES

BRUSH

DENSE TREES

DENSE TREES

SCATTERED TREES AND BRUSH

EX. ACCESS ROAD TO BE REPLACED

NEW PAVED ACCESS ROAD ALIGNMENT

NEW PAVED ACCESS ROAD ALIGNMENT 2-12' LANES AND 4' SHOULDERS

NEW PAVED ACCESS ROAD ALIGNMENT 2-12' LANES AND 4' SHOULDERS

NEW PAVED ACCESS ROAD ALIGNMENT

NEW PAVED ACCESS ROAD ALIGNMENT

EXISTING PRIVATE PAVED ACCESS ROAD

FUTURE CENTERLINE

R=70'

R=70'

R=300'

R=300'

18'

32'

20'

16'

16'

16'

6'

12'

12'

6'

SCALE: 1"=40'

40' 0' 40' 80' 120'

GRAPHIC SCALE: 1"=40'

PILGRIM ROCK QUARRY
HIGHWAY 16/JACKSON ROAD ENTRANCE EXHIBIT

AMADOR COUNTY, CALIFORNIA

MARCH 9, 2020

BAKER WILLIAMS ENGINEERING GROUP
6020 RUTLAND DRIVE, SUITE 19
CARMICHAEL, CA 95608-0515
Phone (916)331-4336~Fax (916)331-4430
EMAIL: office@bwengineers.com

19-07-038

Michael Baker
INTERNATIONAL

Appendix B: Existing SimTraffic and HCM Worksheets

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2878	2799	3004	2796	2898	2910	2854
Vehs Exited	2890	2830	3026	2798	2898	2927	2871
Starting Vehs	392	389	381	370	369	415	361
Ending Vehs	380	358	359	368	369	398	344
Travel Distance (mi)	15833	16040	16502	15696	16252	16099	16040
Travel Time (hr)	378.7	375.4	393.1	368.2	386.4	381.5	378.9
Total Delay (hr)	62.9	55.9	64.3	55.1	60.5	60.9	59.7
Total Stops	3633	3284	3757	3319	3525	3674	3517
Fuel Used (gal)	471.7	472.5	486.6	463.8	476.7	476.1	472.7

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2839	2854	2731	2908	2766	2943	2828
Vehs Exited	2830	2814	2745	2897	2780	2933	2876
Starting Vehs	371	333	369	375	369	388	405
Ending Vehs	380	373	355	386	355	398	357
Travel Distance (mi)	15340	15400	14824	15796	15323	16349	16521
Travel Time (hr)	359.9	362.8	350.8	376.1	357.8	390.7	390.7
Total Delay (hr)	54.0	54.8	53.4	60.9	52.6	64.0	62.8
Total Stops	3240	3312	3318	3615	3197	3679	3651
Fuel Used (gal)	453.6	454.6	437.5	468.1	453.9	488.3	490.3

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2885	2841	2941	2841	2742	2885	2859
Vehs Exited	2842	2819	2908	2815	2729	2874	2854
Starting Vehs	378	371	356	362	366	385	372
Ending Vehs	421	393	389	388	379	396	375
Travel Distance (mi)	16021	15959	15791	15775	15373	16186	15856
Travel Time (hr)	377.0	375.4	371.8	375.5	360.4	380.2	374.6
Total Delay (hr)	58.3	58.7	55.9	60.2	53.4	57.4	58.3
Total Stops	3399	3469	3356	3614	3187	3374	3458
Fuel Used (gal)	475.3	470.8	468.3	469.7	454.6	477.8	469.1

Interval #0 Information Seeding

Start Time	6:30
End Time	7:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	721	684	768	685	716	701	733
Vehs Exited	728	680	746	696	701	744	714
Starting Vehs	392	389	381	370	369	415	361
Ending Vehs	385	393	403	359	384	372	380
Travel Distance (mi)	4106	3958	4015	3895	3920	3942	3911
Travel Time (hr)	100.2	92.4	94.8	92.6	93.6	94.3	91.8
Total Delay (hr)	18.2	13.4	14.3	14.4	14.8	15.2	13.7
Total Stops	1070	788	901	904	873	931	818
Fuel Used (gal)	123.8	116.1	119.1	116.4	116.2	117.7	116.2

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	714	710	673	724	712	744	703
Vehs Exited	704	699	711	746	722	755	705
Starting Vehs	371	333	369	375	369	388	405
Ending Vehs	381	344	331	353	359	377	403
Travel Distance (mi)	3859	3763	3723	3821	3945	4083	4126
Travel Time (hr)	90.1	88.1	89.1	90.1	92.1	96.8	97.9
Total Delay (hr)	13.2	12.7	14.1	13.4	13.9	14.7	16.4
Total Stops	803	790	897	815	807	835	929
Fuel Used (gal)	113.8	110.6	110.1	114.1	117.1	120.9	121.9

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	714	673	769	705	671	695	709
Vehs Exited	707	680	720	673	693	714	712
Starting Vehs	378	371	356	362	366	385	372
Ending Vehs	385	364	405	394	344	366	374
Travel Distance (mi)	4020	3824	4051	4017	3732	4089	3940
Travel Time (hr)	95.3	88.8	94.8	93.7	88.0	95.4	93.0
Total Delay (hr)	14.8	13.3	14.2	14.0	13.7	14.2	14.3
Total Stops	842	801	852	836	785	864	856
Fuel Used (gal)	119.9	112.2	120.8	118.4	109.8	121.0	116.8

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	710	659	770	664	741	732	740
Vehs Exited	737	693	748	663	743	711	724
Starting Vehs	385	393	403	359	384	372	380
Ending Vehs	358	359	425	360	382	393	396
Travel Distance (mi)	3945	4013	4202	3788	4129	3872	4232
Travel Time (hr)	94.5	93.2	100.7	87.9	99.9	91.5	100.9
Total Delay (hr)	16.1	14.1	17.1	12.5	16.7	14.1	17.0
Total Stops	892	794	977	734	989	910	971
Fuel Used (gal)	116.6	118.4	124.8	111.2	122.2	113.9	123.9

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	707	746	680	726	674	747	707
Vehs Exited	725	720	665	697	672	718	702
Starting Vehs	381	344	331	353	359	377	403
Ending Vehs	363	370	346	382	361	406	408
Travel Distance (mi)	3928	3892	3531	3770	3827	4175	4047
Travel Time (hr)	92.3	93.4	82.8	89.5	88.6	100.4	95.0
Total Delay (hr)	14.2	15.2	11.5	14.1	12.5	17.1	14.8
Total Stops	822	932	768	883	768	1003	889
Fuel Used (gal)	117.3	116.6	104.2	112.2	114.4	125.0	118.9

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	710	730	717	732	652	716	712
Vehs Exited	705	734	729	739	653	717	709
Starting Vehs	385	364	405	394	344	366	374
Ending Vehs	390	360	393	387	343	365	376
Travel Distance (mi)	3987	3978	4154	4044	3762	3907	3959
Travel Time (hr)	93.6	93.2	97.1	98.0	87.9	92.6	93.6
Total Delay (hr)	14.2	13.9	14.7	16.7	12.9	14.7	14.7
Total Stops	859	823	808	994	764	836	870
Fuel Used (gal)	116.9	117.6	122.1	118.8	110.9	115.9	117.1

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	715	752	746	765	709	741	699
Vehs Exited	705	708	775	725	721	721	718
Starting Vehs	358	359	425	360	382	393	396
Ending Vehs	368	403	396	400	370	413	377
Travel Distance (mi)	3764	4169	4162	3992	4156	4103	4058
Travel Time (hr)	89.3	97.5	100.4	94.2	97.9	96.1	95.6
Total Delay (hr)	13.6	14.4	17.5	14.2	14.7	14.8	14.7
Total Stops	801	830	1009	908	838	854	842
Fuel Used (gal)	111.7	122.4	122.2	118.0	120.0	120.5	118.2

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	692	687	685	746	668	701	708
Vehs Exited	706	683	669	724	670	731	720
Starting Vehs	363	370	346	382	361	406	408
Ending Vehs	349	374	362	404	359	376	396
Travel Distance (mi)	3697	3793	3768	3999	3687	3942	4268
Travel Time (hr)	86.5	88.9	88.3	95.7	85.4	94.8	100.5
Total Delay (hr)	12.8	13.2	13.2	16.2	11.9	16.4	15.8
Total Stops	784	762	765	947	750	935	901
Fuel Used (gal)	109.7	111.2	110.9	118.1	108.3	119.2	125.3

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	707	734	694	710	703	716	712
Vehs Exited	743	690	727	742	665	696	713
Starting Vehs	390	360	393	387	343	365	376
Ending Vehs	354	404	360	355	381	385	378
Travel Distance (mi)	3923	4086	3724	3885	3865	4007	3952
Travel Time (hr)	91.5	96.8	87.6	93.5	89.8	93.4	93.2
Total Delay (hr)	13.8	16.1	12.7	15.7	12.7	13.6	14.4
Total Stops	862	989	801	938	791	820	858
Fuel Used (gal)	116.4	121.0	110.1	116.9	114.9	117.7	116.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	732	704	720	682	732	736	682
Vehs Exited	720	749	757	714	733	751	715
Starting Vehs	368	403	396	400	370	413	377
Ending Vehs	380	358	359	368	369	398	344
Travel Distance (mi)	4017	3899	4124	4022	4047	4181	3839
Travel Time (hr)	94.7	92.3	97.2	93.5	95.0	99.6	90.6
Total Delay (hr)	15.0	14.0	15.5	13.9	14.3	16.9	14.3
Total Stops	870	872	870	773	825	979	886
Fuel Used (gal)	119.6	115.6	120.5	118.2	118.3	124.1	114.4

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	726	711	693	712	712	751	710
Vehs Exited	695	712	700	730	716	729	749
Starting Vehs	349	374	362	404	359	376	396
Ending Vehs	380	373	355	386	355	398	357
Travel Distance (mi)	3855	3952	3802	4205	3865	4149	4081
Travel Time (hr)	91.1	92.4	90.7	100.8	91.6	98.7	97.3
Total Delay (hr)	13.8	13.6	14.5	17.2	14.3	15.8	15.9
Total Stops	831	828	888	970	872	906	932
Fuel Used (gal)	112.8	116.2	112.3	123.8	114.1	123.2	124.2

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	754	704	761	694	716	758	721
Vehs Exited	687	715	732	661	718	747	722
Starting Vehs	354	404	360	355	381	385	378
Ending Vehs	421	393	389	388	379	396	375
Travel Distance (mi)	4090	4071	3862	3829	4015	4184	4004
Travel Time (hr)	96.6	96.6	92.3	90.3	94.7	98.8	94.7
Total Delay (hr)	15.4	15.4	14.2	13.7	14.1	14.9	14.8
Total Stops	836	856	895	846	847	854	869
Fuel Used (gal)	122.1	120.0	115.4	115.6	119.0	123.1	118.6

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.5	0.5	2.6	0.0	0.0	0.0	3.8	0.5	3.9	0.1	0.1	0.1
Total Del/Veh (s)	21.9	13.0	3.2	44.5	38.4	35.0	21.0	18.6	5.6	24.8	28.8	9.8

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	29.2

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.2	0.5	0.8	0.1	0.1
Total Del/Veh (s)	58.9	35.4	26.9	57.2	42.8	34.1	52.8	28.9	8.7	36.8	22.8	20.1

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	35.7

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	23.4	15.4	11.7	42.6	25.1	17.0	20.7	4.3	7.1	8.0	11.2	18.6

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.5	0.2	0.1	0.1	0.1
Total Del/Veh (s)	13.0	12.5	7.3	7.4	6.6	1.8	9.7

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	5.5	5.7	18.3	4.2	13.1

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.0	0.2	1.8	0.2
Total Del/Veh (s)	25.5	24.0	4.4	3.6	8.3	2.4	12.8

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.6	0.3	0.4	1.3	0.4
Total Del/Veh (s)	21.7	6.1	14.7	18.8	12.3	5.0	12.3

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	64.3

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	13.0	43.3	0.5	39
Murieta Pkwy	2	36.2	224.4	3.2	52
Murieta S Pkwy	3	16.7	81.2	1.1	47
Ione Rd	4	13.4	141.7	2.2	55
Project Access	5	5.5	76.6	1.4	63
	17	15.5	203.3	3.0	52
E. Plymouth Hwy (SR	6	25.5	277.1	5.5	72
Golden Chain Hwy (SR	7	21.1	40.0	0.3	26
Total		147.1	1087.7	17.1	57

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	6.6	24.7	0.3	42
	17	32.3	352.2	5.5	57
Project Access	5	18.3	172.2	3.0	62
Ione Rd	4	7.4	79.2	1.4	62
Murieta S Pkwy	3	25.2	151.2	2.2	51
Murieta Pkwy	2	44.5	109.5	1.1	35
Kiefer Bl	1	38.7	220.0	3.2	53
Total		173.0	1108.9	16.6	54

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	L	TR
Maximum Queue (ft)	62	188	29	138	318	80	41	58	29	34
Average Queue (ft)	21	75	6	64	141	32	10	22	5	9
95th Queue (ft)	49	149	18	112	272	64	30	44	21	32
Link Distance (ft)		2403			17014		361			3736
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	470		500	720		300		140	180	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	100	280	75	174	532	113	176	63	76	98	239
Average Queue (ft)	43	115	32	52	270	67	35	23	27	38	121
95th Queue (ft)	86	230	81	140	469	113	116	53	63	79	202
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)		22	1	0	26	12	0	0	1	1	
Queuing Penalty (veh)		30	2	0	10	9	0	0	0	0	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LTR	LT	R
Maximum Queue (ft)	82	159	8	234	32	24	137
Average Queue (ft)	32	48	1	96	7	5	64
95th Queue (ft)	66	119	5	193	26	19	115
Link Distance (ft)		5566		11290	438	2987	2987
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	430		200				
Storage Blk Time (%)				1			
Queuing Penalty (veh)				0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	18	26	11
Average Queue (ft)	1	3	0
95th Queue (ft)	9	16	8
Link Distance (ft)		2877	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	NB
Directions Served	L
Maximum Queue (ft)	17
Average Queue (ft)	3
95th Queue (ft)	13
Link Distance (ft)	414
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	WB	NB	NB
Directions Served	R	L	L	R
Maximum Queue (ft)	17	51	70	46
Average Queue (ft)	1	11	32	2
95th Queue (ft)	12	37	57	22
Link Distance (ft)			2881	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	220	260		240
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB
Directions Served	T	R	L	T	L
Maximum Queue (ft)	150	113	149	122	152
Average Queue (ft)	63	21	78	52	75
95th Queue (ft)	115	77	128	95	125
Link Distance (ft)	1475			4084	3309
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		670	250		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 53

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3376	3338	3355	3318	3404	3384	3311
Vehs Exited	3352	3325	3396	3293	3385	3409	3306
Starting Vehs	395	441	444	422	407	436	431
Ending Vehs	419	454	403	447	426	411	436
Travel Distance (mi)	17137	17604	17841	16881	17515	17198	17158
Travel Time (hr)	418.7	426.0	433.0	411.3	428.9	422.2	418.7
Total Delay (hr)	69.5	69.4	72.0	68.6	72.4	71.4	70.7
Total Stops	4094	4093	4100	3869	4155	4131	4098
Fuel Used (gal)	500.9	513.4	518.9	493.5	509.8	502.1	502.1

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3342	3395	3189	3449	3336	3375	3308
Vehs Exited	3355	3343	3221	3389	3312	3345	3314
Starting Vehs	427	401	440	390	388	408	423
Ending Vehs	414	453	408	450	412	438	417
Travel Distance (mi)	17654	17228	16874	17530	17113	17155	16515
Travel Time (hr)	430.6	419.8	405.8	431.7	417.3	425.1	402.8
Total Delay (hr)	71.7	70.4	64.8	74.8	69.0	75.1	66.4
Total Stops	4095	4135	3699	4369	4043	4318	3906
Fuel Used (gal)	514.0	508.8	493.4	515.0	503.6	507.0	485.2

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3378	3317	3445	3263	3283	3354	3346
Vehs Exited	3367	3318	3437	3251	3268	3305	3333
Starting Vehs	414	435	415	394	404	388	417
Ending Vehs	425	434	423	406	419	437	424
Travel Distance (mi)	17341	17153	17596	16797	16692	17062	17202
Travel Time (hr)	423.1	417.7	433.0	411.3	410.4	417.0	420.2
Total Delay (hr)	70.8	69.5	75.7	68.7	69.0	67.6	70.4
Total Stops	4149	4079	4358	4020	4087	3977	4089
Fuel Used (gal)	507.9	503.0	513.8	492.6	489.6	501.2	503.8

Interval #0 Information Seeding

Start Time	4:30
End Time	5:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	827	840	848	803	847	833	824
Vehs Exited	811	869	847	796	831	851	856
Starting Vehs	395	441	444	422	407	436	431
Ending Vehs	411	412	445	429	423	418	399
Travel Distance (mi)	4248	4490	4563	4111	4178	4147	4518
Travel Time (hr)	103.0	108.8	109.6	100.3	102.4	102.2	109.5
Total Delay (hr)	16.5	18.2	17.5	16.4	16.5	16.9	18.1
Total Stops	985	1067	988	957	960	983	990
Fuel Used (gal)	124.5	132.2	132.8	120.8	121.9	121.3	132.1

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	862	858	781	842	864	820	821
Vehs Exited	823	830	817	820	808	829	840
Starting Vehs	427	401	440	390	388	408	423
Ending Vehs	466	429	404	412	444	399	404
Travel Distance (mi)	4431	4251	4174	4318	4205	3897	4315
Travel Time (hr)	108.6	103.4	101.1	105.4	101.8	98.7	104.8
Total Delay (hr)	18.4	17.2	16.5	17.3	16.2	18.5	17.3
Total Stops	1078	1000	879	1105	947	1029	995
Fuel Used (gal)	129.3	125.1	122.9	126.7	123.0	115.6	126.6

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	879	809	850	785	845	821	835
Vehs Exited	850	809	840	808	832	817	830
Starting Vehs	414	435	415	394	404	388	417
Ending Vehs	443	435	425	371	417	392	420
Travel Distance (mi)	4278	4330	4250	4086	4253	4236	4264
Travel Time (hr)	104.3	105.0	103.5	99.0	105.5	102.5	104.0
Total Delay (hr)	17.1	17.6	16.7	15.7	18.5	15.7	17.1
Total Stops	1041	994	1026	969	1105	952	1002
Fuel Used (gal)	126.5	126.0	122.5	120.4	124.2	125.1	125.0

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	849	809	835	829	888	869	812
Vehs Exited	879	799	863	853	861	865	776
Starting Vehs	411	412	445	429	423	418	399
Ending Vehs	381	422	417	405	450	422	435
Travel Distance (mi)	4191	4233	4512	4135	4618	4331	4189
Travel Time (hr)	103.8	102.5	109.2	99.9	112.6	107.8	102.6
Total Delay (hr)	17.7	16.4	17.8	16.0	19.0	19.3	18.0
Total Stops	1099	989	999	941	1075	1117	1046
Fuel Used (gal)	122.4	121.7	131.7	120.3	134.4	126.7	122.7

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	837	855	775	878	837	886	807
Vehs Exited	875	869	792	868	844	832	824
Starting Vehs	466	429	404	412	444	399	404
Ending Vehs	428	415	387	422	437	453	387
Travel Distance (mi)	4704	4263	4230	4214	4409	4136	3909
Travel Time (hr)	113.8	105.1	101.0	105.0	108.5	102.3	94.9
Total Delay (hr)	18.9	18.3	15.9	18.4	18.6	17.1	14.9
Total Stops	1033	1099	958	1093	1036	1060	919
Fuel Used (gal)	136.5	126.7	123.9	124.2	129.0	122.9	115.0

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	822	821	859	815	797	829	838
Vehs Exited	841	854	838	761	808	804	835
Starting Vehs	443	435	425	371	417	392	420
Ending Vehs	424	402	446	425	406	417	420
Travel Distance (mi)	4371	4153	4377	4140	4248	4120	4274
Travel Time (hr)	106.8	102.1	107.5	99.9	103.1	100.2	104.4
Total Delay (hr)	17.6	17.2	18.9	15.4	16.7	15.7	17.4
Total Stops	1003	1015	1110	948	991	955	1024
Fuel Used (gal)	127.1	121.8	127.6	121.0	124.1	120.9	125.0

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	850	835	878	856	822	862	822
Vehs Exited	807	823	851	815	840	851	839
Starting Vehs	381	422	417	405	450	422	435
Ending Vehs	424	434	444	446	432	433	418
Travel Distance (mi)	4353	4184	4408	4239	4444	4313	4196
Travel Time (hr)	106.6	100.5	108.9	104.5	108.0	105.2	103.0
Total Delay (hr)	18.1	15.2	19.2	18.6	17.9	17.4	17.6
Total Stops	1031	902	1098	1001	1051	993	1040
Fuel Used (gal)	127.2	121.6	128.4	123.7	129.4	125.0	123.1

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	832	811	811	870	808	816	815
Vehs Exited	843	851	788	857	840	823	813
Starting Vehs	428	415	387	422	437	453	387
Ending Vehs	417	375	410	435	405	446	389
Travel Distance (mi)	4354	4314	4185	4411	4253	4620	4031
Travel Time (hr)	106.9	105.0	99.8	109.3	104.6	113.6	97.9
Total Delay (hr)	18.0	17.3	15.4	19.6	17.7	20.4	15.7
Total Stops	1028	1012	882	1089	1047	1135	943
Fuel Used (gal)	126.6	126.5	122.1	130.2	126.4	136.7	117.7

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	807	857	880	849	818	841	834
Vehs Exited	799	828	892	835	810	819	828
Starting Vehs	424	402	446	425	406	417	420
Ending Vehs	432	431	434	439	414	439	426
Travel Distance (mi)	4245	4344	4503	4311	4030	4217	4298
Travel Time (hr)	103.0	105.6	112.3	108.0	99.4	102.9	105.2
Total Delay (hr)	17.2	17.6	20.8	19.9	16.7	16.6	17.9
Total Stops	1000	1044	1123	1105	999	978	1023
Fuel Used (gal)	124.1	128.4	131.5	126.6	118.7	124.0	125.9

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	850	854	794	830	847	820	853
Vehs Exited	855	834	835	829	853	842	835
Starting Vehs	424	434	444	446	432	433	418
Ending Vehs	419	454	403	447	426	411	436
Travel Distance (mi)	4345	4697	4357	4396	4275	4406	4255
Travel Time (hr)	105.3	114.3	105.3	106.5	105.9	107.0	103.7
Total Delay (hr)	17.3	19.6	17.5	17.6	18.9	17.8	17.0
Total Stops	979	1135	1015	970	1069	1038	1022
Fuel Used (gal)	126.9	138.0	126.0	128.6	124.1	129.1	124.2

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	811	871	822	859	827	853	865
Vehs Exited	814	793	824	844	820	861	837
Starting Vehs	417	375	410	435	405	446	389
Ending Vehs	414	453	408	450	412	438	417
Travel Distance (mi)	4165	4400	4285	4587	4245	4503	4260
Travel Time (hr)	101.2	106.3	103.9	112.0	102.4	110.4	105.2
Total Delay (hr)	16.4	17.6	17.0	19.6	16.5	19.1	18.4
Total Stops	956	1024	980	1082	1013	1094	1049
Fuel Used (gal)	121.6	130.5	124.4	133.8	125.2	131.8	125.9

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	870	830	856	814	823	863	837
Vehs Exited	877	827	867	847	818	865	838
Starting Vehs	432	431	434	439	414	439	426
Ending Vehs	425	434	423	406	419	437	424
Travel Distance (mi)	4447	4325	4466	4259	4161	4489	4366
Travel Time (hr)	109.1	105.0	109.7	104.4	102.4	111.4	106.6
Total Delay (hr)	18.9	17.1	19.2	17.7	17.1	19.6	18.0
Total Stops	1105	1026	1099	998	992	1092	1038
Fuel Used (gal)	130.1	126.8	132.2	124.7	122.6	131.1	127.9

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.1	0.6	2.2	0.0	0.0	0.0	4.3	4.2	0.2	0.2	0.2	0.4
Total Del/Veh (s)	22.2	17.8	3.9	38.6	30.3	23.6	23.5	7.3	21.7	20.5	8.0	22.5

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.2	0.2	0.2	0.3	0.1	0.1	0.9	0.3	0.9	0.8	0.1	0.1
Total Del/Veh (s)	67.2	47.7	38.0	52.2	32.8	25.5	43.7	25.6	16.1	41.6	27.4	8.6

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	39.7

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	23.7	16.2	12.7	24.4	20.2	20.7	19.2	12.9	13.1	19.6

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.4	0.1	0.1	0.1	0.1
Total Del/Veh (s)	14.1	12.3	7.9	7.5	8.9	1.7	11.5

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	7.6	7.9	18.8	6.5	11.1

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.4	0.4	0.0	0.0	0.5	1.6	0.4
Total Del/Veh (s)	38.0	37.1	11.6	6.9	55.8	10.2	25.2

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.6	0.3	0.4	1.3	0.3
Total Del/Veh (s)	25.6	9.7	18.9	18.9	17.1	5.1	17.2

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	66.8

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	17.8	48.3	0.5	35
Murieta Pkwy	2	47.5	231.4	3.2	50
Murieta S Pkwy	3	17.4	85.6	1.1	45
Ione Rd	4	14.2	143.7	2.2	54
Project Access	5	7.5	82.2	1.3	59
	17	20.7	205.8	3.0	52
E. Plymouth Hwy (SR	6	38.0	311.7	5.5	64
Golden Chain Hwy (SR	7	23.2	41.8	0.3	25
Total		186.3	1150.5	17.1	53

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	10.0	28.6	0.3	36
	17	18.6	296.0	5.5	67
Project Access	5	18.8	194.9	3.0	55
Ione Rd	4	7.5	81.4	1.3	60
Murieta S Pkwy	3	24.5	151.5	2.2	51
Murieta Pkwy	2	33.9	95.0	1.1	41
Kiefer Bl	1	31.0	215.3	3.2	54
Total		144.3	1062.7	16.6	56

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	R	L	TR
Maximum Queue (ft)	40	352	14	80	234	48	22	107	75
Average Queue (ft)	10	130	3	29	78	7	7	48	34
95th Queue (ft)	30	271	11	63	177	30	20	87	61
Link Distance (ft)		2403			17014				3736
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	470		500	720		300	140	180	
Storage Blk Time (%)		0							
Queuing Penalty (veh)		0							

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	325	427	75	174	331	112	186	111	102	143	93
Average Queue (ft)	135	206	43	51	161	64	59	52	39	66	43
95th Queue (ft)	233	361	94	131	288	109	131	93	85	120	76
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)		33	1	0	10	7	1	2	2	7	
Queuing Penalty (veh)		115	7	0	5	15	2	3	2	3	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	TR	LTR	LT	R
Maximum Queue (ft)	144	167	235	39	24	88
Average Queue (ft)	71	52	85	9	2	35
95th Queue (ft)	124	127	181	32	13	73
Link Distance (ft)		5566	11290	438	2987	2987
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	430					
Storage Blk Time (%)			1			
Queuing Penalty (veh)			0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	10	47	8
Average Queue (ft)	0	9	0
95th Queue (ft)	5	33	6
Link Distance (ft)		2877	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	NB
Directions Served	L
Maximum Queue (ft)	14
Average Queue (ft)	1
95th Queue (ft)	8
Link Distance (ft)	483
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	NB
Directions Served	T	R	L	L	R
Maximum Queue (ft)	3	105	209	284	223
Average Queue (ft)	0	19	90	100	64
95th Queue (ft)	4	74	168	232	172
Link Distance (ft)	29198			2881	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		220	260		240
Storage Blk Time (%)			0	2	0
Queuing Penalty (veh)			0	5	0

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	219	88	124	142	226	29
Average Queue (ft)	111	14	59	60	120	1
95th Queue (ft)	186	57	100	108	195	30
Link Distance (ft)	1475			4075	3312	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)					0	0
Queuing Penalty (veh)					0	0

Network Summary

Network wide Queuing Penalty: 158

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_1_Kiefer_MurietaSouth_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	608	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.76	Total Trucks, %	8.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.00043	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34718	PF Power Coefficient	0.68713
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	59.1

Vehicle Results

Average Speed, mi/h	59.1	Percent Followers, %	61.6
Segment Travel Time, minutes	4.36	Followers Density, followers/mi/ln	6.3
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_1_Kiefer_MurietaSouth_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1243	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.81	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.73

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	16.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.0

Vehicle Results

Average Speed, mi/h	58.0	Percent Followers, %	79.0
Segment Travel Time, minutes	4.43	Followers Density, followers/mi/ln	16.9
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_1_Kiefer_MurietaSouth_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	964	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.57

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	12.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.5

Vehicle Results

Average Speed, mi/h	58.5	Percent Followers, %	73.1
Segment Travel Time, minutes	4.40	Followers Density, followers/mi/ln	12.1
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_1_Kiefer_MurietaSouth_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	586	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.00945	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34624	PF Power Coefficient	0.68681
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	59.3

Vehicle Results

Average Speed, mi/h	59.3	Percent Followers, %	60.6
Segment Travel Time, minutes	4.34	Followers Density, followers/mi/ln	6.0
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_2_MurietaSouth_Mariah_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	428	Opposing Demand Flow Rate, veh/h	620
Peak Hour Factor	0.68	Total Trucks, %	10.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.82480	Speed Power Coefficient	0.46766
PF Slope Coefficient	-1.25528	PF Power Coefficient	0.77579
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.0

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	47.8
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	3.4
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_2_MurietaSouth_Mariah_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	460	Opposing Demand Flow Rate, veh/h	317
Peak Hour Factor	0.91	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.76678	Speed Power Coefficient	0.51170
PF Slope Coefficient	-1.22365	PF Power Coefficient	0.78706
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.2

Vehicle Results

Average Speed, mi/h	60.2	Percent Followers, %	48.5
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	3.7
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_2_MurietaSouth_Mariah_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	522	Opposing Demand Flow Rate, veh/h	339
Peak Hour Factor	0.96	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.77018	Speed Power Coefficient	0.50746
PF Slope Coefficient	-1.22481	PF Power Coefficient	0.78880
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.0

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	52.0
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	4.5
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_2_MurietaSouth_Mariah_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	348	Opposing Demand Flow Rate, veh/h	535
Peak Hour Factor	0.94	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.81644	Speed Power Coefficient	0.47759
PF Slope Coefficient	-1.25011	PF Power Coefficient	0.77615
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.4

Vehicle Results

Average Speed, mi/h	60.4	Percent Followers, %	42.3
Segment Travel Time, minutes	1.84	Followers Density, followers/mi/ln	2.4
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_3_Mariah_LongGate_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	209	Opposing Demand Flow Rate, veh/h	313
Peak Hour Factor	0.87	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	5.02325	Speed Power Coefficient	0.61326
PF Slope Coefficient	-1.20229	PF Power Coefficient	0.79362
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.8

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	29.3
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	1.0
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_3_Mariah_LongGate_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	289	Opposing Demand Flow Rate, veh/h	193
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.04963	Speed Power Coefficient	0.62848
PF Slope Coefficient	-1.17971	PF Power Coefficient	0.79596
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.7

Vehicle Results

Average Speed, mi/h	60.7	Percent Followers, %	35.5
Segment Travel Time, minutes	1.84	Followers Density, followers/mi/ln	1.7
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/5/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D3	Time Period Analyzed	
Project Description	Existing_3_Mariah_LongGate_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	373	Opposing Demand Flow Rate, veh/h	227
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.85745	Speed Power Coefficient	0.60987
PF Slope Coefficient	-1.18578	PF Power Coefficient	0.79506
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.4

Vehicle Results

Average Speed, mi/h	60.4	Percent Followers, %	41.8
Segment Travel Time, minutes	1.77	Followers Density, followers/mi/ln	2.6
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

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Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	269	Opposing Demand Flow Rate, veh/h	441
Peak Hour Factor	0.81	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	4.58479	Speed Power Coefficient	0.57769
PF Slope Coefficient	-1.23313	PF Power Coefficient	0.77878
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.1

Vehicle Results

Average Speed, mi/h	60.1	Percent Followers, %	35.8
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	1.6
Vehicle LOS	A		

Michael Baker
INTERNATIONAL

Appendix C: Existing Plus Project SimTraffic and HCM Worksheets

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2936	2948	2858	2892	2929	2963	2962
Vehs Exited	2913	2916	2863	2900	2924	2983	2963
Starting Vehs	400	396	382	405	384	407	421
Ending Vehs	423	428	377	397	389	387	420
Travel Distance (mi)	16095	16665	15848	15958	16307	16404	16896
Travel Time (hr)	381.2	397.0	374.2	380.0	387.8	390.1	401.4
Total Delay (hr)	60.2	66.1	58.7	62.0	60.7	62.9	64.9
Total Stops	3661	3743	3481	3676	3559	3642	3755
Fuel Used (gal)	478.2	492.7	473.2	473.3	481.2	487.6	499.3

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2796	3006	2950	2996	2804	2945	2980
Vehs Exited	2798	2982	2948	2977	2804	2927	2951
Starting Vehs	392	370	393	369	346	385	370
Ending Vehs	390	394	395	388	346	403	399
Travel Distance (mi)	16167	16331	16762	17192	15223	16458	16627
Travel Time (hr)	380.3	387.5	396.8	408.7	355.8	392.0	393.8
Total Delay (hr)	57.9	63.0	63.2	66.9	51.7	64.1	63.7
Total Stops	3368	3692	3547	3887	3114	3607	3712
Fuel Used (gal)	474.6	486.6	492.5	506.9	454.6	489.2	490.0

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2974	2899	2989	2829	2945	3006	2928
Vehs Exited	3018	2907	2987	2804	2946	3068	2928
Starting Vehs	410	380	424	381	398	435	391
Ending Vehs	366	372	426	406	397	373	391
Travel Distance (mi)	16954	16139	16619	15989	16220	16790	16382
Travel Time (hr)	405.0	382.8	394.6	376.1	383.3	406.5	388.8
Total Delay (hr)	66.4	60.9	64.6	57.8	59.6	71.7	62.4
Total Stops	3930	3506	3810	3403	3512	4117	3636
Fuel Used (gal)	502.3	482.2	489.0	471.1	480.1	497.3	485.1

Interval #0 Information Seeding

Start Time	6:30
End Time	7:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	728	734	707	708	743	725	723
Vehs Exited	741	736	736	722	726	741	758
Starting Vehs	400	396	382	405	384	407	421
Ending Vehs	387	394	353	391	401	391	386
Travel Distance (mi)	4118	4154	3934	4014	4093	4106	4378
Travel Time (hr)	97.8	98.7	92.2	97.2	97.6	98.7	103.8
Total Delay (hr)	15.4	16.4	14.4	17.3	14.8	16.6	16.5
Total Stops	903	929	894	1025	891	959	936
Fuel Used (gal)	122.6	124.0	118.6	119.7	121.2	121.7	129.2

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	730	763	695	735	725	725	719
Vehs Exited	740	743	728	693	695	714	724
Starting Vehs	392	370	393	369	346	385	370
Ending Vehs	382	390	360	411	376	396	365
Travel Distance (mi)	4110	3998	4131	4015	3967	4010	3961
Travel Time (hr)	96.4	95.3	98.6	95.4	92.5	95.4	93.1
Total Delay (hr)	14.3	15.5	16.5	15.1	13.9	15.5	14.4
Total Stops	841	911	901	917	808	858	876
Fuel Used (gal)	121.0	117.8	121.2	119.3	117.2	117.3	116.2

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	748	739	724	695	731	738	721
Vehs Exited	755	707	778	717	744	776	732
Starting Vehs	410	380	424	381	398	435	391
Ending Vehs	403	412	370	359	385	397	382
Travel Distance (mi)	4242	4146	4172	4068	4166	4269	4102
Travel Time (hr)	100.8	97.7	99.6	94.9	98.4	105.2	97.5
Total Delay (hr)	16.1	14.6	16.8	14.0	15.7	20.7	15.7
Total Stops	960	861	1006	841	930	1063	909
Fuel Used (gal)	124.7	123.6	123.8	119.6	122.2	126.8	121.4

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	732	708	713	713	733	759	741
Vehs Exited	731	719	704	761	741	761	723
Starting Vehs	387	394	353	391	401	391	386
Ending Vehs	388	383	362	343	393	389	404
Travel Distance (mi)	4180	3988	3972	3894	4205	4155	4149
Travel Time (hr)	98.8	96.3	94.7	93.8	101.0	99.1	99.4
Total Delay (hr)	15.9	17.0	15.4	15.8	16.8	16.3	16.5
Total Stops	966	970	881	926	950	911	917
Fuel Used (gal)	123.1	118.6	118.7	117.2	123.8	124.5	122.2

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	720	781	762	774	679	751	766
Vehs Exited	698	762	709	779	701	749	707
Starting Vehs	382	390	360	411	376	396	365
Ending Vehs	404	409	413	406	354	398	424
Travel Distance (mi)	4215	4197	4039	4217	3893	4205	4259
Travel Time (hr)	99.7	100.9	96.1	100.7	90.4	102.4	98.8
Total Delay (hr)	15.5	17.2	15.3	16.0	12.8	18.5	14.3
Total Stops	879	1001	942	954	709	995	838
Fuel Used (gal)	124.3	125.6	118.3	123.6	116.1	125.6	124.6

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	772	750	732	675	731	776	736
Vehs Exited	771	764	731	696	742	766	737
Starting Vehs	403	412	370	359	385	397	382
Ending Vehs	404	398	371	338	374	407	387
Travel Distance (mi)	4385	4220	3975	3834	3948	4075	4100
Travel Time (hr)	104.6	100.5	93.5	90.6	92.9	99.2	97.7
Total Delay (hr)	16.8	16.0	14.7	14.5	14.2	17.2	15.8
Total Stops	1001	953	867	820	818	1047	916
Fuel Used (gal)	129.8	126.3	116.3	113.3	117.5	120.7	121.5

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	696	750	733	748	715	761	735
Vehs Exited	726	713	706	683	738	777	757
Starting Vehs	388	383	362	343	393	389	404
Ending Vehs	358	420	389	408	370	373	382
Travel Distance (mi)	3885	4174	3972	3832	4159	4050	4026
Travel Time (hr)	91.2	98.5	93.5	90.1	97.5	97.3	95.9
Total Delay (hr)	13.8	15.5	14.3	13.6	14.8	16.4	15.5
Total Stops	831	904	849	855	834	970	928
Fuel Used (gal)	115.0	122.9	117.1	113.5	122.9	121.4	118.5

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	636	718	745	774	701	689	746
Vehs Exited	673	742	782	718	735	721	790
Starting Vehs	404	409	413	406	354	398	424
Ending Vehs	367	385	376	462	320	366	380
Travel Distance (mi)	3849	4038	4186	4467	3654	4069	4288
Travel Time (hr)	90.1	95.6	99.2	104.3	86.5	95.7	102.3
Total Delay (hr)	13.4	15.7	15.7	16.2	12.7	15.1	17.4
Total Stops	806	919	865	912	822	864	978
Fuel Used (gal)	112.0	121.9	123.6	131.5	109.8	122.1	126.2

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	740	700	747	713	716	769	728
Vehs Exited	742	724	723	656	706	788	731
Starting Vehs	404	398	371	338	374	407	387
Ending Vehs	402	374	395	395	384	388	381
Travel Distance (mi)	4278	3973	4215	3879	3940	4415	4067
Travel Time (hr)	102.1	95.2	98.6	91.1	92.8	106.6	96.2
Total Delay (hr)	17.2	16.3	14.8	13.6	14.3	18.5	15.2
Total Stops	992	884	881	846	842	1055	890
Fuel Used (gal)	127.1	119.4	122.2	114.5	117.5	130.8	120.5

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	780	756	705	723	738	718	763
Vehs Exited	715	748	717	734	719	704	725
Starting Vehs	358	420	389	408	370	373	382
Ending Vehs	423	428	377	397	389	387	420
Travel Distance (mi)	3913	4349	3970	4219	3850	4093	4344
Travel Time (hr)	93.5	103.5	93.9	98.9	91.7	94.9	102.4
Total Delay (hr)	15.1	17.2	14.6	15.4	14.5	13.7	16.4
Total Stops	961	940	857	870	884	802	974
Fuel Used (gal)	117.4	127.3	118.8	122.9	113.2	120.0	129.4

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	710	744	748	713	699	780	749
Vehs Exited	687	735	729	787	673	743	730
Starting Vehs	367	385	376	462	320	366	380
Ending Vehs	390	394	395	388	346	403	399
Travel Distance (mi)	3993	4100	4405	4493	3709	4175	4119
Travel Time (hr)	94.1	95.7	102.9	108.3	86.4	98.5	99.6
Total Delay (hr)	14.8	14.6	15.6	19.6	12.3	14.9	17.6
Total Stops	842	861	839	1104	775	890	1020
Fuel Used (gal)	117.2	121.3	129.4	132.4	111.5	124.1	123.0

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	714	710	786	746	767	723	736
Vehs Exited	750	712	755	735	754	738	731
Starting Vehs	402	374	395	395	384	388	381
Ending Vehs	366	372	426	406	397	373	391
Travel Distance (mi)	4049	3800	4256	4208	4166	4031	4112
Travel Time (hr)	97.5	89.5	102.8	99.7	99.2	95.5	97.4
Total Delay (hr)	16.4	14.0	18.3	15.8	15.5	15.2	15.6
Total Stops	977	808	1056	896	922	952	909
Fuel Used (gal)	120.8	112.9	126.6	123.7	122.8	119.0	121.7

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.5	0.5	2.4	0.0	0.0	0.0	3.8	0.5	3.9	0.1	0.1	0.1
Total Del/Veh (s)	22.9	14.2	3.3	45.6	40.2	37.0	20.9	19.2	6.0	28.5	25.1	11.8

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	30.4

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.6	0.8	0.1	0.1
Total Del/Veh (s)	66.3	35.2	26.7	61.8	45.0	37.8	64.8	34.4	12.6	36.6	22.3	21.0

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	37.9

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	24.0	15.8	10.4	23.1	25.9	26.9	21.7	6.0	7.8	9.0	11.5	19.3

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.3	0.2	0.1	0.1	0.1
Total Del/Veh (s)	13.5	11.3	6.9	7.1	7.2	1.5	9.8

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.2	6.7	25.2	18.5	6.4	2.6	13.1

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.0	0.2	1.6	0.2
Total Del/Veh (s)	26.0	25.2	4.2	3.5	7.9	2.1	13.0

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.4	0.4	1.4	0.5
Total Del/Veh (s)	21.6	5.8	15.1	18.8	12.5	4.0	12.4

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	67.0

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	14.2	44.6	0.5	38
Murieta Pkwy	2	35.9	224.4	3.2	52
Murieta S Pkwy	3	17.0	81.8	1.1	47
Ione Rd	4	13.9	143.0	2.2	54
Project Access	5	6.1	78.1	1.3	62
	17	15.1	200.8	3.0	53
E. Plymouth Hwy (SR	6	26.0	279.6	5.5	71
Golden Chain Hwy (SR	7	20.7	39.3	0.3	26
Total		149.0	1091.6	17.1	56

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	6.5	24.4	0.3	43
	17	33.0	355.0	5.5	56
Project Access	5	18.5	173.2	3.0	62
Ione Rd	4	7.4	77.9	1.3	62
Murieta S Pkwy	3	26.1	152.2	2.2	51
Murieta Pkwy	2	46.4	111.6	1.1	35
Kiefer Bl	1	40.3	222.1	3.2	53
Total		178.2	1116.4	16.6	54

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	L	TR
Maximum Queue (ft)	63	219	28	132	373	87	42	64	26	43
Average Queue (ft)	21	85	6	65	158	36	10	23	4	11
95th Queue (ft)	48	172	17	113	310	71	30	47	20	34
Link Distance (ft)		2403			17014		361			3736
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	470		500	720		300		140	180	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	114	301	75	174	555	113	220	85	75	85	238
Average Queue (ft)	47	121	31	49	289	72	48	26	26	38	126
95th Queue (ft)	98	244	80	139	501	121	168	63	62	76	208
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)		22	0	0	29	18	0	0	1	1	
Queuing Penalty (veh)		30	2	0	11	15	0	0	0	0	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LTR	LT	R
Maximum Queue (ft)	84	163	10	271	39	35	152
Average Queue (ft)	32	52	1	107	7	6	63
95th Queue (ft)	67	124	5	213	28	23	120
Link Distance (ft)		5566		11290	438	2987	2987
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	430		200				
Storage Blk Time (%)				1			
Queuing Penalty (veh)				0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	18	26	28
Average Queue (ft)	1	3	1
95th Queue (ft)	9	17	15
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	9	38	10
Average Queue (ft)	0	16	1
95th Queue (ft)	5	35	6
Link Distance (ft)		254	254
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	NB
Directions Served	T	R	L	L	R
Maximum Queue (ft)	1	27	52	72	37
Average Queue (ft)	0	1	11	32	2
95th Queue (ft)	2	14	37	57	17
Link Distance (ft)	29198			2881	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		220	260		240
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	146	108	156	116	161	61
Average Queue (ft)	64	18	79	51	80	4
95th Queue (ft)	116	69	131	95	135	29
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 59

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3344	3462	3457	3431	3365	3522	3449
Vehs Exited	3380	3510	3460	3368	3362	3464	3401
Starting Vehs	418	492	435	365	444	402	425
Ending Vehs	382	444	432	428	447	460	473
Travel Distance (mi)	17508	18549	17860	17088	18235	17994	18186
Travel Time (hr)	427.5	457.5	438.1	415.2	446.7	443.4	447.3
Total Delay (hr)	71.7	81.2	74.8	69.4	78.4	79.2	78.8
Total Stops	4211	4634	4299	4109	4448	4551	4517
Fuel Used (gal)	512.3	543.2	524.1	500.0	531.8	530.7	531.5

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3375	3427	3419	3454	3387	3499	3407
Vehs Exited	3317	3411	3437	3441	3435	3501	3384
Starting Vehs	411	421	432	415	473	435	402
Ending Vehs	469	437	414	428	425	433	425
Travel Distance (mi)	18034	17488	17418	18356	18296	18323	17506
Travel Time (hr)	438.5	427.0	427.7	446.9	446.5	451.2	426.8
Total Delay (hr)	74.3	71.7	72.1	75.8	76.4	78.6	71.8
Total Stops	4202	4113	4112	4307	4349	4486	4056
Fuel Used (gal)	525.7	512.1	508.4	533.7	535.6	537.1	513.2

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3426	3361	3426	3437	3344	3347	3417
Vehs Exited	3358	3364	3402	3421	3353	3335	3403
Starting Vehs	406	431	425	422	454	409	422
Ending Vehs	474	428	449	438	445	421	439
Travel Distance (mi)	17367	17570	17475	17765	17732	17226	17799
Travel Time (hr)	423.5	428.8	427.2	434.0	432.5	419.7	435.3
Total Delay (hr)	71.0	71.6	72.4	74.1	73.2	69.9	74.3
Total Stops	4217	4099	4178	4312	4094	4052	4263
Fuel Used (gal)	507.2	512.6	512.1	521.8	516.7	505.4	520.8

Interval #0 Information Seeding

Start Time	4:30
End Time	5:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	828	863	898	840	842	851	838
Vehs Exited	823	904	874	781	888	825	850
Starting Vehs	418	492	435	365	444	402	425
Ending Vehs	423	451	459	424	398	428	413
Travel Distance (mi)	4231	4836	4344	4127	4511	4007	4309
Travel Time (hr)	103.0	119.6	107.9	98.8	111.3	98.7	106.4
Total Delay (hr)	16.8	21.7	18.8	15.8	20.0	16.6	18.5
Total Stops	1005	1246	1110	998	1163	1010	1087
Fuel Used (gal)	124.1	141.7	127.1	122.5	133.0	118.2	126.7

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	871	855	811	872	842	859	834
Vehs Exited	863	873	889	835	877	871	791
Starting Vehs	411	421	432	415	473	435	402
Ending Vehs	419	403	354	452	438	423	445
Travel Distance (mi)	4523	4426	4208	4462	4569	4587	4221
Travel Time (hr)	110.5	107.9	103.7	109.0	112.1	112.5	101.6
Total Delay (hr)	18.7	18.0	17.4	18.8	19.6	18.8	16.2
Total Stops	1067	1020	1022	1102	1093	1081	938
Fuel Used (gal)	131.7	129.5	125.3	131.0	133.9	133.9	123.6

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	818	835	845	876	836	788	844
Vehs Exited	805	810	828	843	894	798	846
Starting Vehs	406	431	425	422	454	409	422
Ending Vehs	419	456	442	455	396	399	426
Travel Distance (mi)	3967	4453	4269	4634	4417	4187	4364
Travel Time (hr)	96.1	108.1	102.9	112.9	108.7	101.2	106.6
Total Delay (hr)	15.0	18.2	16.5	19.4	18.9	16.4	18.0
Total Stops	960	1001	979	1079	1092	939	1047
Fuel Used (gal)	115.5	128.6	125.2	136.4	130.1	123.0	128.0

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	889	875	851	830	869	896	850
Vehs Exited	837	881	874	868	820	854	827
Starting Vehs	423	451	459	424	398	428	413
Ending Vehs	475	445	436	386	447	470	436
Travel Distance (mi)	4681	4590	4468	4057	4561	4600	4498
Travel Time (hr)	114.9	112.5	110.1	98.1	111.5	113.4	109.5
Total Delay (hr)	20.1	19.4	18.9	15.9	19.6	20.7	18.6
Total Stops	1130	1132	1067	937	1082	1205	1035
Fuel Used (gal)	135.5	134.3	131.2	118.0	133.4	135.3	131.1

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	837	883	855	890	839	922	828
Vehs Exited	825	859	799	844	851	860	842
Starting Vehs	419	403	354	452	438	423	445
Ending Vehs	431	427	410	498	426	485	431
Travel Distance (mi)	4592	4474	3993	4677	4424	4633	4428
Travel Time (hr)	111.1	109.0	97.6	112.6	108.7	114.3	107.6
Total Delay (hr)	19.0	18.5	15.8	18.5	18.5	20.0	17.9
Total Stops	1031	1047	922	1048	1123	1159	984
Fuel Used (gal)	133.5	131.3	116.0	135.1	130.1	135.9	130.3

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	858	815	874	861	849	797	858
Vehs Exited	845	870	895	894	819	793	847
Starting Vehs	419	456	442	455	396	399	426
Ending Vehs	432	401	421	422	426	403	430
Travel Distance (mi)	4254	4294	4445	4499	4341	3885	4420
Travel Time (hr)	103.2	105.4	109.6	108.8	103.6	94.6	107.8
Total Delay (hr)	16.4	17.9	19.3	17.8	15.6	15.2	18.2
Total Stops	1012	974	1084	1019	906	944	1042
Fuel Used (gal)	123.4	124.8	131.2	132.4	125.3	113.7	129.1

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	805	859	880	887	816	896	875
Vehs Exited	885	830	882	803	804	876	838
Starting Vehs	475	445	436	386	447	470	436
Ending Vehs	395	474	434	470	459	490	473
Travel Distance (mi)	4457	4533	4645	4434	4558	4694	4563
Travel Time (hr)	108.6	111.1	113.9	108.2	110.8	114.2	112.5
Total Delay (hr)	18.5	19.5	19.6	18.3	19.1	19.6	20.5
Total Stops	1059	1097	1178	1057	1049	1100	1235
Fuel Used (gal)	130.9	132.5	136.7	129.2	132.3	138.3	134.0

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	812	847	902	883	861	838	863
Vehs Exited	829	853	834	920	817	904	884
Starting Vehs	431	427	410	498	426	485	431
Ending Vehs	414	421	478	461	470	419	410
Travel Distance (mi)	4408	4234	4705	4734	4502	4627	4497
Travel Time (hr)	107.2	103.2	114.5	118.0	109.6	114.0	110.7
Total Delay (hr)	18.1	17.0	19.4	21.6	18.5	20.4	19.8
Total Stops	1035	1008	1107	1196	1028	1107	1086
Fuel Used (gal)	128.5	123.9	135.9	137.8	131.3	135.2	131.8

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	843	897	848	839	832	876	860
Vehs Exited	836	872	807	829	809	820	846
Starting Vehs	432	401	421	422	426	403	430
Ending Vehs	439	426	462	432	449	459	444
Travel Distance (mi)	4533	4301	4412	4147	4474	4523	4499
Travel Time (hr)	110.8	105.6	108.5	102.9	109.7	109.8	110.2
Total Delay (hr)	19.9	17.9	18.8	18.2	19.3	18.1	19.1
Total Stops	1097	1078	1078	1163	1058	1051	1087
Fuel Used (gal)	132.3	127.1	128.8	121.5	131.9	132.7	131.6

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	822	865	828	874	838	879	886
Vehs Exited	835	895	830	916	850	909	886
Starting Vehs	395	474	434	470	459	490	473
Ending Vehs	382	444	432	428	447	460	473
Travel Distance (mi)	4138	4591	4403	4470	4605	4694	4816
Travel Time (hr)	101.0	114.3	106.2	110.1	113.0	117.0	118.8
Total Delay (hr)	16.2	20.6	17.3	19.4	19.6	22.3	21.2
Total Stops	1017	1159	944	1117	1154	1236	1160
Fuel Used (gal)	121.9	134.7	129.1	130.2	133.1	138.9	139.8

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	855	842	851	809	845	880	882
Vehs Exited	800	826	915	842	890	866	867
Starting Vehs	414	421	478	461	470	419	410
Ending Vehs	469	437	414	428	425	433	425
Travel Distance (mi)	4511	4354	4512	4482	4801	4477	4360
Travel Time (hr)	109.7	106.9	111.8	107.2	116.2	110.4	106.9
Total Delay (hr)	18.5	18.2	19.5	17.0	19.7	19.5	18.0
Total Stops	1069	1038	1061	961	1105	1139	1048
Fuel Used (gal)	131.9	127.5	131.1	129.7	140.3	132.1	127.5

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	907	814	859	861	827	886	856
Vehs Exited	872	812	872	855	831	924	865
Starting Vehs	439	426	462	432	449	459	444
Ending Vehs	474	428	449	438	445	421	439
Travel Distance (mi)	4613	4522	4348	4485	4501	4631	4516
Travel Time (hr)	113.4	109.7	106.2	109.4	110.4	114.1	110.6
Total Delay (hr)	19.7	17.7	17.9	18.7	19.3	20.3	19.0
Total Stops	1148	1046	1037	1051	1038	1118	1083
Fuel Used (gal)	135.9	131.9	126.9	131.5	129.5	136.1	132.0

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.3	0.7	2.2	0.0	0.0	0.0	4.0	4.2	0.2	0.2	0.2	0.4
Total Del/Veh (s)	21.6	19.1	4.4	39.4	30.8	29.0	22.3	9.0	23.3	20.7	8.7	23.6

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.2	0.2	0.2	0.2	0.1	0.1	1.0	0.3	0.9	0.8	0.1	0.1
Total Del/Veh (s)	67.3	49.9	40.0	52.9	34.3	27.0	48.1	26.3	16.6	42.3	27.7	9.2

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	41.3

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	25.1	17.2	10.8	24.3	20.8	22.6	24.3	12.7	13.9	20.5

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.3	0.1	0.1	0.1	0.1
Total Del/Veh (s)	14.9	13.7	7.1	7.4	8.4	1.7	11.9

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.9	8.2	9.2	19.6	6.4	2.3	11.2

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.3	0.4	0.0	0.0	0.5	1.7	0.4
Total Del/Veh (s)	38.0	38.5	11.1	6.7	55.0	9.3	25.2

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.9	0.3	0.4	1.2	0.3
Total Del/Veh (s)	26.0	9.8	18.8	18.8	16.6	4.5	17.0

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	69.0

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	19.1	49.7	0.5	34
Murieta Pkwy	2	49.7	234.2	3.2	50
Murieta S Pkwy	3	18.4	86.9	1.1	44
Ione Rd	4	15.0	144.3	2.2	54
Project Access	5	7.8	81.9	1.4	59
	17	20.3	205.1	3.0	52
E. Plymouth Hwy (SR	6	38.0	311.0	5.5	64
Golden Chain Hwy (SR	7	23.4	41.9	0.3	25
Total		191.7	1155.0	17.1	53

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	10.2	28.5	0.3	36
	17	20.4	295.5	5.5	68
Project Access	5	19.6	195.7	3.0	55
Ione Rd	4	7.8	81.0	1.4	60
Murieta S Pkwy	3	24.6	147.9	2.2	52
Murieta Pkwy	2	35.5	96.9	1.1	40
Kiefer Bl	1	31.9	218.8	3.2	53
Total		150.1	1064.2	16.6	56

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	R	L	TR
Maximum Queue (ft)	44	374	38	73	251	44	25	108	74
Average Queue (ft)	10	145	4	28	81	7	7	48	34
95th Queue (ft)	31	296	41	59	186	28	21	88	64
Link Distance (ft)		2403			17014				3736
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	470		500	720		300	140	180	
Storage Blk Time (%)		0							
Queuing Penalty (veh)		0							

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	294	449	75	174	363	114	226	112	100	146	94
Average Queue (ft)	135	227	41	55	176	66	64	50	37	67	44
95th Queue (ft)	228	394	92	141	309	113	150	93	84	122	76
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)		35	1	0	13	10	1	2	1	7	
Queuing Penalty (veh)		122	6	0	6	22	2	3	2	3	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	TR	LTR	LT	R
Maximum Queue (ft)	157	202	526	38	22	93
Average Queue (ft)	75	56	105	10	2	33
95th Queue (ft)	127	147	509	33	12	73
Link Distance (ft)		5566	11290	438	2987	2987
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	430					
Storage Blk Time (%)			1			
Queuing Penalty (veh)			0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	9	55	55
Average Queue (ft)	0	11	11
95th Queue (ft)	6	38	46
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	1	41	14
Average Queue (ft)	0	16	1
95th Queue (ft)	0	36	9
Link Distance (ft)		414	414
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	NB
Directions Served	T	R	L	L	R
Maximum Queue (ft)	3	106	194	273	207
Average Queue (ft)	0	22	88	101	64
95th Queue (ft)	4	78	161	208	161
Link Distance (ft)	29198			2881	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		220	260		240
Storage Blk Time (%)			0	1	0
Queuing Penalty (veh)			0	3	0

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	221	71	120	129	222	37
Average Queue (ft)	109	14	59	57	116	2
95th Queue (ft)	180	54	100	100	184	18
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 170

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_1_Kiefer_Murieta South_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	644	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.76	Total Trucks, %	8.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.38

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.00043	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34718	PF Power Coefficient	0.68713
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	59.0

Vehicle Results

Average Speed, mi/h	59.0	Percent Followers, %	63.1
Segment Travel Time, minutes	4.36	Followers Density, followers/mi/ln	6.9
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_1_Kiefer_Murieta South_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1287	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.81	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.76

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	17.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.0

Vehicle Results

Average Speed, mi/h	58.0	Percent Followers, %	79.8
Segment Travel Time, minutes	4.44	Followers Density, followers/mi/ln	17.7
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_1_Kiefer_Murieta South_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1003	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.59

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	12.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.4

Vehicle Results

Average Speed, mi/h	58.4	Percent Followers, %	74.1
Segment Travel Time, minutes	4.40	Followers Density, followers/mi/ln	12.7
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_1_Kiefer_Murieta South_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	615	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.00945	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34624	PF Power Coefficient	0.68681
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	59.2

Vehicle Results

Average Speed, mi/h	59.2	Percent Followers, %	61.9
Segment Travel Time, minutes	4.35	Followers Density, followers/mi/ln	6.4
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_2_MurietaSouth_ Mariah_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	520	Opposing Demand Flow Rate, veh/h	674
Peak Hour Factor	0.68	Total Trucks, %	7.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	3.84106	Speed Power Coefficient	0.46220
PF Slope Coefficient	-1.25864	PF Power Coefficient	0.77351
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.8

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	53.2
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	4.6
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_2_MurietaSouth_ Mariah_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	499	Opposing Demand Flow Rate, veh/h	385
Peak Hour Factor	0.91	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.78556	Speed Power Coefficient	0.49930
PF Slope Coefficient	-1.23345	PF Power Coefficient	0.78321
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.1

Vehicle Results

Average Speed, mi/h	60.1	Percent Followers, %	51.1
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	4.2
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_2_MurietaSouth_ Mariah_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	566	Opposing Demand Flow Rate, veh/h	367
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.77975	Speed Power Coefficient	0.50235
PF Slope Coefficient	-1.22876	PF Power Coefficient	0.78714
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.9

Vehicle Results

Average Speed, mi/h	59.9	Percent Followers, %	54.4
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	5.1
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_2_MurietaSouth_ Mariah_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	376	Opposing Demand Flow Rate, veh/h	580
Peak Hour Factor	0.94	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.82630	Speed Power Coefficient	0.47219
PF Slope Coefficient	-1.25397	PF Power Coefficient	0.77422
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.3

Vehicle Results

Average Speed, mi/h	60.3	Percent Followers, %	44.5
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	2.8
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_3_Mariah_LongGate_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	210	Opposing Demand Flow Rate, veh/h	315
Peak Hour Factor	0.87	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	5.02460	Speed Power Coefficient	0.61270
PF Slope Coefficient	-1.20279	PF Power Coefficient	0.79345
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.8

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	29.5
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	1.0
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_3_Mariah_LongGate_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	291	Opposing Demand Flow Rate, veh/h	194
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.05051	Speed Power Coefficient	0.62811
PF Slope Coefficient	-1.18002	PF Power Coefficient	0.79586
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.6

Vehicle Results

Average Speed, mi/h	60.6	Percent Followers, %	35.7
Segment Travel Time, minutes	1.84	Followers Density, followers/mi/ln	1.7
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_3_Mariah_LongGate_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	375	Opposing Demand Flow Rate, veh/h	228
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.85826	Speed Power Coefficient	0.60955
PF Slope Coefficient	-1.18606	PF Power Coefficient	0.79497
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.4

Vehicle Results

Average Speed, mi/h	60.4	Percent Followers, %	41.9
Segment Travel Time, minutes	1.77	Followers Density, followers/mi/ln	2.6
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +Project_3_Mariah_LongGate_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	270	Opposing Demand Flow Rate, veh/h	444
Peak Hour Factor	0.81	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	4.58610	Speed Power Coefficient	0.57724
PF Slope Coefficient	-1.23356	PF Power Coefficient	0.77863
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.1

Vehicle Results

Average Speed, mi/h	60.1	Percent Followers, %	35.9
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	1.6
Vehicle LOS	A		

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INTERNATIONAL

Appendix D: Existing Plus Approved Projects Without Project SimTraffic and HCM Worksheets

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2933	3013	3013	3061	3044	2976	3079
Vehs Exited	2931	3000	3034	3082	3034	3035	3035
Starting Vehs	426	402	417	429	415	445	399
Ending Vehs	428	415	396	408	425	386	443
Travel Distance (mi)	16639	17403	17187	17745	17493	17019	17554
Travel Time (hr)	402.6	420.9	413.1	437.1	423.3	412.7	427.7
Total Delay (hr)	70.4	74.2	70.5	84.4	73.7	73.0	77.1
Total Stops	4074	4238	3998	4653	4140	4201	4155
Fuel Used (gal)	495.1	515.2	510.2	523.5	518.0	502.3	518.9

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2961	3040	3009	2976	3034	2937	2962
Vehs Exited	2981	3043	3056	2998	3026	2940	2962
Starting Vehs	427	400	430	439	409	392	370
Ending Vehs	407	397	383	417	417	389	370
Travel Distance (mi)	16899	17756	17510	17124	17055	17052	17134
Travel Time (hr)	403.9	429.0	419.0	420.0	408.5	407.4	407.9
Total Delay (hr)	65.9	75.3	69.7	78.9	68.6	68.2	65.3
Total Stops	3744	4327	3878	4090	3937	3965	3682
Fuel Used (gal)	495.6	526.5	516.2	508.4	503.3	504.2	505.1

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2967	2977	2939	3038	3083	3073	3008
Vehs Exited	2984	2979	2926	3049	3005	3003	3007
Starting Vehs	410	421	393	412	369	367	408
Ending Vehs	393	419	406	401	447	437	406
Travel Distance (mi)	16902	16877	16698	17005	17565	17706	17216
Travel Time (hr)	403.4	401.9	399.2	408.0	420.9	422.0	414.4
Total Delay (hr)	66.6	67.2	66.3	69.0	71.4	70.1	71.3
Total Stops	3874	3845	3709	4039	4027	3977	4029
Fuel Used (gal)	498.8	504.4	491.6	507.0	518.9	524.0	509.4

Interval #0 Information Seeding

Start Time	6:30
End Time	7:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	693	765	740	777	727	756	748
Vehs Exited	736	727	742	780	765	762	736
Starting Vehs	426	402	417	429	415	445	399
Ending Vehs	383	440	415	426	377	439	411
Travel Distance (mi)	3989	4484	4475	4482	4147	4454	4124
Travel Time (hr)	95.7	108.4	108.5	112.3	100.1	108.2	97.5
Total Delay (hr)	16.0	19.2	19.9	23.4	17.0	19.6	15.1
Total Stops	920	1090	1073	1256	945	1085	919
Fuel Used (gal)	117.6	132.0	133.1	133.0	123.7	131.8	120.8

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	744	792	748	752	771	737	734
Vehs Exited	762	766	737	762	760	714	729
Starting Vehs	427	400	430	439	409	392	370
Ending Vehs	409	426	441	429	420	415	375
Travel Distance (mi)	4326	4287	4455	4259	4321	4321	4049
Travel Time (hr)	104.9	102.5	107.4	110.2	104.0	102.4	96.2
Total Delay (hr)	18.5	16.0	18.8	24.9	17.6	16.9	14.8
Total Stops	1047	954	1000	1226	1014	963	895
Fuel Used (gal)	126.6	127.5	131.8	126.5	128.3	127.1	119.7

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	725	778	753	734	781	757	749
Vehs Exited	746	769	737	745	732	701	747
Starting Vehs	410	421	393	412	369	367	408
Ending Vehs	389	430	409	401	418	423	411
Travel Distance (mi)	4188	4349	4183	4231	4223	4124	4274
Travel Time (hr)	100.2	106.1	99.9	102.6	101.0	98.5	103.3
Total Delay (hr)	17.0	19.7	16.4	18.7	16.9	16.1	18.1
Total Stops	933	1096	938	1120	980	962	1016
Fuel Used (gal)	122.8	131.2	122.6	126.0	125.2	122.1	126.5

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	759	766	781	785	784	717	783
Vehs Exited	708	789	800	780	730	754	760
Starting Vehs	383	440	415	426	377	439	411
Ending Vehs	434	417	396	431	431	402	434
Travel Distance (mi)	4254	4418	4314	4582	4337	4270	4303
Travel Time (hr)	102.3	109.4	103.9	112.9	104.0	103.5	103.7
Total Delay (hr)	17.8	21.2	17.7	22.1	17.1	18.6	17.5
Total Stops	1056	1243	1045	1189	1014	1081	1041
Fuel Used (gal)	127.4	131.9	128.3	134.8	128.6	126.8	126.2

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	722	801	763	746	708	705	764
Vehs Exited	722	761	811	761	729	713	733
Starting Vehs	409	426	441	429	420	415	375
Ending Vehs	409	466	393	414	399	407	406
Travel Distance (mi)	4203	4570	4524	4251	4156	4299	4453
Travel Time (hr)	100.2	112.6	107.0	106.0	99.7	102.1	104.7
Total Delay (hr)	16.4	21.9	17.0	21.2	16.5	16.6	16.3
Total Stops	947	1278	924	1021	949	960	884
Fuel Used (gal)	123.5	136.6	132.6	127.1	122.5	126.1	130.5

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	744	707	759	829	717	754	752
Vehs Exited	741	759	732	782	738	755	755
Starting Vehs	389	430	409	401	418	423	411
Ending Vehs	392	378	436	448	397	422	419
Travel Distance (mi)	4153	4161	4466	4474	4268	4281	4337
Travel Time (hr)	99.0	97.8	107.1	106.8	101.6	101.2	104.3
Total Delay (hr)	16.2	15.7	17.8	17.8	16.4	16.2	17.9
Total Stops	950	908	998	1000	925	903	1018
Fuel Used (gal)	122.0	124.9	131.9	133.6	126.3	127.4	128.5

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	736	717	750	766	773	755	814
Vehs Exited	787	744	731	777	780	748	778
Starting Vehs	434	417	396	431	431	402	434
Ending Vehs	383	390	415	420	424	409	470
Travel Distance (mi)	4303	4159	4143	4450	4598	4280	4694
Travel Time (hr)	103.9	99.6	99.2	110.1	113.3	103.8	115.2
Total Delay (hr)	17.8	16.8	16.2	21.6	21.7	18.0	21.6
Total Stops	1029	983	957	1179	1184	1024	1100
Fuel Used (gal)	127.5	122.8	123.1	130.8	136.7	125.0	139.5

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	749	740	763	705	762	758	747
Vehs Exited	767	772	727	729	764	749	743
Starting Vehs	409	466	393	414	399	407	406
Ending Vehs	391	434	429	390	397	416	410
Travel Distance (mi)	4183	4478	4351	4248	4226	4295	4357
Travel Time (hr)	99.5	110.2	103.8	99.8	100.4	101.9	104.2
Total Delay (hr)	15.3	21.3	16.9	15.8	16.3	16.6	16.9
Total Stops	857	1218	980	863	939	974	956
Fuel Used (gal)	121.7	133.0	128.3	126.5	123.0	128.3	128.4

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	771	756	689	737	820	806	754
Vehs Exited	732	729	748	804	791	774	756
Starting Vehs	392	378	436	448	397	422	419
Ending Vehs	431	405	377	381	426	454	412
Travel Distance (mi)	4289	4140	4052	4189	4434	4606	4324
Travel Time (hr)	102.3	98.0	98.5	101.6	106.4	110.9	104.1
Total Delay (hr)	17.1	15.8	17.6	17.7	18.2	19.3	17.9
Total Stops	991	905	953	1009	1003	1097	1011
Fuel Used (gal)	127.3	121.9	118.3	125.2	130.4	137.0	127.7

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	745	765	742	733	760	748	734
Vehs Exited	700	740	761	745	759	771	761
Starting Vehs	383	390	415	420	424	409	470
Ending Vehs	428	415	396	408	425	386	443
Travel Distance (mi)	4094	4341	4254	4232	4411	4015	4432
Travel Time (hr)	100.7	103.4	101.5	101.9	106.0	97.2	111.3
Total Delay (hr)	18.7	17.0	16.7	17.4	17.9	16.8	22.8
Total Stops	1069	922	923	1029	997	1011	1095
Fuel Used (gal)	122.6	128.5	125.7	124.9	129.0	118.7	132.4

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	746	707	735	773	793	737	717
Vehs Exited	730	744	781	746	773	764	757
Starting Vehs	391	434	429	390	397	416	410
Ending Vehs	407	397	383	417	417	389	370
Travel Distance (mi)	4187	4421	4179	4366	4351	4137	4276
Travel Time (hr)	99.3	103.7	100.8	104.1	104.5	100.9	102.8
Total Delay (hr)	15.6	16.1	17.0	17.0	18.1	18.1	17.4
Total Stops	893	877	974	980	1035	1068	947
Fuel Used (gal)	123.7	129.4	123.5	128.4	129.6	122.6	126.5

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	727	736	738	738	765	756	743
Vehs Exited	765	722	709	718	744	773	748
Starting Vehs	431	405	377	381	426	454	412
Ending Vehs	393	419	406	401	447	437	406
Travel Distance (mi)	4272	4227	3997	4111	4640	4694	4282
Travel Time (hr)	101.8	100.0	93.7	97.0	111.9	111.5	102.7
Total Delay (hr)	16.4	16.0	14.5	14.8	19.9	18.5	17.3
Total Stops	1000	936	820	910	1119	1015	976
Fuel Used (gal)	126.7	126.4	118.9	122.2	137.0	137.5	126.7

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.5	0.5	2.4	0.0	0.0	0.0	3.9	0.5	3.9	0.1	0.1	0.1
Total Del/Veh (s)	24.9	14.0	3.6	49.7	49.2	44.1	23.7	22.1	6.3	25.8	30.8	12.5

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	35.9

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.5	0.2	0.6	0.8	0.2	0.1
Total Del/Veh (s)	65.3	36.0	28.4	70.7	54.2	47.1	69.0	36.4	13.4	38.3	22.4	23.6

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	42.4

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	26.0	17.0	12.1	37.0	28.8	23.6	25.3	4.7	7.9	15.2	13.1	20.7

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.6	0.2	0.1	0.1	0.1
Total Del/Veh (s)	13.5	12.8	6.7	7.7	7.2	1.1	10.1

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	6.0	6.8	18.6	4.1	13.3

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.0	0.2	1.7	0.2
Total Del/Veh (s)	28.1	27.2	4.6	3.6	8.5	2.3	14.3

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.4	0.4	1.3	0.5
Total Del/Veh (s)	21.4	6.1	15.2	18.6	13.0	4.1	12.5

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	74.6

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	14.0	44.4	0.5	38
Murieta Pkwy	2	36.8	225.9	3.2	52
Murieta S Pkwy	3	18.1	83.1	1.1	46
Ione Rd	4	14.2	144.9	2.2	54
Project Access	5	6.0	77.5	1.3	62
	17	16.7	201.1	3.0	53
E. Plymouth Hwy (SR	6	28.1	284.4	5.5	70
Golden Chain Hwy (SR	7	20.6	39.4	0.3	26
Total		154.4	1100.6	17.1	56

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	6.5	24.4	0.3	43
	17	33.2	353.9	5.5	56
Project Access	5	18.6	173.7	3.0	61
Ione Rd	4	7.7	80.1	1.3	60
Murieta S Pkwy	3	28.8	155.2	2.2	50
Murieta Pkwy	2	54.9	119.0	1.1	32
Kiefer Bl	1	48.5	238.2	3.2	49
Total		198.3	1144.6	16.6	52

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	L	TR
Maximum Queue (ft)	64	203	30	139	480	97	39	58	29	42
Average Queue (ft)	20	86	6	67	220	37	10	23	5	11
95th Queue (ft)	48	169	19	116	407	74	31	46	21	35
Link Distance (ft)		2403			17014		361			3736
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	470		500	720		300		140	180	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	109	287	75	174	682	113	211	79	66	99	276
Average Queue (ft)	44	126	33	54	354	73	49	24	25	37	138
95th Queue (ft)	89	243	84	149	673	118	181	58	57	77	231
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)		23	1	0	35	18	0	0	0	1	
Queuing Penalty (veh)		32	2	0	14	14	1	0	0	0	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LTR	LT	R
Maximum Queue (ft)	96	170	23	289	37	44	178
Average Queue (ft)	43	58	1	119	7	10	81
95th Queue (ft)	82	130	17	232	27	30	147
Link Distance (ft)		5566		11290	438	2987	2987
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	430		200				
Storage Blk Time (%)				2			
Queuing Penalty (veh)				0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	17	25	39
Average Queue (ft)	1	3	2
95th Queue (ft)	9	15	17
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	NB
Directions Served	L
Maximum Queue (ft)	20
Average Queue (ft)	3
95th Queue (ft)	15
Link Distance (ft)	366
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	WB	NB	NB
Directions Served	R	L	L	R
Maximum Queue (ft)	29	55	76	39
Average Queue (ft)	2	13	33	2
95th Queue (ft)	18	40	61	21
Link Distance (ft)			2881	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	220	260		240
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	144	105	160	127	191	55
Average Queue (ft)	63	21	79	53	83	3
95th Queue (ft)	115	77	130	97	146	30
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 64

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3490	3490	3525	3611	3443	3572	3462
Vehs Exited	3465	3499	3541	3600	3456	3580	3462
Starting Vehs	453	474	488	480	484	481	479
Ending Vehs	478	465	472	491	471	473	479
Travel Distance (mi)	18828	19187	18646	19058	18379	19589	18695
Travel Time (hr)	468.9	471.0	462.1	473.0	456.2	487.9	461.3
Total Delay (hr)	88.1	83.2	83.1	86.0	81.6	91.8	83.2
Total Stops	4879	4583	4686	4854	4573	5045	4541
Fuel Used (gal)	551.3	563.6	546.4	560.1	538.7	573.5	551.5

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3441	3472	3507	3575	3591	3462	3458
Vehs Exited	3433	3445	3547	3610	3571	3479	3449
Starting Vehs	473	422	470	473	450	482	434
Ending Vehs	481	449	430	438	470	465	443
Travel Distance (mi)	19002	18378	19162	19578	19355	18861	17963
Travel Time (hr)	470.5	454.3	472.2	487.0	480.4	477.0	444.9
Total Delay (hr)	87.7	82.9	85.0	90.9	88.8	95.2	80.1
Total Stops	4796	4553	4656	4910	4822	4832	4542
Fuel Used (gal)	553.5	540.9	560.1	573.3	562.9	553.2	525.7

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3567	3441	3587	3589	3418	3472	3506
Vehs Exited	3505	3486	3545	3574	3465	3440	3508
Starting Vehs	486	488	458	437	510	452	466
Ending Vehs	548	443	500	452	463	484	467
Travel Distance (mi)	19510	18631	19280	18873	18880	18643	18925
Travel Time (hr)	487.3	463.0	482.9	473.4	469.1	459.1	470.1
Total Delay (hr)	91.9	84.8	92.4	89.5	86.0	82.0	86.7
Total Stops	5009	4793	5088	5027	4751	4573	4776
Fuel Used (gal)	573.4	543.8	565.5	553.9	551.8	546.6	554.5

Interval #0 Information Seeding

Start Time	4:30
End Time	5:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	844	865	891	896	829	874	869
Vehs Exited	825	893	922	908	894	894	922
Starting Vehs	453	474	488	480	484	481	479
Ending Vehs	472	446	457	468	419	461	426
Travel Distance (mi)	4694	4715	4912	4682	4469	4756	4713
Travel Time (hr)	114.2	115.6	121.3	116.9	111.4	118.6	118.2
Total Delay (hr)	20.0	20.2	22.1	21.3	19.9	22.6	22.2
Total Stops	1043	1150	1212	1210	1094	1270	1221
Fuel Used (gal)	137.5	139.2	144.2	137.5	130.3	139.1	140.5

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	834	857	877	900	902	875	882
Vehs Exited	852	831	901	895	857	876	853
Starting Vehs	473	422	470	473	450	482	434
Ending Vehs	455	448	446	478	495	481	463
Travel Distance (mi)	4599	4550	4659	4865	4798	4716	4545
Travel Time (hr)	113.5	112.0	115.8	123.4	118.1	120.4	112.2
Total Delay (hr)	20.6	20.2	20.8	25.0	21.4	25.0	20.5
Total Stops	1169	1123	1135	1350	1166	1198	1113
Fuel Used (gal)	134.4	133.4	137.3	143.3	139.7	138.3	133.6

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	881	851	906	945	860	866	877
Vehs Exited	879	872	879	876	886	841	877
Starting Vehs	486	488	458	437	510	452	466
Ending Vehs	488	467	485	506	484	477	465
Travel Distance (mi)	4767	4719	4802	4705	4991	4757	4721
Travel Time (hr)	118.8	117.9	119.3	119.1	124.2	117.4	117.4
Total Delay (hr)	21.8	21.8	22.0	23.0	23.0	21.1	21.7
Total Stops	1200	1246	1221	1268	1257	1178	1188
Fuel Used (gal)	140.5	137.8	140.2	138.3	146.0	139.7	138.5

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	879	872	883	897	898	916	851
Vehs Exited	870	864	881	920	863	898	821
Starting Vehs	472	446	457	468	419	461	426
Ending Vehs	481	454	459	445	454	479	456
Travel Distance (mi)	4675	4615	4634	4727	4587	4764	4444
Travel Time (hr)	117.5	112.9	114.5	116.2	113.7	118.4	110.8
Total Delay (hr)	22.3	19.6	20.2	20.3	19.7	22.0	20.8
Total Stops	1251	1068	1164	1123	1140	1220	1130
Fuel Used (gal)	137.1	135.5	135.5	138.5	135.1	139.3	131.4

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	847	891	903	899	916	877	838
Vehs Exited	828	868	860	877	905	873	858
Starting Vehs	455	448	446	478	495	481	463
Ending Vehs	474	471	489	500	506	485	443
Travel Distance (mi)	4705	4667	4950	5100	5059	4561	4421
Travel Time (hr)	116.6	115.4	121.1	124.5	125.0	119.7	108.6
Total Delay (hr)	21.9	21.4	21.0	21.8	23.0	26.8	19.2
Total Stops	1205	1175	1175	1177	1283	1247	1104
Fuel Used (gal)	137.2	137.4	145.6	148.3	146.4	135.5	129.3

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	858	880	889	883	834	880	879
Vehs Exited	896	871	889	903	875	878	874
Starting Vehs	488	467	485	506	484	477	465
Ending Vehs	450	476	485	486	443	479	469
Travel Distance (mi)	4814	4697	4771	4770	4767	4585	4716
Travel Time (hr)	118.7	117.9	120.2	121.3	117.4	112.1	117.1
Total Delay (hr)	20.6	22.0	23.3	24.7	21.4	19.1	21.5
Total Stops	1155	1242	1242	1424	1190	1083	1187
Fuel Used (gal)	141.7	137.7	141.1	139.4	140.3	134.5	138.3

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	886	902	889	928	840	894	863
Vehs Exited	915	827	899	865	852	878	862
Starting Vehs	481	454	459	445	454	479	456
Ending Vehs	452	529	449	508	442	495	457
Travel Distance (mi)	4738	4957	4533	4585	4691	5003	4728
Travel Time (hr)	118.0	121.6	112.6	114.6	116.4	125.4	115.5
Total Delay (hr)	22.3	21.8	19.8	21.2	21.1	24.1	20.0
Total Stops	1197	1160	1109	1249	1169	1264	1113
Fuel Used (gal)	138.9	144.4	132.8	134.9	137.6	146.0	138.9

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	862	892	873	895	871	850	839
Vehs Exited	872	887	882	916	932	862	855
Starting Vehs	474	471	489	500	506	485	443
Ending Vehs	464	476	480	479	445	473	427
Travel Distance (mi)	4868	4704	4908	4949	4799	4905	4419
Travel Time (hr)	120.1	116.7	120.3	122.8	120.3	121.4	109.1
Total Delay (hr)	22.4	21.7	22.1	22.8	22.9	22.2	19.2
Total Stops	1207	1155	1224	1225	1179	1170	1130
Fuel Used (gal)	140.5	138.7	142.4	144.8	139.5	143.3	128.7

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	909	845	894	890	862	835	875
Vehs Exited	863	867	879	902	849	873	876
Starting Vehs	450	476	485	486	443	479	469
Ending Vehs	496	454	500	474	456	441	468
Travel Distance (mi)	4738	4629	4775	4535	4415	4581	4723
Travel Time (hr)	117.5	114.1	120.6	112.7	111.0	113.6	117.2
Total Delay (hr)	21.7	21.0	23.5	20.5	20.9	20.8	21.6
Total Stops	1242	1148	1332	1114	1186	1156	1188
Fuel Used (gal)	138.5	134.8	140.1	133.3	129.7	134.4	138.1

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	881	851	862	890	876	888	879
Vehs Exited	855	915	839	907	847	910	857
Starting Vehs	452	529	449	508	442	495	457
Ending Vehs	478	465	472	491	471	473	479
Travel Distance (mi)	4721	4899	4567	5064	4632	5066	4810
Travel Time (hr)	119.2	120.9	113.7	125.2	114.7	125.5	116.8
Total Delay (hr)	23.4	21.6	20.9	23.2	20.9	23.1	20.2
Total Stops	1388	1205	1201	1272	1170	1291	1077
Fuel Used (gal)	137.8	144.6	133.8	149.3	135.7	149.2	140.8

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	898	832	854	881	902	860	899
Vehs Exited	881	859	904	922	877	868	883
Starting Vehs	464	476	480	479	445	473	427
Ending Vehs	481	449	430	438	470	465	443
Travel Distance (mi)	4830	4457	4644	4664	4699	4679	4578
Travel Time (hr)	120.3	110.2	114.9	116.3	117.0	115.4	115.0
Total Delay (hr)	22.8	19.6	21.1	21.3	21.5	21.2	21.3
Total Stops	1215	1100	1122	1158	1194	1217	1195
Fuel Used (gal)	141.4	131.4	134.8	136.7	137.3	136.1	134.2

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	919	865	898	871	862	891	878
Vehs Exited	867	876	898	893	855	848	880
Starting Vehs	496	454	500	474	456	441	468
Ending Vehs	548	443	500	452	463	484	467
Travel Distance (mi)	5190	4586	4932	4864	4707	4719	4765
Travel Time (hr)	132.4	113.2	122.7	120.3	116.5	116.0	118.3
Total Delay (hr)	27.8	20.0	23.6	21.3	20.7	21.0	21.8
Total Stops	1412	1157	1293	1221	1118	1156	1206
Fuel Used (gal)	152.8	133.5	144.1	142.9	135.8	137.9	139.5

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.2	0.9	2.3	0.0	0.0	0.0	4.3	4.2	0.2	0.2	0.2	0.6
Total Del/Veh (s)	31.2	26.6	6.2	44.6	34.6	29.2	26.2	11.5	25.4	23.5	10.0	28.8

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.1	0.1	0.3	0.1	0.1	1.0	0.3	1.0	0.9	0.1	0.1
Total Del/Veh (s)	73.9	57.6	47.3	56.3	36.5	28.1	47.0	27.5	18.4	43.6	29.2	10.1

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	45.8

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	28.8	18.1	13.6	31.6	26.2	24.5	28.6	13.3	15.5	23.8

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.1	0.1	0.1
Total Del/Veh (s)	14.3	10.7	9.5	8.2	9.1	1.5	11.8

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	7.7	9.6	20.2	5.5	11.9

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.3	0.4	0.0	0.0	0.5	1.6	0.4
Total Del/Veh (s)	38.9	38.5	11.6	6.6	72.0	14.5	28.5

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.9	0.3	0.4	1.3	0.3
Total Del/Veh (s)	26.1	9.9	19.3	18.0	17.2	4.6	17.3

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	77.9

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	26.6	57.2	0.5	30
Murieta Pkwy	2	57.3	251.0	3.2	46
Murieta S Pkwy	3	19.2	87.2	1.1	44
Ione Rd	4	14.5	144.3	2.2	54
Project Access	5	7.7	82.2	1.3	58
	17	21.2	205.4	3.0	52
E. Plymouth Hwy (SR	6	38.9	314.8	5.5	63
Golden Chain Hwy (SR	7	23.5	42.2	0.3	25
Total		208.9	1184.4	17.1	52

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	10.0	28.6	0.3	36
	17	20.0	294.7	5.5	68
Project Access	5	20.2	198.0	3.0	54
Ione Rd	4	8.2	82.6	1.3	58
Murieta S Pkwy	3	31.7	159.0	2.2	49
Murieta Pkwy	2	37.3	97.7	1.1	39
Kiefer Bl	1	35.3	227.2	3.2	51
Total		162.7	1087.8	16.6	55

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	R	L	TR
Maximum Queue (ft)	89	510	42	90	282	42	27	114	77
Average Queue (ft)	13	220	4	31	102	6	7	50	34
95th Queue (ft)	65	431	42	68	224	27	21	94	65
Link Distance (ft)		2403			17014				3736
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	470		500	720		300	140	180	
Storage Blk Time (%)		1							
Queuing Penalty (veh)		0							

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	379	548	75	174	380	112	219	112	100	146	90
Average Queue (ft)	152	269	39	57	195	64	63	52	38	66	44
95th Queue (ft)	290	481	91	143	334	110	148	95	83	122	77
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)		38	1	0	16	7	1	2	2	7	
Queuing Penalty (veh)		131	6	0	7	16	3	3	2	3	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	TR	LTR	LT	R
Maximum Queue (ft)	194	198	276	42	30	124
Average Queue (ft)	101	62	125	11	6	51
95th Queue (ft)	169	144	239	34	23	102
Link Distance (ft)		5566	11290	438	2987	2987
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	430					
Storage Blk Time (%)			2			
Queuing Penalty (veh)			0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	11	30	47
Average Queue (ft)	0	8	5
95th Queue (ft)	6	26	31
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	NB
Directions Served	L
Maximum Queue (ft)	12
Average Queue (ft)	1
95th Queue (ft)	6
Link Distance (ft)	476
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	WB	WB	NB	NB
Directions Served	R	L	T	L	R
Maximum Queue (ft)	112	218	16	359	244
Average Queue (ft)	21	90	1	135	81
95th Queue (ft)	77	169	22	332	207
Link Distance (ft)			1475	2881	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	220	260			240
Storage Blk Time (%)		0		6	0
Queuing Penalty (veh)		0		14	0

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	220	83	143	132	231	26
Average Queue (ft)	113	15	61	58	122	1
95th Queue (ft)	183	58	107	104	196	15
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 186

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_1_Kiefer_MurietaSouth_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	673	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.76	Total Trucks, %	8.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.00043	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34718	PF Power Coefficient	0.68713
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.9

Vehicle Results

Average Speed, mi/h	58.9	Percent Followers, %	64.2
Segment Travel Time, minutes	4.37	Followers Density, followers/mi/ln	7.3
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_1_Kiefer_MurietaSouth_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1334	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.81	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.78

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	18.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	57.9

Vehicle Results

Average Speed, mi/h	57.9	Percent Followers, %	80.6
Segment Travel Time, minutes	4.45	Followers Density, followers/mi/ln	18.6
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_1_Kiefer_MurietaSouth_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1055	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.62

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	13.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.3

Vehicle Results

Average Speed, mi/h	58.3	Percent Followers, %	75.3
Segment Travel Time, minutes	4.41	Followers Density, followers/mi/ln	13.6
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_1_Kiefer_MurietaSouth_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	657	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.00945	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34624	PF Power Coefficient	0.68681
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	59.1

Vehicle Results

Average Speed, mi/h	59.1	Percent Followers, %	63.5
Segment Travel Time, minutes	4.35	Followers Density, followers/mi/ln	7.1
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_2_MurietaSouth_Mariah_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	470	Opposing Demand Flow Rate, veh/h	635
Peak Hour Factor	0.68	Total Trucks, %	7.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	3.83327	Speed Power Coefficient	0.46610
PF Slope Coefficient	-1.25603	PF Power Coefficient	0.77502
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.9

Vehicle Results

Average Speed, mi/h	59.9	Percent Followers, %	50.3
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	3.9
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_2_MurietaSouth_Mariah_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	470	Opposing Demand Flow Rate, veh/h	348
Peak Hour Factor	0.91	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.77549	Speed Power Coefficient	0.50585
PF Slope Coefficient	-1.22831	PF Power Coefficient	0.78526
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.2

Vehicle Results

Average Speed, mi/h	60.2	Percent Followers, %	49.3
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	3.9
Vehicle LOS	B		

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Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_2_MurietaSouth_Mariah_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	541	Opposing Demand Flow Rate, veh/h	372
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.78088	Speed Power Coefficient	0.50162
PF Slope Coefficient	-1.22933	PF Power Coefficient	0.78691
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.0

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	53.1
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	4.8
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_2_MurietaSouth_Mariah_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	381	Opposing Demand Flow Rate, veh/h	554
Peak Hour Factor	0.94	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.82071	Speed Power Coefficient	0.47522
PF Slope Coefficient	-1.25182	PF Power Coefficient	0.77532
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.3

Vehicle Results

Average Speed, mi/h	60.3	Percent Followers, %	44.7
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	2.8
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_3_Mariah_LongGate_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	241	Opposing Demand Flow Rate, veh/h	324
Peak Hour Factor	0.87	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	5.02994	Speed Power Coefficient	0.61050
PF Slope Coefficient	-1.20475	PF Power Coefficient	0.79278
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.5

Vehicle Results

Average Speed, mi/h	59.5	Percent Followers, %	32.3
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	1.3
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_3_Mariah_LongGate_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	299	Opposing Demand Flow Rate, veh/h	223
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.07338	Speed Power Coefficient	0.61863
PF Slope Coefficient	-1.18794	PF Power Coefficient	0.79323
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.6

Vehicle Results

Average Speed, mi/h	60.6	Percent Followers, %	36.6
Segment Travel Time, minutes	1.84	Followers Density, followers/mi/ln	1.8
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	Existing +App_3_Mariah_LongGate_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	392	Opposing Demand Flow Rate, veh/h	260
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.88156	Speed Power Coefficient	0.60030
PF Slope Coefficient	-1.19393	PF Power Coefficient	0.79231
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.3

Vehicle Results

Average Speed, mi/h	60.3	Percent Followers, %	43.3
Segment Travel Time, minutes	1.77	Followers Density, followers/mi/ln	2.8
Vehicle LOS	B		

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Project Description	Existing +App_3_Mariah_LongGate_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	307	Opposing Demand Flow Rate, veh/h	463
Peak Hour Factor	0.81	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	4.59643	Speed Power Coefficient	0.57374
PF Slope Coefficient	-1.23691	PF Power Coefficient	0.77743
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	59.9

Vehicle Results

Average Speed, mi/h	59.9	Percent Followers, %	39.0
Segment Travel Time, minutes	1.86	Followers Density, followers/mi/ln	2.0
Vehicle LOS	B		

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INTERNATIONAL

Appendix E: Existing Plus Approved Projects Plus Project SimTraffic and HCM Worksheets

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3093	3049	3045	2999	3111	2997	3046
Vehs Exited	3043	3052	3029	3018	3144	3056	3037
Starting Vehs	395	439	409	448	437	453	422
Ending Vehs	445	436	425	429	404	394	431
Travel Distance (mi)	17773	17981	17279	17620	18563	17048	17488
Travel Time (hr)	438.2	437.2	412.1	421.5	450.1	422.4	422.7
Total Delay (hr)	84.1	79.0	68.8	70.5	80.8	83.6	75.3
Total Stops	4752	4386	3840	3981	4445	4839	4253
Fuel Used (gal)	529.3	533.2	510.9	524.0	550.0	504.9	523.3

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3058	3146	3083	3055	3148	3111	3007
Vehs Exited	3048	3116	2991	3037	3099	3091	3032
Starting Vehs	446	396	430	410	412	413	427
Ending Vehs	456	426	522	428	461	433	402
Travel Distance (mi)	18035	17519	18221	17710	17794	17953	17558
Travel Time (hr)	436.6	420.0	445.4	423.0	434.0	431.5	420.6
Total Delay (hr)	78.3	72.2	82.2	70.1	80.5	74.2	71.8
Total Stops	4303	4175	4496	3963	4534	4158	4104
Fuel Used (gal)	531.2	522.7	536.5	523.7	527.6	530.2	518.6

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3012	3063	2976	3100	3044	3091	3062
Vehs Exited	2961	3103	3045	3057	2974	3053	3048
Starting Vehs	410	451	464	413	392	455	423
Ending Vehs	461	411	395	456	462	493	437
Travel Distance (mi)	17348	17791	17178	17471	17442	17857	17681
Travel Time (hr)	417.1	433.0	413.8	425.3	415.4	437.3	427.9
Total Delay (hr)	71.8	78.8	72.7	76.9	69.7	83.7	76.3
Total Stops	4093	4300	4191	4510	3971	4499	4286
Fuel Used (gal)	511.6	527.3	508.4	519.1	513.3	527.9	523.7

Interval #0 Information Seeding

Start Time	6:30
End Time	7:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	758	742	745	745	776	762	768
Vehs Exited	735	771	739	767	772	799	776
Starting Vehs	395	439	409	448	437	453	422
Ending Vehs	418	410	415	426	441	416	414
Travel Distance (mi)	4225	4429	4079	4518	4542	4414	4399
Travel Time (hr)	105.2	107.3	95.0	107.6	110.2	111.2	106.1
Total Delay (hr)	20.3	19.0	14.1	17.5	19.2	23.3	18.4
Total Stops	1157	1039	824	976	1065	1398	1024
Fuel Used (gal)	126.1	131.5	120.3	134.6	134.6	131.9	131.1

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	795	771	770	734	800	755	777
Vehs Exited	783	771	759	731	791	767	795
Starting Vehs	446	396	430	410	412	413	427
Ending Vehs	458	396	441	413	421	401	409
Travel Distance (mi)	4728	4046	4540	4322	4442	4538	4391
Travel Time (hr)	115.1	96.8	111.7	103.0	106.0	108.1	104.5
Total Delay (hr)	20.9	16.2	21.5	16.7	17.9	17.9	16.8
Total Stops	1139	1019	1141	948	1017	978	943
Fuel Used (gal)	138.1	120.8	133.7	126.8	132.1	133.4	129.8

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	743	740	740	752	758	788	757
Vehs Exited	748	778	786	760	734	795	771
Starting Vehs	410	451	464	413	392	455	423
Ending Vehs	405	413	418	405	416	448	417
Travel Distance (mi)	4468	4278	4423	4286	4344	4701	4406
Travel Time (hr)	106.6	107.0	107.8	101.9	103.7	112.9	106.4
Total Delay (hr)	18.0	21.5	20.0	16.7	17.2	19.9	18.6
Total Stops	1025	1093	1133	956	990	1104	1044
Fuel Used (gal)	130.0	128.3	131.1	126.9	127.5	138.7	130.4

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	805	746	781	736	794	766	741
Vehs Exited	763	750	751	756	782	731	745
Starting Vehs	418	410	415	426	441	416	414
Ending Vehs	460	406	445	406	453	451	410
Travel Distance (mi)	4560	4347	4577	4327	4795	4258	4275
Travel Time (hr)	114.2	104.2	110.1	101.8	116.8	105.9	101.9
Total Delay (hr)	23.3	17.5	19.7	15.8	21.7	21.8	17.4
Total Stops	1263	1008	1014	891	1156	1270	1004
Fuel Used (gal)	135.4	129.4	135.8	127.1	142.7	125.3	128.0

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	767	809	731	792	751	803	743
Vehs Exited	792	763	765	776	743	758	723
Starting Vehs	458	396	441	413	421	401	409
Ending Vehs	433	442	407	429	429	446	429
Travel Distance (mi)	4698	4467	4349	4385	4327	4346	4400
Travel Time (hr)	112.1	107.3	103.7	106.1	106.0	105.2	105.1
Total Delay (hr)	18.9	18.5	16.8	17.7	20.2	18.7	17.6
Total Stops	1077	1076	1026	1034	1141	1088	1017
Fuel Used (gal)	139.9	133.3	127.0	129.6	129.4	128.5	129.4

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	728	806	758	765	737	755	763
Vehs Exited	733	769	761	740	765	782	758
Starting Vehs	405	413	418	405	416	448	417
Ending Vehs	400	450	415	430	388	421	430
Travel Distance (mi)	4362	4645	4515	4400	4271	4382	4434
Travel Time (hr)	105.1	110.6	108.0	105.1	101.3	105.9	106.8
Total Delay (hr)	18.3	17.8	18.7	17.6	16.6	19.7	18.7
Total Stops	1010	1016	1061	1012	954	1074	1057
Fuel Used (gal)	127.5	135.8	133.4	130.8	126.2	129.2	131.2

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	768	797	759	747	770	746	754
Vehs Exited	783	724	794	725	793	778	737
Starting Vehs	460	406	445	406	453	451	410
Ending Vehs	445	479	410	428	430	419	427
Travel Distance (mi)	4551	4545	4384	4337	4684	4270	4494
Travel Time (hr)	112.6	110.4	106.1	104.3	113.4	107.7	107.0
Total Delay (hr)	22.2	19.5	18.6	18.2	20.6	22.9	18.4
Total Stops	1280	1096	1029	1028	1117	1264	1016
Fuel Used (gal)	136.8	134.3	129.0	128.8	139.1	126.4	133.9

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	710	792	800	786	789	771	774
Vehs Exited	736	799	750	794	781	790	776
Starting Vehs	433	442	407	429	429	446	429
Ending Vehs	407	435	457	421	437	427	427
Travel Distance (mi)	4333	4526	4620	4546	4411	4626	4595
Travel Time (hr)	104.7	109.3	110.9	107.8	109.9	110.3	108.7
Total Delay (hr)	18.7	19.5	18.4	17.8	22.1	18.5	18.0
Total Stops	1040	1044	1027	951	1210	1019	1004
Fuel Used (gal)	128.1	135.5	135.8	135.0	130.4	136.2	135.1

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	733	788	726	810	756	748	762
Vehs Exited	729	782	794	776	735	732	765
Starting Vehs	400	450	415	430	388	421	430
Ending Vehs	404	456	347	464	409	437	427
Travel Distance (mi)	4141	4556	4174	4393	4190	4260	4432
Travel Time (hr)	98.1	110.8	100.4	109.1	98.5	103.4	107.2
Total Delay (hr)	15.8	20.4	17.2	20.9	15.6	18.5	19.1
Total Stops	889	1154	1000	1252	908	1031	1067
Fuel Used (gal)	123.3	135.2	122.9	130.6	122.7	125.8	131.3

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	762	764	760	771	771	723	783
Vehs Exited	762	807	745	770	797	748	779
Starting Vehs	445	479	410	428	430	419	427
Ending Vehs	445	436	425	429	404	394	431
Travel Distance (mi)	4437	4660	4238	4439	4542	4106	4320
Travel Time (hr)	106.2	115.3	100.8	107.8	109.8	97.5	107.7
Total Delay (hr)	18.3	23.0	16.4	19.0	19.3	15.6	21.2
Total Stops	1052	1243	973	1086	1107	907	1209
Fuel Used (gal)	130.9	138.0	125.7	133.6	133.5	121.3	130.4

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	786	774	782	743	808	782	713
Vehs Exited	737	783	717	736	784	776	738
Starting Vehs	407	435	457	421	437	427	427
Ending Vehs	456	426	522	428	461	433	402
Travel Distance (mi)	4275	4480	4712	4457	4613	4443	4172
Travel Time (hr)	104.8	106.6	119.2	106.1	112.1	108.0	102.3
Total Delay (hr)	19.8	18.0	25.5	18.0	20.3	19.1	19.4
Total Stops	1047	1036	1302	1030	1166	1073	1140
Fuel Used (gal)	125.1	133.1	140.0	132.3	135.7	132.1	124.3

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	808	729	752	773	793	800	768
Vehs Exited	751	774	704	781	740	744	760
Starting Vehs	404	456	347	464	409	437	427
Ending Vehs	461	411	395	456	462	493	437
Travel Distance (mi)	4377	4312	4066	4391	4638	4514	4410
Travel Time (hr)	107.3	104.5	97.6	109.2	111.9	115.1	107.5
Total Delay (hr)	19.7	19.0	16.8	21.7	20.4	25.6	19.8
Total Stops	1169	1037	997	1290	1119	1290	1113
Fuel Used (gal)	130.7	128.1	121.0	130.8	136.9	134.3	130.9

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.4	0.5	2.4	0.0	0.0	0.0	3.9	0.6	3.9	0.1	0.1	0.1
Total Del/Veh (s)	25.0	14.5	3.3	50.7	50.8	44.4	23.0	21.7	6.7	29.3	29.9	14.9

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	36.5

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.2	0.6	0.9	0.1	0.1
Total Del/Veh (s)	66.9	37.7	30.2	82.0	62.7	54.0	64.1	34.2	12.2	38.7	22.7	22.7

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	46.2

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	27.3	18.0	13.8	26.0	30.4	23.8	24.4	7.0	8.4	9.6	13.2	21.8

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.4	0.2	0.1	0.1	0.1
Total Del/Veh (s)	14.3	13.6	7.9	7.4	6.2	1.0	10.4

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.5	7.2	17.6	18.9	5.7	2.9	13.3

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.0	0.2	1.7	0.2
Total Del/Veh (s)	27.8	25.8	4.3	3.7	8.7	2.3	14.0

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.4	0.5	1.3	0.5
Total Del/Veh (s)	21.8	6.0	15.5	19.2	13.0	4.0	12.7

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	78.1

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	14.5	44.9	0.5	38
Murieta Pkwy	2	38.3	228.2	3.2	51
Murieta S Pkwy	3	19.1	84.5	1.1	46
Ione Rd	4	15.0	145.9	2.2	53
Project Access	5	6.5	78.6	1.3	61
	17	16.0	200.7	3.0	53
E. Plymouth Hwy (SR	6	27.8	285.3	5.5	70
Golden Chain Hwy (SR	7	20.9	39.7	0.3	26
Total		158.2	1107.7	17.1	55

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	6.8	24.8	0.3	42
	17	33.0	353.2	5.5	56
Project Access	5	18.9	175.0	3.0	61
Ione Rd	4	7.7	79.0	1.3	61
Murieta S Pkwy	3	30.5	157.1	2.2	49
Murieta Pkwy	2	63.2	127.5	1.1	30
Kiefer Bl	1	49.6	239.1	3.2	49
Total		209.7	1155.6	16.6	52

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	L	TR
Maximum Queue (ft)	61	261	29	171	516	93	41	63	26	45
Average Queue (ft)	22	95	6	73	227	37	11	23	4	10
95th Queue (ft)	52	192	18	189	452	72	31	48	19	35
Link Distance (ft)		2403			17014		361			3736
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	470		500	720		300		140	180	
Storage Blk Time (%)		0			0					
Queuing Penalty (veh)		0			0					

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	113	312	75	174	826	114	224	77	75	96	267
Average Queue (ft)	46	139	32	57	417	67	42	23	24	39	133
95th Queue (ft)	93	266	83	153	773	115	154	56	58	82	223
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)		26	1	0	40	15	0	0	0	1	
Queuing Penalty (veh)		36	2	0	16	12	0	0	0	0	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	TR	LTR	LT	R
Maximum Queue (ft)	102	187	21	306	30	42	179
Average Queue (ft)	43	69	1	133	7	10	84
95th Queue (ft)	82	150	17	253	26	31	147
Link Distance (ft)		5566		11290	438	2987	2987
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	430		200				
Storage Blk Time (%)				3			
Queuing Penalty (veh)				0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	16	23	34
Average Queue (ft)	1	2	2
95th Queue (ft)	9	13	17
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	1	40	9
Average Queue (ft)	0	14	1
95th Queue (ft)	2	32	5
Link Distance (ft)		338	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	WB	NB	NB
Directions Served	R	L	L	R
Maximum Queue (ft)	10	53	76	44
Average Queue (ft)	0	12	33	3
95th Queue (ft)	8	38	59	24
Link Distance (ft)			2881	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	220	260		240
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	143	119	154	122	167	48
Average Queue (ft)	65	21	80	55	83	3
95th Queue (ft)	119	78	132	99	139	22
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Network Summary

Network wide Queuing Penalty: 68

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3625	3635	3616	3540	3495	3563	3499
Vehs Exited	3564	3623	3603	3536	3504	3602	3503
Starting Vehs	447	483	477	502	458	502	460
Ending Vehs	508	495	490	506	449	463	456
Travel Distance (mi)	18979	19400	19401	19766	18896	19458	18932
Travel Time (hr)	476.9	480.7	487.5	489.0	465.6	481.3	474.8
Total Delay (hr)	91.8	88.2	94.4	90.7	82.8	87.6	90.1
Total Stops	5257	4858	5211	4960	4708	4958	5032
Fuel Used (gal)	556.4	567.8	566.9	573.7	556.3	572.4	554.3

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3509	3685	3599	3538	3536	3674	3538
Vehs Exited	3489	3616	3548	3518	3581	3673	3495
Starting Vehs	465	482	461	467	519	485	448
Ending Vehs	485	551	512	487	474	486	491
Travel Distance (mi)	18540	20768	19499	19237	19517	20007	19391
Travel Time (hr)	464.9	515.6	498.2	478.0	483.3	508.1	478.9
Total Delay (hr)	88.8	99.0	103.7	89.8	90.0	103.4	88.3
Total Stops	4893	5209	5649	4916	4776	5688	4864
Fuel Used (gal)	542.5	606.8	570.0	564.1	571.7	585.6	567.0

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3575	3508	3543	3639	3522	3557	3571
Vehs Exited	3569	3498	3527	3649	3513	3561	3559
Starting Vehs	484	494	478	497	479	474	482
Ending Vehs	490	504	494	487	488	470	487
Travel Distance (mi)	19572	19173	19025	19664	18935	19080	19362
Travel Time (hr)	488.9	472.3	470.2	490.5	469.0	474.8	482.4
Total Delay (hr)	93.8	85.0	85.9	91.9	85.4	88.8	91.0
Total Stops	5226	4858	4928	5083	4642	4932	5031
Fuel Used (gal)	576.4	557.8	559.0	574.1	554.3	560.0	566.9

Interval #0 Information Seeding

Start Time	4:30
End Time	5:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	856	895	879	899	896	875	850
Vehs Exited	873	907	878	929	885	929	841
Starting Vehs	447	483	477	502	458	502	460
Ending Vehs	430	471	478	472	469	448	469
Travel Distance (mi)	4337	4964	4700	4992	4732	4975	4701
Travel Time (hr)	107.2	122.9	117.8	124.7	115.9	122.6	116.3
Total Delay (hr)	18.7	22.8	22.4	23.9	20.0	22.0	20.9
Total Stops	1123	1238	1213	1288	1187	1232	1121
Fuel Used (gal)	127.8	146.6	137.9	146.6	139.4	146.0	138.2

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	872	918	905	918	909	890	870
Vehs Exited	860	904	914	923	965	877	869
Starting Vehs	465	482	461	467	519	485	448
Ending Vehs	477	496	452	462	463	498	449
Travel Distance (mi)	4501	5047	4715	4713	5085	4982	4742
Travel Time (hr)	114.5	124.8	120.5	119.0	127.0	122.9	118.2
Total Delay (hr)	23.0	23.4	24.5	22.8	24.3	22.9	22.2
Total Stops	1281	1242	1351	1265	1246	1222	1175
Fuel Used (gal)	132.5	147.0	138.0	139.2	148.7	145.7	139.2

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	935	849	881	912	929	868	888
Vehs Exited	894	862	873	927	942	874	899
Starting Vehs	484	494	478	497	479	474	482
Ending Vehs	525	481	486	482	466	468	469
Travel Distance (mi)	5021	4669	4698	4955	4810	4778	4806
Travel Time (hr)	129.7	114.9	117.2	124.9	120.7	117.4	119.9
Total Delay (hr)	29.0	20.7	21.8	24.1	22.9	21.1	22.7
Total Stops	1586	1202	1273	1333	1220	1173	1247
Fuel Used (gal)	147.5	136.8	137.5	145.6	141.4	140.0	141.1

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	942	892	925	868	852	861	897
Vehs Exited	873	892	923	859	871	839	884
Starting Vehs	430	471	478	472	469	448	469
Ending Vehs	499	471	480	481	450	470	482
Travel Distance (mi)	4576	4735	4844	4800	4642	4643	4710
Travel Time (hr)	115.2	117.7	124.1	118.6	113.5	114.1	118.8
Total Delay (hr)	22.2	22.2	25.8	21.9	19.8	20.2	23.4
Total Stops	1322	1233	1443	1218	1091	1182	1283
Fuel Used (gal)	133.2	139.0	142.8	139.4	137.0	136.2	137.8

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	866	942	881	912	865	988	893
Vehs Exited	892	916	857	869	867	938	866
Starting Vehs	477	496	452	462	463	498	449
Ending Vehs	451	522	476	505	461	548	476
Travel Distance (mi)	4701	5143	4752	4873	4802	5094	4823
Travel Time (hr)	118.5	128.7	119.8	122.1	118.4	130.6	117.2
Total Delay (hr)	23.4	25.0	24.0	23.7	21.6	27.9	20.4
Total Stops	1264	1370	1368	1300	1129	1548	1135
Fuel Used (gal)	138.3	151.0	138.3	142.1	140.7	148.6	140.6

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	854	910	859	875	848	931	890
Vehs Exited	926	921	865	895	871	903	885
Starting Vehs	525	481	486	482	466	468	469
Ending Vehs	453	470	480	462	443	496	478
Travel Distance (mi)	4900	4943	4718	4790	4535	4897	4796
Travel Time (hr)	122.0	124.2	115.8	119.0	110.4	123.2	119.6
Total Delay (hr)	23.9	23.5	20.6	22.0	18.3	23.9	22.7
Total Stops	1319	1307	1185	1216	1057	1354	1264
Fuel Used (gal)	144.8	144.8	138.7	138.7	133.2	144.4	140.5

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	889	921	921	880	865	937	887
Vehs Exited	909	907	885	863	852	889	900
Starting Vehs	499	471	480	481	450	470	482
Ending Vehs	479	485	516	498	463	518	469
Travel Distance (mi)	4983	4903	5008	4922	4796	4901	4847
Travel Time (hr)	128.8	120.9	124.6	121.7	118.6	122.5	122.2
Total Delay (hr)	28.2	21.8	23.3	22.8	22.0	23.4	23.5
Total Stops	1536	1182	1316	1226	1208	1295	1297
Fuel Used (gal)	145.4	141.9	145.6	141.5	140.5	144.5	141.6

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	866	891	918	821	870	916	875
Vehs Exited	896	907	857	874	860	965	883
Starting Vehs	451	522	476	505	461	548	476
Ending Vehs	421	506	537	452	471	499	468
Travel Distance (mi)	4541	5181	4966	4824	4757	5118	4952
Travel Time (hr)	112.9	128.8	126.3	119.6	117.5	134.5	122.2
Total Delay (hr)	20.3	25.0	26.4	22.4	22.1	30.3	22.9
Total Stops	1142	1329	1411	1204	1196	1635	1249
Fuel Used (gal)	131.3	151.5	145.3	142.2	139.5	149.9	145.1

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	874	837	898	942	849	873	885
Vehs Exited	833	825	923	893	819	905	885
Starting Vehs	453	470	480	462	443	496	478
Ending Vehs	494	482	455	511	473	464	479
Travel Distance (mi)	4793	4679	4818	4869	4723	4674	4863
Travel Time (hr)	117.6	113.4	118.7	120.9	114.9	115.3	121.1
Total Delay (hr)	20.3	19.0	21.5	22.2	19.8	20.5	22.9
Total Stops	1152	1138	1216	1236	1065	1163	1261
Fuel Used (gal)	140.8	135.5	140.7	141.8	137.8	136.9	142.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	938	927	891	893	882	890	865
Vehs Exited	909	917	917	885	896	945	878
Starting Vehs	479	485	516	498	463	518	469
Ending Vehs	508	495	490	506	449	463	456
Travel Distance (mi)	5084	4797	4850	5052	4726	4939	4674
Travel Time (hr)	125.7	119.3	121.0	123.9	117.6	122.1	117.5
Total Delay (hr)	22.8	21.5	22.8	22.2	21.0	21.9	22.2
Total Stops	1276	1205	1239	1228	1222	1249	1331
Fuel Used (gal)	149.9	140.4	140.5	146.1	139.4	145.7	136.8

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	905	934	895	887	892	880	900
Vehs Exited	841	889	920	852	889	893	877
Starting Vehs	421	506	537	452	471	499	468
Ending Vehs	485	551	512	487	474	486	491
Travel Distance (mi)	4796	5398	5066	4827	4873	4813	4873
Travel Time (hr)	118.9	133.4	131.6	117.3	120.4	120.1	121.3
Total Delay (hr)	22.1	25.7	28.8	20.8	22.0	22.4	22.9
Total Stops	1206	1268	1519	1147	1205	1283	1305
Fuel Used (gal)	140.4	157.2	148.5	140.5	142.9	141.5	142.2

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	912	912	905	910	896	885	898
Vehs Exited	916	890	866	934	881	879	894
Starting Vehs	494	482	455	511	473	464	479
Ending Vehs	490	504	494	487	488	470	487
Travel Distance (mi)	4859	4882	4791	5050	4866	4730	4897
Travel Time (hr)	119.6	119.9	118.4	125.7	122.9	119.0	121.8
Total Delay (hr)	20.6	21.8	22.0	23.6	24.3	23.3	22.7
Total Stops	1169	1211	1254	1298	1300	1242	1259
Fuel Used (gal)	143.4	140.8	142.2	148.0	141.9	138.7	143.3

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.3	0.9	2.3	0.0	0.0	0.0	3.8	4.1	0.2	0.2	0.2	0.6
Total Del/Veh (s)	32.3	30.4	9.0	45.7	35.0	27.0	24.5	12.7	26.1	25.6	9.6	30.9

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.1	0.3	0.1	0.1	1.0	0.3	0.9	0.9	0.1	0.1
Total Del/Veh (s)	78.8	62.2	52.6	56.6	37.8	30.6	52.8	26.5	17.5	44.2	29.2	10.5

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	48.6

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	30.1	18.5	12.8	32.2	25.2	25.1	26.8	12.8	15.6	24.4

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.3	0.1	0.1	0.1	0.1
Total Del/Veh (s)	14.7	15.5	11.2	8.0	9.2	1.4	11.9

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.9	8.1	16.6	20.6	5.5	1.4	11.8

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.3	0.4	0.0	0.0	0.5	1.7	0.5
Total Del/Veh (s)	38.2	37.4	11.5	6.3	60.1	10.3	26.3

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.3	0.4	1.4	0.3
Total Del/Veh (s)	26.5	9.8	19.8	19.0	17.3	4.5	17.6

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	80.3

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	30.4	61.1	0.5	28
Murieta Pkwy	2	61.8	257.0	3.2	45
Murieta S Pkwy	3	19.5	87.5	1.1	44
Ione Rd	4	14.9	145.2	2.2	53
Project Access	5	7.9	81.9	1.3	59
	17	20.1	203.6	3.0	52
E. Plymouth Hwy (SR	6	38.2	311.8	5.5	64
Golden Chain Hwy (SR	7	23.8	42.3	0.3	25
Total		216.6	1190.5	17.1	52

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	10.1	28.7	0.3	36
	17	21.4	299.6	5.5	67
Project Access	5	20.6	197.2	3.0	54
Ione Rd	4	8.6	83.2	1.3	58
Murieta S Pkwy	3	32.4	161.0	2.2	48
Murieta Pkwy	2	38.7	99.4	1.1	39
Kiefer Bl	1	35.5	228.6	3.2	51
Total		167.3	1097.7	16.6	54

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	R	L	TR
Maximum Queue (ft)	177	666	169	77	299	40	28	121	76
Average Queue (ft)	17	254	13	30	102	5	7	52	34
95th Queue (ft)	108	544	133	63	233	24	22	100	62
Link Distance (ft)		2403			17014				3736
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	470		500	720		300	140	180	
Storage Blk Time (%)		3	0					0	
Queuing Penalty (veh)		1	0					0	

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	TR	L	T	R
Maximum Queue (ft)	456	673	75	174	408	113	217	113	99	150	100
Average Queue (ft)	178	313	41	56	210	68	66	50	39	70	45
95th Queue (ft)	376	593	93	144	362	116	156	94	88	126	81
Link Distance (ft)		17014			5566		2490			2440	2440
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	450		50	150		90		90	80		
Storage Blk Time (%)	0	39	1	0	18	11	1	1	2	7	
Queuing Penalty (veh)	0	136	7	0	8	26	3	2	3	3	

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	TR	LTR	LT	R
Maximum Queue (ft)	209	186	294	42	29	127
Average Queue (ft)	104	63	131	10	6	51
95th Queue (ft)	180	147	247	33	21	101
Link Distance (ft)		5566	11290	438	2987	2987
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	430					
Storage Blk Time (%)			2			
Queuing Penalty (veh)			0			

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	9	32	50
Average Queue (ft)	0	8	6
95th Queue (ft)	5	27	34
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	5	38	11
Average Queue (ft)	0	14	1
95th Queue (ft)	4	30	6
Link Distance (ft)		447	447
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	3	106	214	18	261	225
Average Queue (ft)	0	23	89	1	113	72
95th Queue (ft)	3	79	167	25	218	178
Link Distance (ft)	29198			1475	2881	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		220	260			240
Storage Blk Time (%)			0		1	0
Queuing Penalty (veh)			0		3	0

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	228	90	130	131	236	54
Average Queue (ft)	117	16	62	57	123	3
95th Queue (ft)	190	62	110	102	197	35
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 192

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_1_Kiefer_MurietaSouth_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	709	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.76	Total Trucks, %	8.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.42

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.00043	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34718	PF Power Coefficient	0.68713
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.8

Vehicle Results

Average Speed, mi/h	58.8	Percent Followers, %	65.5
Segment Travel Time, minutes	4.38	Followers Density, followers/mi/ln	7.9
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_1_Kiefer_MurietaSouth_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1378	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.81	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.81

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	19.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	57.8

Vehicle Results

Average Speed, mi/h	57.8	Percent Followers, %	81.3
Segment Travel Time, minutes	4.45	Followers Density, followers/mi/ln	19.4
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_1_Kiefer_MurietaSouth_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1094	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.64

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	14.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.3

Vehicle Results

Average Speed, mi/h	58.3	Percent Followers, %	76.1
Segment Travel Time, minutes	4.42	Followers Density, followers/mi/ln	14.3
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_1_Kiefer_MurietaSouth_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	686	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.00945	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34624	PF Power Coefficient	0.68681
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	59.0

Vehicle Results

Average Speed, mi/h	59.0	Percent Followers, %	64.6
Segment Travel Time, minutes	4.36	Followers Density, followers/mi/ln	7.5
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_2_MurietaSouth_Mariah_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	510	Opposing Demand Flow Rate, veh/h	688
Peak Hour Factor	0.68	Total Trucks, %	7.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	3.84399	Speed Power Coefficient	0.46077
PF Slope Coefficient	-1.25958	PF Power Coefficient	0.77294
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.8

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	52.7
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	4.5
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_2_MurietaSouth_Mariah_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	510	Opposing Demand Flow Rate, veh/h	377
Peak Hour Factor	0.91	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.78353	Speed Power Coefficient	0.50060
PF Slope Coefficient	-1.23244	PF Power Coefficient	0.78362
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.1

Vehicle Results

Average Speed, mi/h	60.1	Percent Followers, %	51.7
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	4.4
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_2_MurietaSouth_Mariah_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	578	Opposing Demand Flow Rate, veh/h	400
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.78832	Speed Power Coefficient	0.49686
PF Slope Coefficient	-1.23303	PF Power Coefficient	0.78540
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.9

Vehicle Results

Average Speed, mi/h	59.9	Percent Followers, %	55.2
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	5.3
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_2_MurietaSouth_Mariah_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	410	Opposing Demand Flow Rate, veh/h	593
Peak Hour Factor	0.94	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.82905	Speed Power Coefficient	0.47073
PF Slope Coefficient	-1.25500	PF Power Coefficient	0.77369
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.2

Vehicle Results

Average Speed, mi/h	60.2	Percent Followers, %	46.7
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	3.2
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_3_Mariah_LongGate _AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	243	Opposing Demand Flow Rate, veh/h	326
Peak Hour Factor	0.87	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	5.03126	Speed Power Coefficient	0.60996
PF Slope Coefficient	-1.20523	PF Power Coefficient	0.79261
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.5

Vehicle Results

Average Speed, mi/h	59.5	Percent Followers, %	32.4
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	1.3
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_3_Mariah_LongGate _AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	301	Opposing Demand Flow Rate, veh/h	224
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.07420	Speed Power Coefficient	0.61830
PF Slope Coefficient	-1.18822	PF Power Coefficient	0.79314
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.6

Vehicle Results

Average Speed, mi/h	60.6	Percent Followers, %	36.8
Segment Travel Time, minutes	1.84	Followers Density, followers/mi/ln	1.8
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_3_Mariah_LongGate _PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	394	Opposing Demand Flow Rate, veh/h	261
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.88231	Speed Power Coefficient	0.60000
PF Slope Coefficient	-1.19418	PF Power Coefficient	0.79223
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.3

Vehicle Results

Average Speed, mi/h	60.3	Percent Followers, %	43.5
Segment Travel Time, minutes	1.77	Followers Density, followers/mi/ln	2.8
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Proj_3_Mariah_LongGate _PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	309	Opposing Demand Flow Rate, veh/h	466
Peak Hour Factor	0.81	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	4.59771	Speed Power Coefficient	0.57331
PF Slope Coefficient	-1.23732	PF Power Coefficient	0.77728
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	59.9

Vehicle Results

Average Speed, mi/h	59.9	Percent Followers, %	39.1
Segment Travel Time, minutes	1.86	Followers Density, followers/mi/ln	2.0
Vehicle LOS	B		

Michael Baker
INTERNATIONAL

Appendix F: Existing Plus Approved and Pending Projects Without Project SimTraffic and HCM Worksheets

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4088	4052	4068	4160	4038	4049	4062
Vehs Exited	3846	3809	3911	3931	3825	3838	3897
Starting Vehs	581	588	608	503	556	596	617
Ending Vehs	823	831	765	732	769	807	782
Travel Distance (mi)	22473	21375	21581	22511	21972	21859	22637
Travel Time (hr)	684.5	707.0	691.3	690.1	640.9	666.8	711.1
Total Delay (hr)	236.0	277.5	256.7	238.6	201.5	229.5	257.7
Total Stops	8635	9048	9192	8284	8244	8813	8892
Fuel Used (gal)	692.0	670.9	669.3	693.0	669.6	672.6	699.8

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4013	4036	3964	4002	4081	3973	4004
Vehs Exited	3844	3854	3795	3900	3942	3881	3817
Starting Vehs	621	575	526	559	544	555	570
Ending Vehs	790	757	695	661	683	647	757
Travel Distance (mi)	21598	21739	21218	22028	22343	22143	21506
Travel Time (hr)	676.9	684.8	619.8	671.2	636.3	607.9	665.4
Total Delay (hr)	244.4	250.1	194.5	230.0	188.7	165.8	234.8
Total Stops	8548	8424	8088	8116	7838	7250	8152
Fuel Used (gal)	670.4	676.0	650.2	677.3	678.2	668.7	663.8

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4084	4083	4034	4069	4108	4052	4049
Vehs Exited	3835	3924	3830	3953	3891	3843	3867
Starting Vehs	591	674	580	581	562	568	576
Ending Vehs	840	833	784	697	779	777	756
Travel Distance (mi)	21723	21762	21731	21892	22014	21623	21886
Travel Time (hr)	734.7	697.1	677.3	639.9	655.7	680.8	672.0
Total Delay (hr)	299.2	259.9	242.5	203.1	213.7	247.3	233.6
Total Stops	9157	8894	8544	7734	8332	8612	8441
Fuel Used (gal)	683.2	676.5	669.1	674.8	672.4	670.5	674.9

Interval #0 Information Seeding

Start Time	6:30
End Time	7:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1026	1003	1017	1086	983	980	987
Vehs Exited	1020	960	977	927	943	951	945
Starting Vehs	581	588	608	503	556	596	617
Ending Vehs	587	631	648	662	596	625	659
Travel Distance (mi)	5621	5472	5659	5476	5513	5521	5669
Travel Time (hr)	146.6	150.2	158.6	147.4	140.7	149.6	157.6
Total Delay (hr)	34.4	39.7	44.9	37.4	31.0	39.5	43.9
Total Stops	1687	1909	2082	1912	1489	1784	1916
Fuel Used (gal)	169.2	165.4	169.5	163.5	165.5	167.8	170.3

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	985	991	987	1061	1030	1032	979
Vehs Exited	986	931	918	964	957	993	920
Starting Vehs	621	575	526	559	544	555	570
Ending Vehs	620	635	595	656	617	594	629
Travel Distance (mi)	5360	5366	5091	5586	5333	5569	5402
Travel Time (hr)	156.9	153.4	137.9	150.9	144.2	144.4	150.1
Total Delay (hr)	49.2	45.9	35.7	39.1	36.3	32.9	41.9
Total Stops	2039	2011	1866	1941	1782	1544	1862
Fuel Used (gal)	163.5	163.2	154.4	167.8	160.2	165.1	162.2

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1010	1019	1038	979	1018	1029	1011
Vehs Exited	935	1065	978	985	976	1002	966
Starting Vehs	591	674	580	581	562	568	576
Ending Vehs	666	628	640	575	604	595	624
Travel Distance (mi)	5522	5795	5656	5463	5539	5525	5507
Travel Time (hr)	158.6	162.9	152.1	146.6	148.5	148.7	150.3
Total Delay (hr)	48.0	46.5	39.1	37.4	37.2	37.5	39.9
Total Stops	2123	2390	1923	1774	1873	1722	1880
Fuel Used (gal)	165.9	175.6	168.6	164.7	165.7	164.8	165.7

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1037	1023	1039	1015	1000	1046	1024
Vehs Exited	919	913	1004	966	990	1015	984
Starting Vehs	587	631	648	662	596	625	659
Ending Vehs	705	741	683	711	606	656	699
Travel Distance (mi)	5752	5314	5288	5705	5441	5624	5364
Travel Time (hr)	161.9	169.7	166.1	174.2	150.0	157.0	166.0
Total Delay (hr)	47.3	63.5	59.2	60.5	41.0	44.7	58.2
Total Stops	2012	2271	2474	2242	1930	2134	2180
Fuel Used (gal)	173.4	165.9	162.9	174.4	164.2	170.6	165.4

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	954	1059	953	985	986	996	994
Vehs Exited	918	995	944	938	942	979	1004
Starting Vehs	620	635	595	656	617	594	629
Ending Vehs	656	699	604	703	661	611	619
Travel Distance (mi)	5198	5659	5267	5455	5542	5492	5455
Travel Time (hr)	161.7	171.4	150.2	168.1	156.7	148.0	161.8
Total Delay (hr)	57.6	58.4	44.9	59.1	45.9	38.2	52.4
Total Stops	2066	2064	1926	2258	1833	1872	2151
Fuel Used (gal)	162.6	173.7	161.3	168.5	168.6	166.6	167.0

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1032	1049	968	1052	987	1031	1011
Vehs Exited	959	1001	951	1004	994	914	970
Starting Vehs	666	628	640	575	604	595	624
Ending Vehs	739	676	657	623	597	712	664
Travel Distance (mi)	5568	5518	5346	5443	5241	5381	5453
Travel Time (hr)	178.2	165.7	162.4	152.0	152.2	159.3	161.6
Total Delay (hr)	66.7	54.4	55.5	43.2	46.5	51.1	52.4
Total Stops	2324	2111	2094	1902	1814	2142	2088
Fuel Used (gal)	171.8	168.5	162.9	167.5	159.9	163.1	166.9

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1032	1030	990	1043	1073	999	1052
Vehs Exited	993	992	948	1025	965	942	969
Starting Vehs	705	741	683	711	606	656	699
Ending Vehs	744	779	725	729	714	713	782
Travel Distance (mi)	5580	5361	5340	5611	5567	5390	5829
Travel Time (hr)	177.7	189.4	177.9	180.3	164.7	169.3	188.0
Total Delay (hr)	66.5	81.4	70.7	67.3	52.9	61.4	71.7
Total Stops	2367	2446	2176	2319	2195	2512	2466
Fuel Used (gal)	172.4	170.8	167.8	175.5	168.6	165.7	181.1

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1003	975	1017	953	1048	975	1004
Vehs Exited	929	960	939	960	1016	967	907
Starting Vehs	656	699	604	703	661	611	619
Ending Vehs	730	714	682	696	693	619	716
Travel Distance (mi)	5493	5433	5446	5565	5830	5571	5084
Travel Time (hr)	170.3	175.3	161.0	175.5	164.1	155.0	168.0
Total Delay (hr)	60.7	67.1	52.2	64.3	47.5	43.9	65.9
Total Stops	2089	2094	2081	2011	2041	1900	2294
Fuel Used (gal)	170.0	169.7	167.4	171.7	176.7	168.4	158.5

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1011	1012	989	1010	1066	975	1013
Vehs Exited	946	970	918	926	936	964	959
Starting Vehs	739	676	657	623	597	712	664
Ending Vehs	804	718	728	707	727	723	721
Travel Distance (mi)	5347	5370	5294	5454	5380	5419	5468
Travel Time (hr)	191.8	174.6	175.7	165.4	166.3	183.4	173.7
Total Delay (hr)	84.6	67.2	70.2	56.7	58.2	75.3	64.3
Total Stops	2411	2172	2093	1954	2078	2441	2206
Fuel Used (gal)	171.5	167.8	165.1	169.3	165.4	171.6	169.7

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	993	996	1022	1016	982	1024	999
Vehs Exited	914	944	982	1013	927	930	999
Starting Vehs	744	779	725	729	714	713	782
Ending Vehs	823	831	765	732	769	807	782
Travel Distance (mi)	5520	5229	5294	5718	5452	5323	5776
Travel Time (hr)	198.2	197.7	188.7	188.2	185.4	190.9	199.5
Total Delay (hr)	87.8	92.9	81.9	73.4	76.5	83.9	83.9
Total Stops	2569	2422	2460	1811	2630	2383	2330
Fuel Used (gal)	177.0	168.8	169.0	179.5	171.2	168.5	182.9

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1071	1011	1007	1003	1017	970	1027
Vehs Exited	1011	968	994	1038	1027	942	986
Starting Vehs	730	714	682	696	693	619	716
Ending Vehs	790	757	695	661	683	647	757
Travel Distance (mi)	5547	5281	5414	5423	5638	5510	5565
Travel Time (hr)	188.0	184.7	170.7	176.7	171.3	160.4	185.5
Total Delay (hr)	76.9	78.7	61.7	67.5	58.9	50.8	74.6
Total Stops	2354	2255	2215	1906	2182	1934	1845
Fuel Used (gal)	174.4	169.4	167.1	169.2	172.7	168.6	176.1

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1031	1003	1039	1028	1037	1017	1012
Vehs Exited	995	888	983	1038	985	963	978
Starting Vehs	804	718	728	707	727	723	721
Ending Vehs	840	833	784	697	779	777	756
Travel Distance (mi)	5287	5079	5435	5532	5853	5298	5459
Travel Time (hr)	206.1	193.8	187.1	175.8	188.7	189.5	186.3
Total Delay (hr)	99.9	91.8	77.9	65.9	71.8	83.4	77.0
Total Stops	2299	2221	2434	2104	2567	2307	2260
Fuel Used (gal)	173.9	164.6	172.5	173.3	181.3	171.1	172.6

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.5	0.8	2.4	1.4	5.6	0.0	3.9	0.6	3.8	0.1	0.1	0.1
Total Del/Veh (s)	49.2	18.1	4.9	252.8	253.0	258.3	42.5	39.8	13.6	44.2	53.7	28.1

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	3.5
Total Del/Veh (s)	161.7

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.3	0.5	0.1	0.0	0.1	0.9	0.3	1.0	0.7	0.2	0.1
Total Del/Veh (s)	39.5	31.1	22.7	48.8	27.6	5.0	45.0	36.3	16.7	47.1	37.1	23.3

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	29.4

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	33.9	22.5	13.7	48.9	36.1	32.6	29.9	4.5	13.7	18.1	22.7	25.2

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.5	0.2	0.1	0.1	0.1
Total Del/Veh (s)	14.2	14.3	7.7	8.4	8.4	1.6	10.9

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	5.9	6.7	19.6	4.0	13.6

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.2	1.6	0.2
Total Del/Veh (s)	30.2	30.2	4.8	3.7	9.4	2.6	15.6

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.4	0.5	1.3	0.5
Total Del/Veh (s)	22.0	6.0	15.7	18.5	13.4	4.2	12.8

Total Network Performance

Denied Del/Veh (s)	2.6
Total Del/Veh (s)	179.6

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	18.1	48.8	0.5	35
	23	11.4	75.8	1.0	47
	22	16.9	142.0	2.0	50
Murieta Pkwy	2	31.1	45.0	0.2	18
	16	6.0	14.7	0.1	32
Murieta S Pkwy	3	22.5	80.2	0.9	42
Ione Rd	4	14.8	145.8	2.2	53
Project Access	5	5.9	77.9	1.3	62
	17	17.5	203.1	3.0	53
E. Plymouth Hwy (SR	6	30.2	291.0	5.5	69
Golden Chain Hwy (SR	7	21.2	40.0	0.3	26
Total		195.6	1164.3	17.0	53

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	6.6	24.5	0.3	42
	17	34.0	353.5	5.5	56
Project Access	5	19.6	178.2	3.0	60
Ione Rd	4	8.4	81.6	1.3	59
Murieta S Pkwy	3	36.1	162.3	2.2	48
	16	11.8	71.4	0.9	47
Murieta Pkwy	2	27.6	35.7	0.1	13
	22	23.5	38.0	0.2	21
	23	71.9	196.0	2.0	36
Kiefer Bl	1	253.0	317.2	1.0	12
Total		492.4	1458.4	16.5	41

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	B23	B22	B22	NB	NB	NB	SB
Directions Served	L	T	R	L	TR	T	T		L	T	R	L
Maximum Queue (ft)	99	403	53	745	5100	2041	855	567	116	48	82	51
Average Queue (ft)	29	174	6	505	2861	246	123	46	49	14	30	12
95th Queue (ft)	65	344	44	1022	5286	1473	649	369	97	38	63	37
Link Distance (ft)		2403			5188	10378	1080	1080		361		
Upstream Blk Time (%)					6		0	0				
Queuing Penalty (veh)					89		1	0				
Storage Bay Dist (ft)	470		500	720					300		140	180
Storage Blk Time (%)		0		0	30						0	
Queuing Penalty (veh)		0		0	49						0	

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	SB
Directions Served	TR
Maximum Queue (ft)	43
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	3736
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	T	R	L	T	TR	L
Maximum Queue (ft)	82	436	674	75	169	317	251	149	108	133	59	104
Average Queue (ft)	26	86	300	28	50	192	131	26	59	21	13	77
95th Queue (ft)	64	280	587	79	138	286	214	78	107	83	40	118
Link Distance (ft)			1080			603	603			2468		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	450	450		50	150			150	90		90	80
Storage Blk Time (%)			35	1	0	18	3	0	7		0	21
Queuing Penalty (veh)			70	4	0	7	2	0	6		0	14

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	SB	SB	SB
Directions Served	T	R	R
Maximum Queue (ft)	232	330	287
Average Queue (ft)	66	185	126
95th Queue (ft)	179	292	250
Link Distance (ft)	2407	2407	2407
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)	2		
Queuing Penalty (veh)	2		

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	LT	R
Maximum Queue (ft)	127	220	181	153	363	90	12	42	248
Average Queue (ft)	60	102	68	16	160	34	2	8	118
95th Queue (ft)	106	186	128	80	295	71	8	28	210
Link Distance (ft)		4858			11283	421	421	2983	2983
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	430		200	200					
Storage Blk Time (%)		0	0		5				
Queuing Penalty (veh)		2	0		1				

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	19	23	36
Average Queue (ft)	1	3	2
95th Queue (ft)	10	15	16
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	NB
Directions Served	L
Maximum Queue (ft)	20
Average Queue (ft)	4
95th Queue (ft)	16
Link Distance (ft)	404
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	EB	WB	NB	NB
Directions Served	T	R	L	L	R
Maximum Queue (ft)	2	32	52	85	46
Average Queue (ft)	0	2	13	36	3
95th Queue (ft)	2	18	39	66	25
Link Distance (ft)	29198			2881	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		220	260		240
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	149	114	167	125	176	44
Average Queue (ft)	68	22	79	55	86	3
95th Queue (ft)	123	80	134	97	144	24
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Network Summary

Network wide Queuing Penalty: 248

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4599	4621	4675	4658	4595	4592	4440
Vehs Exited	4617	4557	4675	4680	4578	4566	4375
Starting Vehs	704	646	691	716	679	666	648
Ending Vehs	686	710	691	694	696	692	713
Travel Distance (mi)	23699	22657	23937	23250	23574	23617	22286
Travel Time (hr)	928.0	806.6	815.7	837.1	857.2	760.8	824.9
Total Delay (hr)	444.4	345.5	328.3	363.1	377.5	282.4	371.5
Total Stops	8125	8120	8751	8722	8581	8105	7461
Fuel Used (gal)	778.0	728.0	758.4	744.7	757.5	738.6	716.9

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4668	4425	4626	4610	4605	4521	4528
Vehs Exited	4572	4493	4588	4563	4530	4556	4506
Starting Vehs	660	699	635	688	675	701	663
Ending Vehs	756	631	673	735	750	666	685
Travel Distance (mi)	23184	22806	23345	23018	23329	23100	22836
Travel Time (hr)	836.0	772.7	855.5	872.9	874.4	897.7	920.9
Total Delay (hr)	364.6	309.1	382.5	403.8	401.8	427.2	456.9
Total Stops	8317	7880	8000	7787	8092	7801	7973
Fuel Used (gal)	744.7	720.1	750.3	750.0	755.3	758.8	757.2

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4545	4427	4531	4403	4523	4480	4556
Vehs Exited	4492	4415	4527	4448	4550	4477	4540
Starting Vehs	635	643	647	683	693	698	671
Ending Vehs	688	655	651	638	666	701	687
Travel Distance (mi)	23018	21921	23015	22362	22897	23044	23045
Travel Time (hr)	855.0	914.0	934.9	887.5	934.7	914.1	865.0
Total Delay (hr)	387.8	466.9	466.2	432.0	469.0	448.3	396.4
Total Stops	7636	7143	7907	7464	7969	8155	8000
Fuel Used (gal)	739.9	731.3	760.8	737.0	756.9	759.4	747.2

Interval #0 Information Seeding

Start Time	4:30
End Time	5:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1178	1145	1136	1169	1124	1186	1109
Vehs Exited	1198	1120	1165	1173	1114	1170	1090
Starting Vehs	704	646	691	716	679	666	648
Ending Vehs	684	671	662	712	689	682	667
Travel Distance (mi)	6006	5640	5836	5659	5980	5859	5629
Travel Time (hr)	199.3	175.7	189.3	190.1	190.8	181.3	175.1
Total Delay (hr)	76.6	61.5	70.4	74.2	69.7	61.7	60.3
Total Stops	2126	1955	2237	2388	1966	2099	1896
Fuel Used (gal)	190.1	175.4	184.7	177.1	186.5	181.6	173.4

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1168	1100	1201	1088	1145	1138	1113
Vehs Exited	1161	1111	1142	1124	1137	1180	1091
Starting Vehs	660	699	635	688	675	701	663
Ending Vehs	667	688	694	652	683	659	685
Travel Distance (mi)	5743	5898	5949	5612	5660	5970	5571
Travel Time (hr)	171.6	170.8	195.7	178.7	191.2	196.8	193.1
Total Delay (hr)	55.0	51.0	75.1	64.4	76.7	75.0	80.2
Total Stops	2117	2025	2082	1917	1982	2069	1769
Fuel Used (gal)	176.3	178.3	186.0	176.4	180.2	187.7	178.6

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1120	1114	1162	1083	1123	1119	1134
Vehs Exited	1114	1092	1102	1096	1115	1133	1132
Starting Vehs	635	643	647	683	693	698	671
Ending Vehs	641	665	707	670	701	684	676
Travel Distance (mi)	5640	5606	5841	5862	5750	5854	5778
Travel Time (hr)	179.8	195.6	206.0	194.5	211.2	199.2	189.3
Total Delay (hr)	64.8	81.9	87.3	75.8	94.3	81.5	71.9
Total Stops	1756	1689	2066	1889	2100	2093	2011
Fuel Used (gal)	173.9	178.1	186.0	182.3	185.1	185.3	181.1

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1151	1137	1165	1181	1166	1136	1097
Vehs Exited	1117	1140	1108	1200	1168	1125	1137
Starting Vehs	684	671	662	712	689	682	667
Ending Vehs	718	668	719	693	687	693	627
Travel Distance (mi)	5732	5651	6064	5977	5806	5941	5644
Travel Time (hr)	220.1	193.9	200.0	209.1	213.2	182.0	193.3
Total Delay (hr)	102.4	79.1	77.2	87.5	94.5	62.8	78.9
Total Stops	2008	1981	2223	2378	2216	2194	1935
Fuel Used (gal)	186.4	179.4	189.4	190.9	186.5	184.7	179.7

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1121	1115	1125	1209	1124	1113	1133
Vehs Exited	1104	1125	1162	1157	1126	1101	1112
Starting Vehs	667	688	694	652	683	659	685
Ending Vehs	684	678	657	704	681	671	706
Travel Distance (mi)	5652	5613	5731	5761	5761	5649	5775
Travel Time (hr)	195.0	188.8	200.4	203.6	211.3	210.0	223.7
Total Delay (hr)	80.0	74.0	84.3	85.6	94.5	95.4	106.5
Total Stops	1815	2028	2051	1955	1793	1950	2112
Fuel Used (gal)	180.1	176.9	182.0	183.8	185.8	183.9	188.7

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1170	1076	1059	1097	1116	1090	1131
Vehs Exited	1100	1091	1124	1118	1159	1099	1129
Starting Vehs	641	665	707	670	701	684	676
Ending Vehs	711	650	642	649	658	675	677
Travel Distance (mi)	5564	5420	5640	5489	5693	5570	5707
Travel Time (hr)	199.6	217.5	225.6	209.0	224.3	215.9	206.8
Total Delay (hr)	85.9	107.6	111.5	97.1	108.3	102.9	90.8
Total Stops	1812	1759	1926	1852	1896	2042	1992
Fuel Used (gal)	176.9	178.6	187.2	179.2	186.1	182.1	183.4

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1155	1131	1193	1168	1181	1124	1105
Vehs Exited	1124	1145	1171	1192	1161	1142	1052
Starting Vehs	718	668	719	693	687	693	627
Ending Vehs	749	654	741	669	707	675	680
Travel Distance (mi)	5837	5742	6217	5763	5814	5945	5560
Travel Time (hr)	244.8	209.9	211.2	212.6	223.8	190.7	214.2
Total Delay (hr)	125.6	92.8	84.8	94.8	105.0	70.9	101.6
Total Stops	2038	1945	2160	1971	2315	1941	1739
Fuel Used (gal)	195.2	185.7	195.2	186.2	189.1	185.8	180.9

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1176	1132	1145	1155	1128	1128	1129
Vehs Exited	1119	1138	1097	1134	1140	1106	1107
Starting Vehs	684	678	657	704	681	671	706
Ending Vehs	741	672	705	725	669	693	728
Travel Distance (mi)	5830	5837	6021	5759	5812	5741	5761
Travel Time (hr)	220.3	204.4	223.5	230.7	229.8	231.9	240.1
Total Delay (hr)	102.0	86.2	102.1	113.7	112.1	115.0	123.5
Total Stops	2198	1952	1951	1945	2022	1880	1996
Fuel Used (gal)	189.7	185.9	193.6	189.8	190.8	190.7	192.6

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1150	1114	1170	1097	1128	1096	1138
Vehs Exited	1114	1147	1107	1110	1105	1068	1124
Starting Vehs	711	650	642	649	658	675	677
Ending Vehs	747	617	705	636	681	703	695
Travel Distance (mi)	5897	5480	5613	5571	5663	5719	5779
Travel Time (hr)	233.2	240.1	241.8	225.4	240.1	236.0	225.2
Total Delay (hr)	114.1	127.5	127.1	112.6	125.2	120.4	107.8
Total Stops	2058	1810	1884	1891	1908	1936	1974
Fuel Used (gal)	193.2	184.7	188.6	185.0	188.9	190.6	189.1

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1115	1208	1181	1140	1124	1146	1129
Vehs Exited	1178	1152	1231	1115	1135	1129	1096
Starting Vehs	749	654	741	669	707	675	680
Ending Vehs	686	710	691	694	696	692	713
Travel Distance (mi)	6124	5623	5820	5851	5974	5872	5454
Travel Time (hr)	263.8	227.2	215.2	225.4	229.4	206.8	242.2
Total Delay (hr)	139.8	112.2	96.0	106.7	108.4	86.9	130.7
Total Stops	1953	2239	2131	1985	2084	1871	1891
Fuel Used (gal)	206.3	187.5	189.1	190.5	195.3	186.4	182.9

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1203	1078	1155	1158	1208	1142	1153
Vehs Exited	1188	1119	1187	1148	1127	1169	1196
Starting Vehs	741	672	705	725	669	693	728
Ending Vehs	756	631	673	735	750	666	685
Travel Distance (mi)	5958	5457	5644	5886	6096	5740	5729
Travel Time (hr)	249.2	208.8	236.0	259.9	242.0	258.9	264.0
Total Delay (hr)	127.6	97.9	121.0	140.0	118.4	141.7	146.7
Total Stops	2187	1875	1916	1970	2295	1902	2096
Fuel Used (gal)	198.6	179.0	188.7	200.1	198.5	196.5	197.3

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1105	1123	1140	1126	1156	1175	1148
Vehs Exited	1164	1085	1194	1124	1171	1177	1155
Starting Vehs	747	617	705	636	681	703	695
Ending Vehs	688	655	651	638	666	701	687
Travel Distance (mi)	5917	5415	5921	5440	5790	5901	5781
Travel Time (hr)	242.4	260.8	261.5	258.6	259.2	263.1	243.7
Total Delay (hr)	122.8	149.9	140.3	146.5	141.3	143.5	125.9
Total Stops	2010	1885	2031	1832	2065	2084	2015
Fuel Used (gal)	195.8	190.0	199.0	190.5	196.7	201.5	193.5

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	487.8	463.1	446.8	0.0	0.0	0.0	4.1	4.0	0.2	0.2	0.2	234.4
Total Del/Veh (s)	221.7	239.6	197.7	43.8	27.7	25.8	37.4	20.2	42.5	29.7	21.3	124.9

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.1	0.4	0.9	0.1	0.4	0.9	0.3	1.0	0.9	0.2	0.1
Total Del/Veh (s)	44.1	27.0	16.5	60.3	39.9	10.8	66.8	35.2	23.6	55.1	35.3	12.5

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	33.8

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.2	0.3	0.1	0.1	0.2
Total Del/Veh (s)	53.6	27.7	11.4	77.1	72.4	65.2	48.4	34.9	6.5	30.1	41.3	46.0

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.4	0.2	0.1	0.1	0.1
Total Del/Veh (s)	16.4	14.0	10.4	9.0	10.0	1.6	13.1

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	7.8	10.6	21.4	3.8	13.0

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.5	1.6	0.4
Total Del/Veh (s)	38.5	39.9	11.9	6.8	158.0	55.2	45.8

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.9	0.3	0.4	1.3	0.3
Total Del/Veh (s)	26.3	9.7	20.1	18.7	17.2	4.6	17.4

Total Network Performance

Denied Del/Veh (s)	133.7
Total Del/Veh (s)	148.5

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	239.6	821.4	0.5	6
	23	14.2	76.0	1.0	45
	22	20.4	150.8	2.1	49
Murieta Pkwy	2	27.0	38.6	0.2	17
	16	5.4	14.0	0.1	33
Murieta S Pkwy	3	27.7	87.4	0.9	39
Ione Rd	4	17.0	145.9	2.2	53
Project Access	5	7.7	83.2	1.3	58
	17	21.1	205.9	3.0	52
E. Plymouth Hwy (SR	6	38.5	315.0	5.5	63
Golden Chain Hwy (SR	7	23.8	42.4	0.3	24
Total		442.4	1980.7	17.0	43

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	10.2	28.3	0.3	37
	17	23.7	300.8	5.5	66
Project Access	5	21.4	198.3	3.0	54
Ione Rd	4	9.0	84.6	1.3	57
Murieta S Pkwy	3	72.6	200.4	2.2	39
	16	12.9	71.6	0.9	47
Murieta Pkwy	2	39.9	47.8	0.1	10
	22	16.2	28.5	0.2	23
	23	16.6	147.1	2.1	50
Kiefer Bl	1	27.7	86.4	1.0	40
Total		250.3	1193.7	16.5	50

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	B22	B22	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	T		L	R	L	TR
Maximum Queue (ft)	494	2453	525	253	633	311	44	42	38	163	115
Average Queue (ft)	69	2398	114	42	240	17	2	6	8	72	41
95th Queue (ft)	336	2673	467	148	515	217	63	26	26	140	90
Link Distance (ft)		2403			4980	890	890				3736
Upstream Blk Time (%)		73				0	0				
Queuing Penalty (veh)		0				0	0				
Storage Bay Dist (ft)	470		500	720				300	140	180	
Storage Blk Time (%)		51	0		0					1	
Queuing Penalty (veh)		21	0		0					1	

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	T	R	L	T	TR	L
Maximum Queue (ft)	249	322	475	75	174	407	337	175	114	286	114	104
Average Queue (ft)	150	165	234	36	71	255	177	74	74	88	57	71
95th Queue (ft)	224	258	409	88	177	384	307	164	124	219	107	118
Link Distance (ft)			890			591	591			2482		
Upstream Blk Time (%)						0	0					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)	450	450		50	150			150	90		90	80
Storage Blk Time (%)			33	0	0	36	8	0	18	2	3	15
Queuing Penalty (veh)			260	5	0	16	14	0	41	6	5	17

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	SB	SB	SB
Directions Served	T	R	R
Maximum Queue (ft)	241	149	102
Average Queue (ft)	82	67	21
95th Queue (ft)	183	122	60
Link Distance (ft)	2405	2405	2405
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)	6		
Queuing Penalty (veh)	6		

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	LT	R
Maximum Queue (ft)	308	316	216	143	548	420	91	29	224
Average Queue (ft)	167	151	44	9	287	242	10	4	96
95th Queue (ft)	272	269	143	70	510	394	71	18	190
Link Distance (ft)		4868			11283	421	421	2983	2983
Upstream Blk Time (%)						2	0		
Queuing Penalty (veh)						0	0		
Storage Bay Dist (ft)	430		200	200					
Storage Blk Time (%)	0	4	0		30				
Queuing Penalty (veh)	0	16	0		2				

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	9	28	52
Average Queue (ft)	0	7	5
95th Queue (ft)	5	25	30
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	NB
Directions Served	L
Maximum Queue (ft)	12
Average Queue (ft)	1
95th Queue (ft)	6
Link Distance (ft)	425
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	6	106	213	21	883	265
Average Queue (ft)	0	22	91	1	353	144
95th Queue (ft)	6	78	169	29	937	323
Link Distance (ft)	29198			1475	2881	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		220	260			240
Storage Blk Time (%)			0		31	1
Queuing Penalty (veh)			0		75	1

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	230	91	125	132	225	36
Average Queue (ft)	117	15	61	60	125	2
95th Queue (ft)	192	60	105	107	199	20
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 487

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_1_Kiefer_MurietaSouth_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1078	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.76	Total Trucks, %	8.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.63

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.00043	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34718	PF Power Coefficient	0.68713
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	14.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.1

Vehicle Results

Average Speed, mi/h	58.1	Percent Followers, %	75.8
Segment Travel Time, minutes	4.43	Followers Density, followers/mi/ln	14.1
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_1_Kiefer_MurietaSouth_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1925	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.81	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.13

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	19.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	57.8

Vehicle Results

Average Speed, mi/h	57.8	Percent Followers, %	81.3
Segment Travel Time, minutes	4.45	Followers Density, followers/mi/ln	19.4
Vehicle LOS	F		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_1_Kiefer_MurietaSouth_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1675	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.99

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	24.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	57.4

Vehicle Results

Average Speed, mi/h	57.4	Percent Followers, %	85.3
Segment Travel Time, minutes	4.48	Followers Density, followers/mi/ln	24.9
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_1_Kiefer_MurietaSouth_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1227	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.72

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.00945	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34624	PF Power Coefficient	0.68681
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	16.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.0

Vehicle Results

Average Speed, mi/h	58.0	Percent Followers, %	78.8
Segment Travel Time, minutes	4.44	Followers Density, followers/mi/ln	16.7
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_2_MurietaSouth_Mariah_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	535	Opposing Demand Flow Rate, veh/h	699
Peak Hour Factor	0.68	Total Trucks, %	7.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	3.84602	Speed Power Coefficient	0.45979
PF Slope Coefficient	-1.26022	PF Power Coefficient	0.77255
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.7

Vehicle Results

Average Speed, mi/h	59.7	Percent Followers, %	54.0
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	4.8
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_2_MurietaSouth_Mariah_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	518	Opposing Demand Flow Rate, veh/h	396
Peak Hour Factor	0.91	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.78843	Speed Power Coefficient	0.49747
PF Slope Coefficient	-1.23487	PF Power Coefficient	0.78263
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	4.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.0

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	52.2
Segment Travel Time, minutes	1.86	Followers Density, followers/mi/ln	4.5
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_2_MurietaSouth_Mariah_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	597	Opposing Demand Flow Rate, veh/h	400
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.78832	Speed Power Coefficient	0.49686
PF Slope Coefficient	-1.23303	PF Power Coefficient	0.78540
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.8

Vehicle Results

Average Speed, mi/h	59.8	Percent Followers, %	56.1
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	5.6
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_2_MurietaSouth_Mariah_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	439	Opposing Demand Flow Rate, veh/h	612
Peak Hour Factor	0.94	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.83311	Speed Power Coefficient	0.46860
PF Slope Coefficient	-1.25648	PF Power Coefficient	0.77290
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.1

Vehicle Results

Average Speed, mi/h	60.1	Percent Followers, %	48.5
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	3.5
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_3_Mariah_LongGate_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	292	Opposing Demand Flow Rate, veh/h	374
Peak Hour Factor	0.87	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	5.05725	Speed Power Coefficient	0.59949
PF Slope Coefficient	-1.21473	PF Power Coefficient	0.78930
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.2

Vehicle Results

Average Speed, mi/h	59.2	Percent Followers, %	36.9
Segment Travel Time, minutes	1.81	Followers Density, followers/mi/ln	1.8
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_3_Mariah_LongGate_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	345	Opposing Demand Flow Rate, veh/h	270
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.10765	Speed Power Coefficient	0.60496
PF Slope Coefficient	-1.19962	PF Power Coefficient	0.78932
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.3

Vehicle Results

Average Speed, mi/h	60.3	Percent Followers, %	40.4
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	2.3
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_3_Mariah_LongGate_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	448	Opposing Demand Flow Rate, veh/h	316
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.92015	Speed Power Coefficient	0.58562
PF Slope Coefficient	-1.20672	PF Power Coefficient	0.78794
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.5
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.1

Vehicle Results

Average Speed, mi/h	60.1	Percent Followers, %	47.3
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	3.5
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App +Pend_3_Mariah_LongGate_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	374	Opposing Demand Flow Rate, veh/h	530
Peak Hour Factor	0.81	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	4.62970	Speed Power Coefficient	0.56289
PF Slope Coefficient	-1.24753	PF Power Coefficient	0.77356
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	59.5

Vehicle Results

Average Speed, mi/h	59.5	Percent Followers, %	44.2
Segment Travel Time, minutes	1.87	Followers Density, followers/mi/ln	2.8
Vehicle LOS	B		

Michael Baker
INTERNATIONAL

Appendix G: Existing Plus Approved and Pending Projects Plus Project SimTraffic and HCM Worksheets

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4110	4168	4145	4119	4046	4114	4111
Vehs Exited	3916	3920	3877	3886	3903	3886	3949
Starting Vehs	566	609	606	585	637	585	586
Ending Vehs	760	857	874	818	780	813	748
Travel Distance (mi)	22100	22473	21717	22649	22393	22022	21960
Travel Time (hr)	642.7	733.1	733.4	705.0	743.9	688.5	671.6
Total Delay (hr)	201.1	283.2	296.9	252.6	294.9	247.9	231.2
Total Stops	7996	9333	9468	8631	9800	8879	8626
Fuel Used (gal)	672.8	699.6	686.0	701.8	700.4	678.0	676.9

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4118	4155	4113	4099	4172	4099	4142
Vehs Exited	3858	3861	3867	3846	3915	4032	3924
Starting Vehs	589	609	542	623	566	593	586
Ending Vehs	849	903	788	876	823	660	804
Travel Distance (mi)	22065	22062	21967	22570	22419	22283	22501
Travel Time (hr)	710.8	740.9	702.4	769.4	651.9	612.1	682.9
Total Delay (hr)	267.7	298.5	261.1	319.1	201.8	165.3	233.9
Total Stops	8924	9279	9011	9701	8232	7604	8410
Fuel Used (gal)	688.6	691.2	681.6	710.2	683.4	669.8	693.5

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	6:30	6:30	6:30	6:30	6:30	6:30	6:30
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4145	4165	4094	4053	4063	4179	4117
Vehs Exited	3802	3914	3897	3910	3798	3951	3895
Starting Vehs	590	581	635	653	564	600	593
Ending Vehs	933	832	832	796	829	828	825
Travel Distance (mi)	22497	22702	22185	22357	21657	23059	22282
Travel Time (hr)	762.1	666.5	761.3	741.4	706.6	702.8	706.5
Total Delay (hr)	312.0	211.2	317.7	293.6	272.3	243.3	260.3
Total Stops	9407	8158	9615	9120	9235	8660	8905
Fuel Used (gal)	705.0	692.6	702.9	699.3	674.8	710.0	690.9

Interval #0 Information Seeding

Start Time	6:30
End Time	7:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1011	1031	1022	1007	1051	1000	990
Vehs Exited	989	948	940	942	983	987	963
Starting Vehs	566	609	606	585	637	585	586
Ending Vehs	588	692	688	650	705	598	613
Travel Distance (mi)	5354	5588	5604	5503	5951	5576	5266
Travel Time (hr)	140.5	157.6	162.5	156.8	170.1	151.0	140.6
Total Delay (hr)	33.3	45.8	49.9	46.4	50.5	40.0	35.0
Total Stops	1730	2039	2222	2103	2368	1764	1755
Fuel Used (gal)	159.2	168.8	170.3	166.5	179.8	167.1	157.9

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1018	1056	1002	1002	1016	1000	964
Vehs Exited	964	1005	913	937	990	1012	956
Starting Vehs	589	609	542	623	566	593	586
Ending Vehs	643	660	631	688	592	581	594
Travel Distance (mi)	5618	5654	5416	5578	5624	5595	5287
Travel Time (hr)	158.1	161.8	150.3	160.2	146.9	146.8	145.2
Total Delay (hr)	45.5	47.8	41.6	48.9	34.5	34.8	39.4
Total Stops	2114	2075	1939	2219	1701	1681	1868
Fuel Used (gal)	170.7	168.9	163.1	169.6	168.3	167.5	159.8

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1023	997	1054	1001	1049	1058	1016
Vehs Exited	879	1032	936	1002	940	997	964
Starting Vehs	590	581	635	653	564	600	593
Ending Vehs	734	546	753	652	673	661	645
Travel Distance (mi)	5555	5439	5783	5828	5415	5621	5563
Travel Time (hr)	159.5	137.0	172.3	170.5	155.3	159.8	155.1
Total Delay (hr)	48.4	27.6	57.4	54.3	46.6	47.9	43.8
Total Stops	1924	1366	2205	2415	2099	2060	1981
Fuel Used (gal)	165.9	161.5	177.4	176.1	164.0	170.6	167.7

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1009	997	1029	1008	998	1077	1045
Vehs Exited	973	947	1031	939	952	992	980
Starting Vehs	588	692	688	650	705	598	613
Ending Vehs	624	742	686	719	751	683	678
Travel Distance (mi)	5481	5549	5436	5723	5789	5692	5606
Travel Time (hr)	152.6	176.0	177.2	174.2	188.7	167.5	168.4
Total Delay (hr)	43.2	65.6	68.0	59.8	72.9	53.5	56.4
Total Stops	1852	2406	2504	1911	2670	2316	2337
Fuel Used (gal)	163.9	171.0	170.6	176.0	179.3	173.6	172.2

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	979	997	1077	1033	1011	1047	1055
Vehs Exited	946	933	996	941	999	1029	953
Starting Vehs	643	660	631	688	592	581	594
Ending Vehs	676	724	712	780	604	599	696
Travel Distance (mi)	5307	5364	5469	5643	5627	5665	5637
Travel Time (hr)	167.0	173.0	166.4	184.7	151.4	150.7	165.9
Total Delay (hr)	60.6	65.6	56.5	72.0	38.3	37.6	53.1
Total Stops	2139	2174	2305	2563	1874	1744	2131
Fuel Used (gal)	165.0	165.3	167.3	175.7	168.4	171.6	173.2

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1025	1038	996	1018	968	1022	1021
Vehs Exited	966	937	988	932	941	1002	967
Starting Vehs	734	546	753	652	673	661	645
Ending Vehs	793	647	761	738	700	681	700
Travel Distance (mi)	5579	5632	5516	5495	5499	5873	5579
Travel Time (hr)	185.3	151.9	189.3	176.4	172.7	172.7	170.6
Total Delay (hr)	73.5	39.0	79.6	66.4	62.8	56.4	59.0
Total Stops	2675	1847	2536	2304	2337	2277	2245
Fuel Used (gal)	173.0	168.5	174.1	171.7	170.1	179.2	171.5

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1026	1050	1068	1042	992	1003	1041
Vehs Exited	974	1011	965	1008	1002	963	1007
Starting Vehs	624	742	686	719	751	683	678
Ending Vehs	676	781	789	753	741	723	712
Travel Distance (mi)	5627	5637	5203	5699	5451	5513	5451
Travel Time (hr)	168.1	190.1	183.1	183.0	189.1	179.4	177.0
Total Delay (hr)	55.5	77.0	77.7	69.4	79.9	69.3	67.0
Total Stops	2078	2235	2315	2243	2133	2334	2332
Fuel Used (gal)	173.1	177.4	167.7	178.0	172.8	170.2	169.8

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1066	1040	979	1070	1034	1061	1067
Vehs Exited	957	960	961	975	967	1040	1023
Starting Vehs	676	724	712	780	604	599	696
Ending Vehs	785	804	730	875	671	620	740
Travel Distance (mi)	5501	5402	5656	5802	5438	5595	5835
Travel Time (hr)	186.1	194.1	186.3	207.1	165.5	153.3	177.2
Total Delay (hr)	75.4	85.7	73.2	91.2	56.4	41.0	61.3
Total Stops	2363	2531	2395	2450	2230	1850	2123
Fuel Used (gal)	172.7	173.8	177.0	184.0	166.9	167.1	179.6

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1011	1061	1000	1019	1015	1045	1031
Vehs Exited	1004	950	991	989	960	987	985
Starting Vehs	793	647	761	738	700	681	700
Ending Vehs	800	758	770	768	755	739	746
Travel Distance (mi)	5706	5864	5508	5634	5334	5754	5581
Travel Time (hr)	200.9	176.1	197.5	196.8	180.1	179.1	183.5
Total Delay (hr)	86.5	58.4	87.0	83.6	72.8	63.8	71.6
Total Stops	2352	2300	2575	2415	2410	2041	2284
Fuel Used (gal)	181.3	179.3	176.7	178.5	167.2	177.0	174.5

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1064	1090	1026	1062	1005	1034	1035
Vehs Exited	980	1014	941	997	966	944	999
Starting Vehs	676	781	789	753	741	723	712
Ending Vehs	760	857	874	818	780	813	748
Travel Distance (mi)	5638	5698	5473	5724	5202	5241	5638
Travel Time (hr)	181.5	209.5	210.6	190.9	196.0	190.6	185.6
Total Delay (hr)	69.1	94.9	101.4	77.0	91.5	85.1	72.8
Total Stops	2336	2653	2427	2374	2629	2465	2202
Fuel Used (gal)	176.7	182.3	177.4	181.3	168.4	167.1	177.1

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1055	1062	1055	994	1111	991	1056
Vehs Exited	991	963	997	993	959	951	992
Starting Vehs	785	804	730	875	671	620	740
Ending Vehs	849	903	788	876	823	660	804
Travel Distance (mi)	5639	5642	5426	5546	5729	5427	5742
Travel Time (hr)	199.6	212.0	199.4	217.4	188.1	161.2	194.6
Total Delay (hr)	86.3	99.3	89.8	106.9	72.6	52.0	80.2
Total Stops	2308	2499	2372	2469	2427	2329	2288
Fuel Used (gal)	180.2	183.2	174.3	180.9	179.7	163.5	180.9

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1086	1069	1044	1015	1031	1054	1046
Vehs Exited	953	995	982	987	957	965	976
Starting Vehs	800	758	770	768	755	739	746
Ending Vehs	933	832	832	796	829	828	825
Travel Distance (mi)	5657	5767	5378	5400	5409	5811	5559
Travel Time (hr)	216.4	201.4	202.2	197.7	198.5	191.3	197.2
Total Delay (hr)	103.6	86.2	93.7	89.3	90.1	75.2	85.8
Total Stops	2456	2645	2299	1986	2389	2282	2391
Fuel Used (gal)	184.7	183.2	174.6	173.0	173.5	183.2	177.3

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.4	0.9	2.3	4.4	7.2	0.0	3.9	0.6	3.9	0.1	0.1	0.1
Total Del/Veh (s)	55.0	19.6	5.0	254.0	258.9	261.2	43.0	40.4	14.6	48.4	57.8	32.5

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	4.4
Total Del/Veh (s)	163.3

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.6	0.5	0.4	0.1	0.0	0.1	1.0	0.3	0.9	1.6	1.3	1.6
Total Del/Veh (s)	40.4	36.2	26.6	51.1	28.5	4.9	45.1	35.9	17.1	53.5	45.0	26.4

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	32.4

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	35.4	24.1	14.8	47.9	36.6	30.3	29.9	5.2	13.7	12.5	22.8	26.0

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.1	0.1	0.1
Total Del/Veh (s)	14.7	14.0	10.5	8.0	7.5	1.5	10.9

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	6.6	6.8	16.9	19.7	7.0	2.5	13.6

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	0.2	1.6	0.2
Total Del/Veh (s)	29.7	30.2	4.7	3.7	9.7	2.4	15.6

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.4	0.5	1.3	0.5
Total Del/Veh (s)	22.2	6.3	15.7	19.2	13.5	4.1	13.0

Total Network Performance

Denied Del/Veh (s)	3.5
Total Del/Veh (s)	195.4

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	B23	B22	B22	NB	NB	NB	SB
Directions Served	L	T	R	L	TR	T	T		L	T	R	L
Maximum Queue (ft)	110	451	47	745	4930	3293	956	540	100	56	88	47
Average Queue (ft)	31	195	5	481	2993	559	167	50	44	14	33	12
95th Queue (ft)	71	377	43	1009	5406	2560	749	384	86	41	69	37
Link Distance (ft)		2403			4937	10617	999	999		361		
Upstream Blk Time (%)					9		0	0				
Queuing Penalty (veh)					138		4	0				
Storage Bay Dist (ft)	470		500	720					300		140	180
Storage Blk Time (%)		0		0	30						0	
Queuing Penalty (veh)		0		0	49						0	

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	SB
Directions Served	TR
Maximum Queue (ft)	50
Average Queue (ft)	12
95th Queue (ft)	38
Link Distance (ft)	3736
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	EB	B22	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	R	T	L	T	T	R	L	T	TR
Maximum Queue (ft)	59	437	777	75	17	174	336	251	154	108	96	54
Average Queue (ft)	20	93	353	29	1	53	204	135	27	59	14	9
95th Queue (ft)	50	313	683	81	22	150	299	227	86	108	61	35
Link Distance (ft)			999		10617		586	586			2460	
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			3									
Storage Bay Dist (ft)	450	450		50		150			150	90		90
Storage Blk Time (%)			38	0		0	21	3	0	5	0	0
Queuing Penalty (veh)			75	3		0	9	2	0	4	0	0

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	SB	SB	SB	SB
Directions Served	L	T	R	R
Maximum Queue (ft)	104	387	265	258
Average Queue (ft)	74	83	162	91
95th Queue (ft)	117	270	254	230
Link Distance (ft)		2405		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	80		250	250
Storage Blk Time (%)	22	2	1	1
Queuing Penalty (veh)	175	15	2	1

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	LT	R
Maximum Queue (ft)	147	307	171	105	341	86	12	36	256
Average Queue (ft)	62	118	79	13	170	32	2	7	117
95th Queue (ft)	116	231	156	63	300	68	8	25	213
Link Distance (ft)		4874			11283	421	421	2983	2983
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	430		150	200					
Storage Blk Time (%)		3	0		6				
Queuing Penalty (veh)		15	0		1				

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	17	23	31
Average Queue (ft)	1	2	2
95th Queue (ft)	9	14	17
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	10	43	9
Average Queue (ft)	0	16	1
95th Queue (ft)	6	35	5
Link Distance (ft)		299	299
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	WB	NB	NB
Directions Served	R	L	L	R
Maximum Queue (ft)	41	53	91	45
Average Queue (ft)	2	13	38	2
95th Queue (ft)	22	40	69	22
Link Distance (ft)			2881	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	220	260		240
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	150	124	153	130	173	55
Average Queue (ft)	71	22	80	56	87	4
95th Queue (ft)	126	80	131	99	146	28
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 497

Summary of All Intervals

Run Number	1	10	11	12	13	14	15
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4629	4569	4573	4677	4518	4595	4642
Vehs Exited	4589	4540	4581	4668	4487	4519	4619
Starting Vehs	640	689	721	662	622	620	674
Ending Vehs	680	718	713	671	653	696	697
Travel Distance (mi)	23172	23436	23194	23487	22579	23033	24039
Travel Time (hr)	933.2	926.2	885.7	892.0	932.4	991.9	945.9
Total Delay (hr)	463.3	451.7	415.4	415.2	474.8	525.1	459.5
Total Stops	7983	7952	8243	8265	7830	7747	8382
Fuel Used (gal)	769.2	775.6	758.6	762.2	752.3	776.5	787.2

Summary of All Intervals

Run Number	16	17	18	19	2	20	3
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4541	4648	4543	4572	4715	4608	4740
Vehs Exited	4547	4607	4561	4635	4662	4620	4667
Starting Vehs	680	697	700	685	659	682	662
Ending Vehs	674	738	682	622	712	670	735
Travel Distance (mi)	22851	23794	23314	23452	23393	22814	23411
Travel Time (hr)	914.0	921.8	885.6	876.1	928.6	905.6	921.0
Total Delay (hr)	450.6	440.9	413.0	399.9	454.9	441.5	445.2
Total Stops	7625	8781	7844	7903	8011	8042	8634
Fuel Used (gal)	755.7	775.5	759.3	759.1	765.6	754.9	768.3

Summary of All Intervals

Run Number	4	5	6	7	8	9	Avg
Start Time	4:30	4:30	4:30	4:30	4:30	4:30	4:30
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	90	90	90	90	90	90	90
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4543	4600	4590	4684	4544	4568	4608
Vehs Exited	4508	4605	4566	4677	4500	4589	4587
Starting Vehs	654	686	670	676	654	660	664
Ending Vehs	689	681	694	683	698	639	686
Travel Distance (mi)	23225	23152	23072	23365	22810	22886	23224
Travel Time (hr)	889.3	905.9	951.7	791.3	874.3	835.6	905.4
Total Delay (hr)	419.0	435.9	483.2	318.1	411.7	371.4	434.5
Total Stops	7788	7942	8541	8135	7897	7623	8060
Fuel Used (gal)	758.0	763.3	765.5	738.6	743.2	737.7	761.3

Interval #0 Information Seeding

Start Time	4:30
End Time	5:00
Total Time (min)	30

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1194	1135	1187	1187	1134	1129	1151
Vehs Exited	1145	1175	1153	1223	1089	1093	1133
Starting Vehs	640	689	721	662	622	620	674
Ending Vehs	689	649	755	626	667	656	692
Travel Distance (mi)	5721	5909	5866	5755	5586	5546	5898
Travel Time (hr)	201.5	202.7	196.2	199.2	202.2	209.2	200.5
Total Delay (hr)	85.2	82.9	77.0	82.0	88.6	96.8	80.9
Total Stops	2002	2022	2081	1947	1899	1812	1841
Fuel Used (gal)	182.5	188.4	184.9	182.3	179.4	180.0	186.7

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1112	1137	1136	1168	1143	1136	1222
Vehs Exited	1134	1151	1152	1156	1149	1136	1174
Starting Vehs	680	697	700	685	659	682	662
Ending Vehs	658	683	684	697	653	682	710
Travel Distance (mi)	5629	5853	5945	5979	5798	5792	5749
Travel Time (hr)	204.7	200.4	189.5	197.3	209.1	206.2	197.8
Total Delay (hr)	90.2	81.6	68.6	75.9	91.8	88.9	80.5
Total Stops	1979	2064	2000	1920	1903	2062	2165
Fuel Used (gal)	182.1	183.7	184.8	186.8	185.9	185.9	180.5

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1140	1165	1185	1163	1163	1156	1160
Vehs Exited	1118	1191	1161	1143	1162	1169	1149
Starting Vehs	654	686	670	676	654	660	664
Ending Vehs	676	660	694	696	655	647	676
Travel Distance (mi)	5560	5762	5907	5825	5874	5833	5789
Travel Time (hr)	187.0	197.2	207.0	183.3	194.4	181.9	198.4
Total Delay (hr)	73.1	79.5	87.7	66.1	75.4	63.0	80.8
Total Stops	1951	2072	2137	2227	2055	1982	2013
Fuel Used (gal)	174.6	183.4	188.5	181.5	184.4	181.2	183.4

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1143	1144	1146	1195	1161	1144	1183
Vehs Exited	1142	1101	1178	1131	1178	1116	1094
Starting Vehs	689	649	755	626	667	656	692
Ending Vehs	690	692	723	690	650	684	781
Travel Distance (mi)	5775	5695	5844	5798	5698	5590	5921
Travel Time (hr)	216.9	216.0	209.7	209.7	227.4	237.5	226.2
Total Delay (hr)	99.6	100.1	91.3	92.1	111.7	124.2	106.3
Total Stops	1872	1911	2187	2107	2053	1846	2100
Fuel Used (gal)	187.7	186.5	188.2	185.2	189.7	189.1	191.9

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1122	1177	1108	1176	1185	1097	1159
Vehs Exited	1116	1171	1141	1163	1144	1122	1167
Starting Vehs	658	683	684	697	653	682	710
Ending Vehs	664	689	651	710	694	657	702
Travel Distance (mi)	5741	5932	5683	6035	5964	5627	5672
Travel Time (hr)	215.4	217.8	202.7	215.6	225.2	218.6	225.1
Total Delay (hr)	98.6	97.4	87.4	93.0	104.6	104.5	110.1
Total Stops	1930	2182	1789	2136	2095	1792	2200
Fuel Used (gal)	185.5	191.3	182.6	192.7	191.8	184.8	187.2

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1124	1200	1090	1195	1052	1159	1147
Vehs Exited	1105	1179	1109	1203	1087	1164	1141
Starting Vehs	676	660	694	696	655	647	676
Ending Vehs	695	681	675	688	620	642	682
Travel Distance (mi)	5783	5795	5488	5971	5410	5738	5758
Travel Time (hr)	213.4	214.2	229.2	195.3	198.9	194.6	215.5
Total Delay (hr)	96.8	96.1	117.2	73.8	89.1	78.3	98.6
Total Stops	1814	2137	2202	2091	1757	1949	2004
Fuel Used (gal)	187.9	187.8	181.8	187.6	173.7	181.8	186.7

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1164	1142	1133	1145	1152	1123	1192
Vehs Exited	1133	1130	1152	1133	1136	1124	1221
Starting Vehs	690	692	723	690	650	684	781
Ending Vehs	721	704	704	702	666	683	752
Travel Distance (mi)	5972	5691	5804	6006	5713	5887	6224
Travel Time (hr)	249.8	242.8	227.4	233.6	245.9	262.8	253.4
Total Delay (hr)	129.2	127.3	109.9	112.2	130.0	143.9	127.3
Total Stops	2042	2044	2123	2102	2031	1923	2298
Fuel Used (gal)	200.9	192.7	191.3	196.5	191.3	200.7	204.6

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1149	1173	1171	1135	1181	1214	1175
Vehs Exited	1134	1126	1100	1173	1210	1179	1177
Starting Vehs	664	689	651	710	694	657	702
Ending Vehs	679	736	722	672	665	692	700
Travel Distance (mi)	5626	6032	5770	5862	5846	5628	6015
Travel Time (hr)	234.0	241.9	235.2	222.9	235.3	233.7	245.8
Total Delay (hr)	120.0	120.4	117.7	103.9	116.7	118.4	123.2
Total Stops	1954	2288	2004	1996	2089	2090	2128
Fuel Used (gal)	188.5	199.6	191.5	191.4	192.2	189.3	200.5

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1155	1115	1160	1193	1183	1156	1162
Vehs Exited	1158	1085	1152	1207	1078	1110	1147
Starting Vehs	695	681	675	688	620	642	682
Ending Vehs	692	711	683	674	725	688	697
Travel Distance (mi)	5909	5714	5729	5902	5677	5663	5833
Travel Time (hr)	232.9	239.3	243.3	197.7	229.6	217.5	236.2
Total Delay (hr)	113.5	123.9	127.1	78.0	114.9	102.5	118.0
Total Stops	2033	1892	2024	1923	1967	1804	2035
Fuel Used (gal)	194.6	192.4	191.5	186.0	187.3	184.7	193.4

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	11	12	13	14	15
Vehs Entered	1128	1148	1107	1150	1071	1199	1116
Vehs Exited	1169	1134	1098	1181	1084	1186	1171
Starting Vehs	721	704	704	702	666	683	752
Ending Vehs	680	718	713	671	653	696	697
Travel Distance (mi)	5705	6141	5680	5928	5582	6010	5996
Travel Time (hr)	265.1	264.8	252.4	249.4	256.9	282.5	265.8
Total Delay (hr)	149.2	141.5	137.2	128.9	144.5	160.2	144.9
Total Stops	2067	1975	1852	2109	1847	2166	2143
Fuel Used (gal)	198.1	208.0	194.1	198.2	192.0	206.7	204.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	16	17	18	19	2	20	3
Vehs Entered	1158	1161	1128	1093	1206	1161	1184
Vehs Exited	1163	1159	1168	1143	1159	1183	1149
Starting Vehs	679	736	722	672	665	692	700
Ending Vehs	674	738	682	622	712	670	735
Travel Distance (mi)	5855	5976	5915	5576	5786	5767	5974
Travel Time (hr)	259.8	261.8	258.2	240.4	259.0	247.1	252.2
Total Delay (hr)	141.7	141.5	139.2	127.1	141.9	129.7	131.5
Total Stops	1762	2247	2051	1851	1924	2098	2141
Fuel Used (gal)	199.7	200.9	200.5	188.2	195.9	194.9	200.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	4	5	6	7	8	9	Avg
Vehs Entered	1124	1120	1155	1133	1146	1097	1137
Vehs Exited	1127	1150	1144	1124	1173	1146	1152
Starting Vehs	692	711	683	674	725	688	697
Ending Vehs	689	681	694	683	698	639	686
Travel Distance (mi)	5973	5881	5949	5667	5848	5652	5843
Travel Time (hr)	256.0	255.2	272.2	215.0	251.5	241.6	255.3
Total Delay (hr)	135.6	136.4	151.2	100.2	132.3	127.6	137.1
Total Stops	1990	1841	2178	1894	2118	1888	2009
Fuel Used (gal)	200.8	199.7	203.7	183.5	197.9	190.0	197.8

1: Kiefer Bl & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	498.0	537.4	552.0	0.0	0.0	0.0	4.1	4.0	0.2	0.2	0.2	276.0
Total Del/Veh (s)	219.4	236.4	195.7	44.5	29.8	28.2	40.2	20.7	38.6	35.0	21.2	123.8

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.3	0.5	0.9	0.1	0.6	0.9	0.3	1.0	1.1	0.6	1.1
Total Del/Veh (s)	45.6	28.9	18.3	62.4	37.5	9.9	67.8	36.6	25.5	52.3	36.6	14.2

2: Murieta Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	34.2

3: Murieta S Pkwy & Jackson Rd (SR-16) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.4	0.1	0.1	0.2
Total Del/Veh (s)	46.6	25.7	12.1	63.7	62.8	56.1	39.0	24.2	4.5	31.2	34.0	40.1

4: Ione Rd & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.3	0.1	0.1	0.1	0.1
Total Del/Veh (s)	16.4	17.1	8.0	8.8	9.5	1.4	13.0

5: Project Access & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.7	7.3	14.4	21.6	6.6	2.7	12.7

6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.4	0.3	0.0	0.0	0.5	1.7	0.4
Total Del/Veh (s)	37.7	37.8	12.3	7.1	159.4	57.9	45.6

7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16) Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.3	0.4	1.2	0.3
Total Del/Veh (s)	27.1	9.9	20.3	19.2	18.0	5.1	18.0

Total Network Performance

Denied Del/Veh (s)	159.2
Total Del/Veh (s)	146.3

Arterial Level of Service: EB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Kiefer Bl	1	236.4	931.0	0.5	6
	25	14.1	74.8	0.9	45
	23	16.3	128.7	1.8	49
	22	4.3	23.6	0.3	45
Murieta Pkwy	2	28.9	41.8	0.2	18
	16	5.7	14.3	0.1	32
Murieta S Pkwy	3	25.7	85.3	0.9	39
Ione Rd	4	17.0	146.6	2.2	53
Project Access	5	7.6	82.2	1.3	58
	17	20.4	205.2	3.0	52
E. Plymouth Hwy (SR	6	37.7	313.6	5.5	64
Golden Chain Hwy (SR	7	24.4	43.0	0.3	24
Total		438.5	2090.2	17.0	43

Arterial Level of Service: WB Jackson Rd (SR-16)

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
E. Plymouth Hwy (SR	6	10.4	28.6	0.3	36
	17	23.7	302.5	5.5	66
Project Access	5	21.6	197.4	3.0	54
Ione Rd	4	9.2	85.7	1.3	56
Murieta S Pkwy	3	62.9	189.7	2.2	41
	16	12.9	71.7	0.9	47
Murieta Pkwy	2	37.5	45.1	0.1	10
	22	17.0	30.5	0.2	24
	23	2.6	21.9	0.3	48
	25	14.3	126.3	1.8	50
Kiefer Bl	1	29.8	87.3	0.9	39
Total		241.8	1186.6	16.5	50

Intersection: 1: Kiefer Bl & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	B22	B22	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	T		L	R	L	TR
Maximum Queue (ft)	494	2453	525	194	684	422	79	50	43	154	114
Average Queue (ft)	72	2401	120	41	262	26	3	7	9	69	43
95th Queue (ft)	344	2657	481	159	575	275	81	30	28	128	86
Link Distance (ft)		2403			4880	992	992				3736
Upstream Blk Time (%)		73				0					
Queuing Penalty (veh)		0				0					
Storage Bay Dist (ft)	470		500	720				300	140	180	
Storage Blk Time (%)		50	0		1					0	
Queuing Penalty (veh)		20	0		0					0	

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	T	R	L	T	TR	L
Maximum Queue (ft)	241	401	516	75	174	384	329	175	114	299	114	104
Average Queue (ft)	151	179	253	35	73	256	175	71	71	88	55	71
95th Queue (ft)	222	300	431	88	180	366	285	159	121	235	104	117
Link Distance (ft)			992			597	597			2481		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	450	450		50	150			150	90		90	80
Storage Blk Time (%)			36	0	0	34	7	0	17	3	2	13
Queuing Penalty (veh)			287	6	1	16	12	0	38	7	4	54

Intersection: 2: Murieta Pkwy & Jackson Rd (SR-16)

Movement	SB	SB	SB
Directions Served	T	R	R
Maximum Queue (ft)	250	190	93
Average Queue (ft)	78	69	24
95th Queue (ft)	177	142	62
Link Distance (ft)	2407		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		200	200
Storage Blk Time (%)	6	0	0
Queuing Penalty (veh)	24	0	0

Intersection: 3: Murieta S Pkwy & Jackson Rd (SR-16)

Movement	EB	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	TR	L	TR	LT	R
Maximum Queue (ft)	288	331	175	163	563	377	68	36	130
Average Queue (ft)	154	150	51	8	270	207	8	5	39
95th Queue (ft)	254	280	151	64	484	344	68	20	96
Link Distance (ft)		4864			11283	421	421	2983	2983
Upstream Blk Time (%)						1	0		
Queuing Penalty (veh)						0	0		
Storage Bay Dist (ft)	430		150	200					
Storage Blk Time (%)		8	0		24				
Queuing Penalty (veh)		33	0		2				

Intersection: 4: Ione Rd & Jackson Rd (SR-16)

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	16	30	50
Average Queue (ft)	1	8	5
95th Queue (ft)	8	27	32
Link Distance (ft)		2876	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	430		50
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 5: Project Access & Jackson Rd (SR-16)

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	4	41
Average Queue (ft)	0	15
95th Queue (ft)	4	32
Link Distance (ft)		415
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	200	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: E. Plymouth Hwy (SR 124) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	3	111	219	20	846	265
Average Queue (ft)	0	21	94	1	359	139
95th Queue (ft)	4	79	173	29	916	316
Link Distance (ft)	29198			1475	2881	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		220	260			240
Storage Blk Time (%)			0		31	1
Queuing Penalty (veh)			0		76	1

Intersection: 7: Golden Chain Hwy (SR-49) & Jackson Rd (SR-16)

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	244	91	124	147	254	51
Average Queue (ft)	122	16	63	62	135	2
95th Queue (ft)	204	62	106	114	216	28
Link Distance (ft)	1475			3996	3316	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		670	250			270
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Network Summary

Network wide Queuing Penalty: 583

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_1_Kiefer_MurietaSouth_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1114	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.76	Total Trucks, %	8.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.66

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.00043	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34718	PF Power Coefficient	0.68713
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	14.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.1

Vehicle Results

Average Speed, mi/h	58.1	Percent Followers, %	76.6
Segment Travel Time, minutes	4.43	Followers Density, followers/mi/ln	14.7
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_1_Kiefer_MurietaSouth_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1969	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.81	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.16

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	75.0
Speed Slope Coefficient	0.00000	Speed Power Coefficient	0.00000
PF Slope Coefficient	0.00000	PF Power Coefficient	0.00000
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	0.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	75.0

Vehicle Results

Average Speed, mi/h	75.0	Percent Followers, %	0.0
Segment Travel Time, minutes	0.00	Followers Density, followers/mi/ln	0.0
Vehicle LOS	F		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_1_Kiefer_MurietaSouth_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1681	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.93	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.99

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.01126	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34605	PF Power Coefficient	0.68674
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	25.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	57.4

Vehicle Results

Average Speed, mi/h	57.4	Percent Followers, %	85.4
Segment Travel Time, minutes	4.48	Followers Density, followers/mi/ln	25.0
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_1_Kiefer_MurietaSouth_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	22651
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	1256	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.74

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	4.00945	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34624	PF Power Coefficient	0.68681
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	17.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	22651	-	-	58.0

Vehicle Results

Average Speed, mi/h	58.0	Percent Followers, %	79.3
Segment Travel Time, minutes	4.44	Followers Density, followers/mi/ln	17.2
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_2_MurietaSouth_Mariah_AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	575	Opposing Demand Flow Rate, veh/h	752
Peak Hour Factor	0.68	Total Trucks, %	7.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.3
Speed Slope Coefficient	3.85626	Speed Power Coefficient	0.45498
PF Slope Coefficient	-1.26325	PF Power Coefficient	0.77058
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.6

Vehicle Results

Average Speed, mi/h	59.6	Percent Followers, %	56.1
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	5.4
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_2_MurietaSouth_Mariah_AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	557	Opposing Demand Flow Rate, veh/h	426
Peak Hour Factor	0.91	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.79599	Speed Power Coefficient	0.49276
PF Slope Coefficient	-1.23851	PF Power Coefficient	0.78111
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.1
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	59.9

Vehicle Results

Average Speed, mi/h	59.9	Percent Followers, %	54.3
Segment Travel Time, minutes	1.86	Followers Density, followers/mi/ln	5.1
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_2_MurietaSouth_Mariah_PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	635	Opposing Demand Flow Rate, veh/h	456
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.37

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.5
Speed Slope Coefficient	3.80245	Speed Power Coefficient	0.48818
PF Slope Coefficient	-1.23965	PF Power Coefficient	0.78256
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.7

Vehicle Results

Average Speed, mi/h	59.7	Percent Followers, %	58.0
Segment Travel Time, minutes	1.79	Followers Density, followers/mi/ln	6.2
Vehicle LOS	C		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_2_MurietaSouth_Mariah_PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.5

Demand and Capacity

Directional Demand Flow Rate, veh/h	467	Opposing Demand Flow Rate, veh/h	650
Peak Hour Factor	0.94	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.4
Speed Slope Coefficient	3.84106	Speed Power Coefficient	0.46453
PF Slope Coefficient	-1.25925	PF Power Coefficient	0.77136
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.0

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	50.4
Segment Travel Time, minutes	1.86	Followers Density, followers/mi/ln	3.9
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_3_Mariah_LongGate _AM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	293	Opposing Demand Flow Rate, veh/h	376
Peak Hour Factor	0.87	Total Trucks, %	14.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.1
Speed Slope Coefficient	5.05847	Speed Power Coefficient	0.59900
PF Slope Coefficient	-1.21518	PF Power Coefficient	0.78914
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	1.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	59.2

Vehicle Results

Average Speed, mi/h	59.2	Percent Followers, %	37.0
Segment Travel Time, minutes	1.81	Followers Density, followers/mi/ln	1.8
Vehicle LOS	A		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_3_Mariah_LongGate _AM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	347	Opposing Demand Flow Rate, veh/h	271
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.1
Speed Slope Coefficient	4.10839	Speed Power Coefficient	0.60467
PF Slope Coefficient	-1.19987	PF Power Coefficient	0.78924
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	60.3

Vehicle Results

Average Speed, mi/h	60.3	Percent Followers, %	40.6
Segment Travel Time, minutes	1.85	Followers Density, followers/mi/ln	2.3
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_3_Mariah_LongGate _PM_EB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9400
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	450	Opposing Demand Flow Rate, veh/h	317
Peak Hour Factor	0.96	Total Trucks, %	2.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.92083	Speed Power Coefficient	0.58537
PF Slope Coefficient	-1.20694	PF Power Coefficient	0.78787
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	3.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9400	-	-	60.0

Vehicle Results

Average Speed, mi/h	60.0	Percent Followers, %	47.5
Segment Travel Time, minutes	1.78	Followers Density, followers/mi/ln	3.6
Vehicle LOS	B		

HCS7 Two-Lane Highway Report

Project Information

Analyst	at	Date	3/9/2020
Agency	MBI	Analysis Year	2020
Jurisdiction	Caltrans D10	Time Period Analyzed	
Project Description	E+App+Pend +Proj_3_Mariah_LongGate _PM_WB	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	9800
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	1.4

Demand and Capacity

Directional Demand Flow Rate, veh/h	375	Opposing Demand Flow Rate, veh/h	533
Peak Hour Factor	0.81	Total Trucks, %	6.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results

Segment Vertical Class	2	Free-Flow Speed, mi/h	61.8
Speed Slope Coefficient	4.63088	Speed Power Coefficient	0.56252
PF Slope Coefficient	-1.24791	PF Power Coefficient	0.77343
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	2.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9800	-	-	59.5

Vehicle Results

Average Speed, mi/h	59.5	Percent Followers, %	44.3
Segment Travel Time, minutes	1.87	Followers Density, followers/mi/ln	2.8
Vehicle LOS	B		