



REVISED TRAFFIC IMPACT ANALYSIS MOTTE COUNTY PLAZA

MENIFEE, CA

January 2021



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January 13, 2021

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RE: Traffic Impact Analysis Report for Motte Country Plaza in the City of Menifee, CA.

Dear Marwan,

We are pleased to submit herewith our Traffic Impact Analysis Report for the proposed Motte Country Plaza, which we have prepared at your request.

If you have any questions regarding this report, please call the undersigned for clarification.

Sincerely yours,

ALBERT A. WEBB ASSOCIATES



Nicholas Lowe, P.E.
Senior Engineer

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1.0 EXECUTIVE SUMMARY

1.1 Proposed Development of Motte Country Plaza (Project) in the City of Menifee

The purpose of this study is to evaluate the effects on traffic circulation produced from the proposed development of sixteen pump gas station with 3,600 SF convenience store, 1,750 SF fast-food with drive-thru and automated car wash with one car wash tunnel (Project).

The objectives of this study include the following:

- Document Existing (2018) traffic conditions in the vicinity of the proposed Project;
- Determine the traffic generated from the proposed Project;
- Evaluate Existing Plus Project traffic conditions;
- Evaluate Existing Plus Ambient Growth Plus Project (2020) traffic conditions;
- Evaluate Existing Plus Ambient Growth Plus Cumulative Projects Plus Project (2020) traffic conditions;
- Determine if the level of service (LOS) required by County of Riverside, California Department of Transportation (Caltrans) and City of Menifee will be maintained within the study area, and if not, determine the mitigation measures that will be necessary in order to maintain the required LOS;
- Determine if peak hour traffic signal warrants are met for any of the unsignalized study area intersections;
- Evaluate the adequacy of on-site circulation for the proposed Project; and
- Determine if safety and/or operational improvements are necessary due to the proposed Project.

The Project is forecasted to generate 206 AM peak hour trips, 268 PM peak hour trips, and 4,083 daily trips.

1.2 Project Traffic Impacts

Based on the analysis and City of Menifee Traffic Impact Analysis Guidelines, the Project introduces traffic impacts at the following intersections and roadway segments

Intersections:

4. Menifee Road (NS) / SR-74 (EW)
5. Briggs Road (NS) / SR-74 (EW)
6. Palomar Road (NS) / Matthews Road (EW)
7. Menifee Road (NS) / Matthews Road (EW)
10. Menifee Road (NS) / McCall Boulevard (EW)

Roadway Segments:

1. SR-74: Sherman Road to Antelope Road
2. SR-74: Antelope Road to Palomar Road
3. SR-74: Palomar Road to Menifee Road
4. SR-74: Menifee Road to Briggs Road

1.3 Traffic and Transportation Project Design Features and Mitigation Measures

This traffic impact analysis demonstrates that the direct traffic impacts generated by the Project can be mitigated to meet the required level of service if the following recommended project design features and mitigation measures are adopted. Project design features are improvements that the Project had anticipated and is 100 percent responsible for since the improvements are proposed to provide Project access and safety for the proposed Project. Mitigation measures are proposed as a result of intersection and/or roadway segment impact due to the addition of Project traffic. A fair share percentage responsibility or improvement responsibility is determined based on the impacts.

1.3.1 Roadway & Safety Improvements for Project

- Construct full width improvements on all internal roadways as needed.
- Sight distance at project driveways will be reviewed with respect to City of Menifee sight distance standards at the time of preparation of final grading, landscape, site development, and street improvement plans.
- Implement on-site traffic calming measures in parking lots and internal roadways as needed.

1.3.2 Project Design Features and Mitigation Measures

Intersection Project Design Features

- Project to restripe the intersection of Palomar Road (NS) and East Project Driveway (EW) to include the following geometrics:
Northbound: One left turn pocket. One through lane.
Southbound: One lane shared by through and right-turn movements
Eastbound: One lane shared by left-turn and right-turn movements.
Westbound: Not Applicable.
- Project to restripe the intersection of South Project Driveway (NS) and SR-74 (EW) to include the following geometrics with a raised median on SR-74:
Northbound: Not Applicable.
Southbound: One right-turn only lane.
Eastbound: One through lane and one shared through and right-turn lane.
Westbound: Two through lanes.

Intersection Mitigation Measures

- Contribute fair share for improvement of Menifee Road (NS) and SR-74 (EW) to include the following geometrics:
Northbound: Two left turn lanes. One through lane. One right-turn lane with overlap phasing.
Southbound: One left turn lane. One through lane. One right-turn lane.
Eastbound: One left turn lane. Two through lanes. One right-turn lane with overlap phasing.
Westbound: Two left turn lanes. One through lane. One lane shared by through and right-turn movements.

- Contribute fair share for improvement of the intersection of Briggs Road (NS) and SR-74 (EW) to include the following geometrics:
Northbound: One left turn lane. One lane shared by through and left-turn movements. One right turn lane.
Southbound: One left turn lane. One through lane. One right-turn lane.
Eastbound: One left turn lane. Two through lanes. One right-turn lane with overlap phasing.
Westbound: One left turn lane. One through lane. One lane shared by through and right-turn movements.
- Contribute fair share for improvement of Palomar Road (NS) and Matthews Road (EW) to include a new traffic signal and the following geometrics:
Northbound: Not Applicable.
Southbound: One left-turn lane. One right-turn lane.
Eastbound: One left-turn lane. One through lane.
Westbound: One through lane. One right turn lane.
- Contribute fair share for improvement of Menifee Road (NS) and Matthews Road (EW) to include a new traffic signal and the following geometrics:
Northbound: One left-turn lane. One through lane.
Southbound: One through lane. One lane shared by through and right-turn movements.
Eastbound: One lane shared by left-turn and right-turn movements.
Westbound: Not Applicable.
- Contribute fair share for improvement of Menifee Road (NS) and McCall Boulevard (EW) to include the following geometrics:
Northbound: Two left-turn lanes. One through lane. One lane shared by through and right-turn movements.
Southbound: One left-turn lane. Two through lanes. One right-turn lane with overlap phasing.
Eastbound: Two left-turn lanes. One through lane. One lane shared by through and right-turn movements.
Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.

1.4 Traffic Signal Warrant Results

“Traffic Signal Warrants” are a method of determining whether or not an unsignalized intersection needs to install a traffic signal. Traffic conditions that satisfy a traffic signal warrant are more likely to require the installation of a traffic signal. However, the Manual on Uniform Traffic Control Devices (MUTCD) states that the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal. Peak hour traffic signal warrant analysis should only be considered as an “indicator” of the likelihood of an unsignalized intersection warranting a traffic signal. Intersections that exceed the peak hour warrant are more likely to meet one or more of the other volume based signal warrants. The MUTCD also advises that a traffic control signal should not be installed unless:

- One or more of the traffic signal warrants is satisfied;
- An engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection; and
- It will not seriously disrupt progressive traffic flow.

Table 1-1 provides a summary of the peak hour traffic signal warrants for the Project at unsignalized intersections.

Table 1-1 – Peak Hour Traffic Signal Warrants

	<i>Intersection</i>	<i>Jurisdiction</i>	<i>Traffic Control</i>	<i>Peak Hour</i>	<i>Existing</i>	<i>EP</i>	<i>EAP</i>	<i>EACP</i>
6	Palomar Road (NS) / Matthews Road (EW)	City of Menifee	OWSC	AM PM	- -	- -	- -	MET -
7	Menifee Road (NS) / Matthews Road (EW)	City of Menifee	OWSC	AM PM	MET -	MET -	MET -	MET MET
11	South Project Driveway (NS) / SR-74 (EW)	Caltrans	OWSC	AM PM	- -	- -	- -	- -
12	Palomar Road (NS) / East Project Driveway (EW)	City of Menifee	OWSC	AM PM	- -	- -	- -	- -

*TWSC: Two way stop control, OWSC: One way stop control
MET = Peak Hour Signal Warrant Met

It should be noted that the intersection of Menifee Road/Matthews Road meets peak hour signal warrants, but is not recommended to be signalized as a mitigation measure. The intersection’s side street currently operates as a right-in/right-out street which does not need to be signalized. An increase in the roadway capacity on Menifee Road would allow for satisfactory level of service at the intersection without signalization.

1.5 Intersections and Project Fair Share Mitigation Summary

The Project will participate in the cost of off-site improvements through the payment of “fair share” mitigation fees, including the following:

- Transportation Uniform Mitigation Fee (TUMF), current at time of construction.
- Development Fees (DIF Fees) current at time of construction.

These fees will be collected and utilized as needed by the City of Menifee to construct the improvements necessary to assist in maintaining the required level of service in the transportation network.

Table 1-2 summarizes the proposed mitigation measure and associated funding mechanism for the study intersections. Table 1-3 summarizes the proposed mitigation measure and associated funding mechanism for the study roadway segments.

Table 1-2 – Project Intersection Fair Share Mitigation Summary

No.	Intersection	Scenario Impacted	Improvement Measure	Funding Mechanism	Existing Volume		Project Volume		EACP Volume		Net New Volume		AM	PM
					AM	PM	AM	PM	AM	PM	AM	PM	Fair Share	Fair Share
4	Menifee Road (NS) / SR-74 (EW)	All	Improve intersection geometrics to include: • Northbound: Widen approach to accommodate two left-turn lanes, one through lane, and one right-turn lane with overlap phasing. • Southbound: Widen approach to accommodate one left-turn lane, one through lane, and one right-turn lane. • Eastbound: Widen approach to accommodate one left-turn lane, two through lanes, and one right-turn lane with overlap phasing. • Westbound: Widen approach to accommodate two left-turn lanes, one through lane, one shared through and right-turn lane.	TUMF Fees/ Fair Share	3490	2795	98	128	4591	4316	1101	1521	8.9%	8.4%
5	Briggs Road (NS) / SR-74 (EW)	All	Improve intersection geometrics to include: • Northbound: Restripe approach to one left-turn lane, one shared through and left-turn lane, and one right-turn lane. • Southbound: Widen approach to accommodate one left-turn lane, one through lane, and one right-turn lane. • Eastbound: Maintain one left-turn lane, two through lanes, one right-turn lane. Add right-turn overlap phasing to signal. • Westbound: Maintain one left-turn lane, one through lane, and one shared through and right-turn lane.	TUMF Fees/ Fair Share	3722	2664	52	68	4490	3634	768	970	6.8%	7.0%
6	Palomar Road (NS) / Matthews Road (EW)	EACP	Improve intersection geometrics to include: Install Traffic Signal • Southbound: Restripe to include one left-turn lane and one right-turn lane. • Eastbound: Restripe to include one left-turn lane and one through lane. • Westbound: Restripe to include one right-turn lane and one through lane.	Fair Share	858	537	52	67	1578	1288	720	751	7.2%	8.9%
7	Menifee Road (NS) / Matthews Road (EW)	All	Improve intersection geometrics to include: Install Traffic Signal • Northbound: Widen approach to accommodate left turn lane • Southbound: Widen approach to accommodate one through lane and one shared through and right-turn lane.	TUMF Fees/ Fair Share	1648	947	52	68	2133	1767	485	820	10.7%	8.3%
10	Menifee Road (NS) / McCall Boulevard (EW)	EACP	Improve intersection geometrics to include: • Northbound: Restripe approach to include two left-turn lanes, one through lane, and one shared through and right-turn lane. • Southbound: Widen approach to accommodate one left-turn lane, two through lanes, and one right-turn lane with overlap phasing. • Eastbound: Maintain two left-turn lanes, one through lane, and one shared through and right-turn lane. • Westbound: Maintain two left-turn lanes, two through lanes, and one right-turn lane.	TUMF Fees/ Fair Share	2994	1875	40	55	4621	3641	1627	1766	2.5%	3.1%
11	South Project Driveway (NS) / SR-74 (EW)	All	Improve intersection geometrics to include: Construct raised median on SR-74 • Southbound: One right-turn lane. • Eastbound: One through lane and one shared through and right-turn lane. • Westbound: Two through lanes.	Project Responsibility										
12	Palomar Road (NS) / East Project Driveway (EW)	All	Improve intersection geometrics to include: • Northbound: Restripe approach to include one left-turn lane and one through lane. • Southbound: Maintain one shared through and right-turn lane. • Eastbound: One shared left-turn and right-turn lane.	Project Responsibility										

Table 1-3 – Project Roadway Segment Fair Share Mitigation Summary

Roadway Segment	Scenario Impacted	Improvement Measure	Roadway Classification	Lanes	Funding Mechanism	Roadway Capacity	Existing ADT	Project ADT	EACP ADT	Net ADT	Fair Share
SR-74											
1. Sherman Road to Antelope Road*	EP, EAP, EACP	Construct raised median to classify as 4-lane Expressway	Expressway	4	TUMF	64,000	30,610	1,021	39,000	8,390	12.17%
2. Antelope Road to Palomar Road	EACP		Expressway	4	TUMF	64,000	27,692	1,225	37,159	9,467	12.94%
3. Palomar Road to Menifee Road	EP, EAP, EACP		Expressway	4	TUMF	64,000	29,136	1,633	39,179	10,043	16.26%
4. Menifee Road to Briggs Road	All		Expressway	4	TUMF	64,000	33,885	1,021	41,990	8,105	12.60%

Source: City of Menifee Traffic Impact Analysis Guidelines

Fair share percentages shown for all roadway segments for reference.

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

2.0 INTRODUCTION

2.1 Purposed Development of Motte Country Plaza (Project) in the City of Menifee

The purpose of this study is to evaluate the effects on traffic circulation produced from the proposed development of a sixteen pump gas station with a 3,600 SF convenience store, 1,750 SF fast-food with drive-thru and an automated car wash with one car wash tunnel (Project).

The objectives of this study include the following:

- Document Existing (2018) traffic conditions in the vicinity of the proposed Project;
- Determine the traffic generated from the proposed Project;
- Evaluate Existing Plus Project traffic conditions;
- Evaluate Existing Plus Ambient Growth Plus Project (2020) traffic conditions;
- Evaluate Existing Plus Ambient Growth Plus Cumulative Projects Plus Project (2020) traffic conditions;
- Determine if the level of service (LOS) required by City of Menifee, County of Riverside and California Department of Transportation will be maintained within the study area, and if not, determine the mitigation measures that will be necessary in order to maintain the required LOS;
- Determine if peak hour traffic signal warrants are met for any of the un-signalized study area intersections;
- Evaluate the adequacy of on-site circulation for the proposed Project; and
- Determine if safety and/or operational improvements are necessary due to the proposed Project.

2.2 Site Location

The proposed Project is located in the City of Menifee generally to the northwest corner of the Palomar Road (NS) / SR-74 (EW) intersection. The Project is located in an existing commercial center.

2.3 Development Project Description

2.3.1 Project Size and Description

The Project includes development of a sixteen pump gas station with a 3,600 SF convenience store, 1,750 SF fast-food with drive-thru and automated car wash with one car wash tunnel.

2.3.2 Existing Land Use and Zoning

Existing land use and zoning designations are as follows:

- Existing Zoning: Menifee North SP
- Existing Land Use: Menifee North SP-Commercial

2.3.3 Proposed Land Use and Zoning

Proposed land use and zoning designations are as follows:

- Proposed Zoning: Menifee North SP
- Proposed Land Use: Menifee North SP-Commercial

2.3.4 Site Plan of Proposed Project

The proposed Project layout is shown on **Figure 2-A**. The project site plan includes the N/S driveway at SR-74 with one way stop control and E/W driveway at Palomar Road with a one-way stop control.

Figure 2-A – Project Site Plan



2.3.5 Proposed Project Opening Year and Proposed Project Phasing

For analysis purposes, it is assumed that the Project is to be developed by 2020.

2.3.6 Sphere of Influence

The Project is located within one mile influence area of the County of Riverside, City of Perris, and Caltrans.

3.0 AREA CONDITIONS

3.1 Existing Roadway Descriptions

3.1.1 Collector/ Interconnected Local (2 Lanes)

- Palomar Road is an undivided 2-lane roadway in the Project vicinity. It is classified as collector roadway in the City of Menifee General Plan Circulation Element and provides connectivity to SR-74. Street parking is not allowed. There are existing sidewalks on the both sides of the street where development is complete, but designated bike lanes do not exist within the study area.

3.1.2 Secondary Roadway

- Watson Road is an undivided 2-lane secondary roadway in the Project vicinity. It is classified as secondary roadway in the City of Menifee General Plan Circulation Element and provides connectivity to Sherman Road and Menifee Road. Street parking is not allowed. There are existing sidewalks on the both sides of the street where development is complete, but designated bike lanes do not exist within the study area.

3.1.3 Major Roadway

- Briggs Road is a divided 2 to 4 lane north-south roadway in the Project vicinity. It is 2-3 lanes with a painted two way left turn lane south of SR-74 and is 2 lanes undivided north of SR-74. It is classified as a major roadway in the City of Menifee General Circulation Element and provides connectivity to Newport Road and SR-74. Street parking is not allowed. There are existing sidewalks on both sides of the street where development is complete, but designated bike lanes do not exist within the study area.
- Sherman Road is an undivided 2-lane north-south roadway in the Project vicinity. It is classified as a major roadway in the City of Menifee General Plan Circulation Element and provides connectivity to SR-74 and Street parking is not allowed. There are existing sidewalks on both sides of the street, but designated bike lanes do not exist within the study area.
- Antelope Road is an undivided 2-lane north-south major roadway in the Project vicinity. It is classified as a major roadway in the City of Menifee General Plan Circulation Element and provides connectivity to SR-74 and Watson Road. Street parking is not allowed. There are existing sidewalks on both sides of the street where development is complete, but designated bike lanes do not exist within the study area.

3.1.4 Urban Arterial

- Menifee Road is a 2 to 4-lane north-south urban arterial roadway in the Project vicinity. It is divided in some areas with painted median. It is classified as an urban arterial roadway in the City of Menifee General Plan Circulation Element and provides connectivity to SR-74 and Newport Road. Street parking is not allowed. There are existing sidewalks on both sides of the street where development is complete, but designated bike lanes do not exist within the study area.

3.1.5 Expressway

- State Route 74 (SR-74) a 4-lane east-west expressway in the Project vicinity. It is divided in some areas by painted median. It is classified as an expressway in the City of Menifee General Plan Circulation Element and provides connectivity to the I-215 and the City of Hemet. Street parking is not allowed. There are existing sidewalks on both sides of the street where development is complete, but designated bike lanes do not exist within the study area.

3.2 Study Area Intersections and Roadways

Study intersections and roadway segments are typically selected based on their location in relation to the vicinity of the project and whether potential significant project-related traffic will pass through them. The intersections were identified in coordination with the City of Menifee staff and are shown on **Figure 3-A**. The study area includes the following intersections and roadway segments:

Intersections

1. Sherman Road (NS) / SR-74 (EW)
2. Antelope Road (NS) / SR-74 (EW)
3. Palomar Road (NS) / SR-74 (EW)
4. Menifee Road (NS) / SR-74 (EW)
5. Briggs Road (NS) / SR-74 (EW)
6. Palomar Road (NS) / Matthew Road (EW)
7. Menifee Road (NS) / Matthew Road (EW)
8. Menifee Road (NS) / Rouse Road (EW)
9. Menifee Road (NS) / Heritage Lake Drive (EW)
10. Menifee Road (NS) / McCall Boulevard (EW)
11. South Project Driveway (NS) / SR-74 (EW)
12. Palomar Road (NS) / East Project Driveway (EW)

Roadway Segments

SR-74

1. Sherman Road to Antelope Road
2. Antelope Road to Palomar Road
3. Palomar Road to Menifee Road
4. Menifee Road to Briggs Road

Matthews Road

5. Palomar Road to Menifee Road

Palomar Road

6. SR-74 to Matthews Road

Menifee Road

7. Matthews Road to Rouse Road
8. Rouse Road to Heritage Lake Drive
9. Heritage Lake Drive to McCall Boulevard

3.3 Existing Traffic Controls and Intersection Geometrics

The existing roadway system is shown on **Figure 3-B**. It identifies the existing intersection traffic controls (i.e. signals and signage), intersection geometrics, and the number of traffic lanes within the study area.

3.4 Existing Traffic Volumes

The existing AM and PM peak hour intersection turning movement counts and roadway ADT counts at the 12 study intersections and 10 roadway segments, respectively, were conducted by Counts Unlimited, Inc. on September 20, 2018. The traffic count worksheets are provided in Appendix C. The AM and PM peak hour intersection turning movement volumes and roadway ADT volumes are presented on **Figure 3-C**, **Figure 3-D**, respectively.

Figure 3-A – Study Area Intersections

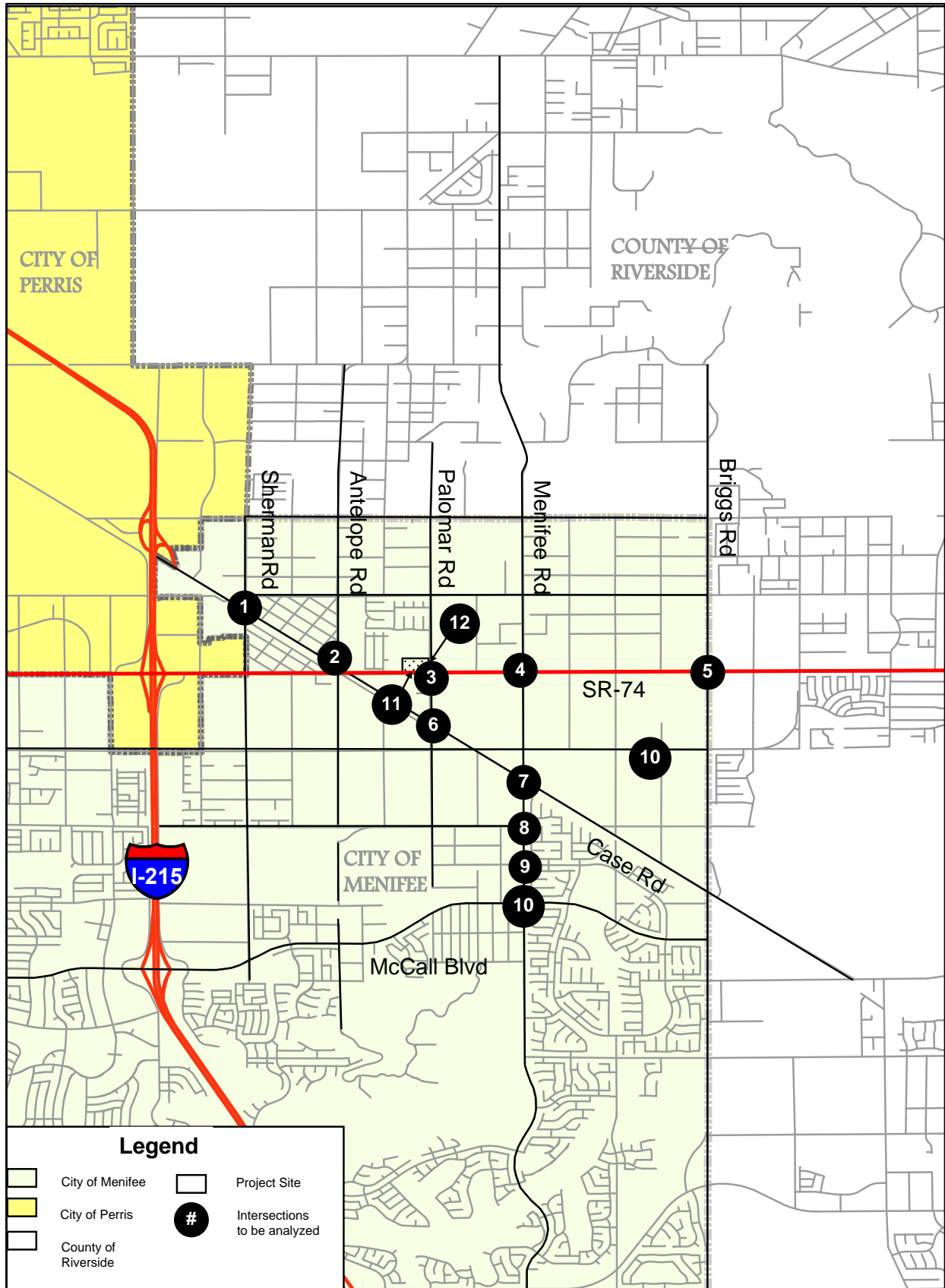


Figure 3-B – Existing Roadway System

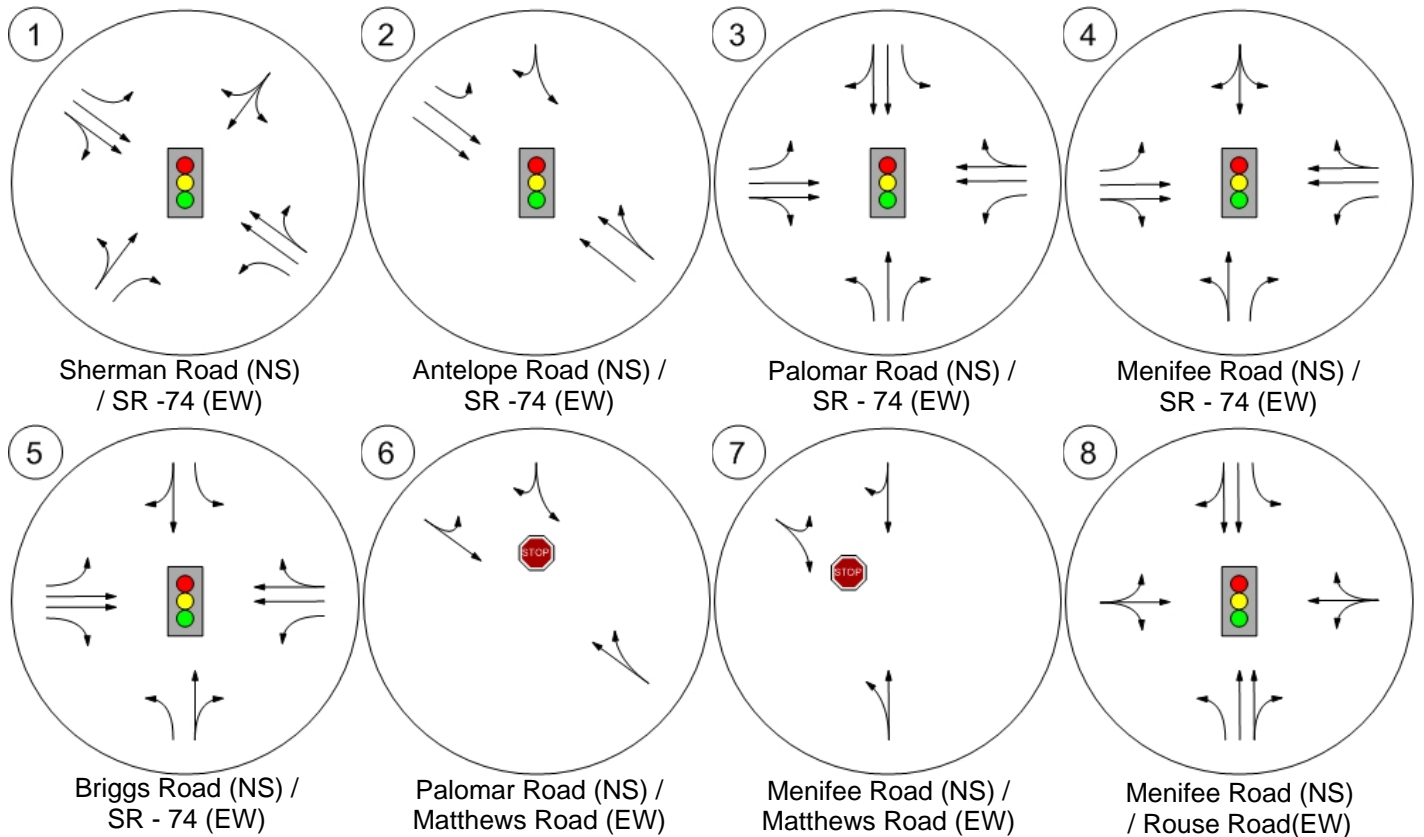


Figure 3-B (Continued) – Existing Roadway System

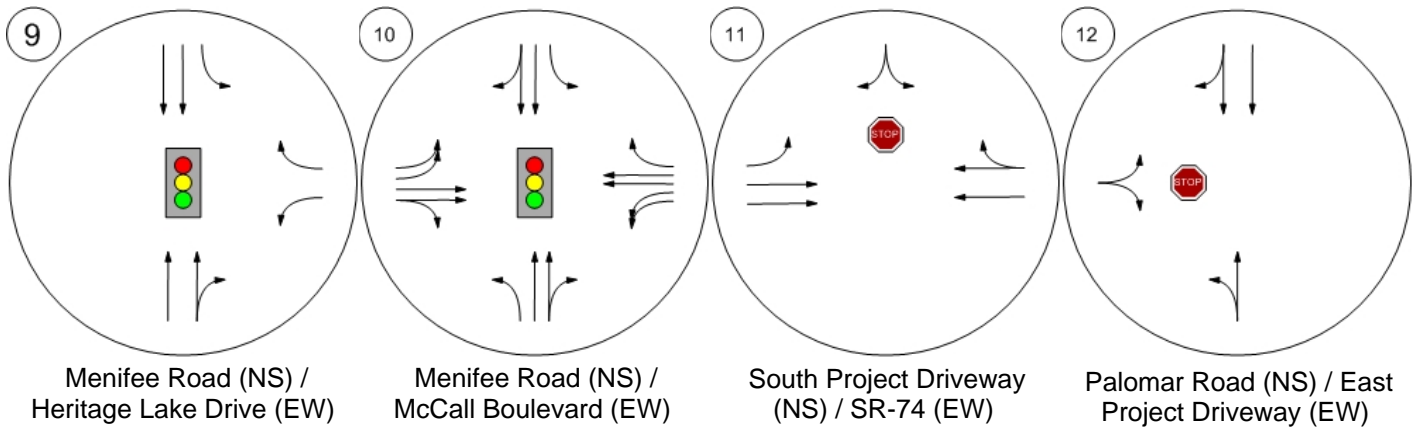


Figure 3-C – Existing (2018) AM Peak Hour Intersection Volumes

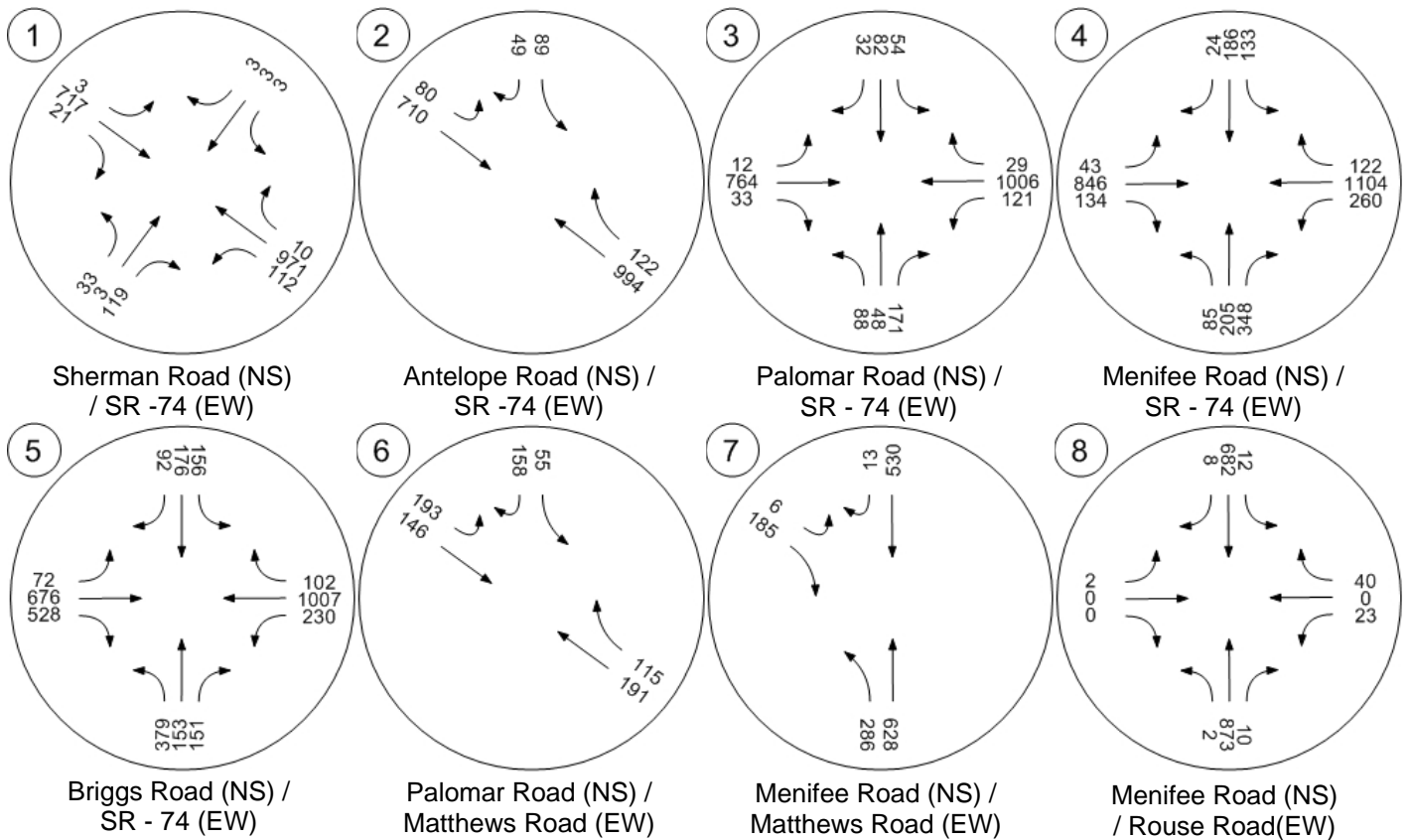


Figure 3-C (Continued) – Existing (2018) AM Peak Hour Intersection Volumes

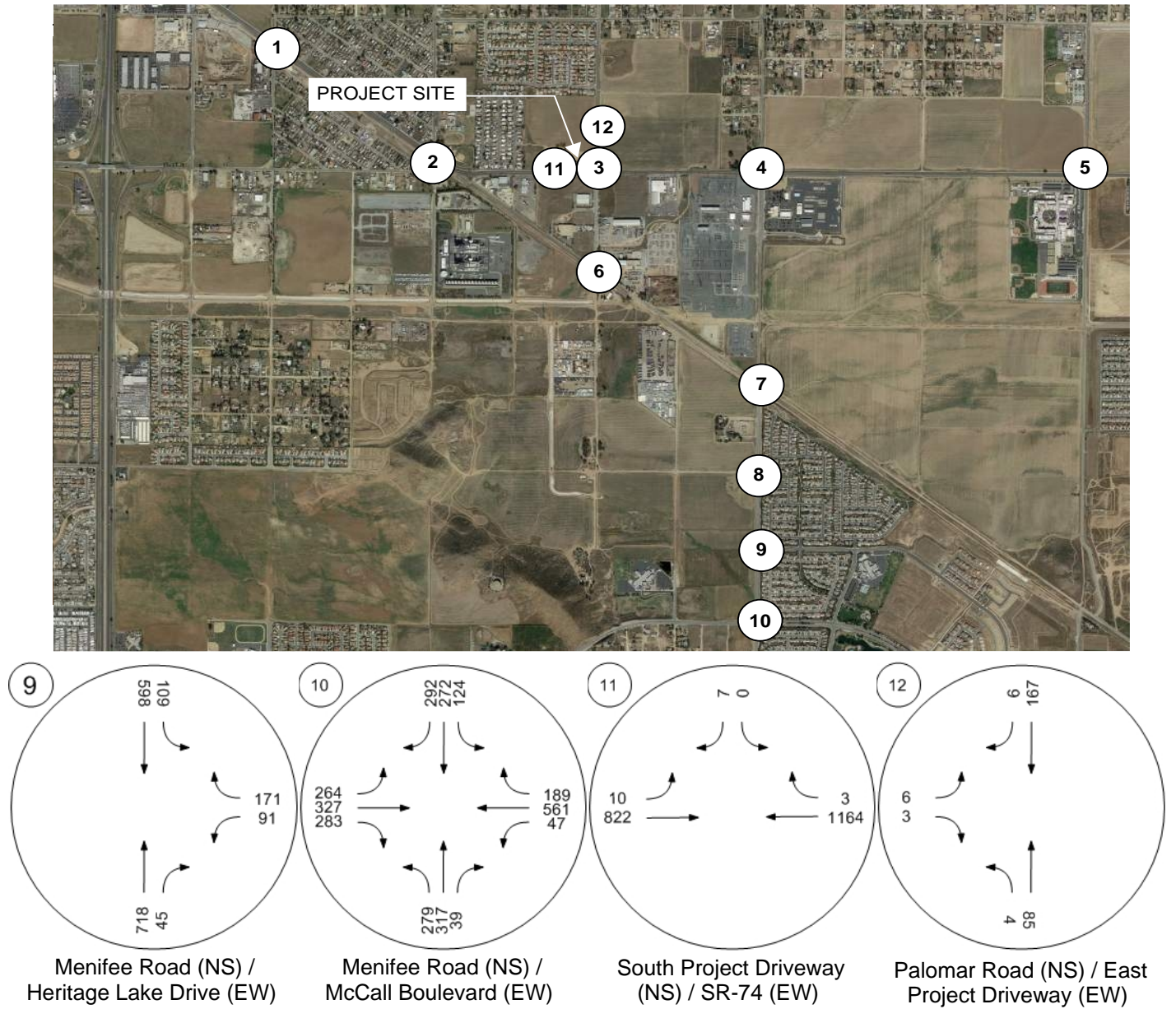


Figure 3-D – Existing (2018) PM Peak Hour Intersection Volumes

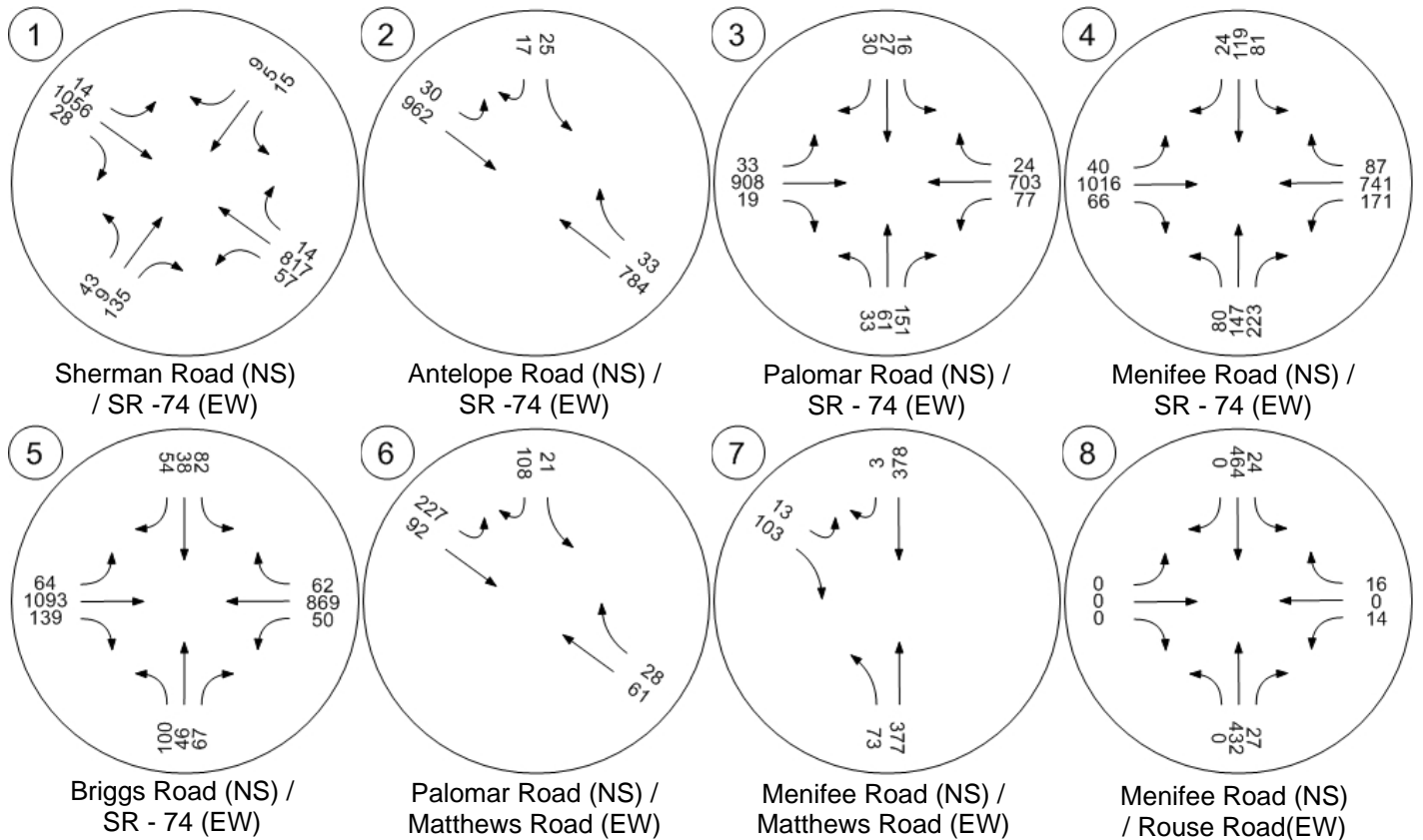
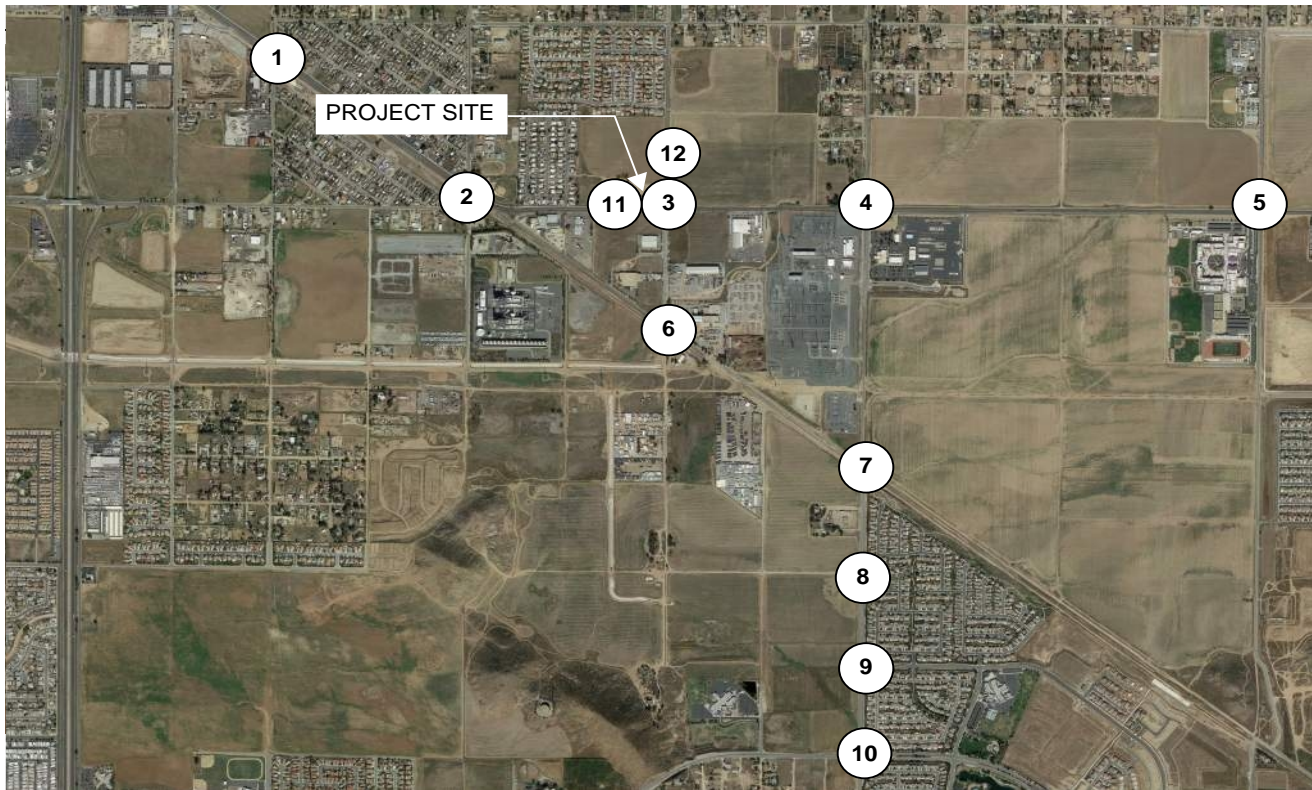
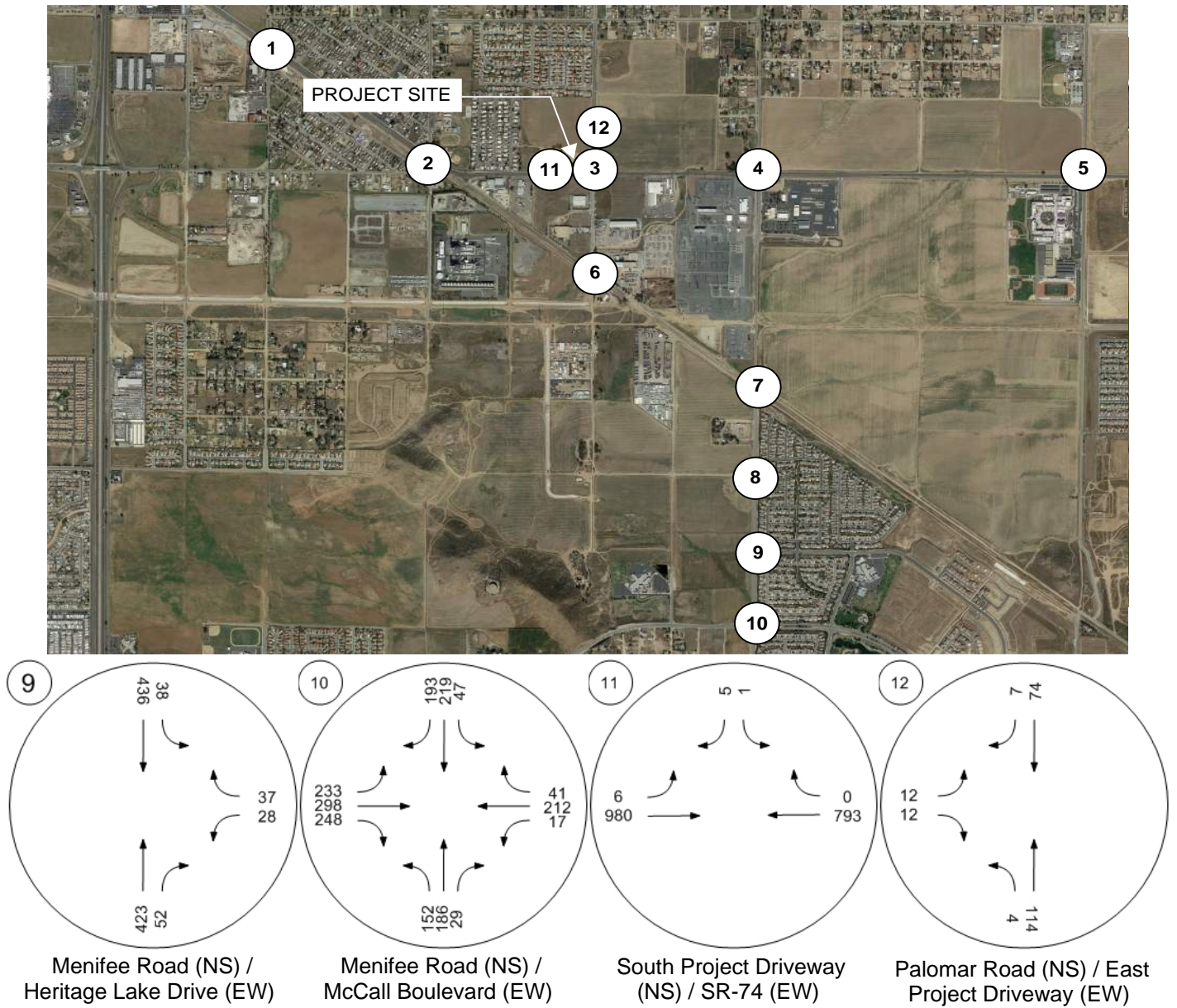


Figure 3-D (Continued) – Existing (2018) PM Peak Hour Intersection Volumes



3.5 Level of Service Methodology

The City of Menifee requires that the Transportation Research Board Highway Capacity Manual 2010 (HCM2010) or the most recent release of the HCM be used to analyze Level of Service (LOS). The Highway Capacity Manual 6th Edition (HCM6) was used in this analysis.

Quality of service describes how well a transportation facility or service operates from the traveler's perspective. Level of service (LOS) is a quantitative stratification of a performance measure or measures that represent quality of service. LOS is measured on a familiar A to F scale where LOS A represents the best conditions from a traveler's perspective and LOS F the worst. A simple LOS letter system is used to hide much of the complexity of transportation facility performance in order to simplify decision making on whether facility performance is generally acceptable and whether a future change in performance is likely to be perceived as significant by the general public. One reason for the widespread adoption of the LOS concept by agencies is the concept's ability to communicate roadway performance to nontechnical decision makers.

The HCM6 evaluates the LOS of intersections based upon the control delay per vehicle. Control delay is defined as the delay associated with vehicles slowing in advance of an intersection, the time spent stopped on an intersection approach, the time spent as vehicles move up in the queue, and the time needed for vehicles to accelerate to their desired speed. The methodology used to evaluate the intersection level of service differs on whether the intersection is signalized or unsignalized. Levels of service at signalized and unsignalized intersections have been evaluated using PTV Vistro 7.00 software, which is based upon HCM6 methodologies.

3.5.1 Signalized Intersections

Signalized intersections have been evaluated using the Operational Method as described in Chapter 19 of the HCM6. According to this methodology, the level of service for signalized intersections is based upon the weighted average control delay, in seconds per vehicle, of all vehicles passing through the intersection. **Table 3-1** shows the criteria used to determine the level of service for signalized intersections.

Table 3-1 – Level of Service for Signalized Intersections

Level of Service	Control Delay (sec/vehicle)	Description
A	≤ 10	Minimal delay and primarily free-flow operation. Most vehicles do not stop because they arrive during the green indication or only stop for a brief amount of time as the signal changes.
B	> 10 – 20	Short delay and reasonably unimpeded operation. Many vehicles do not stop because they arrive during the green indication or only stop for a short amount of time as the signal changes. More vehicles stop than with LOS A.
C	> 20 – 35	Moderate delay and stable operation. Individual cycle failures (i.e. when queued vehicles do not clear the signal during the next green indication) may begin to appear. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	> 35 – 55	Less stable operation in which small increases in vehicles may cause substantial increases in delay. Many vehicles stop and individual cycle failures are noticeable.
E	> 55 – 80	Significant delay and unstable operation. Most vehicles stop and individual cycle failures are frequent.
F	> 80	Considerable delay and extensive queuing. Almost all vehicles stop and most cycles fail to clear the queue.

Source: Transportation Research Board Highway Capacity Manual 6th Edition (HCM6)

3.5.2 Unsignalized Intersections

Unsignalized intersections were evaluated using Chapter 20-21 of the HCM6. According to this methodology, the level of service for all-way stop intersections is based upon the weighted average control delay, in seconds per vehicle, of all vehicles passing through the intersection. For two-way stop controlled intersections, the level of service is based on the highest control delay of all controlled movements for the intersection. **Table 3-2** shows the criteria used to determine the level of service for unsignalized intersections.

Table 3-2 – Level of Service for Unsignalized Intersections

Level of Service	Control Delay (sec/vehicle)	Description
A	≤ 10	Minimal delay. Usually no conflicting traffic.
B	> 10 – 15	Short delay. Occasionally some conflicting traffic.
C	> 15 – 25	Noticeable delay, but not inconveniencing. Usually some conflicting traffic.
D	> 25 – 35	Noticeable delay and irritating. A significant amount of conflicting traffic. Increased likelihood of risk taking.
E	> 35 – 50	Significant delay approaching tolerance level. Lots of conflicting traffic, but with some gaps of suitable size. Risk taking behavior likely.
F	> 50	Considerable delay exceeding tolerance level. Lots of conflicting traffic, with not enough gaps of suitable size. High likelihood of risk taking.

Source: Transportation Research Board Highway Capacity Manual 6th Edition (HCM6)

3.6 Acceptable Level of Service

3.6.1 County of Riverside

The acceptable Level of Service (LOS) for County of Riverside is based on the County of Riverside General Plan Circulation Element:

LOS C shall apply to all development proposals in any area of the Riverside County not located within the boundaries of an Area Plan, as well those areas located within the following Area Plans: REMAP, Eastern Coachella Valley, Desert Center, Palo Verde Valley, and those non-Community Development areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans.

LOS D shall apply to all development proposals located within any of the following Area Plans: Eastvale, Jurupa, Highgrove, Reche Canyon/Badlands, Lakeview/Nuevo, Sun City/Menifee Valley, Harvest Valley/Winchester, Southwest Area, The Pass, San Jacinto Valley, Western Coachella Valley and those Community Development Areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans.

LOS E may be allowed by the Board of Supervisors within designated areas where transit oriented development and walkable communities are proposed.

Notwithstanding the forgoing minimum LOS targets, the Board of Supervisors may, on occasion by virtue of their discretionary powers, approve a project that fails to meet these LOS targets in order to balance congestion management considerations in relation to benefits, environmental impacts and costs, provided an Environmental Impact Report, or equivalent, has been completed to fully evaluate the impacts of such approval. Any such approval must incorporate all feasible mitigation measures, make specific.

3.6.2 City of Menifee

The acceptable LOS for the City of Menifee is based on the City of Menifee Traffic Impact Analysis Guidelines:

City of Menifee has identified LOS D as the threshold for acceptable operating conditions for intersections.

Require development to mitigate its traffic impacts and achieve a peak hour Level of Service (LOS) D or better at intersections, except at constrained intersections at close proximity to the I-215 where LOS E may be permitted.

3.6.3 Caltrans

The acceptable LOS for Caltrans facilities is based on the Caltrans' Guide for the Preparation of Traffic Impact Studies Section II:

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 State highway facility is operating at less than the

appropriate target LOS, the existing measures of effectiveness (MOE) should be maintained.

Per discussion with Mark Roberts, Caltrans District 8 Office Chief, Intergovernmental Review, Community and Regional Planning, the region-wide goal for acceptable LOS on all freeways, roadway segments, and intersections is LOS D.

Roadway Segments

Roadway segments are evaluated based on a roadway daily volume and its capacity. Roadway segment analysis compares the daily volume with the capacity to determine a volume to capacity ratio (v/c). This study follows the “v/c” ratio stipulated by the City of Menifee TIA roadway segment thresholds, shown in Table 3-3. Capacities for two lane roads classified as Collector or Urban Arterial were linearly interpolated. The target LOS for roadway segments will be considered “D” for consistency with the City of Menifee TIA guidelines.

Table 3-3 – Level of Service for Roadway Segments

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

Footnotes:

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

3.7 Levels of Service – Existing (2018) Conditions

The intersection and roadway levels of service for existing (2018) conditions shown on **Table 3-4** and **Table 3-5** are based upon the existing roadway system shown on **Figure 3-B** and the existing AM and PM peak hour intersection volumes shown on **Figure 3-C** and **Figure 3-D**, respectively. The level of service calculation worksheets are provided in Appendix E.

The following intersections are operating at an unacceptable level of service under existing (2018) conditions:

4. Menifee Road (NS) / SR-74 (EW) in AM and PM peak hour
5. Briggs Road (NS) / SR-74 (EW) in AM peak hour
7. Menifee Road (NS) / Matthews Road (EW) in AM peak hour

The following study roadway segment is expected to operate at unacceptable level of service under existing conditions:

4. SR-74: Menifee Road to Briggs Road

Table 3-4 – Intersection Levels of Service – Existing (2018) Conditions

	Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	Existing	
						Delay (sec)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	8.9 9.1	A A
2	Antelope Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	8.1 5.0	A A
3	Palomar Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	11.8 10.0	B B
4	Menifee Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	79.5 78.0	E E
5	Briggs Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	63.3 18.0	E B
6	Palomar Road (NS) / Matthews Road (EW)	City of Menifee	D	AM PM	OWSC	23.8 16.0	C C
7	Menifee Road (NS) / Matthews Road (EW)	City of Menifee	D	AM PM	OWSC	150.4 21.1	F C
8	Menifee Road (NS) / Rouse Road (EW)	City of Menifee	D	AM PM	Signal	5.1 4.4	A A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	City of Menifee	D	AM PM	Signal	9.2 6.6	A A
10	Menifee Road (NS) / McCall Boulevard (EW)	City of Menifee	D	AM PM	Signal	41.6 31.9	D C
11	South Project Driveway (NS) / SR-74 (EW)	Caltrans	D	AM PM	OWSC	13.2 32.1	B D
12	Palomar Road (NS) / East Project Driveway (EW)	City of Menifee	D	AM PM	OWSC	10.7 9.8	B A

*TWSC: Two way stop control, OWSC: One way stop control
XX = Exceeds Target LOS

Table 3-5 - Roadway Segments Level of Service - Existing (2018) Conditions

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	ADT	V/C	LOS
<i>SR -74</i>						
1. <i>Sherman Road to Antelope Road</i>	Major	34,100	4	30,610	0.90	D
2. <i>Antelope Road to Palomar Road</i>	Major	34,100	4	27,692	0.81	D
3. <i>Palomar Road to Menifee Road</i>	Major	34,100	4	29,136	0.85	D
4. <i>Menifee Road to Briggs Road</i>	Major	34,100	4	33,885	0.99	E
<i>Matthews Road</i>						
5. <i>Palomar Road to Menifee Road</i>	Collector	13,000	2	3,398	0.26	A
<i>Palomar Road</i>						
6. <i>SR-74 to Matthews Road</i>	Collector	13,000	2	5,583	0.43	A
<i>Menifee Road</i>						
7. <i>Matthews Road to Rouse Road</i>	Major	34,100	4	11,402	0.33	A
8. <i>Rouse Road to Heritage Lake Drive</i>	Major	34,100	4	13,938	0.41	A
9. <i>Heritage Lake Dr ato McCall Boulevard</i>	Major	34,100	4	13,865	0.41	A

Source: City of Menifee Traffic Impact Analysis Guidelines
 XX = Exceeds Target LOS

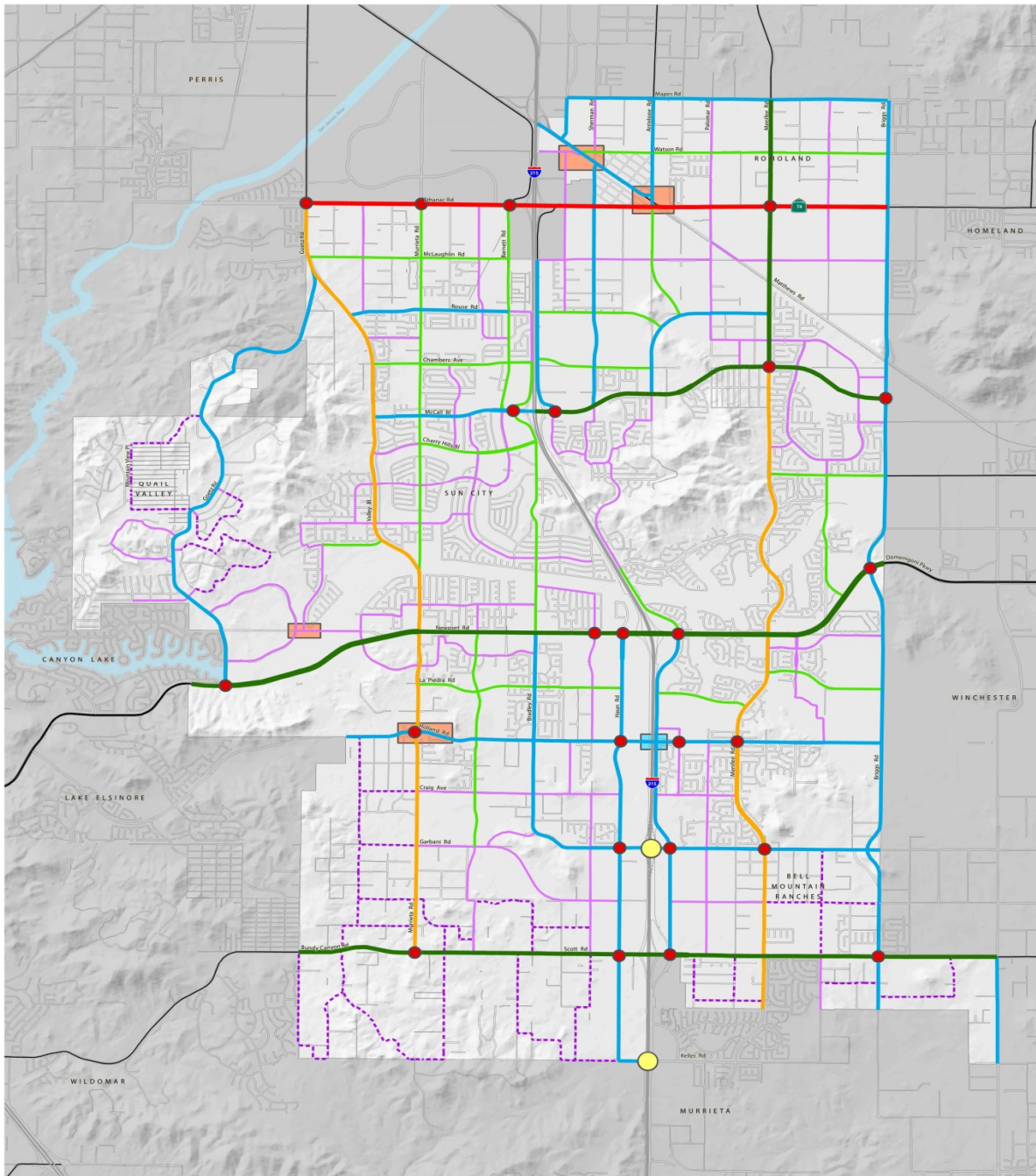
3.8 General Plan Circulation

The current City of Menifee General Plan Circulation Element Roadways Figure is shown on **Figure 3-E**.

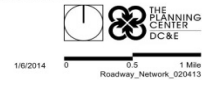
3.9 Transit Service

The Project is currently served by Riverside Transit Agency (RTA) Route 27. The nearest bus stops are located at the south of project driveway.

Figure 3-E – City of Menifee General Plan Circulation Element Roadways



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



4.0 PROJECTED FUTURE TRAFFIC

4.1 Method of Projection

In order to estimate the traffic impact characteristics of the Project, a multi-step process has been utilized. The first step is traffic generation which estimates the total arriving and departing traffic during a peak hour and on a daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation rates to the project development tabulation. The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic based on existing/expected future travel patterns in the study area. The third step is traffic assignment, which involves the allocation of Project traffic to study area street segments and intersections. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway segments and intersection turning movements throughout the study area. The impact of the Project is isolated by comparing operation level of service conditions at selected study intersections using expected future traffic volumes with and without forecasted Project traffic.

The method of traffic projection is based on the following criteria:

- Existing traffic conditions (2018);
- Ambient growth projections;
- Project generated traffic; and
- Planned development Project generated traffic.

This report uses project opening year of 2020 for analysis purposes.

4.2 Ambient Growth

In order to evaluate traffic conditions for the opening year, area wide growth on existing roadways must be projected. The majority of the anticipated growth within the study area is accounted for with other cumulative project traffic. The ambient traffic growth factor is intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. Per discussion with City of Menifee staff, this study will utilize a 2 percent annual growth rate to each phase opening year.

4.3 Project Generated Traffic

4.3.1 Project Trip Generation

Trip Generation Rates

Trip generation represents the amount of traffic traveling to and from the proposed Project, which are defined as inbound and outbound trips. An inbound and outbound trip by the same vehicle is considered two separate trips. The AM and PM peak hour trip generation rates used in this study are based upon the development of the various land uses as shown in **Table 4-1**. The automated car wash land use did not have a daily trip generation rate in the ITE Trip Generation Manual, so recent 12-month data from two similar nearby sites were utilized and are provided in **Appendix F**. The highest daily rate for the peak month was used in the analysis. The peak hour trip generation for the automated car wash land use remains per the ITE Trip Generation Manual to remain conservative.

Table 4-1 – Trip Generation Rates

Land Use	Unit	AM Peak Hour			PM Peak Hour			Daily
		Total	In	Out	Total	In	Out	
Super Convenience Market/Gas Station	VFP	28.08	14.04	14.04	22.96	11.48	11.48	230.52
Automated Car Wash	CWT	0.00	0.00	0.00	77.50	38.75	38.75	96.00
Fast Food With Drive-Through Window	TSF	40.19	20.50	19.69	32.67	16.99	15.68	470.95

VFP =Vehicle Fueling Positions, CWT = Car Wash Tunnels, and TSF=Thousand Square Feet.

Source: ITE Trip Generation Manual 10th Edition

Daily trip rate for Automated Car Wash based on two similar existing sites in Riverside County. Peak hour rates kept the same as ITE for conservative peak hour analysis.

Project Trip Generation

The trip generation for the proposed Project was forecast using ITE Trip Generation Manual 10th Edition. **Table 4-2** present the daily, AM, and PM peak hour trip generation for the proposed Project.

Table 4-2 – Project Trip Generation

Land Use	Qty	Unit	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Super Convenience Market/Gas Station	16	VFP	449	225	225	367	184	184	3,688
<i>Pass-by Trips (AM: 62% PM: 56% Gas Station)</i>			(278)	(139)	(139)	(206)	(103)	(103)	(484)
Automated Car Wash*	1	CWT	0	0	0	78	39	39	96
Fast Food With Drive-Through Window	1.75	TSF	70	36	34	57	30	27	824
<i>Pass-by Trips (AM: 49% PM: 50% Fast Food)</i>			(34)	(17)	(17)	(29)	(14)	(14)	(63)
PROJECT NET TOTAL			206	104	102	268	135	133	4,061
PROJECT DRIVEWAY TOTAL TRIPS			519	260	259	502	252	250	4,608

VFP =Vehicle Fueling Positions, CWT = Car Wash Tunnels, and TSF=Thousand Square Feet.

* Automated Car Wash Land Use (948) does not have any AM trip rates

Pass-by trip percentages per ITE Trip Generation Handbook

Daily trips for Automated Car Wash based on two similar existing sites in Riverside County. Peak hour trips kept the same as ITE for conservative peak hour analysis.

4.3.2 Pass-By Trips

Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Primary trips are trips made for the specific purpose of visiting the site. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. Pass-by trips do not add new traffic to the adjacent street system. Pass-by trips are only applicable to trips that enter or exit the site. Rates of Pass-by Trip Capture are calculated based on the ITE Trip Generation Handbook, 3rd Edition. Due to the attraction of existing trips on adjacent roadways, negative volumes may be provided for some movements in the Project-only volume figures as they are added to other movements towards the Project.

4.3.3 Project Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the Project. Trip distribution is influenced by the geographical location of the site, type of land use in the study area, such as residential areas and recreational sites, and proximity to the regional roadway system.

The trip directional orientation of traffic for the proposed Project was determined based upon the existing roadway system, existing traffic patterns, and existing and future land uses. The directional distribution for the Project

traffic assumed in this study are shown on **Figure 4-A**. They show the direction that vehicles will travel from the Project to their next destination.

4.3.4 Project Modal Split

The traffic-reducing potential of public transit has not been considered in this study. Therefore, the traffic projections provided in this report are considered conservative since public transit could reduce traffic volumes in the Project vicinity.

4.3.5 Project Trip Assignment

Trip assignment is the result of assigning the previously discussed trip generation numbers to the City's circulation system using the aforementioned trip distribution. Project AM and PM peak hour volumes are shown in **Figure 4-B** and **Figure 4-C**.

Figure 4-A – Distribution of Project Traffic

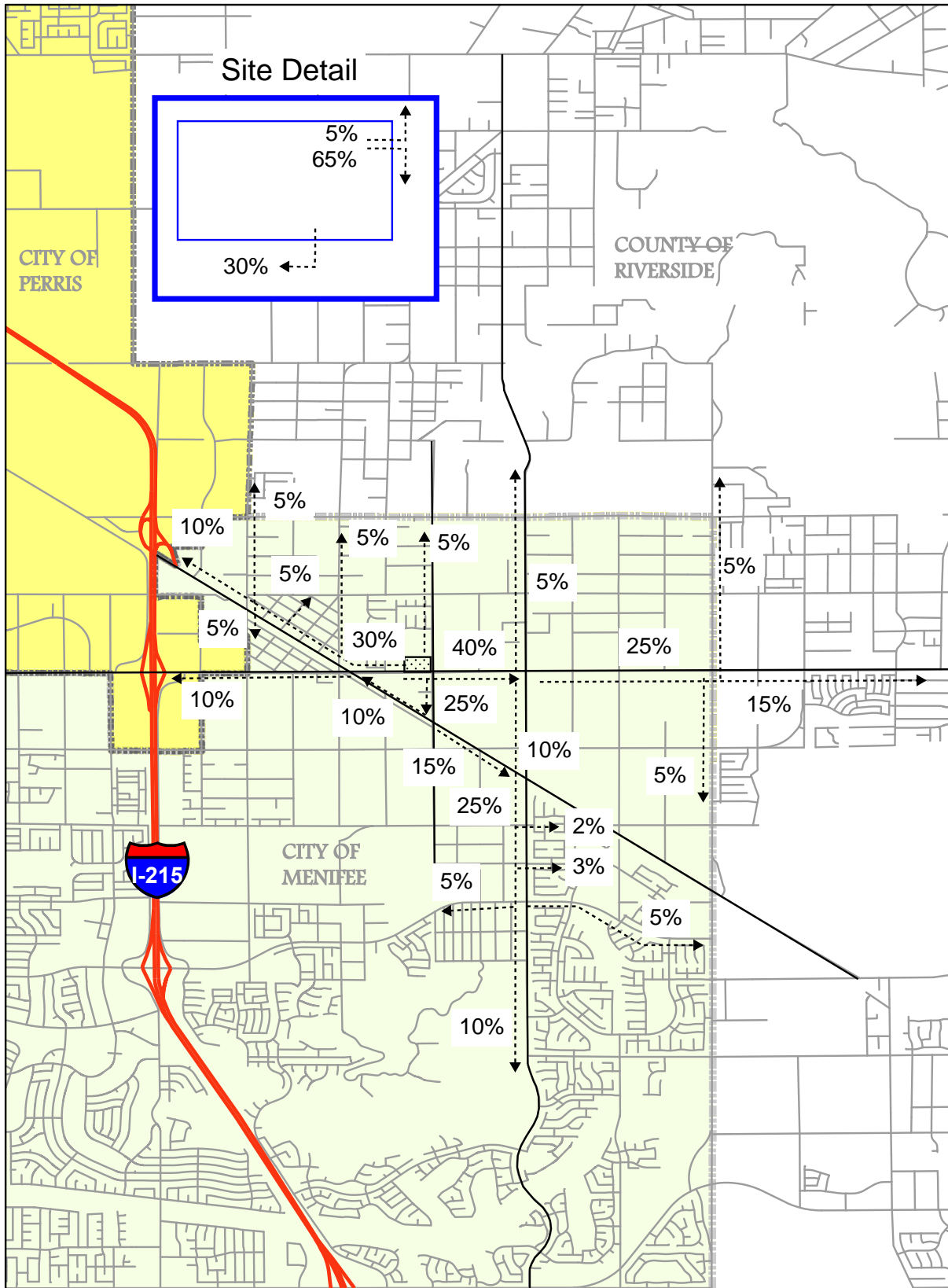


Figure 4-B– Project AM Peak Hour Intersection Volumes

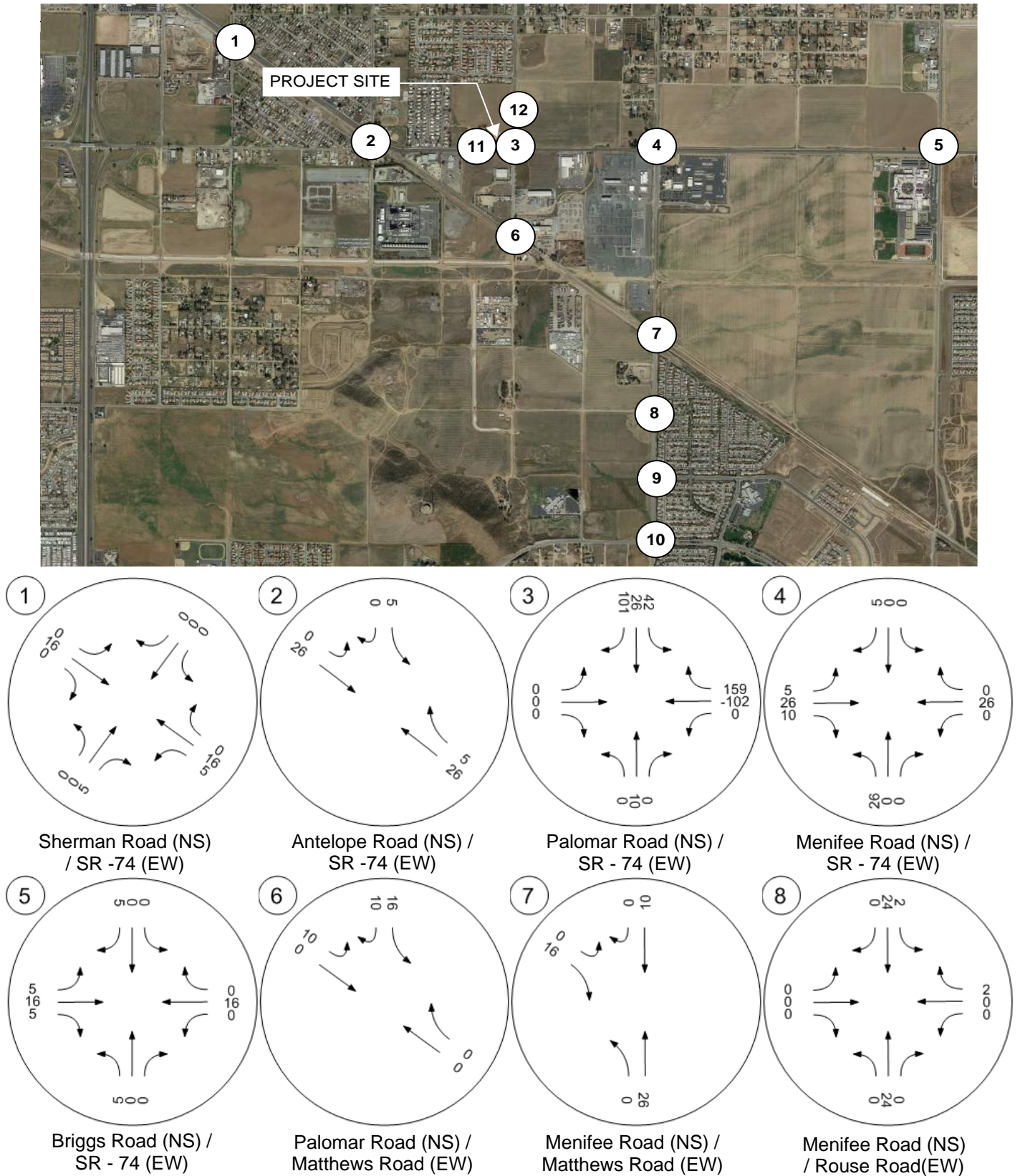


Figure 4-B (Continued) – Project AM Peak Hour Intersection Volumes

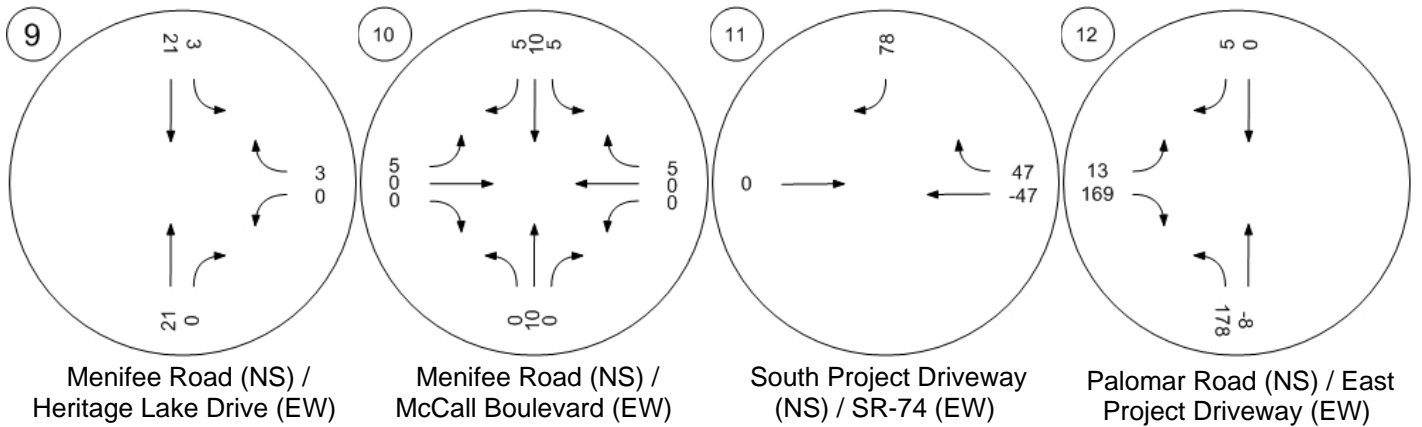


Figure 4-C – Project PM Peak Hour Intersection Volumes

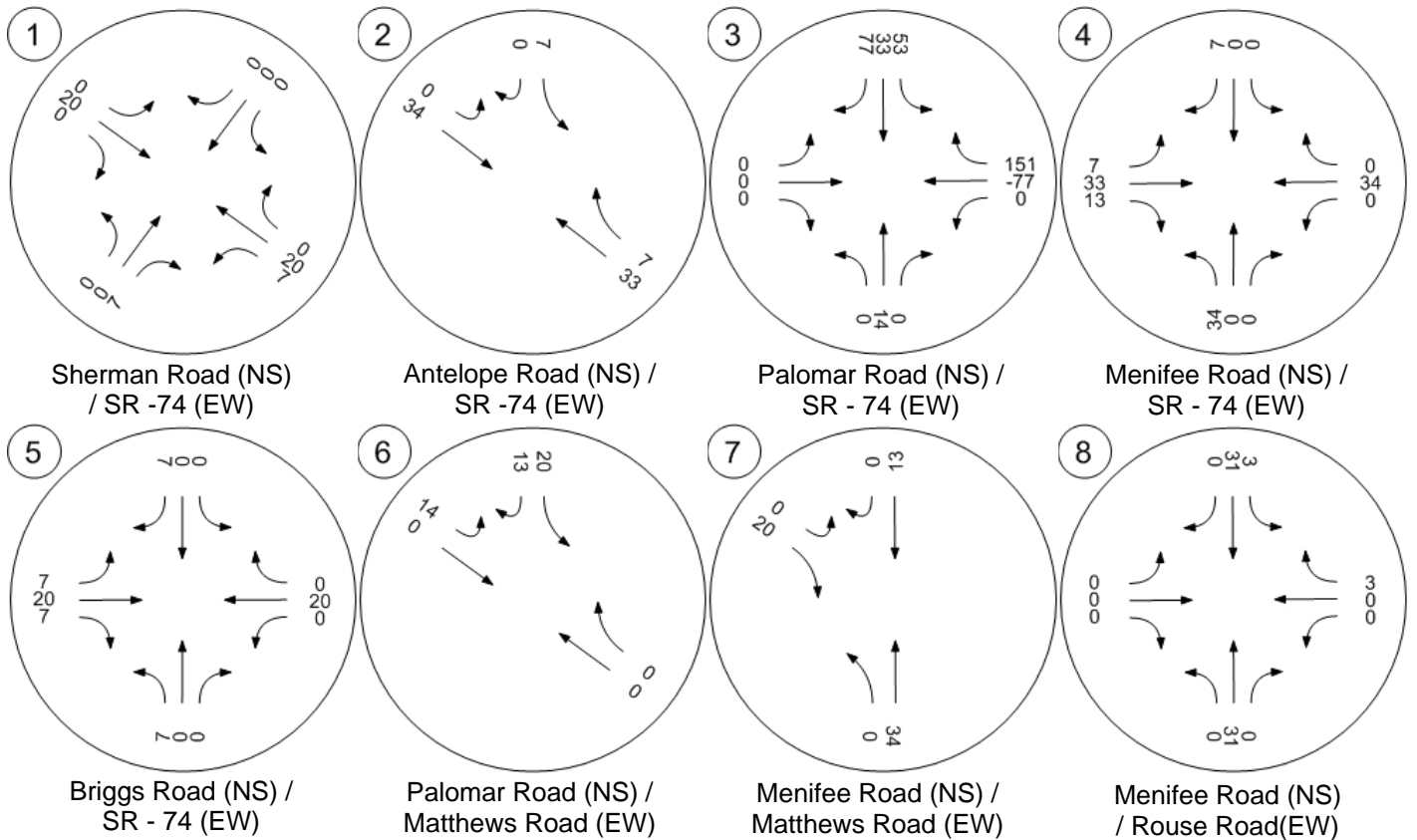
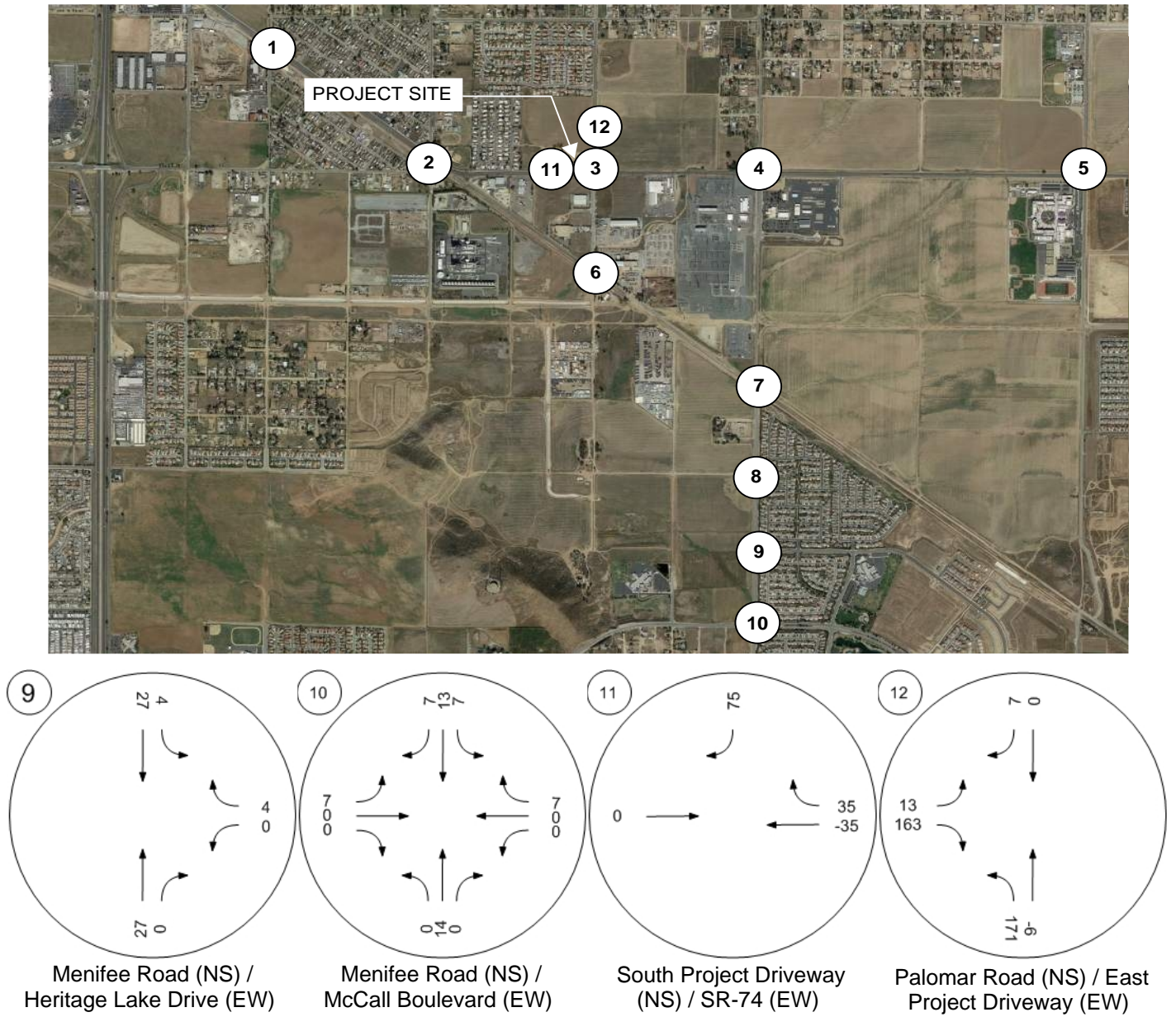


Figure 4-C (Continued) – Project PM Peak Hour Intersection Volumes



4.4 Planned Development Project Generated Traffic

Planned development projects are those projects identified by the agencies within the study area that are anticipated to be completed and contribute vehicle trips to the roadway network by each phase's opening year 2020. The County of Riverside, City of Menifee, and City of Perris provided a list of projects that are in development within the study area of this Project. Traffic from these planned development projects is expected to have an impact on levels of service. The planned development projects within the study area and each project's AM, PM, and daily trip generation values are listed in **Table 4-3**. The location of these projects are shown on **Figure 4-D**. The AM and PM peak hour intersection turning movement volumes for cumulative projects are shown on **Figure 4-E** and **Figure 4-F**, respectively.

Table 4-3 – Planned Development Projects within the Study Area

Project	Land Use	Qty	Unit	AM Peak Hour	PM Peak Hour	Daily	
<i>City of Menifee</i>							
1. TTM 31856	Single Family Detached Housing	79	DU	58	78	746	
2. TTM 34118	Single Family Detached Housing	85	DU	63	84	802	
3. TTM 33738	Single Family Detached Housing	52	DU	38	51	491	
4. TTM 34600	Multi Family Housing	153	DU	113	151	1,444	
5. TTM 29777	Single Family Detached Housing	173	DU	128	171	1,633	
6. TTM 29835	Single Family Detached Housing	264	DU	195	261	2,492	
7. CUP 3549 / 2017-089	Supermarket	43.8	TSF	167	405	4,677	
	Retail	47	TSF	44	179	1,774	
	Fast Food Restaurant with Drive Through	3.8	TSF	153	124	1,790	
	Gas Station with Convenience Store	6	VFP	75	84	1,232	
	Automated Car Wash	1	CWT		78		
	<i>Sub-Total</i>				439	870	9,473
	<i>Internal Trips (10%)</i>				(44)	(87)	(947)
	<i>Pass-by Trips (PM: 36% Supermarket)</i>					(131)	(1,515)
	<i>Pass-by Trips (AM: 62% PM: 59% Gas Station)</i>				(42)	(45)	(654)
	<i>Pass-by Trips (PM:34% Retail Only)</i>					(55)	(543)
<i>Pass-by Trips (AM:49% PM:50% Fast Food)</i>				(67)	(56)	(806)	
8. TTM 31812	Single Family Detached Housing	737	DU	545	730	6,957	
9. TTM 34406	Single Family Detached Housing	817	DU	605	809	7,712	
10. PP 19469	Single Family Detached Housing	221	DU	164	219	2,086	
11. SP 2009-025	Medium Density Residential	1080	DU	796	1,064	10,148	
	Shopping Center	225	TSF	212	857	8,494	
	<i>Sub-Total</i>				1,008	1,921	18,642
	<i>Internal Trips (10%)</i>				(101)	(192)	(1,864)
<i>Pass-by Trips (PM: 34% Retail Only)</i>					(262)	(2,599)	
12. 2012-120	Shopping Center	208	TSF	196	792	7,852	
	<i>Pass-by Trips (PM: 34% Retail Only)</i>					(242)	(2,403)
<i>Total</i>				196	792	7,852	
13. TM 31582	Single Family Detached Housing	40	DU	30	40	378	
14. PP 2014-189	Single Family Detached Housing	240	DU	178	238	2,266	
15. PP 2011-093	Industrial Buildings	97.5	TSF	39	39	329	
16. TR 2015-250	Single Family Detached Housing	126	DU	93	125	1,189	
17. TR 31536	Single Family Detached Housing	44	DU	33	33	415	

CWT= Car Wash Tunnel, TSF- Thousand Square Feet, VFP- Vehicle Fueling Positions, DU- Dwelling Unit

Trip Generation is based on ITE Trip Generation Manual 10th Edition

Motte Country Plaza

Project	Land Use	Qty	Unit	AM Peak Hour	PM Peak Hour	Daily
18. 2011-003	Industrial Buildings	21.7	TSF	9	9	73
19. 2016-110 CUP	Fast Food Restaurant with Drive Thru	2.4	TSF	96	78	1,130
	Pass-by Trips (AM: 49% PM:50% Fast Food)			(48)	(39)	(565)
20. PP 2016-124	Shopping Center	18.2	TSF	17	69	687
	Pass-by Trips (PM: 34% Retail Only)				(23)	(234)
21. 2016-183 CUP	Assisted Living	45.2	TSF	18	22	189
22. CUP 2017-060	Gas Station with Convenience Store	16	VFP	200	224	3,286
	Car Wash	2	CWT		155	
	Fast Food Restaurant with Drive Through	4.3	TSF	173	140	2,025
	Sub-Total			373	519	5,311
	Internal Trips (10%)			(37)	(52)	(531)
	Pass-by Trips (AM: 62% PM: 59% Gas Station)			(112)	(119)	(1834)
	Pass-by Trips (AM: 49% PM:50% Fast Food)			(76)	(63)	(911)
	Total Volumes			148	285	2,035
23. 2016-233 CUP	Automobile Sales	17.6	TSF	33	43	490
24. CUP 2016-263	Industrial Buildings	12.3	TSF	9	8	61
25. 2016-139 TR (Heritage Lake)	Single Family Detached Housing	40	DU	30	40	378
26. TR 37400/2018-065	Single Family Detached Housing	174	DU	129	172	1,643
County of Riverside						
27. TR25901	Single Family Detached Housing	152	DU	112	150	1,435
28. TTM 37358	Single Family Detached Housing	154	DU	114	152	1,454
29. TR31687	Single Family Detached Housing	65	DU	48	64	614
30. TR35045	Single Family Detached Housing	712	DU	527	705	6,721
31. SP00344	Single Family Detached Housing	796	DU	589	583	7,514
32. TR24936	Single Family Detached Housing	41	DU	30	41	387
33. TR29322	Single Family Detached Housing	202	DU	149	200	1907
34. TTM37533	Single Family Detached Housing	363	DU	269	359	3,427
35. R29327	Single Family Detached Housing	78	DU	58	77	736
36. TR31500	Single Family Detached Housing	182	DU	135	180	1,718
37. TR30972	Single Family Detached Housing	91	DU	67	90	859
38. TR36430	Single Family Detached Housing	340	DU	252	337	3,210
City of Perris						
39 Classic Pacific (PUD) E of I-215 btw Watson and Ethanac	Industrial Business Park	387.9	TSF	155	155	1,307
40. Quick Quick Carwash E of Case Rd and North of Ethanac	Car Wash	3.6	TSF		42	
41. Motte Town Center (MTC) SE Corner of Ethanac and	Retail	484	TSF	455	1,844	18,271
Total Trip Generation				7,072	11,427	111,426

TSF- Thousand Square Feet, VFP- Vehicle Fueling Positions, DU- Dwelling Unit
 Trip Generation is based on ITE Trip Generation Manual 10th Edition

Figure 4-D – Planned Development Project Locations within the Study Area

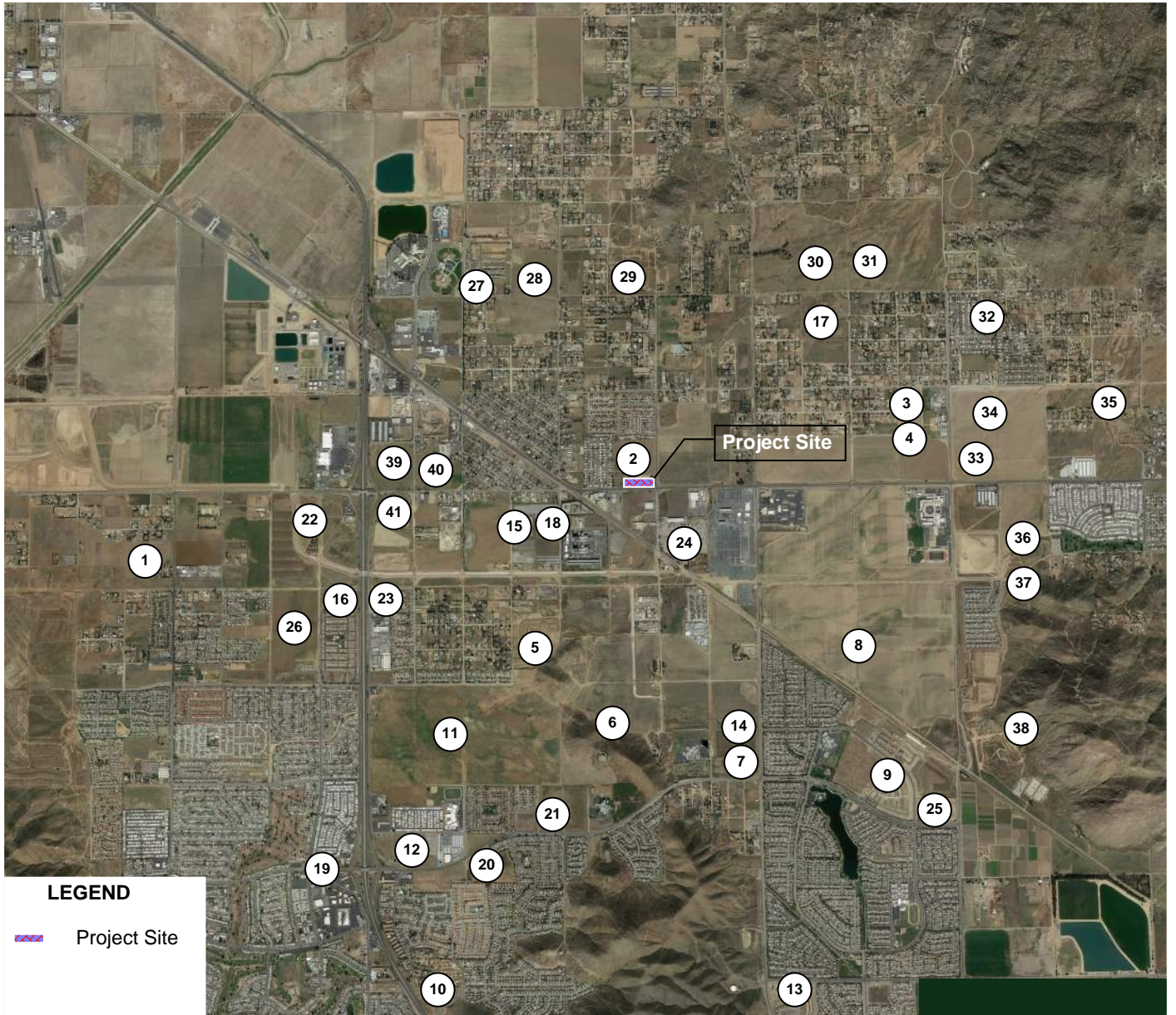


Figure 4-E – Planned Development Projects AM Peak Hour Intersection Volumes

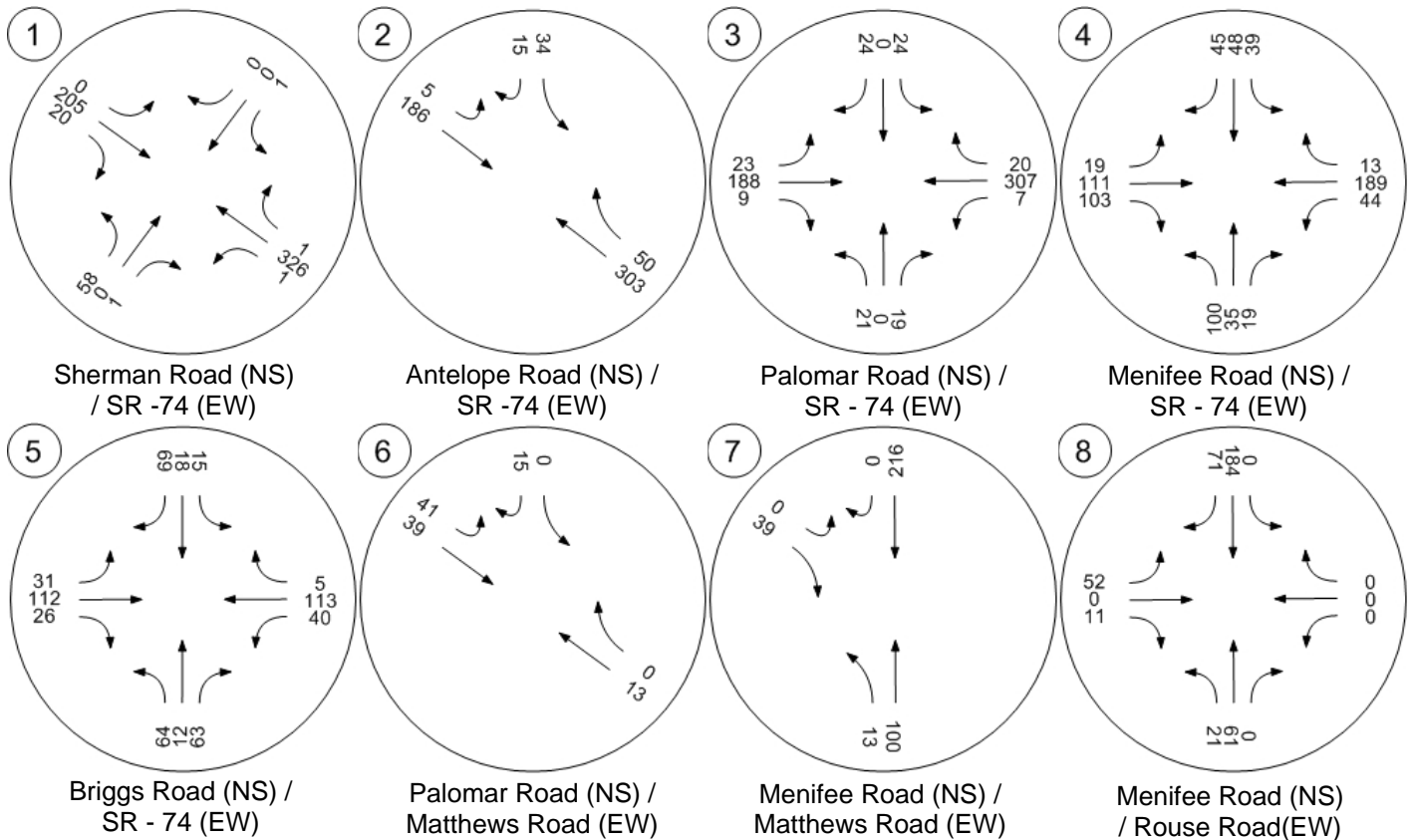


Figure 4-E (Continued) – Planned Development Projects AM Peak Hour Intersection Volumes

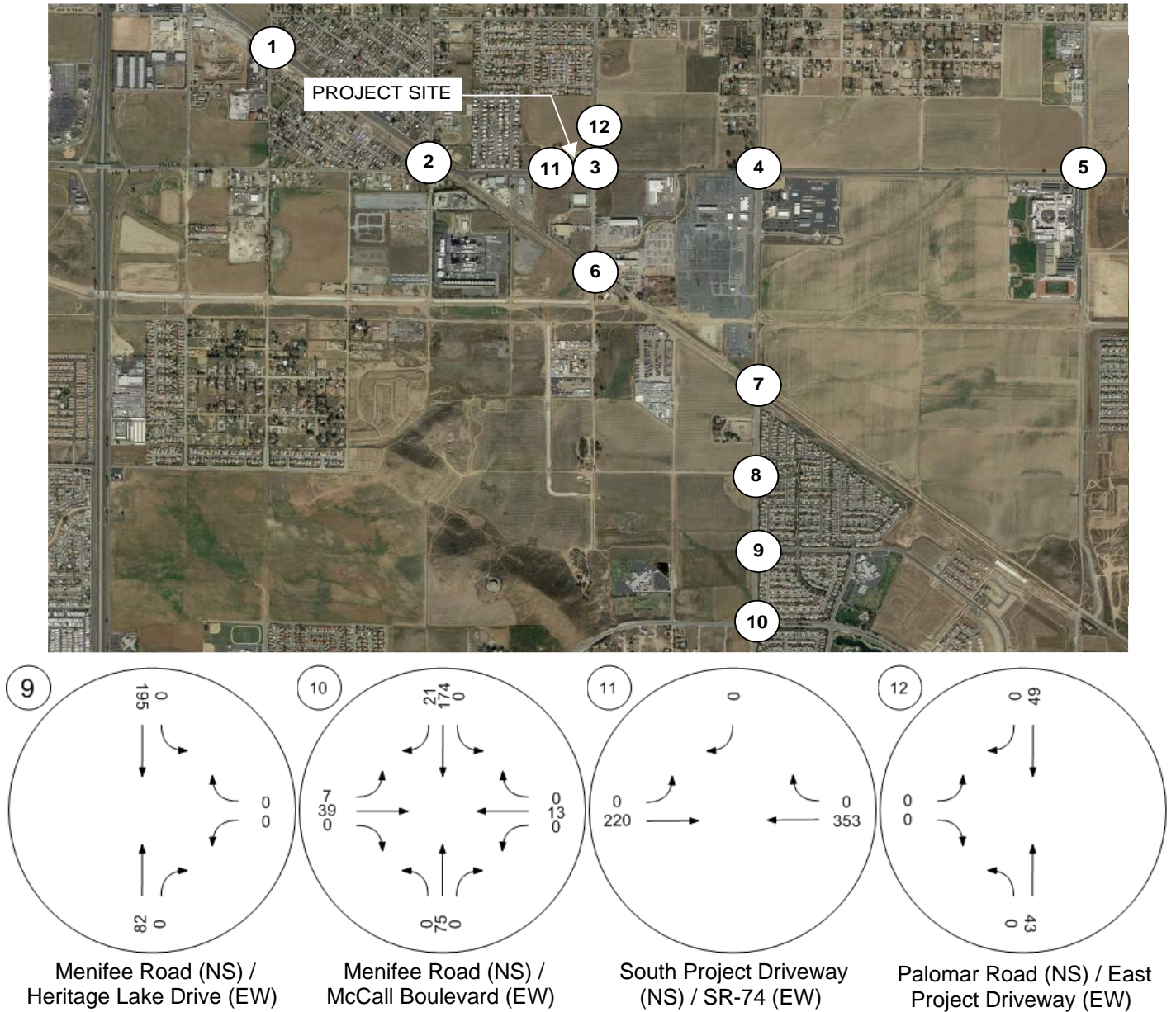


Figure 4-F – Planned Development Projects PM Peak Hour Intersection Volumes

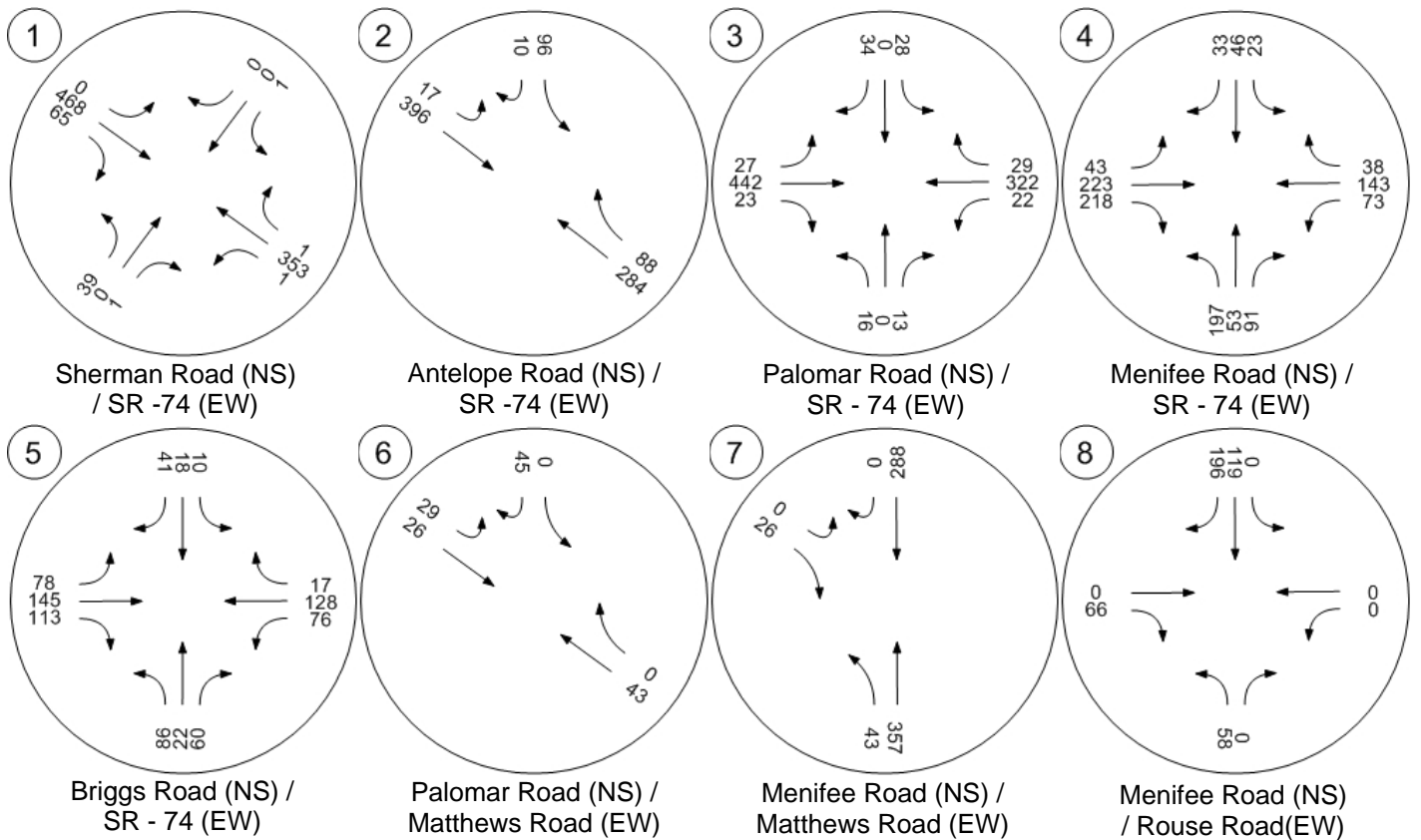
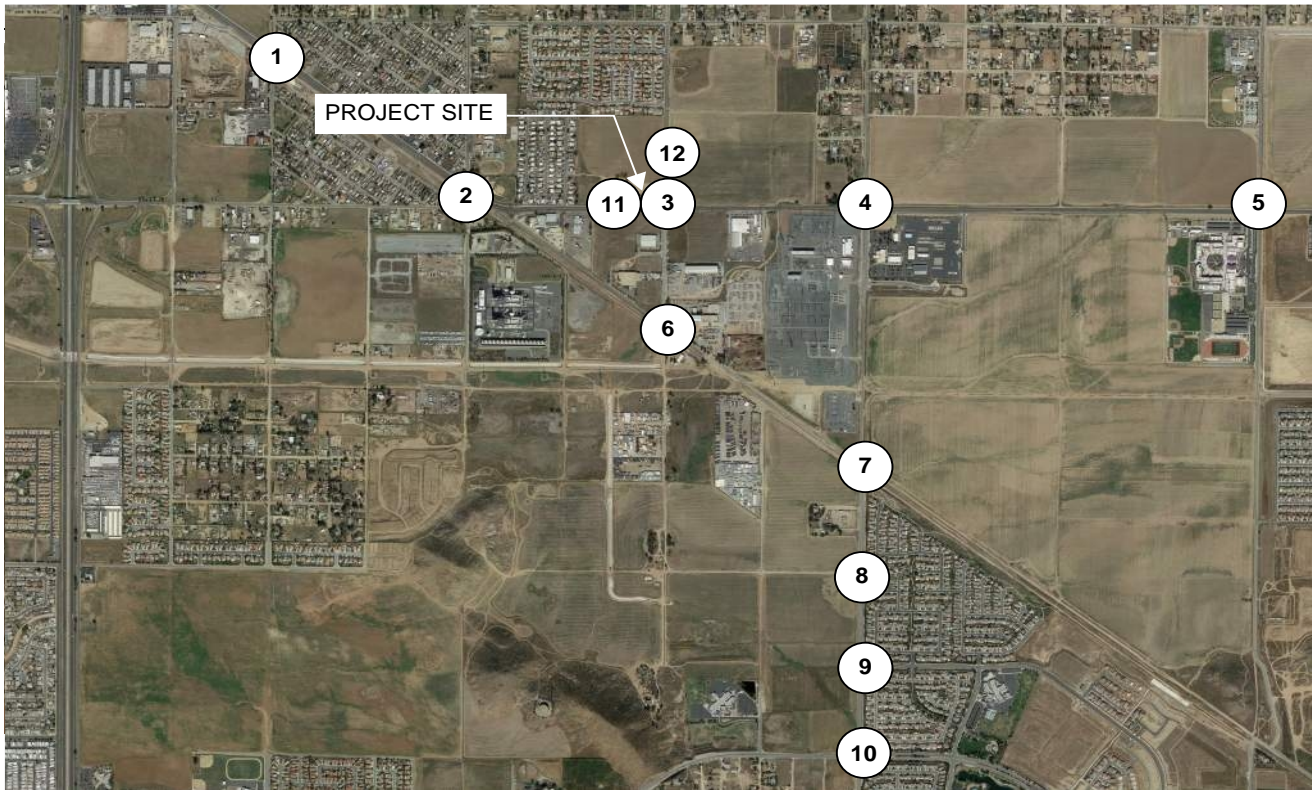
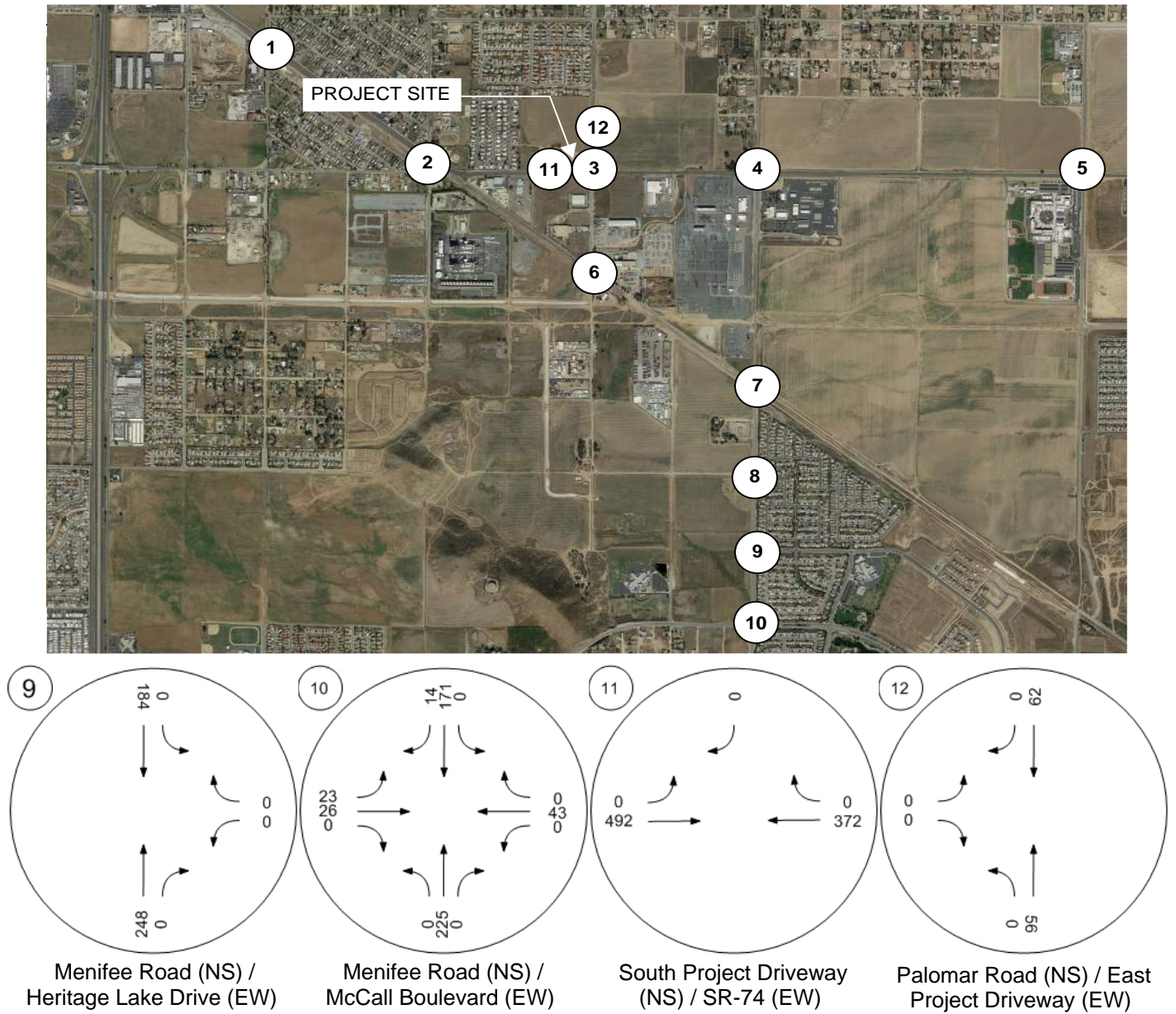


Figure 4-F (Continued) – Planned Development Projects PM Peak Hour Intersection Volumes



5.0 TRAFFIC ANALYSIS

5.1 Capacity and Level of Service and Improvement Analysis

5.1.1 Levels of Service – Existing Plus Project Conditions

The Existing Plus Project scenario includes existing traffic and Project traffic. **Table 5-1** and **Table 5-2** provide the projected delay and levels of service at the study intersections and roadway segments under Existing Plus Project conditions without off-site improvements. These levels of service vary from LOS A to F. The Project AM and PM peak hour intersection turning movement volumes for each Project are shown on **Figure 5-A** and **Figure 5-B** respectively. The levels of service are based upon the existing geometrics for the study area intersections. The level of service calculation worksheets for the intersections are provided in Appendix E. The following study intersections are expected to operate at an unacceptable level of service:

4. Meniffee Road (NS) / SR - 74 (EW) in AM and PM peak hour
5. Briggs Road (NS) / SR-74 (EW) in AM peak hour
7. Meniffee Road (NS) / Matthews Road (EW) in AM peak hour

The following study roadway segments are expected to operate at unacceptable level of service in Existing Plus Project conditions:

1. SR-74: Sherman Road to Antelope Road
3. SR-74: Palomar Road to Meniffee Road
4. SR-74: Meniffee Road to Briggs Road

Table 5-1 – Intersection LOS – Existing Plus Project Conditions

Intersection	Jurisdiction	Peak Hour	Traffic Control	Existing		Traffic Control	EP		Project Trips	Impact?
				Delay (sec)	LOS		Delay (sec)	LOS		
1 Sherman Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	8.9	A	Signal	9.0	A	42	NO
				9.1	A		9.4	A	54	NO
2 Antelope Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	8.1	A	Signal	8.2	A	62	NO
				5.0	A		5.2	A	81	NO
3 Palomar Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	11.8	B	Signal	13.3	B	135	NO
				10.0	B		11.1	B	174	NO
4 Menifee Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	79.5	E	Signal	86.0	F	98	YES
				78.0	E		90.5	F	128	YES
5 Briggs Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	63.3	E	Signal	65.2	E	52	YES
				18.0	B		18.5	B	68	NO
6 Palomar Road (NS) / Matthews Road (EW)	City of Menifee	AM PM	OWSC	23.8	C	OWSC	25.2	D	52	NO
				16.0	C		16.6	C	67	NO
7 Menifee Road (NS) / Matthews Road (EW)	City of Menifee	AM PM	OWSC	150.4	F	OWSC	172.5	F	52	YES
				21.1	C		22.7	C	68	NO
8 Menifee Road (NS) / Rouse Road (EW)	City of Menifee	AM PM	Signal	5.1	A	Signal	5.3	A	52	NO
				4.4	A		4.6	A	68	NO
9 Menifee Road (NS) / Heritage Lake Drive (EW)	City of Menifee	AM PM	Signal	9.2	A	Signal	9.4	A	48	NO
				6.6	A		6.9	A	62	NO
10 Menifee Road (NS) / McCall Boulevard (EW)	City of Menifee	AM PM	Signal	41.6	D	Signal	46.6	D	40	NO
				31.9	C		32.2	C	55	NO
11 South Project Driveway (NS) / SR-74 (EW)	Caltrans	AM PM	OWSC	13.2	B	OWSC	15.1	C	31	NO
				32.1	D		12.3	B	40	NO
12 Palomar Road (NS) / East Project Driveway (EW)	City of Menifee	AM PM	OWSC	10.7	B	OWSC	20.7	C	146	NO
				9.8	A		15.5	C	188	NO

*TWSC: Two way stop control, OWSC: One way stop control
XX = Exceeds Target LOS

Table 5-2 - Roadway Segments Levels of Service - Existing Plus Project Conditions

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	Without Project			EP			Project Volumes	Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
SR -74											
1. Sherman Road to Antelope Road	Major	34,100	4	30,610	0.90	D	31,631	0.93	E	1,021	YES*
2. Antelope Road to Palomar Road	Major	34,100	4	27,692	0.81	D	28,917	0.85	D	1,225	NO
3. Palomar Road to Menifee Road	Major	34,100	4	29,136	0.85	D	30,769	0.90	E	1,633	YES
4. Menifee Road to Briggs Road	Major	34,100	4	33,885	0.99	E	34,906	1.02	F	1,021	YES
Matthews Road											
5. Palomar Road to Menifee Road	Collector	13,000	2	3,398	0.26	A	4,010	0.31	A	612	NO
Palomar Road											
6. SR-74 to Matthews Road	Collector	13,000	2	5,583	0.43	A	6,604	0.51	A	1,021	NO
Menifee Road											
7. Matthews Road to Rouse Road	Major	34,100	4	11,402	0.33	A	12,423	0.36	A	1,021	NO
8. Rouse Road to Heritage Lake Drive	Major	34,100	4	13,938	0.41	A	14,877	0.44	A	939	NO
9. Heritage Lake Dr ato McCall Boulevard	Major	34,100	4	13,865	0.41	A	14,682	0.43	A	817	NO

Source: City of Menifee Traffic Impact Analysis Guidelines

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

Figure 5-A – Existing Plus Project AM Peak Hour Intersection Volumes

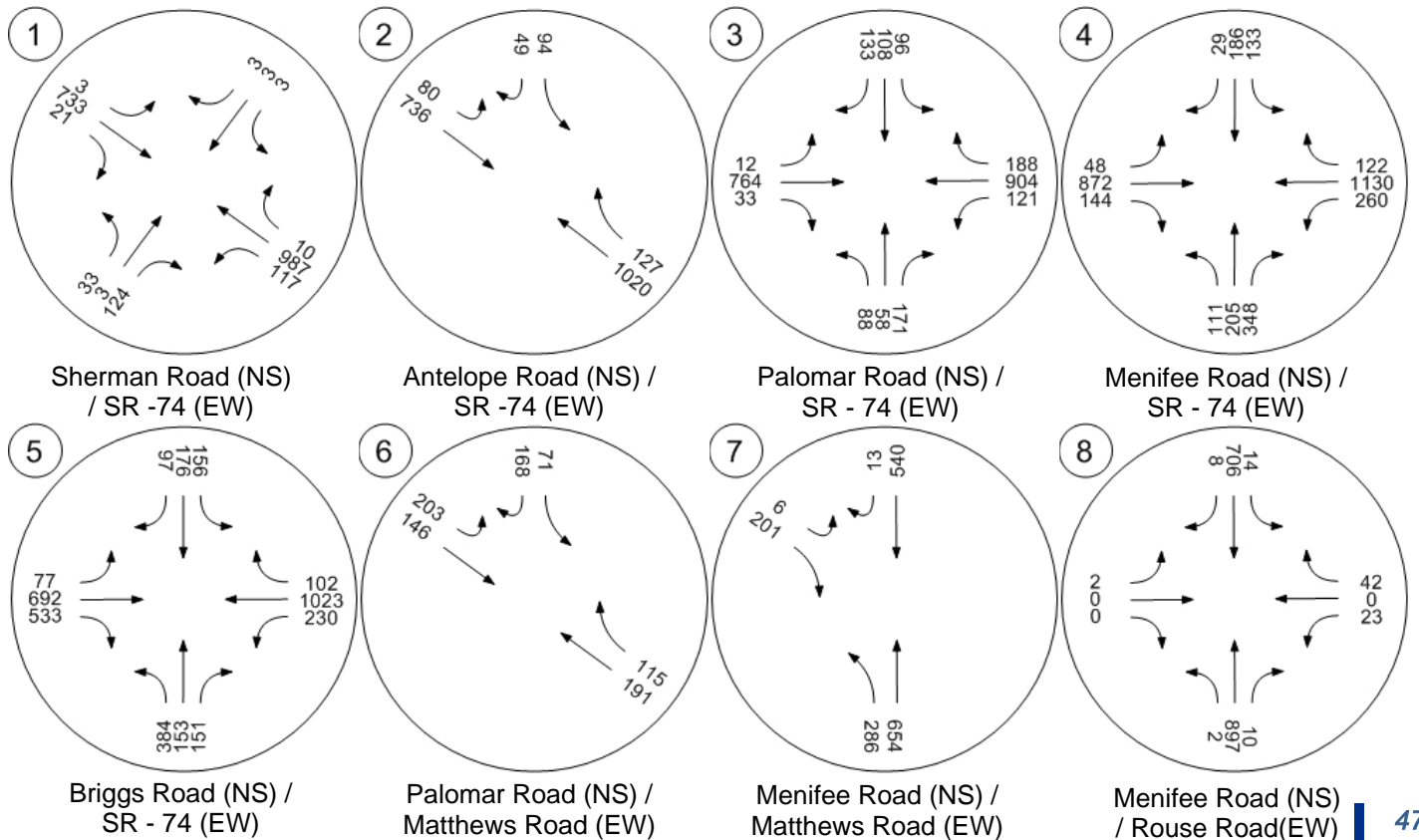


Figure 5-A (Continued) – Existing Plus Project AM Peak Hour Intersection Volumes

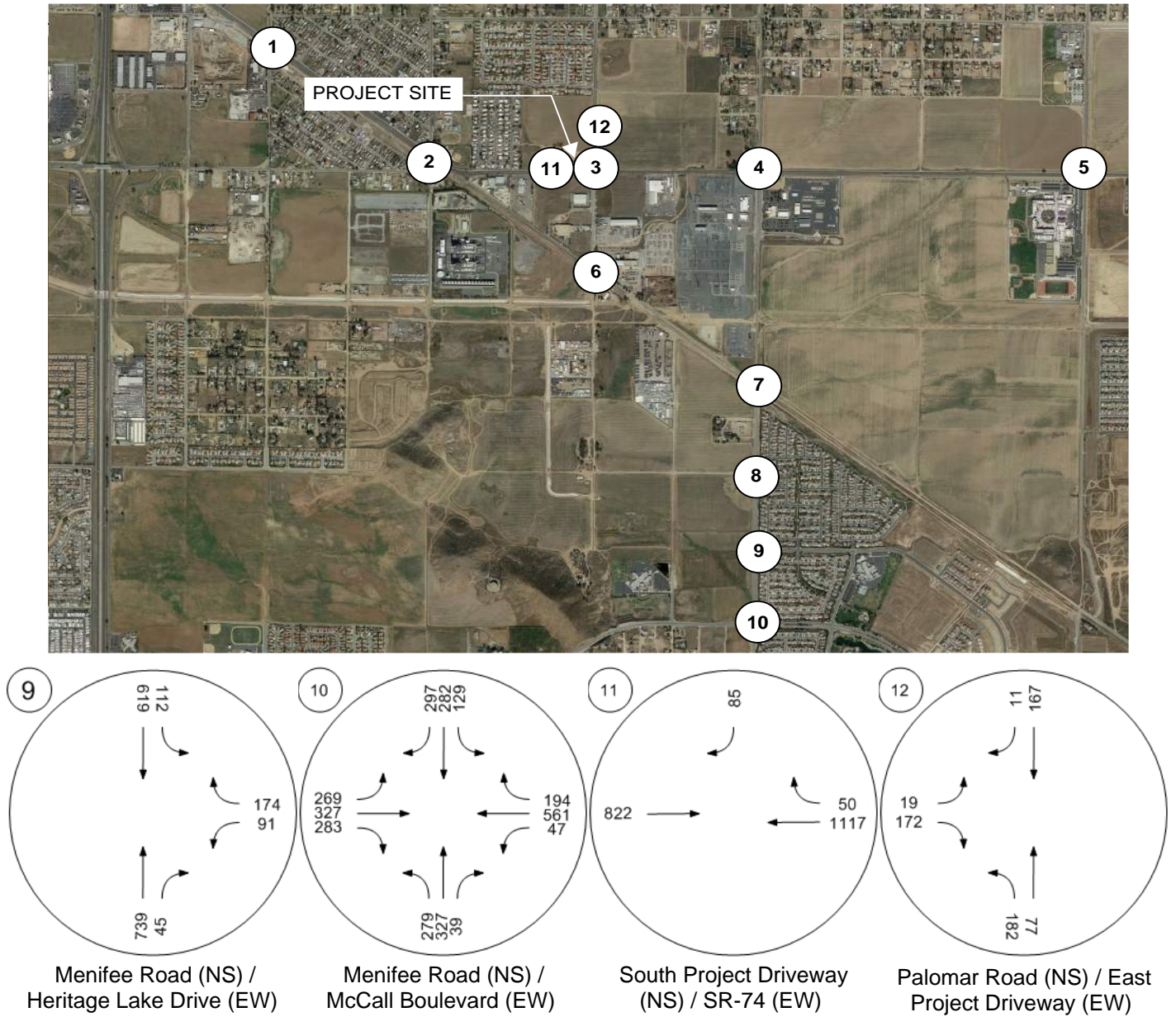


Figure 5-B – Existing Plus Project PM Peak Hour Intersection Volumes

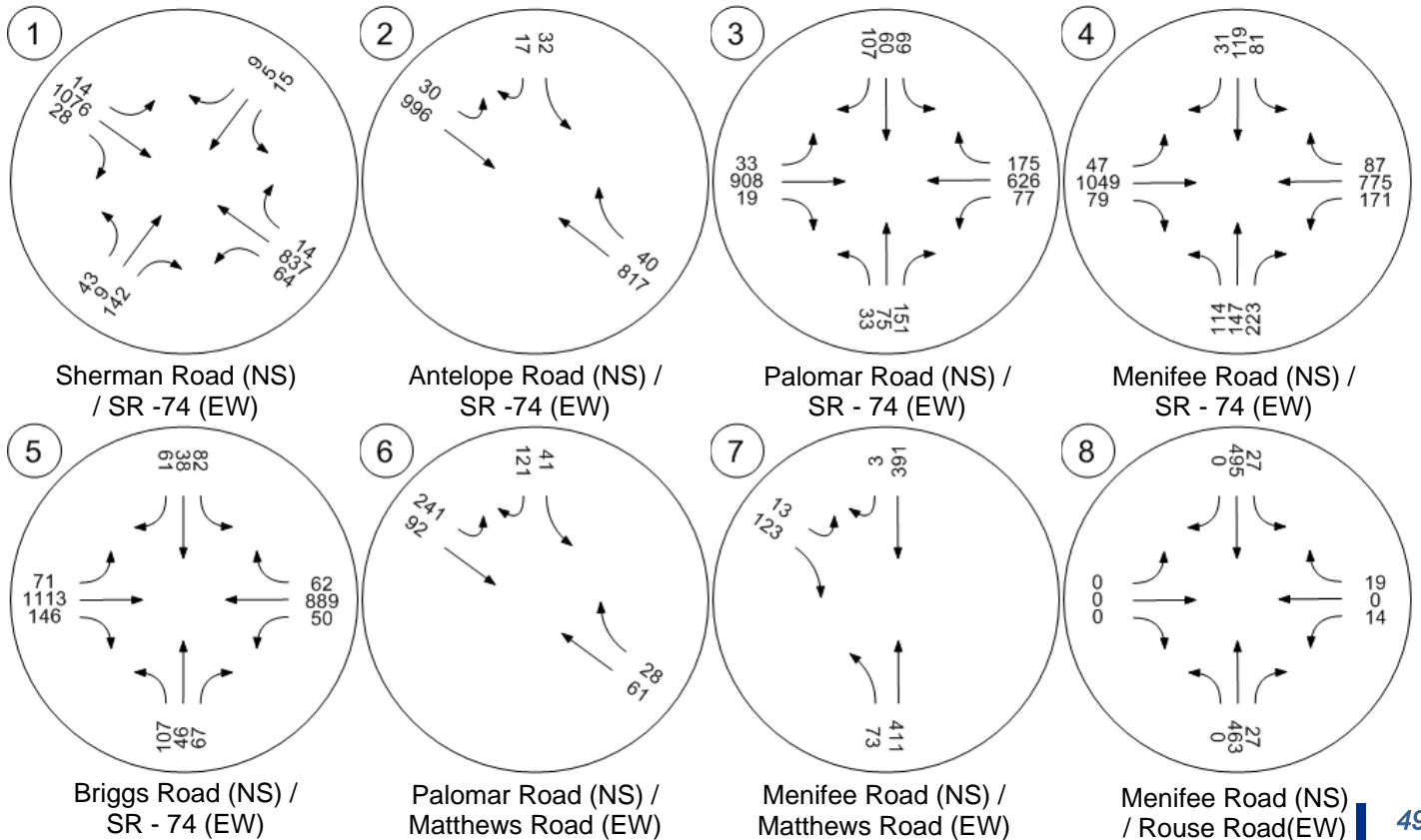
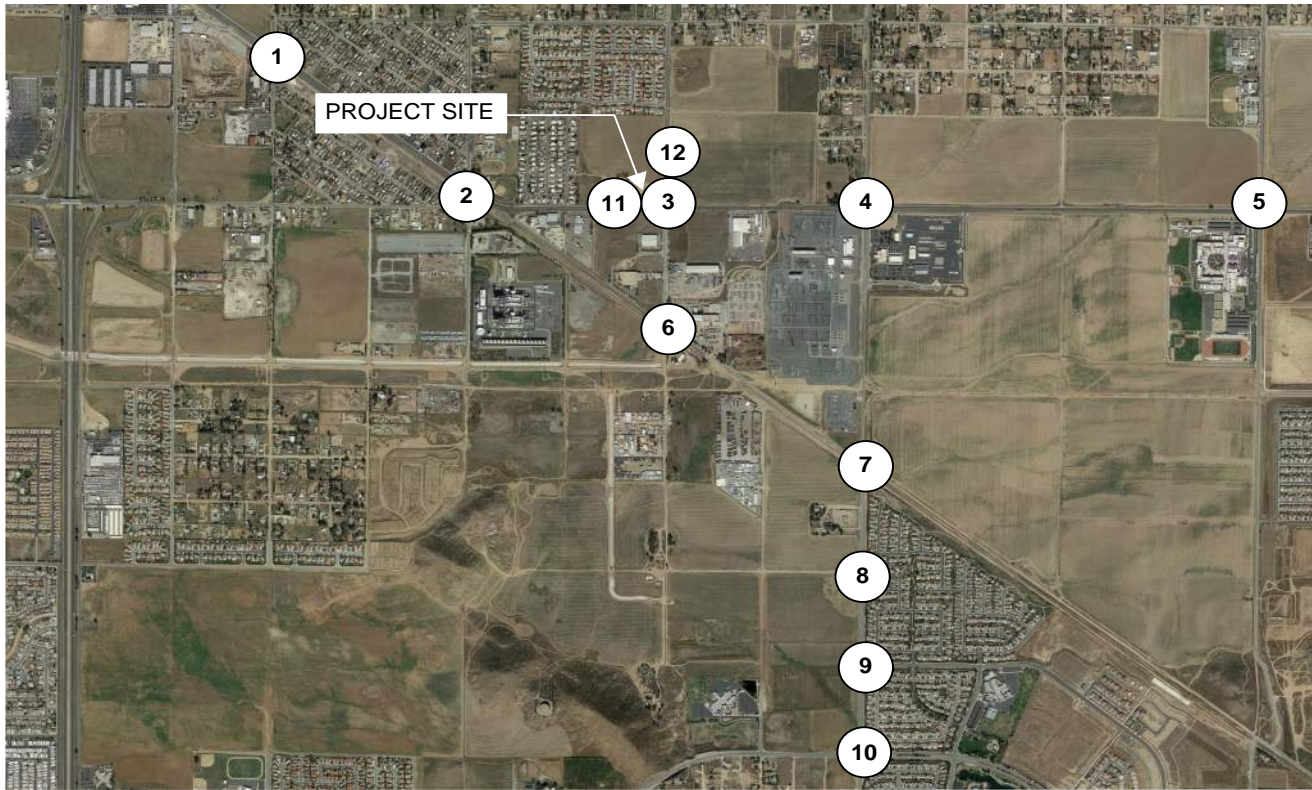
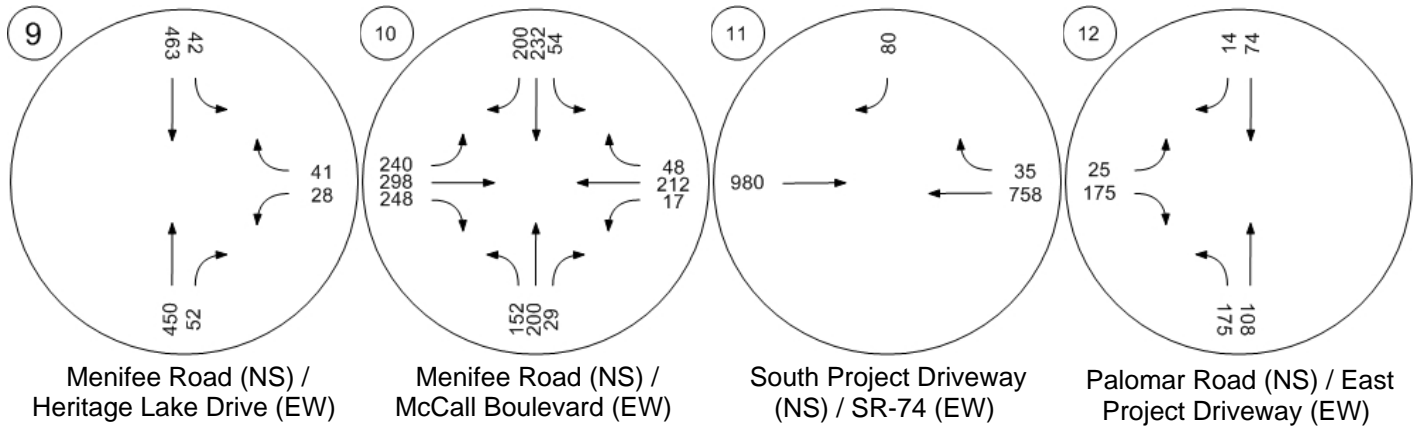


Figure 5-B (Continued) – Existing Plus Project PM Peak Hour Intersection Volumes



5.1.2 Levels of Service – Existing Plus Project Conditions with Improvements

Table 5-3 provides the projected delay and levels of service at the study intersections under Existing Plus Project conditions with off-site improvements. The level of service calculation worksheets are provided in Appendix E.

Table 5-4 provides the projected daily traffic and levels of service at the study roadway segments under Existing Plus Project conditions with off-site improvements. With the recommended off-site improvements, the study area intersections and roadway segments would operate at an acceptable LOS D or better.

Table 5-3 – Intersection LOS – Project with Improvements

Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	EP		EP MIT	
					Delay (sec)	LOS	Delay (sec)	LOS
4 Menifee Road (NS) / SR-74 (EW)	Caltrans	D	AM	Signal	86.0	F	28.5	C
			PM		90.5	F	32.7	C
5 Briggs Road (NS) / SR-74 (EW)	Caltrans	D	AM	Signal	65.2	E	50.8	D
			PM		18.5	B	19.1	B
7 Menifee Road (NS) / Matthews Road (EW)	Menifee	D	AM	Signal	172.5	F	17.6	B
			PM		22.7	C	9.0	A

*TWSC: Two way stop control, OWSC: One way stop control

XX = Exceeds Target LOS

Table 5-4 – Roadway Segment LOS – Project with Improvements

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	EP		EP MIT				
				ADT	LOS	Roadway Classification	Roadway Capacity	Lanes	LOS	
SR -74										
1. Sherman Road to Antelope Road*	Major	34,100	4	31,631	E	Arterial	37,000	4	D	
3. Palomar Road to Menifee Road	Major	34,100	4	30,769	E	Arterial	37,000	4	D	
4. Menifee Road to Briggs Road	Major	34,100	4	34,906	F	Expressway	64,000	4	A	

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

5.1.1 Levels of Service – Existing Plus Ambient Growth Conditions

The AM and PM peak hour intersection turning movement volumes for the Existing Plus Ambient Growth scenario are shown on **Figure 5-C** and **Figure 5-D**.

Figure 5-C – Existing Plus Ambient Growth AM Peak Hour Intersection Volumes

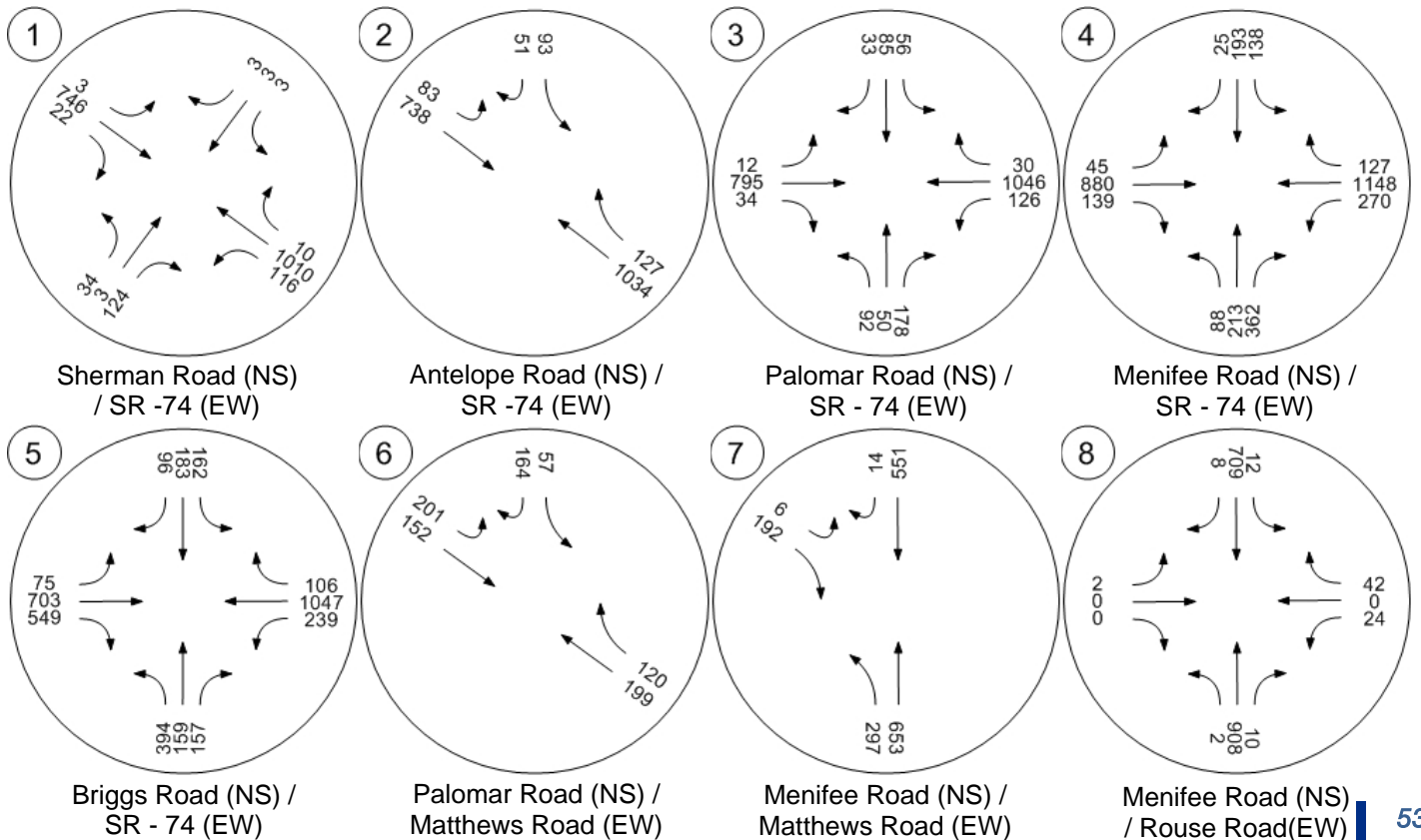


Figure 5-C (Continued) – Existing Plus Ambient Growth AM Peak Hour Intersection Volumes

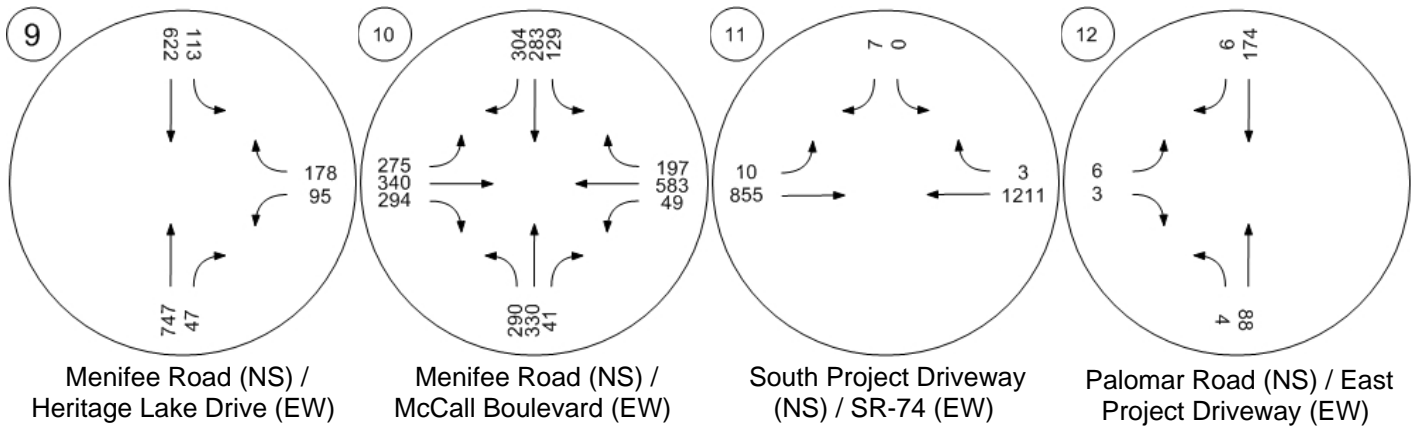


Figure 5-D – Existing Plus Ambient Growth PM Peak Hour Intersection Volumes

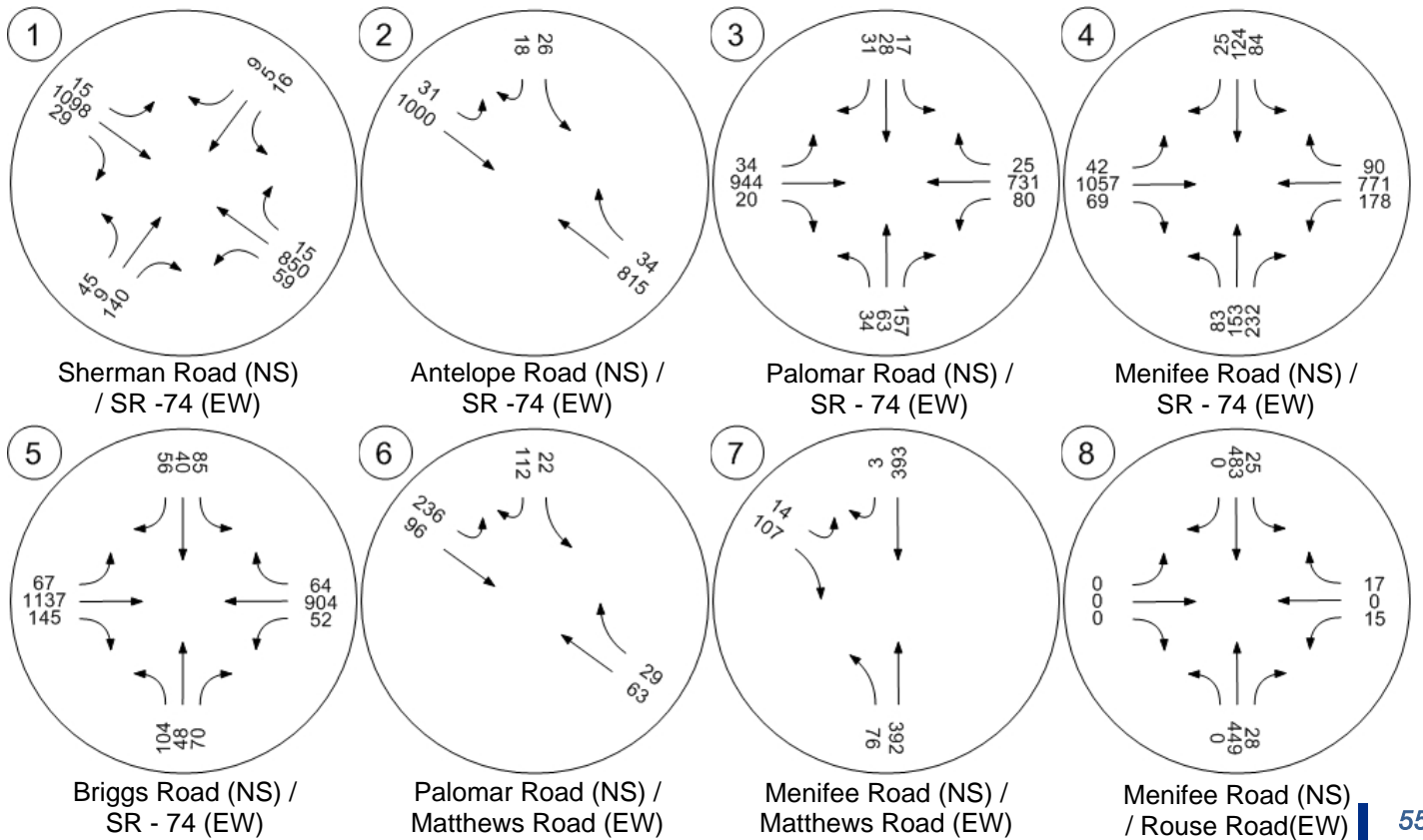
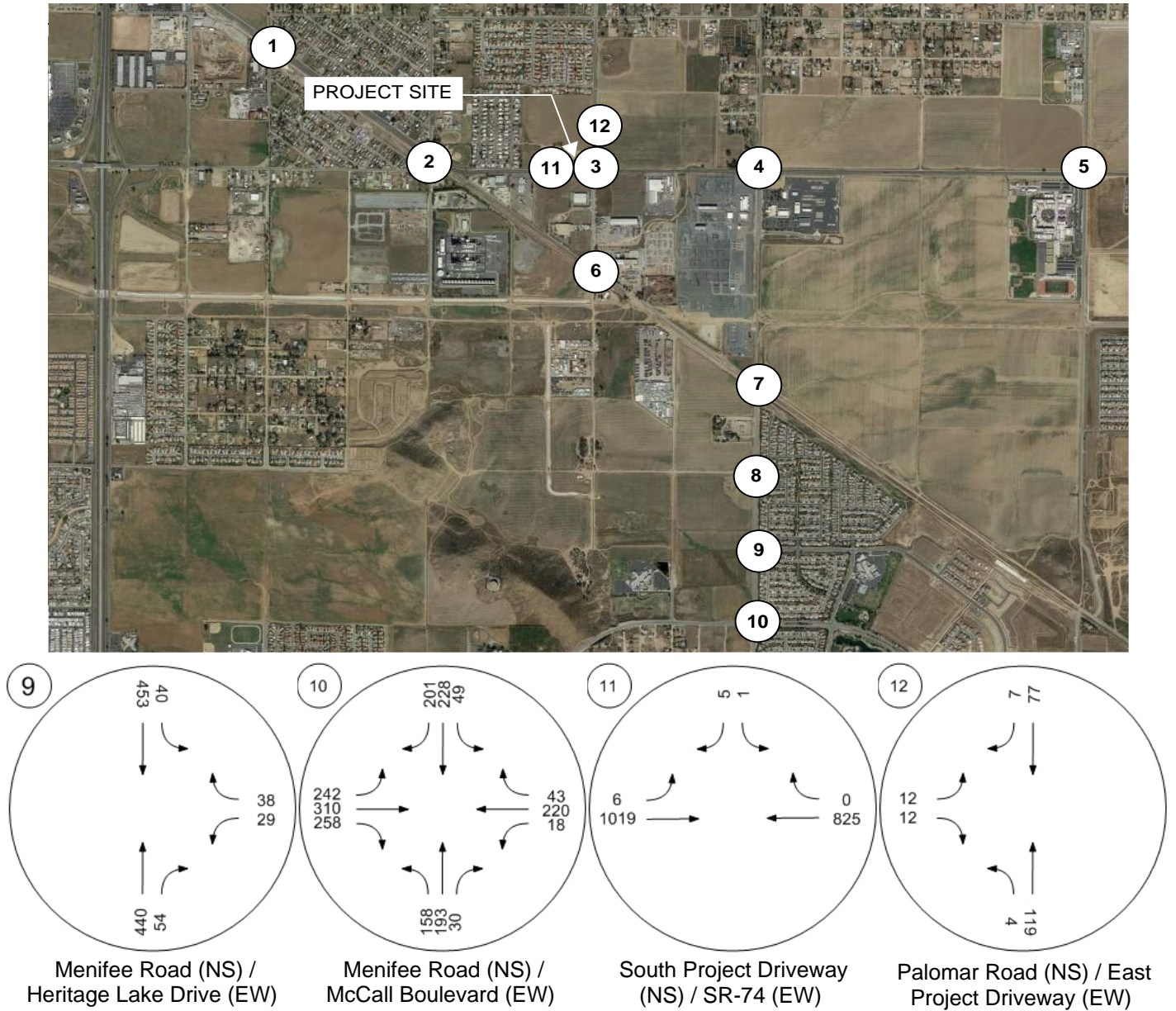


Figure 5-D (Continued) – Existing Plus Ambient Growth PM Peak Hour Intersection Volumes



5.1.2 Levels of Service – Existing Plus Ambient Growth Plus Project Conditions

The Existing Plus Ambient Growth Plus Project scenario includes existing traffic, ambient growth traffic (2 percent per year), and Project traffic. **Table 5-5** and **Table 5-6** provide the projected delay and levels of service at the study intersections and roadway segments under Existing Plus Ambient Growth Plus Project conditions without off-site improvements. The levels of service vary from LOS A to F. The AM and PM peak hour intersection turning movement volumes for each phase are shown on **Figure 5-E** and **Figure 5-F**. The levels of service are based upon the existing geometrics for the study area intersections. The level of service calculation worksheets for the intersections are provided in Appendix E. The following study intersections are expected to operate at an unacceptable level of service:

4. Menifee Road (NS) / SR-74 (EW) in AM and PM peak hour
5. Briggs Road (NS) / SR-74 (EW) in AM peak hour
7. Menifee Road (NS) / Matthews Road (EW) in AM peak hour

The following study roadway segments are expected to operate at unacceptable level of service in Existing Plus Ambient Growth Plus Project conditions:

1. SR-74: Sherman Road to Antelope Road
3. SR-74: Palomar Road to Menifee Road
4. SR-74: Menifee Road to Briggs Road

Table 5-5 – Intersection LOS – Existing Plus Ambient Growth Plus Project Conditions

Intersection	Jurisdiction	Peak Hour	Traffic Control	Existing		Traffic Control	EAP		Project Trips	Impact?
				Delay (sec)	LOS		Delay (sec)	LOS		
1 Sherman Road (NS) / SR-74 (EW)	Caltrans	AM	Signal	8.9	A	Signal	9.6	A	42	NO
		PM		9.1	A		10.4	B	54	NO
2 Antelope Road (NS) / SR-74 (EW)	Caltrans	AM	Signal	8.1	A	Signal	8.3	A	62	NO
		PM		5.0	A		5.1	A	81	NO
3 Palomar Road (NS) / SR-74 (EW)	Caltrans	AM	Signal	11.8	B	Signal	14.7	B	135	NO
		PM		10.0	B		12.0	B	174	NO
4 Menifee Road (NS) / SR-74 (EW)	Caltrans	AM	Signal	79.5	E	Signal	99.4	F	98	YES
		PM		78.0	E		104.9	F	128	YES
5 Briggs Road (NS) / SR-74 (EW)	Caltrans	AM	Signal	63.3	E	Signal	82.3	F	52	YES
		PM		18.0	B		19.0	B	68	NO
6 Palomar Road (NS) / Matthews Road (EW)	City of Menifee	AM	OWSC	23.8	C	OWSC	25.4	D	52	NO
		PM		16.0	C		16.4	C	67	NO
7 Menifee Road (NS) / Matthews Road (EW)	City of Menifee	AM	OWSC	150.4	F	OWSC	230.1	F	52	YES
		PM		21.1	C		23.9	C	68	NO
8 Menifee Road (NS) / Rouse Road (EW)	City of Menifee	AM	Signal	5.1	A	Signal	5.4	A	52	NO
		PM		4.4	A		4.7	A	68	NO
9 Menifee Road (NS) / Heritage Lake Drive (EW)	City of Menifee	AM	Signal	9.2	A	Signal	9.6	A	48	NO
		PM		6.6	A		6.9	A	62	NO
10 Menifee Road (NS) / McCall Boulevard (EW)	City of Menifee	AM	Signal	41.6	D	Signal	49.2	D	40	NO
		PM		31.9	C		32.4	C	55	NO
11 South Project Driveway (NS) / SR-74 (EW)	Caltrans	AM	OWSC	13.2	B	OWSC	15.5	C	31	NO
		PM		32.1	D		12.5	B	40	NO
12 Palomar Road (NS) / East Project Driveway (EW)	City of Menifee	AM	OWSC	10.7	B	OWSC	24.4	C	146	NO
		PM		9.8	A		17.7	C	188	NO

*TWSC: Two way stop control, OWSC: One way stop control

XX = Exceeds Target LOS

Table 5-6 - Roadway Segments Levels of Service - Existing Plus Ambient Growth Plus Project Conditions

Roadway Segment	Roadway Classification	Lanes	Roadway Capacity	EA			EAP			Project Volumes	Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
SR -74											
1. Sherman Road to Antelope Road	Major	4	34,100	31,834	0.93	E	32,855	0.96	E	1,021	YES*
2. Antelope Road to Palomar Road	Major	4	34,100	28,800	0.84	D	30,025	0.88	D	1,225	NO
3. Palomar Road to Menifee Road	Major	4	34,100	30,301	0.89	D	31,934	0.94	E	1,633	YES
4. Menifee Road to Briggs Road	Major	4	34,100	35,240	1.03	F	36,261	1.06	F	1,021	YES
Matthews Road											
5. Palomar Road to Menifee Road	Collector	2	13,000	3,534	0.27	A	4,146	0.32	A	612	NO
Palomar Road											
6. SR-74 to Matthews Road	Collector	2	13,000	5,806	0.45	A	6,827	0.53	A	1,021	NO
Menifee Road											
7. Matthews Road to Rouse Road	Major	4	34,100	11,858	0.35	A	12,879	0.38	A	1,021	NO
8. Rouse Road to Heritage Lake Drive	Major	4	34,100	14,496	0.43	A	15,435	0.45	A	939	NO
9. Heritage Lake Dr ato McCall Boulevard	Major	4	34,100	14,420	0.42	A	15,237	0.45	A	817	NO

Source: City of Menifee Traffic Impact Analysis Guidelines

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

Figure 5-E – Existing Plus Ambient Growth Plus Project AM Peak Hour Intersection Volumes

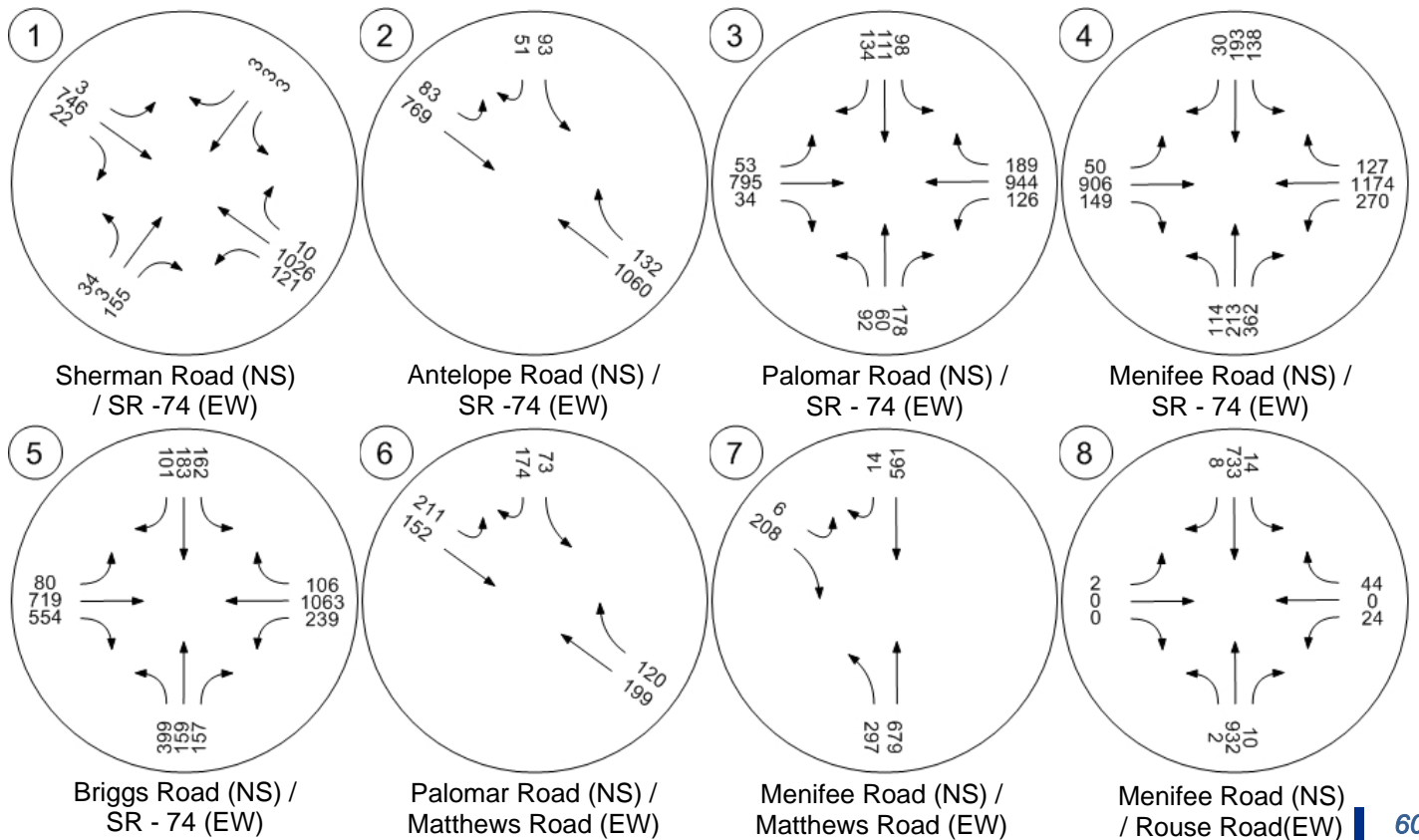


Figure 5-E (Continued) – Existing Plus Ambient Growth Plus Project AM Peak Hour Intersection Volumes

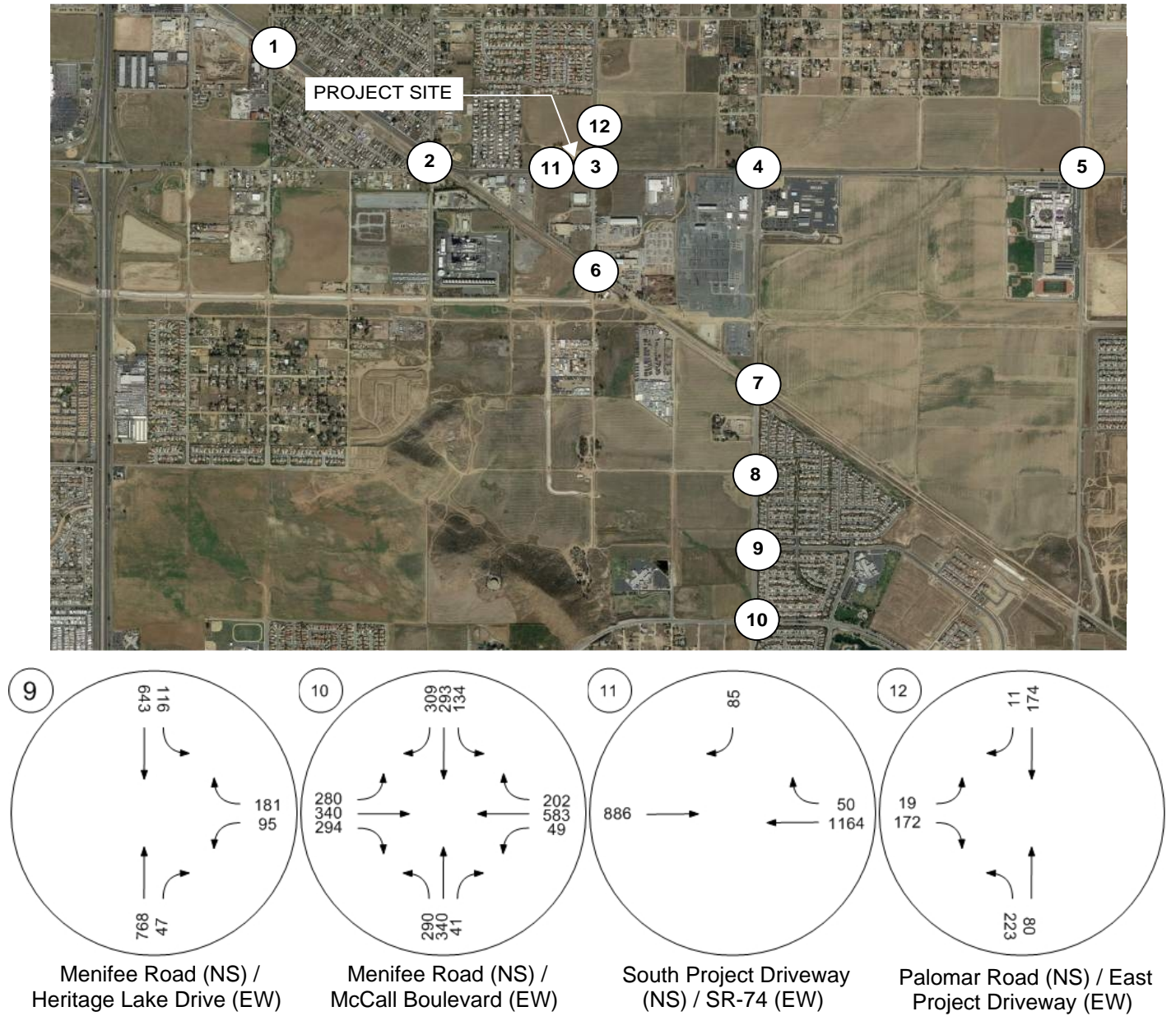


Figure 5-F – Existing Plus Ambient Growth Plus Project PM Peak Hour Intersection Volumes

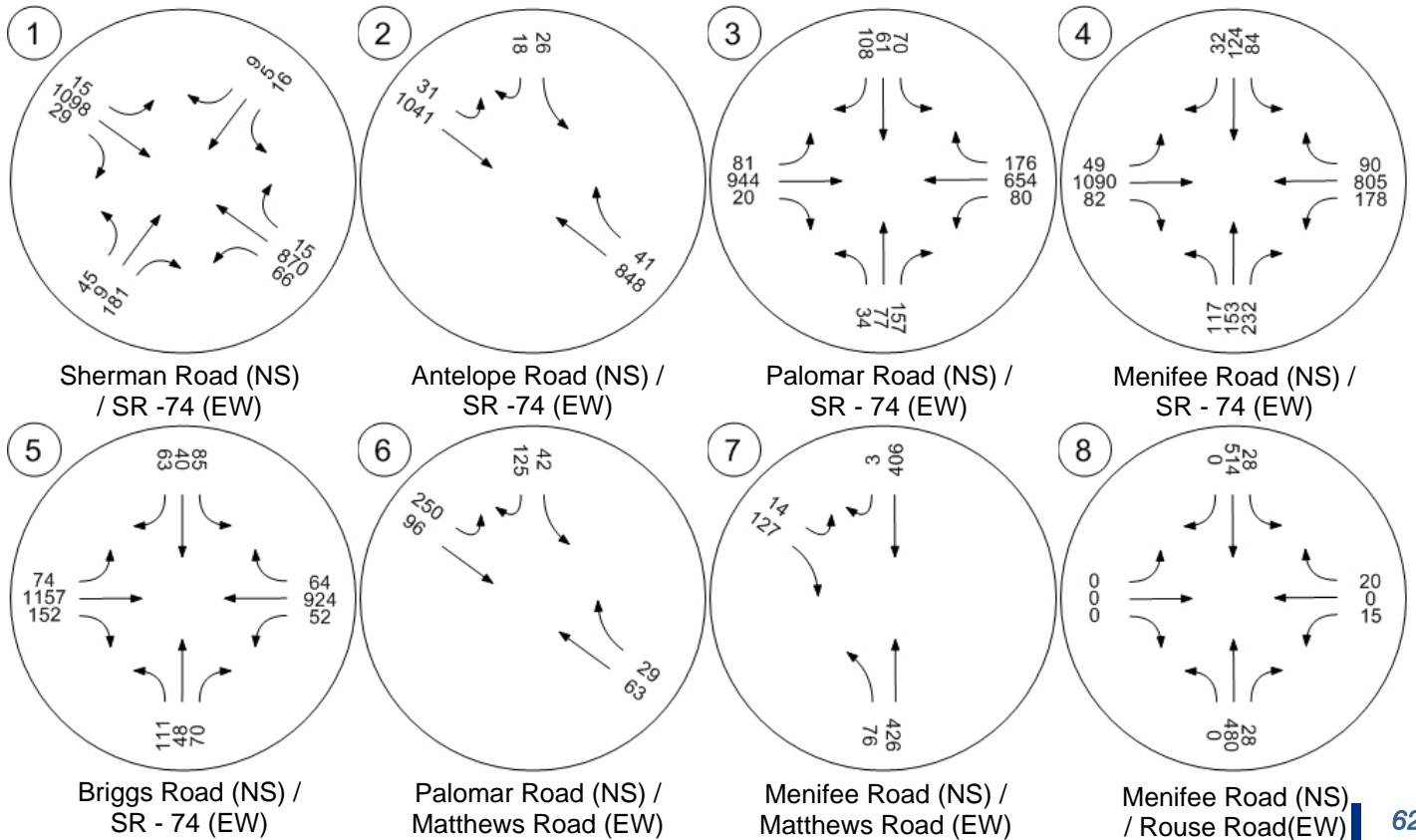
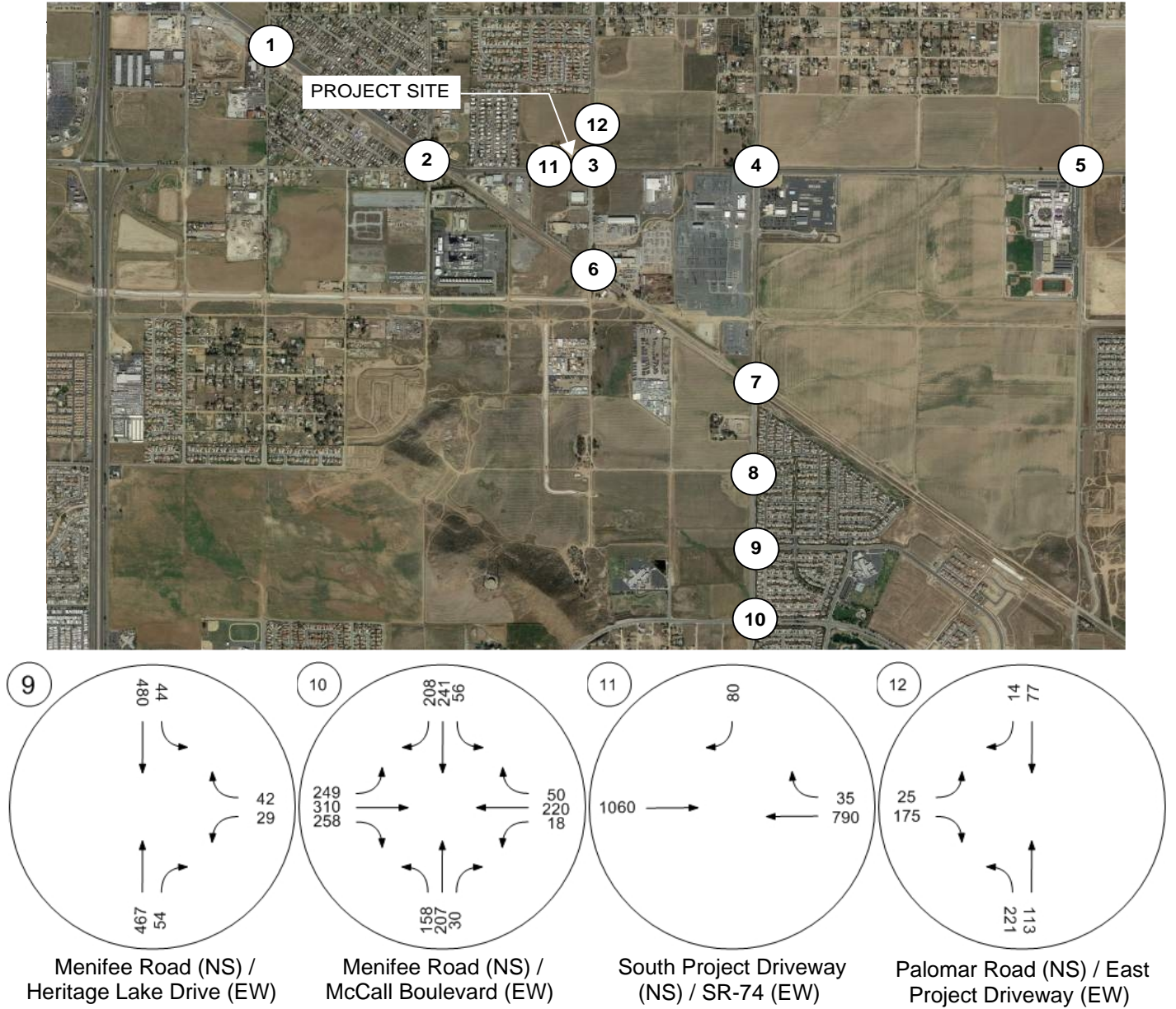


Figure 5-F (Continued) – Existing Plus Ambient Growth Plus Project PM Peak Hour Intersection Volumes



5.1.3 Levels of Service – Existing Plus Ambient Growth Plus Project with Improvements

Table 5-7 provides the projected delay and levels of service at the study intersections under Existing Plus Ambient Growth Plus Project conditions with off-site improvements. The level of service calculation worksheets are provided in Appendix E. Table 5-8 provides the projected daily traffic and levels of service at the study roadway segments under Existing Plus Ambient Growth Plus Project conditions with off-site improvements. With the recommended off-site improvements, the study area intersections and roadway segments would operate at an acceptable LOS D or better.

Table 5-7 – Intersection LOS – Existing Plus Ambient Growth Plus Project with Improvements

Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	EAP		EAP MIT	
					Delay (sec)	LOS	Delay (sec)	LOS
4 Menifee Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	99.4	F	30.4	C
					104.9	F	34.8	C
5 Briggs Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	82.3	F	53.6	D
					19.0	B	18.8	B
7 Menifee Road (NS) / Matthews Road (EW)	Menifee	D	AM PM	Signal	230.1	F	29.9	C
					23.9	C	9.2	A

*TWSC: Two way stop control, OWSC: One way stop control
XX = Exceeds Target LOS

Table 5-8 – Roadway Segment LOS – Existing Plus Ambient Growth Plus Project with Improvements

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	EAP		EAP MIT			
				ADT	LOS	Roadway Classification	Roadway Capacity	Lanes	LOS
SR - 74									
1. Sherman Road to Antelope Road*	Major	34,100	4	32,855	E	Arterial	37,000	4	D
3. Palomar Road to Menifee Road	Major	34,100	4	31,934	E	Arterial	37,000	4	D
4. Menifee Road to Briggs Road	Major	34,100	4	36,261	F	Expressway	64,000	4	A

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

5.1.4 Levels of Service – Existing Plus Ambient Growth Plus Cumulative Projects Conditions

The AM and PM peak hour intersection turning movement volumes for the Existing Plus Ambient Growth Plus Cumulative Projects scenario are shown on **Figure 5-G** and **Figure 5-H**.

Figure 5-G – Existing Plus Ambient Growth Plus Cumulative Projects AM Peak Hour Intersection Volumes

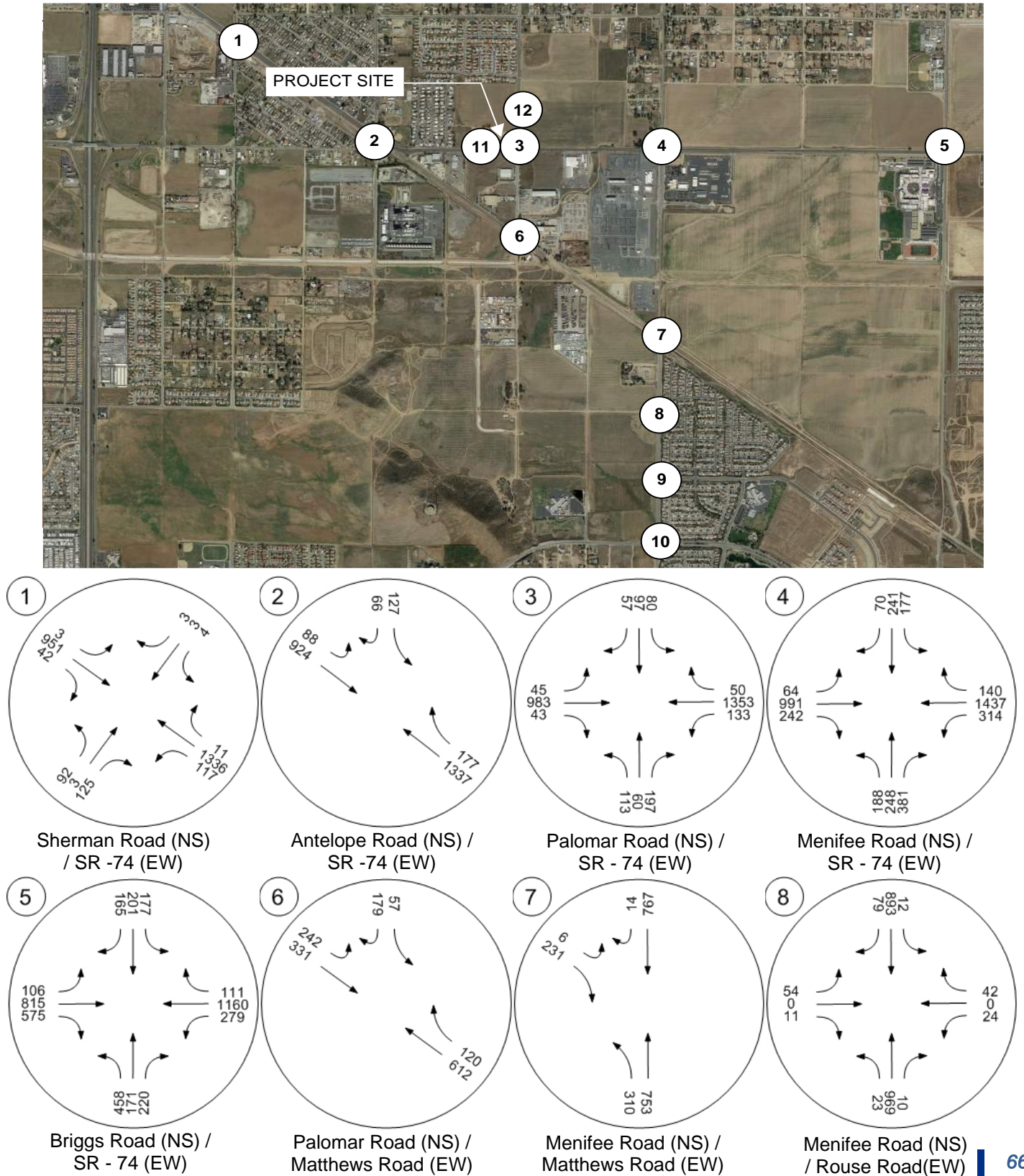


Figure 5-G (Continued) – Existing Plus Ambient Growth Plus Cumulative Projects AM Peak Hour Intersection Volumes

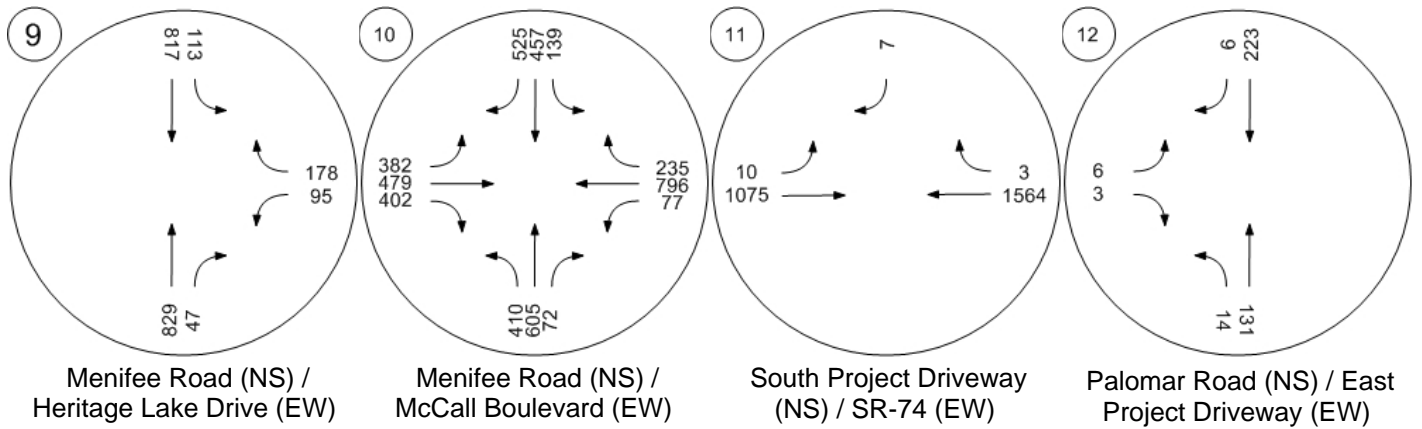


Figure 5-H – Existing Plus Ambient Growth Plus Cumulative Projects PM Peak Hour Intersection Volumes

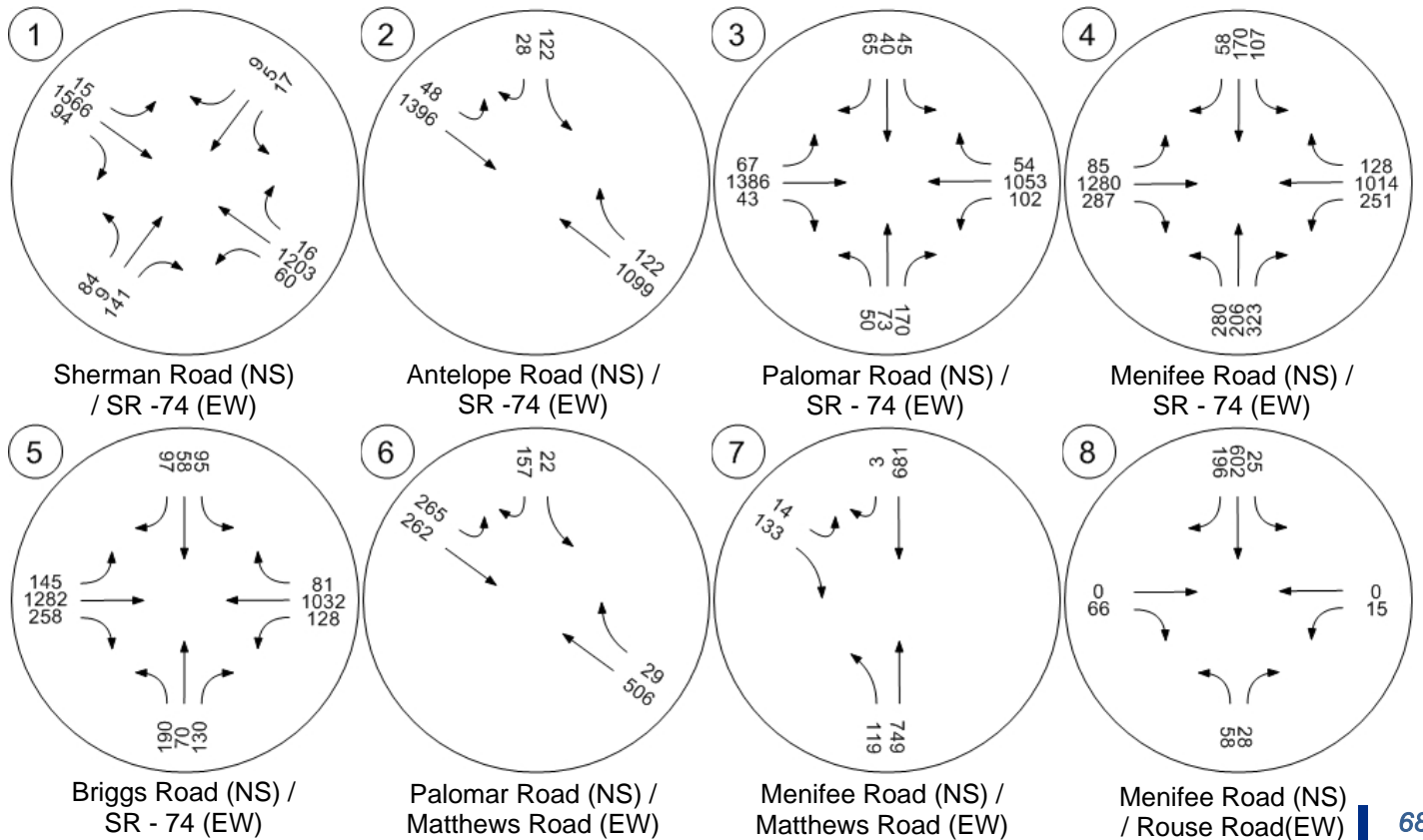
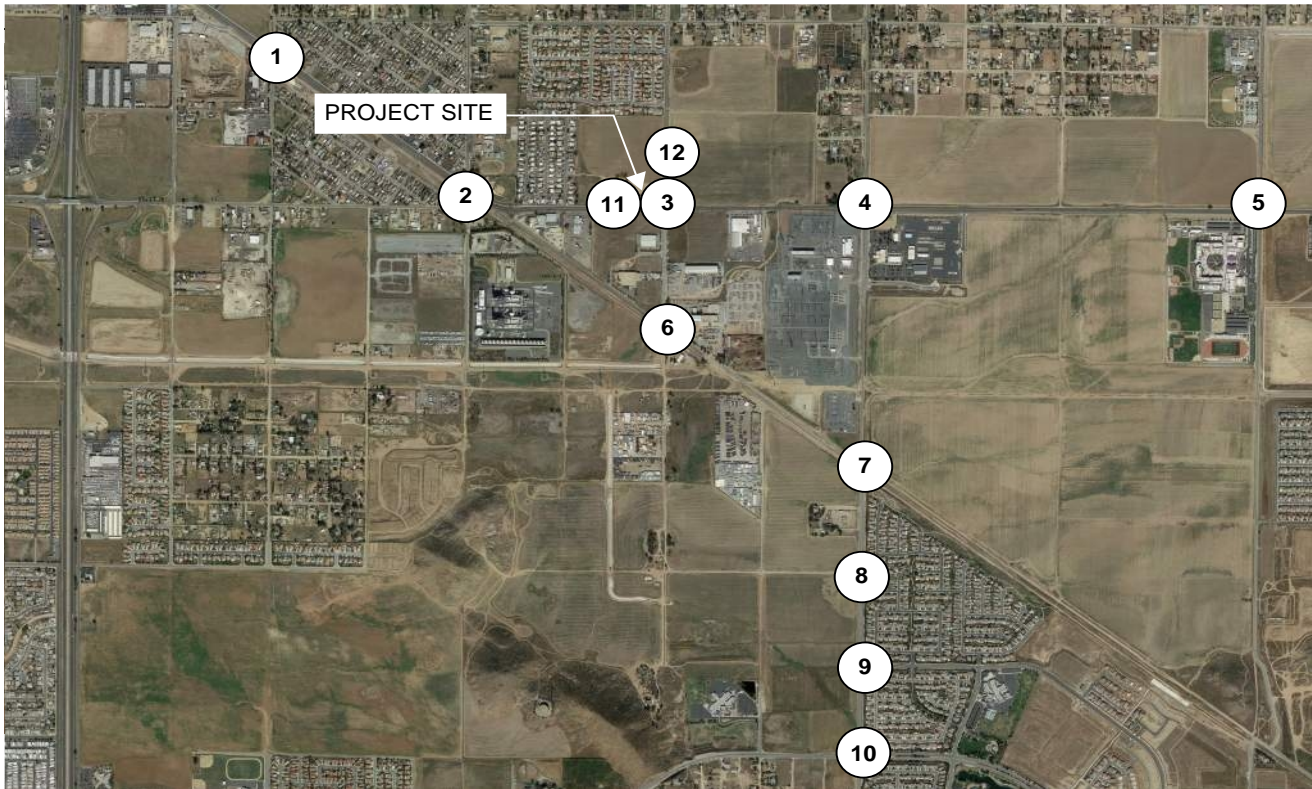
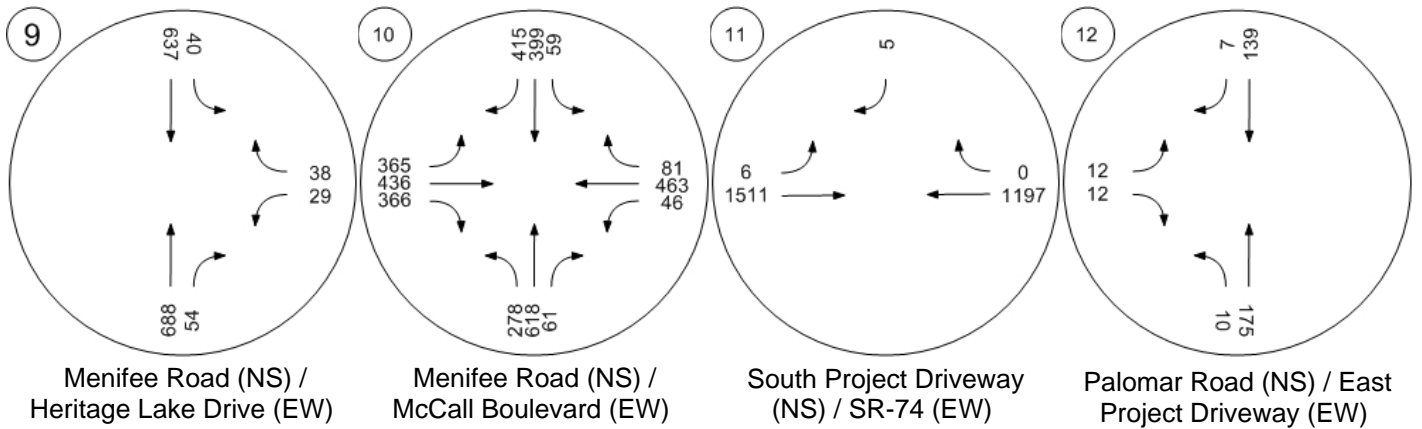
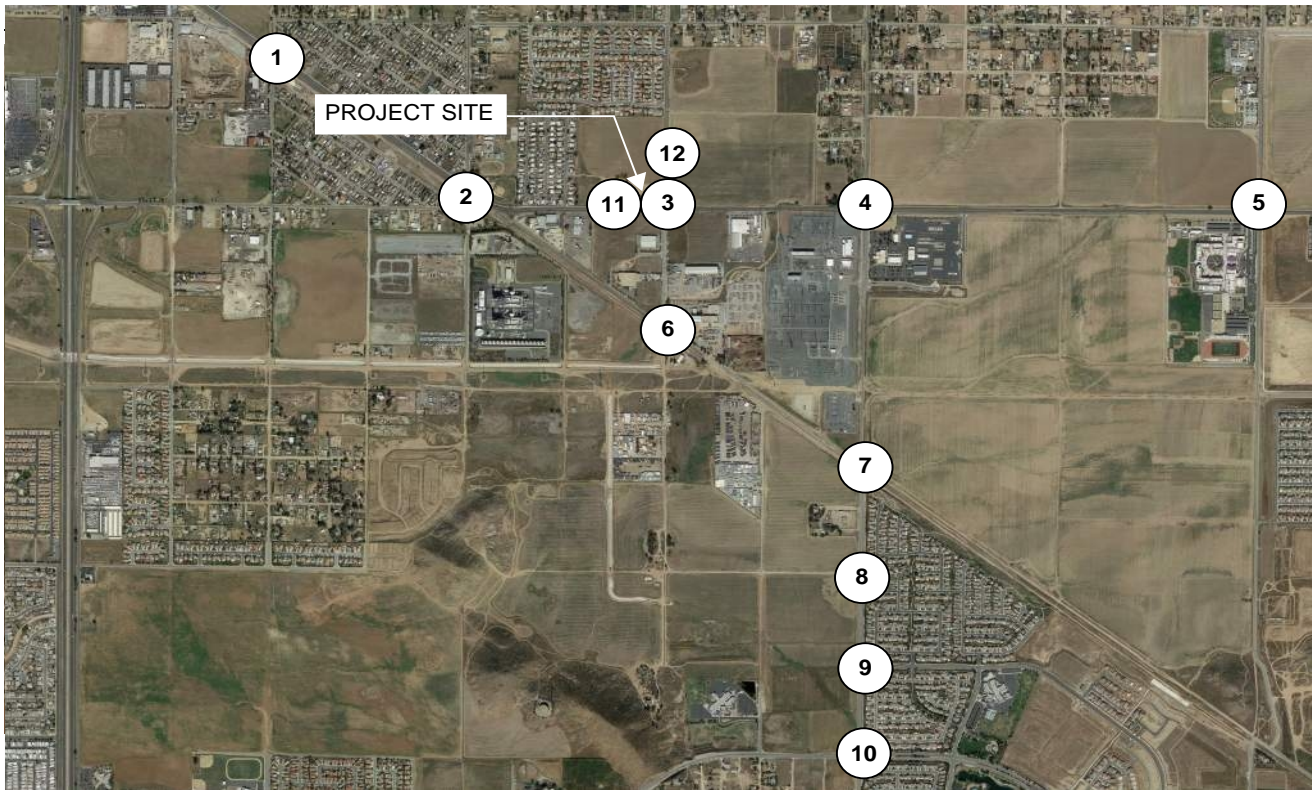


Figure 5-H (Continued) – Existing Plus Ambient Growth Plus Cumulative Projects PM Peak Hour Intersection Volumes



5.1.5 Levels of Service – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project Conditions

The Existing Plus Ambient Growth Plus Cumulative Projects Plus Project scenario includes traffic from other nearby developments. **Table 5-9** and **Table 5-10** provide the projected delay and levels of service at the study intersections and roadway segments under Existing Plus Ambient Growth Plus Cumulative Projects Plus Project conditions without off-site improvements. These levels of service vary from LOS A to F. The Existing Plus Ambient Growth Plus Cumulative Projects Plus Project AM and PM peak hour intersection turning movement volumes are shown on **Figure 5-I** and **Figure 5-J**. The levels of service are based upon the existing geometrics for the study intersections. The level of service calculation worksheets are provided in Appendix E. The following study intersections are expected to operate at an unacceptable level of service:

4. Menifee Road (NS) / SR-74 (EW) in AM and PM peak hour
5. Briggs Road (NS) / Mathews Road (EW) in AM peak hour
6. Palomar Road (NS) / SR-74 (EW) in AM and PM peak hour
7. Menifee Road (NS) / Mathews Road (EW) in AM and PM peak hour
10. Menifee Road (NS) / McCall Boulevard (EW) in AM peak hour

The following study roadway segments are expected to operate at unacceptable level of service in Existing Plus Ambient Growth Plus Cumulative Projects Plus Project conditions:

1. SR-74: Sherman Road to Antelope Road
2. SR-74: Antelope Road to Palomar Road
3. SR-74: Palomar Road to Menifee Road
4. SR-74: Menifee Road to Briggs Road

Table 5-9 – Intersection LOS – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project Conditions

	Intersection	Jurisdiction	Peak Hour	Traffic Control	EAC		Traffic Control	EACP		Project Trips	Impact?
					Delay (sec)	LOS		Delay (sec)	LOS		
1	Sherman Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	10.0 13.9	A B	Signal	10.7 16.5	B B	42 54	NO NO
2	Antelope Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	12.6 7.4	B A	Signal	13.1 7.5	B A	62 81	NO NO
3	Palomar Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	16.7 14.2	B B	Signal	24.7 18.0	C B	135 174	NO NO
4	Menifee Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	191.1 325.8	F F	Signal	205.3 349.4	F F	98 128	YES YES
5	Briggs Road (NS) / SR-74 (EW)	Caltrans	AM PM	Signal	115.3 31.6	F C	Signal	118.4 32.5	F C	52 68	YES NO
6	Palomar Road (NS) / Matthews Road (EW)	City of Menifee	AM PM	OWSC	272.5 48.8	F E	OWSC	422.2 72.8	F F	52 67	YES YES
7	Menifee Road (NS) / Matthews Road (EW)	City of Menifee	AM PM	OWSC	1954.1 78.1	F F	OWSC	3433.0 89.7	F F	52 68	YES YES
8	Menifee Road (NS) / Rouse Road (EW)	City of Menifee	AM PM	Signal	7.3 11.9	A B	Signal	7.4 11.6	A B	52 68	NO NO
9	Menifee Road (NS) / Heritage Lake Drive (EW)	City of Menifee	AM PM	Signal	9.4 5.6	A A	Signal	9.6 5.8	A A	48 62	NO NO
10	Menifee Road (NS) / McCall Boulevard (EW)	City of Menifee	AM PM	Signal	114.0 47.4	F D	Signal	116.6 48.6	F D	40 55	YES NO
11	South Project Driveway (NS) / SR-74 (EW)	Caltrans	AM PM	OWSC	16.3 13.7	C B	OWSC	20.0 15.8	C C	31 40	NO NO
12	Palomar Road (NS) / East Project Driveway (EW)	City of Menifee	AM PM	OWSC	12.2 11.0	B B	OWSC	28.8 20.5	D C	146 188	NO NO

*TWSC: Two way stop control, OWSC: One way stop control

XX = Exceeds Target LOS

Motte Country Plaza

Table 5-10 - Roadway Segments Levels of Service - Existing Plus Ambient Growth Plus Cumulative Projects Plus Project Conditions

Roadway Segment	Roadway Classification	Lanes	Roadway Capacity	EAC			EACP			Project Volumes	Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
SR -74											
1. Sherman Road to Antelope Road	Major	4	34,100	37,979	1.11	F	39,000	1.14	F	1,021	YES*
2. Antelope Road to Palomar Road	Major	4	34,100	35,934	1.05	F	37,159	1.09	F	1,225	YES
3. Palomar Road to Menifee Road	Major	4	34,100	37,546	1.10	F	39,179	1.15	F	1,633	YES
4. Menifee Road to Briggs Road	Major	4	34,100	40,969	1.20	F	41,990	1.23	F	1,021	YES
Matthews Road											
5. Palomar Road to Menifee Road	Collector	2	13,000	5,440	0.42	A	6,052	0.47	A	612	NO
Palomar Road											
6. SR-74 to Matthews Road	Collector	2	13,000	7,712	0.59	A	8,733	0.67	B	1,021	NO
Menifee Road											
7. Matthews Road to Rouse Road	Major	4	34,100	17,300	0.51	A	18,321	0.54	A	1,021	NO
8. Rouse Road to Heritage Lake Drive	Major	4	34,100	18,985	0.56	A	19,924	0.58	A	939	NO
9. Heritage Lake Dr ato McCall Boulevard	Major	4	34,100	18,909	0.55	A	19,726	0.58	A	817	NO

Source: City of Menifee Traffic Impact Analysis Guidelines

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

Figure 5-I – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project AM Peak Hour Intersection Volumes

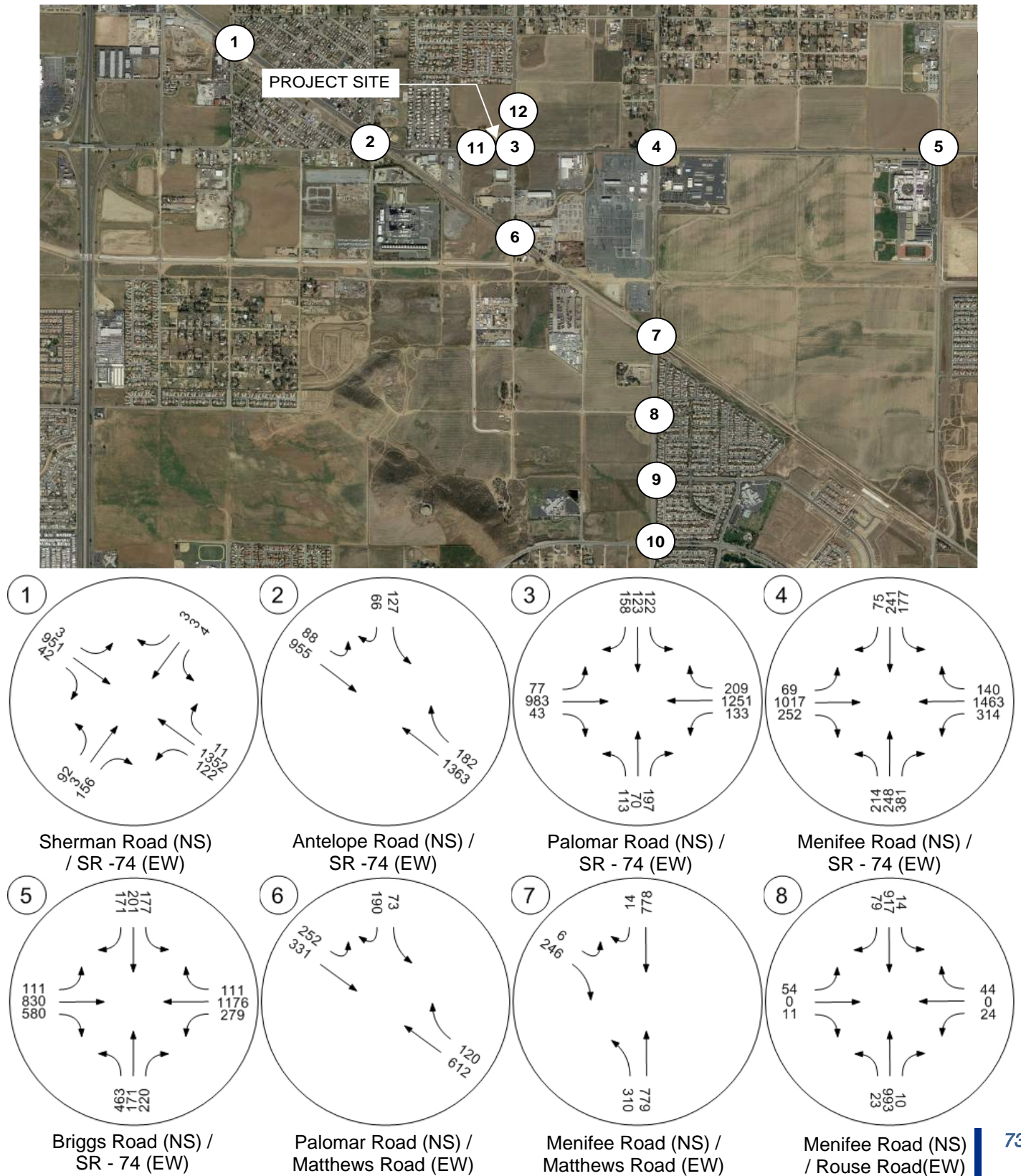


Figure 5-I (Continued) – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project AM Peak Hour Intersection Volumes

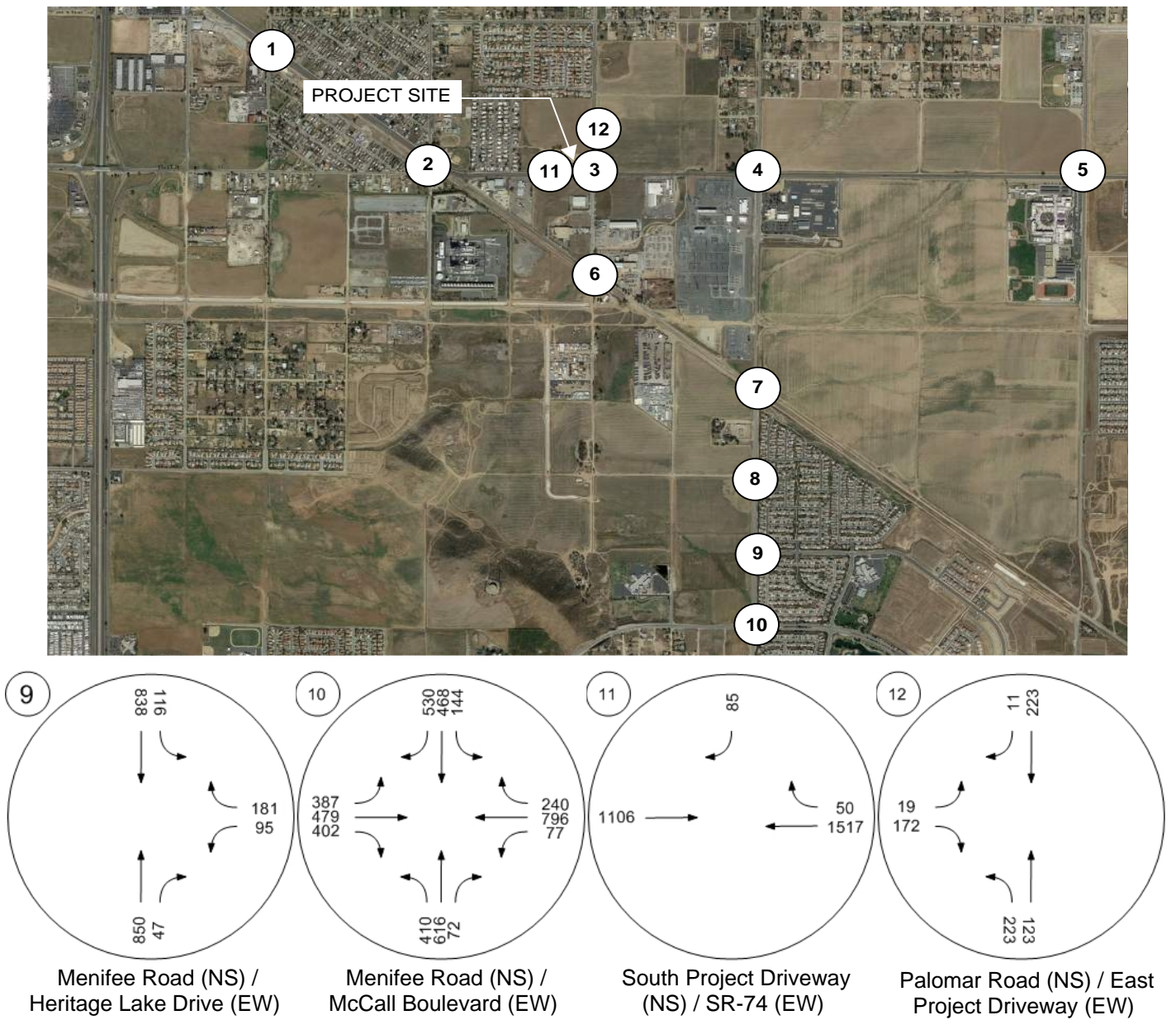


Figure 5-J – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project PM Peak Hour Intersection Volumes

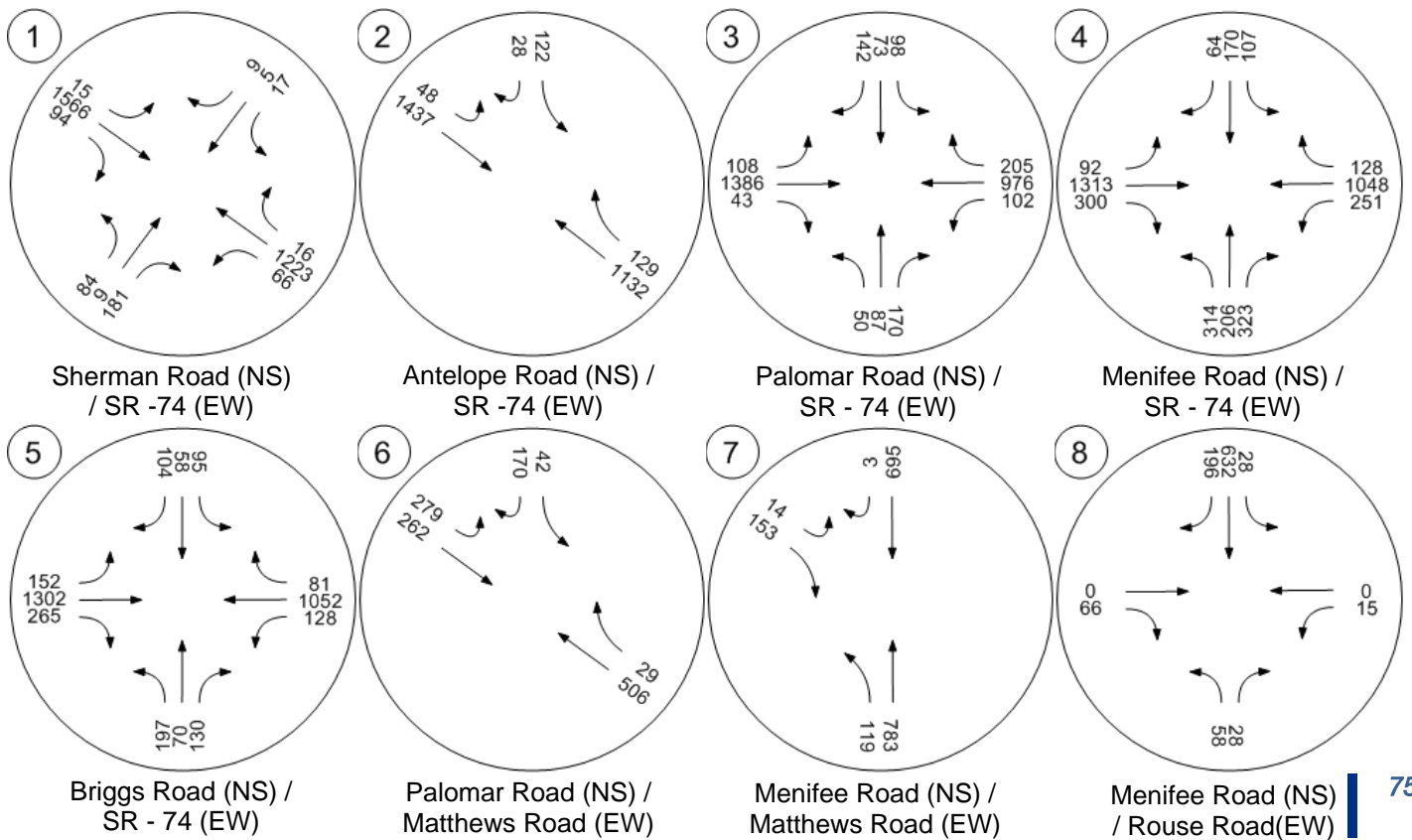
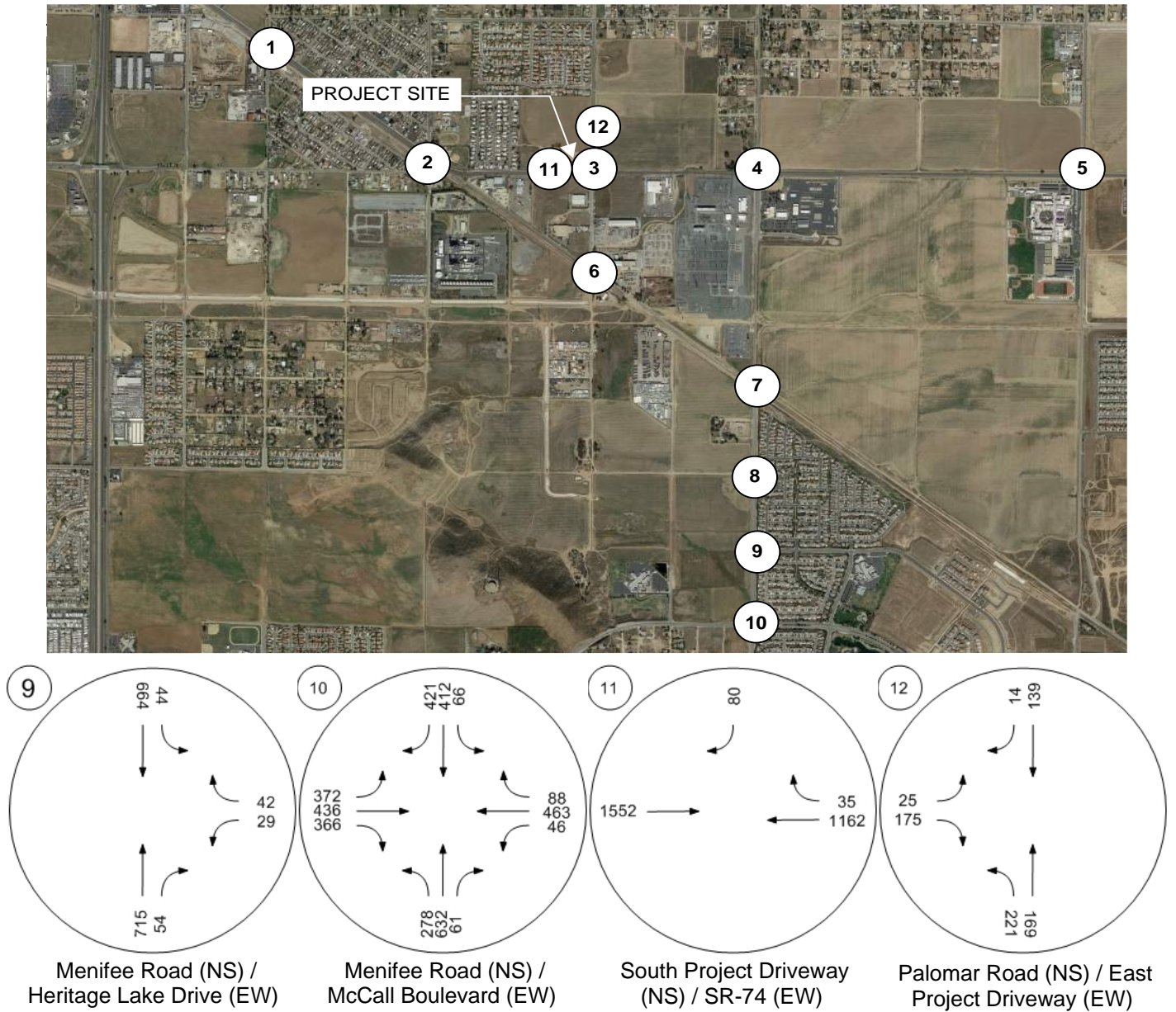


Figure 5-J (Continued) – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project PM Peak Hour Intersection Volumes



5.1.6 Levels of Service – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project with Improvements

Table 5-11 provides the projected delay and levels of service at the study intersections under Existing Plus Ambient Growth Plus Cumulative Projects Plus Project conditions with off-site improvements. The level of service calculation worksheets are provided in Appendix E. **Table 5-12** provides the projected daily traffic and levels of service at the study roadway segments under Existing Plus Ambient Growth Plus Cumulative Projects Plus Project conditions with off-site improvements. With the recommended off-site improvements, the study area intersections and roadway segments would operate at an acceptable LOS D or better.

Table 5-11 – Intersection LOS – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project with Improvements

Intersection	Jurisdiction	LOS Standard	Peak Hour	Traffic Control	EACP		EACP MIT	
					Delay (sec)	LOS	Delay (sec)	LOS
4 Menifee Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	205.3	F	41.9	D
					349.4	F	54.2	D
5 Briggs Road (NS) / SR-74 (EW)	Caltrans	D	AM PM	Signal	118.4	F	47.2	D
					32.5	C	26.3	C
6 Palomar Road (NS) / Mathews Road (EW)	City of Menifee	D	AM PM	Signal	422.2	F	18.1	B
					72.8	F	23.7	C
7 Menifee Road (NS) / Matthews Road (EW)	City of Menifee	D	AM PM	Signal	3433.0	F	22.7	C
					89.7	F	15.9	B
10 Menifee Road (NS) / McCall Boulevard (EW)	City of Menifee	D	AM PM	Signal	116.6	F	42.5	D
					48.6	D	33.0	C

*TWSC: Two way stop control, OWSC: One way stop control

XX = Exceeds Target LOS

Table 5-12 – Roadway Segment LOS – Existing Plus Ambient Growth Plus Cumulative Projects Plus Project with Improvements

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	EACP		EACP MIT			
				ADT	LOS	Roadway Classification	Roadway Capacity	Lanes	LOS
SR -74									
1. Sherman Road to Antelope Road*	Major	34,100	4	39,000	F	Expressway	64,000	4	B
2. Antelope Road to Palomar Road	Major	34,100	4	37,159	F	Expressway	64,000	4	A
3. Palomar Road to Menifee Road	Major	34,100	4	39,179	F	Expressway	64,000	4	B
4. Menifee Road to Briggs Road	Major	34,100	4	41,990	F	Expressway	64,000	4	B

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

6.0 FINDINGS AND RECOMMENDATIONS

6.1 Traffic Impacts and Level of Service Analysis

Table 6-1 presents a summary of intersection level of service for each analyzed scenario.

Table 6-1 – Intersection Level of Service Summary

	Intersection	Jurisdiction	Peak Hour	Existing	EP	EAP	EAC	EACP	Project Trips	Impact?
1	Sherman Road (NS) / SR-74 (EW)	Caltrans	AM PM	- -	- -	- -	- -	- -	42 54	NO NO
2	Antelope Road (NS) / SR-74 (EW)	Caltrans	AM PM	- -	- -	- -	- -	- -	62 81	NO NO
3	Palomar Road (NS) / SR-74 (EW)	Caltrans	AM PM	- -	- -	- -	- -	- -	135 174	NO NO
4	Menifee Road (NS) / SR-74 (EW)	Caltrans	AM PM	E E	F F	F F	F F	F F	98 128	YES YES
5	Briggs Road (NS) / SR-74 (EW)	Caltrans	AM PM	E -	E -	F -	F -	F -	52 68	YES NO
6	Palomar Road (NS) / Matthews Road (EW)	City of Menifee	AM PM	- -	- -	- -	F E	F F	52 67	YES YES
7	Menifee Road (NS) / Matthews Road (EW)	City of Menifee	AM PM	F -	F -	F -	F -	F F	52 68	YES YES
8	Menifee Road (NS) / Rouse Road (EW)	City of Menifee	AM PM	- -	- -	- -	- -	- -	52 68	NO NO
9	Menifee Road (NS) / Heritage Lake Drive (EW)	City of Menifee	AM PM	- -	- -	- -	- -	- -	48 62	NO NO
10	Menifee Road (NS) / McCall Boulevard (EW)	City of Menifee	AM PM	- -	- -	- -	F -	F -	40 55	YES NO
11	South Project Driveway (NS) / SR-74 (EW)	Caltrans	AM PM	- -	- -	- -	- -	- -	31 40	NO NO
12	Palomar Road (NS) / East Project Driveway (EW)	City of Menifee	AM PM	- -	- -	- -	- -	- -	146 188	NO NO

XX = Exceeds Target LOS

Table 6-2 presents a summary of intersection level of service for each analyzed scenario.

Table 6-2 – Roadway Segment Level of Service Summary

Roadway Segment	Jurisdiction	Existing	EP	EAP	EAC	EACP	Project ADT
SR -74							
1. Sherman Road to Antelope Road*	Caltrans	-	E	E	F	F	1,021
2. Antelope Road to Palomar Road	Caltrans	-	-	-	F	F	1,225
3. Palomar Road to Meniffee Road	Caltrans	-	E	E	F	F	1,633
4. Meniffee Road to Briggs Road	Caltrans	E	F	F	F	F	1,021
Matthews Road							
5. Palomar Road to Meniffee Road	Meniffee	-	-	-	-	-	612
Palomar Road							
6. SR-74 to Matthews Road	Meniffee	-	-	-	-	-	1,021

Source: City of Meniffee Traffic Impact Analysis Guidelines

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended

6.2 Traffic Signal Warrants

“Traffic Signal Warrants” are a method of determining whether or not an unsignalized intersection needs to install a traffic signal. Traffic conditions that satisfy a traffic signal warrant are more likely to require the installation of a traffic signal. However, the Manual on Uniform Traffic Control Devices (MUTCD) states that the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal. Peak hour traffic signal warrant analysis should only be considered as an “indicator” of the likelihood of an unsignalized intersection warranting a traffic signal. Intersections that exceed the peak hour warrant are more likely to meet one or more of the other volume based signal warrants. The MUTCD also advises that a traffic control signal should not be installed unless:

- One or more of the traffic signal warrants is satisfied;
- An engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection; and
- It will not seriously disrupt progressive traffic flow.

Table 6-3 provides a summary of the peak hour traffic signal warrants for the Project at unsignalized intersections.

Table 6-3 – Peak Hour Traffic Signal Warrants

	<i>Intersection</i>	<i>Jurisdiction</i>	<i>Traffic Control</i>	<i>Peak Hour</i>	<i>Existing</i>	<i>EP</i>	<i>EAP</i>	<i>EACP</i>
6	Palomar Road (NS) / Matthews Road (EW)	City of Menifee	OWSC	AM PM	- -	- -	- -	MET -
7	Menifee Road (NS) / Matthews Road (EW)	City of Menifee	OWSC	AM PM	MET -	MET -	MET -	MET MET
11	South Project Driveway (NS) / SR-74 (EW)	Caltrans	OWSC	AM PM	- -	- -	- -	- -
12	Palomar Road (NS) / East Project Driveway (EW)	City of Menifee	OWSC	AM PM	- -	- -	- -	- -

*TWSC: Two way stop control, OWSC: One way stop control

MET = Peak Hour Signal Warrant Met

It should be noted that the intersection of Menifee Road/Matthews Road meets peak hour signal warrants, but is not recommended to be signalized as a mitigation measure. The intersection’s side street currently operates as a right-in/right-out street which does not need to be signalized. An increase in the roadway capacity on Menifee Road would allow for satisfactory level of service at the intersection without signalization.

6.3 Traffic and Transportation Project Design Features and Mitigation Measures

This traffic impact analysis demonstrates that the direct traffic impacts generated by the Project can be mitigated to meet the required level of service if the following recommended improvements are adopted. Project design features are those improvements that the Project had anticipated and is 100 percent responsible for since the improvements are not proposed as a result of an impact, but rather to improve project access and safety for the proposed Project. Mitigation measures shown in **Table 6-4**, **Table 6-6**, and **Table 6-8** are proposed as a result of intersection impact and either a fair share percentage is determined or the project responsibility is described. Mitigation measures shown in **Table 6-5**, **Table 6-7**, and **Table 6-9** are proposed as a result of roadway segment impact and either a fair share percentage is determined or a fee program is prescribed.

6.3.1 Roadway and Safety Improvements for Project

- Construct full width improvements on all internal roadways as needed.
- Sight distance at project driveways will be reviewed with respect to City of Menifee sight distance standards at the time of preparation of final grading, landscape, site development, and street improvement plans.
- Implement on-site traffic calming measures in parking lots and internal roadways as needed.

6.3.2 Project Design Features and Mitigation Measures

Intersection Project Design Features

- Project to restripe the intersection of Palomar Road (NS) and East Project Driveway (EW) to include the following geometrics:

Northbound: One left turn pocket. One through lane.
Southbound: One lane shared by through and right-turn movements
Eastbound: One lane shared by left-turn and right-turn movements.
Westbound: Not Applicable.

- Project to restripe the intersection of South Project Driveway (NS) and SR-74 (EW) to include the following geometrics with a raised median on SR-74:
Northbound: Not Applicable.
Southbound: One right-turn only lane.
Eastbound: One through lane and one shared through and right-turn lane.
Westbound: Two through lanes.

Intersection Mitigation Measures

- Contribute fair share for improvement of Menifee Road (NS) and SR-74 (EW) to include the following geometrics:
Northbound: Two left turn lanes. One through lane. One right-turn lane with overlap phasing.
Southbound: One left turn lane. One through lane. One right-turn lane.
Eastbound: One left turn lane. Two through lanes. One right-turn lane with overlap phasing.
Westbound: Two left turn lanes. One through lane. One lane shared by through and right-turn movements.
- Contribute fair share for improvement of the intersection of Briggs Road (NS) and SR-74 (EW) to include the following geometrics:
Northbound: One left turn lane. One lane shared by through and left-turn movements. One right turn lane.
Southbound: One left turn lane. One through lane. One right-turn lane.
Eastbound: One left turn lane. Two through lanes. One right-turn lane with overlap phasing.
Westbound: One left turn lane. One through lane. One lane shared by through and right-turn movements.
- Contribute fair share for improvement of Palomar Road (NS) and Matthews Road (EW) to include a new traffic signal and the following geometrics:
Northbound: Not Applicable.
Southbound: One lane left-turn lane. One right-turn lane.
Eastbound: One left-turn lane. One through lane.
Westbound: One through lane. One right turn lane.
- Contribute fair share for improvement of Menifee Road (NS) and Matthews Road (EW) to include a new traffic signal and the following geometrics:
Northbound: One left-turn lane. One through lane.
Southbound: One through lane. One lane shared by through and right-turn movements.
Eastbound: One lane shared by left-turn and right-turn movements.
Westbound: Not Applicable.

- Contribute fair share for improvement of Menifee Road (NS) and McCall Boulevard (EW) to include the following geometrics:
 Northbound: Two left-turn lanes. One through lane. One lane shared by through and right-turn movements.
 Southbound: One left-turn lane. Two through lanes. One right-turn lane with overlap phasing.
 Eastbound: Two left-turn lanes. One through lane. One lane shared by through and right-turn movements.
 Westbound: Two left-turn lanes. Two through lanes. One right-turn lane.

Table 6-4 – Intersection Improvements for Existing Plus Project Condition

Intersection	Scenario	Northbound			Southbound			Eastbound			Westbound			Traffic Control
		L	T	R	L	T	R	L	T	R	L	T	R	
4 Menifee Road (NS) / SR-74 (EW)	Existing	S	1	1	S	1	S	1	2	S	1	2	S	Signal
	EP Mitigations	1	1	1	1	1	S	1	2	S	1	2	S	Signal
5 Briggs Road (NS) / SR-74 (EW)	Existing	1	1	S	1	1	S	1	2	1	1	2	S	Signal
	EP Mitigations	1	1	S	1	1	S	1	2	1OL	1	2	S	Signal
7 Menifee Road (NS) / Matthew Road (EW)	Existing	S	1	-	-	1	S	S	-	1	-	-	-	OWSC
	EP Mitigations	1	1	-	-	2	S	S	-	1	-	-	-	Signal
11 Project Driveway (NS) / SR-74 (EW)	Existing	-	-	-	S	-	1	1	2	-	-	2	S	OWSC
	EP Improvements	-	-	-	-	-	1	-	2	-	-	2	S	OWSC
12 Palomar Road (NS) / East Project Driveway (EW)	Existing	S	1	-	-	1	S	S	-	1	-	-	-	OWSC
	EP Improvements	1	1	-	-	1	S	S	-	1	-	-	-	OWSC

*TWSC: Two way stop control, OWSC: One way stop control
 S: Shared Lane, A: All Movements, OL: Overlap Phase
BOLD: Proposed Improvement

Table 6-5 – Roadway Improvements for Existing Plus Project Condition

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	EP		EP MIT				
				ADT	LOS	Roadway Classification	Roadway Capacity	Lanes	LOS	
SR -74										
1. Sherman Road to Antelope Road*	Major	34,100	4	31,631	E	Arterial	37,000	4	D	
3. Palomar Road to Menifee Road	Major	34,100	4	30,769	E	Arterial	37,000	4	D	
4. Menifee Road to Briggs Road	Major	34,100	4	34,906	F	Expressway	64,000	4	A	

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

Table 6-6 – Intersection Improvements for Existing Plus Ambient Growth Plus Project Condition

Intersection	Scenario	Northbound			Southbound			Eastbound			Westbound			Traffic Control
		L	T	R	L	T	R	L	T	R	L	T	R	
4 Menifee Road (NS) / SR-74 (EW)	Existing	S	1	1	S	1	S	1	2	S	1	2	S	Signal
	EAP Mitigations	1	1	1	1	1	S	1	2	S	1	2	S	Signal
5 Briggs Road (NS) / SR-74 (EW)	Existing	1	1	S	1	1	S	1	2	1	1	2	S	Signal
	EAP Mitigations	1	A	S	1	1	S	1	2	1OL	1	2	S	Signal
7 Menifee Road (NS) / Matthew Road (EW)	Existing	S	1	-	-	1	S	S	-	1	-	-	-	OWSC
	EAP Mitigations	1	1	-	-	2	S	S	-	1	-	-	-	Signal
11 Project Driveway (NS) / SR-74 (EW)	Existing	-	-	-	S	-	1	1	2	-	-	2	S	
	EAP Improvements	-	-	-	-	-	1	-	2	-	-	2	S	OWSC
12 Palomar Road (NS) / East Project Driveway (EW)	Existing	S	1	-	-	1	S	S	-	1	-	-	-	
	EAP Improvements	1	1	-	-	1	S	S	-	1	-	-	-	OWSC

*TWSC: Two way stop control, OWSC: One way stop control
S: Shared Lane, A: All Movements, OL: Overlap Phase
BOLD: Proposed Improvement

Table 6-7 – Roadway Improvements for Existing Plus Ambient Growth Plus Project Condition

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	EAP		EAP MIT				
				ADT	LOS	Roadway Classification	Roadway Capacity	Lanes	LOS	
SR -74										
1. Sherman Road to Antelope Road*	Major	34,100	4	32,855	E	Arterial	37,000	4	D	
3. Palomar Road to Menifee Road	Major	34,100	4	31,934	E	Arterial	37,000	4	D	
4. Menifee Road to Briggs Road	Major	34,100	4	36,261	F	Expressway	64,000	4	A	

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

Table 6-8 – Intersection Improvements for Existing Plus Ambient Growth Plus Cumulative Projects Plus Project Condition

Intersection		Scenario	Northbound			Southbound			Eastbound			Westbound			Traffic Control
			L	T	R	L	T	R	L	T	R	L	T	R	
4	Menifee Road (NS) / SR-74 (EW)	Existing	S	1	1	S	1	S	1	2	S	1	2	S	Signal
		EACP Mitigations	2	1	1OL	1	1	1	1	2	1OL	2	2	S	Signal
5	Briggs Road (NS) / SR-74 (EW)	Existing	1	1	S	1	1	S	1	2	1	1	2	S	Signal
		EACP Mitigations	1.5	0.5	1	1	1	1	1	2	1OL	1	2	S	Signal
6	Palomar Road (NS) / Matthew Road (EW)	Existing	-	-	-	S	-	1	S	1	-	-	1	S	OWSC
		EACP Mitigations	-	-	-	1	-	1	1	1	-	-	1	1	Signal
7	Menifee Road (NS) / Matthew Road (EW)	Existing	S	1	-	-	1	S	S	-	1	-	-	-	OWSC
		EACP Mitigations	1	1	-	-	2	S	S	-	1	-	-	-	Signal
10	Menifee Road (NS) / McCall Boulevard (EW)	Existing	1	2	S	1	2	S	2	2	S	2	2	1	Signal
		EACP Mitigations	2	2	1	2	2	1OL	2	2	S	2	2	1OL	Signal
11	Project Driveway (NS) / SR-74 (EW)	Existing	-	-	-	S	-	1	1	2	-	-	2	S	OWSC
		EACP Improvements	-	-	-	-	-	1	-	2	-	-	2	S	OWSC
12	Palomar Road (NS) / East Project Driveway (EW)	Existing	S	1	-	-	1	S	S	-	1	-	-	-	OWSC
		EACP Improvements	1	1	-	-	1	S	S	-	1	-	-	-	OWSC

*TWSC: Two way stop control, OWSC: One way stop control
S: Shared Lane, A: All Movements, OL: Overlap Phase
BOLD: Proposed Improvement

Table 6-9 – Roadway Improvements for Existing Plus Ambient Growth Plus Cumulative Projects Plus Project Condition

Roadway Segment	Roadway Classification	Roadway Capacity	Lanes	EACP		EACP MIT				
				ADT	LOS	Roadway Classification	Roadway Capacity	Lanes	LOS	
SR -74										
1. Sherman Road to Antelope Road*	Major	34,100	4	39,000	F	Expressway	64,000	4	B	
2. Antelope Road to Palomar Road	Major	34,100	4	37,159	F	Expressway	64,000	4	A	
3. Palomar Road to Menifee Road	Major	34,100	4	39,179	F	Expressway	64,000	4	B	
4. Menifee Road to Briggs Road	Major	34,100	4	41,990	F	Expressway	64,000	4	B	

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

6.4 Queueing Analysis

Vehicle queueing and storage were analyzed for all analysis scenarios for the northbound left turn movement at Palomar Road/East Project Driveway and for the southbound left turn movement at SR-74/Palomar Road. Forecast vehicle queues are provided in **Table 6-10**. The total available space between the SR-74/Palomar Road intersection and the Palomar Road/East Project Driveway is 255'. It is recommended that the northbound left turn movement at Palomar Road/East Project Driveway have an 80' two-way left-turn lane and the southbound left turn movement at SR-74/Palomar Road have a 125' left turn storage lane. This leaves approximately 50' for a striped opening between the lanes.

Table 6-10 – Queueing Analysis

Intersection and Movement	95th Percentile Vehicle Queue Length										Recommended Storage Length
	E		EP		EAP		EAC		EACP		
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Palomar Road / East Project Driveway											
Northbound Left Turn	1'	1'	17'	12'	22'	15'	2'	1'	24'	16'	80'
SR-74 / Palomar Road											
Southbound Left Turn	14'	8'	41'	29'	49'	31'	31'	28'	86'	69'	125'

All Vehicle Queue Lengths Rounded Up To Nearest Foot

6.5 Truck Operations

Trucks traveling to the site will be primarily double tanker trucks to provide fuel to the gas station once or twice per week. It is expected that the trucks will access the site by heading eastbound on SR-74, making a left turn at Palomar Road, and then turning left into the Project’s eastern driveway. The fueling trucks are then expected to use the Project’s southern driveway on SR-74 to head back towards I-215. If necessary, trucks can also access the site via Antelope Road and Watson Road to Palomar Road which are all paved roadways.

6.6 Project Fair Share Mitigation Summary

The Project will participate in the cost of off-site improvements through the payment of “fair share” mitigation fees, including the following:

- Transportation Uniform Mitigation Fee (TUMF), current at time of construction.
- Development Fees (DIF Fees) current at time of construction.

These fees will be collected and utilized as needed by the City of Menifee to construct the improvements necessary to assist in maintaining the required level of service in the transportation network.

Table 6-11 summarizes the proposed intersection mitigation measures and associated funding mechanism for the study intersections. **Table 6-12** summarizes the proposed roadway segment mitigation measures and associated funding mechanism for the study roadway segments.

Motte Country Plaza

Table 6-11 – Project Intersection Fair Share Mitigation Summary

No.	Intersection	Scenario Impacted	Improvement Measure	Funding Mechanism	Existing Volume		Project Volume		EACP Volume		Net New Volume		AM	PM
					AM	PM	AM	PM	AM	PM	AM	PM	Fair Share	Fair Share
4	Menifee Road (NS) / SR-74 (EW)	All	Improve intersection geometrics to include: • Northbound: Widen approach to accommodate two left-turn lanes, one through lane, and one right-turn lane with overlap phasing. • Southbound: Widen approach to accommodate one left-turn lane, one through lane, and one right-turn lane. • Eastbound: Widen approach to accommodate one left-turn lane, two through lanes, and one right-turn lane with overlap phasing. • Westbound: Widen approach to accommodate two left-turn lanes, one through lane, one shared through and right-turn lane.	TUMF Fees/ Fair Share	3490	2795	98	128	4591	4316	1101	1521	8.9%	8.4%
5	Briggs Road (NS) / SR-74 (EW)	All	Improve intersection geometrics to include: • Northbound: Restripe approach to one left-turn lane, one shared through and left-turn lane, and one right-turn lane. • Southbound: Widen approach to accommodate one left-turn lane, one through lane, and one right-turn lane. • Eastbound: Maintain one left-turn lane, two through lanes, one right-turn lane. Add right-turn overlap phasing to signal. • Westbound: Maintain one left-turn lane, one through lane, and one shared through and right-turn lane.	TUMF Fees/ Fair Share	3722	2664	52	68	4490	3634	768	970	6.8%	7.0%
6	Palomar Road (NS) / Matthews Road (EW)	EACP	Improve intersection geometrics to include: Install Traffic Signal • Southbound: Restripe to include one left-turn lane and one right-turn lane. • Eastbound: Restripe to include one left-turn lane and one through lane. • Westbound: Restripe to include one right-turn lane and one through lane.	Fair Share	858	537	52	67	1578	1288	720	751	7.2%	8.9%
7	Menifee Road (NS) / Matthews Road (EW)	All	Improve intersection geometrics to include: Install Traffic Signal • Northbound: Widen approach to accommodate left turn lane • Southbound: Widen approach to accommodate one through lane and one shared through and right-turn lane.	TUMF Fees/ Fair Share	1648	947	52	68	2133	1767	485	820	10.7%	8.3%
10	Menifee Road (NS) / McCall Boulevard (EW)	EACP	Improve intersection geometrics to include: • Northbound: Restripe approach to include two left-turn lanes, one through lane, and one shared through and right-turn lane. • Southbound: Widen approach to accommodate one left-turn lane, two through lanes, and one right-turn lane with overlap phasing. • Eastbound: Maintain two left-turn lanes, one through lane, and one shared through and right-turn lane. • Westbound: Maintain two left-turn lanes, two through lanes, and one right-turn lane.	TUMF Fees/ Fair Share	2994	1875	40	55	4621	3641	1627	1766	2.5%	3.1%
11	South Project Driveway (NS) / SR-74 (EW)	All	Improve intersection geometrics to include: Construct raised median on SR-74 • Southbound: One right-turn lane. • Eastbound: One through lane and one shared through and right-turn lane. • Westbound: Two through lanes.	Project Responsibility										
12	Palomar Road (NS) / East Project Driveway (EW)	All	Improve intersection geometrics to include: • Northbound: Restripe approach to include one left-turn lane and one through lane. • Southbound: Maintain one shared through and right-turn lane. • Eastbound: One shared left-turn and right-turn lane.	Project Responsibility										

Table 6-12 – Project Roadway Segment Fair Share Mitigation Summary

Roadway Segment	Scenario Impacted	Improvement Measure	Roadway Classification	Lanes	Funding Mechanism	Roadway Capacity	Existing ADT	Project ADT	EACP ADT	Net ADT	Fair Share
SR -74											
1. Sherman Road to Antelope Road*	EP, EAP, EACP	Construct raised median to classify as 4-lane Expressway	Expressway	4	TUMF	64,000	30,610	1,021	39,000	8,390	12.17%
2. Antelope Road to Palomar Road	EACP		Expressway	4	TUMF	64,000	27,692	1,225	37,159	9,467	12.94%
3. Palomar Road to Menifee Road	EP, EAP, EACP		Expressway	4	TUMF	64,000	29,136	1,633	39,179	10,043	16.26%
4. Menifee Road to Briggs Road	All		Expressway	4	TUMF	64,000	33,885	1,021	41,990	8,105	12.60%

Source: City of Menifee Traffic Impact Analysis Guidelines

Fair share percentages shown for all roadway segments for reference.

XX = Exceeds Target LOS

*SR-74 from Sherman Road to Antelope Road is currently built out to General Plan width and no further improvements can be recommended.

APPENDIX

APPENDIX A
SCOPING AGREEMENT

Project No: _____

**CITY OF MENIFEE
ENGINEERING DEPARTMENT**

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the City of Menifee requirements for the traffic impact analysis of the following project.

RPT No. _____
Case No. _____
Related Cases -
SP No. _____
EIR No. _____
GPA No. _____
CZ No. _____

Project Name: Motte County Plaza
Project Location: Northwest corner of Highway 74 / Palomar Road
Project Description: 16 pump gas station with 3,600sf convenience store, 1,750sf fast food with drive thru, automated car wash with 1 car wash tunnel

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>Albert A. Webb Associates</u>	<u>Palomarmar, LP</u>
Address:	<u>3788 McCray Street</u> <u>Riverside, CA 92506</u>	<u>764 W Ramona Expressway, Suite "C"</u> <u>Perris, CA 92571</u>
Telephone:	<u>(951) 686-1070</u>	<u>(951) 776-9300</u>

A. Trip Generation Source: ITE Trip Generation Manual, 10th Edition

Existing Land Use	<u>Commercial</u>	Proposed Land Use	<u>Commercial</u>
Existing Zoning	<u>C-P-S (Highway Comm.)</u>	Proposed Zoning	<u>C-P-S (Highway Comm.)</u>
Total Daily Trips	<u>4,246</u>		
	In	Out	Total
AM Trips	<u>108</u>	<u>98</u>	<u>206</u>
PM Trips	<u>139</u>	<u>129</u>	<u>268</u>

Internal Trip Allowance Yes No (10 % Trip Discount)
Pass-By Trip Allowance Yes No (See Attached) 49-62% Trip Discount
(Attach additional sheet if this is a multi-use site with a breakdown of trips generated)

B. Trip Geographic Distribution: N 20 % S 25 % E 25 % W 30 %
(See attached exhibit for detailed assignment)

C. Background Traffic

Project Completion Year: 2020
Annual Ambient Growth Rate: 2.0%

Other area projects to be included: Please provide the latest Cumulative Project List for Menifee Projects. County of Riverside and City of Perris will be contacted to obtain cumulative projects.

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

Model/Forecast methodology if required: Build-Up Method

Build-out Studies: Does this project require a Build-out Study?

Yes No

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

- | | |
|--|---|
| 1. <u>SR-74 / Sherman Road</u> | 8. <u>Rouse Road / Menifee Road</u> |
| 2. <u>SR-74 / Antelope Road</u> | 9. <u>Heritage Lake Drive / Menifee Road</u> |
| 3. <u>SR-74 / Palomar Road</u> | 10. <u>McCall Boulevard / Menifee Road</u> |
| 4. <u>SR-74 / Menifee Road</u> | 11. <u>SR-74 / South Project Driveway</u> |
| 5. <u>SR-74 / Briggs Road</u> | 12. <u>East Project Driveway / Palomar Road</u> |
| 6. <u>Palomar Road / Matthews Road</u> | |
| 7. <u>Menifee Road / Matthews Road</u> | |

E. Study Roadway Segments (For Build-out Studies):

1. SR-74 from Sherman Road to Antelope Road
2. SR-74 from Antelope Road to Palomar Road
3. SR-74 from Palomar Road to Menifee Road
4. SR-74 from Menifee Road to Briggs Road
5. Matthews Road from Palomar Road to Menifee Road
6. Palomar Road from SR-74 to Matthews Road
7. Menifee Road from SR-74 to Matthews Road
8. Menifee Road from Matthews Road to Rouse Road
9. Menifee Road from Rouse Road to Heritage Lake Drive
10. Menifee Road from Heritage Lake Drive to McCall Boulevard

F. Site Plan (please attach a legible 11'X17' copy)

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

Signal Warrant Analysis for Palomar Road/Matthews Road and Menifee Road/Matthews Road for all scenarios.

Queueing Analysis for all turning movements at SR-74/Palomar Road for all scenarios.

Queueing Analysis for East Project Driveway for all scenarios for left turn lane.

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.

Date of counts: During Normal School Days on weeks without holidays

I. Analysis Scenario

1. Existing (2018) Conditions
2. Project-Only Trips (Tables and Figures showing project trips only)
3. Existing Plus Project (2018) Conditions
4. Existing Plus Ambient (2020) Plus Project Conditions
5. Existing Plus Ambient (2020) Plus Cumulative Plus Project Conditions

Recommended by:



Consultant Engineer

9/5/2018

Date

Scoping Agreement Submitted on

Date

Scoping Agreement Resubmitted on

Date

Approved Scoping Agreement:

Nick Minicilli

City of Menifee – Traffic Engineer

9/11/2018

Date

Table 1: Trip Generation Rates

Land Use	Unit	AM Peak Hour			PM Peak Hour			Daily
		Total	In	Out	Total	In	Out	
Super Convenience Market/Gas Station	VFP	28.08	14.04	14.04	22.96	11.48	11.48	230.52
Automated Car Wash	CWT	0.00	0.00	0.00	77.50	38.75	38.75	77.50
Fast Food With Drive-Through Window	TSF	40.19	20.50	19.69	32.67	16.99	15.68	470.95

VFP =Vehicle Fueling Positions, CWT = Car Wash Tunnels, and TSF=Thousand Square Feet.

Table 2: Project Trip Generation


Land Use	Qty	Unit	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Super Convenience Market/Gas Station	16	VFP	449	225	225	367	184	184	3,688
<i>Pass-by Trips (AM: 62% PM: 56% Gas Station)</i>			(278)	(139)	(139)	(206)	(103)	(103)	(484)
Automated Car Wash*	1	CWT	0	0	0	78	39	39	96
Fast Food With Drive-Through Window	1.75	TSF	70	36	34	57	30	27	824
<i>Pass-by Trips (AM: 49% PM: 50% Fast Food)</i>			(34)	(17)	(17)	(29)	(14)	(14)	(63)
PROJECT NET TOTAL			206	104	102	268	135	133	4,061
PROJECT DRIVEWAY TOTAL TRIPS			519	260	259	502	252	250	4,608

VFP =Vehicle Fueling Positions, CWT = Car Wash Tunnels, and TSF=Thousand Square Feet.

* Automated Car Wash Land Use (948) does not have any AM trip rates

Pass-by trip percentages per ITE Trip Generation Handbook

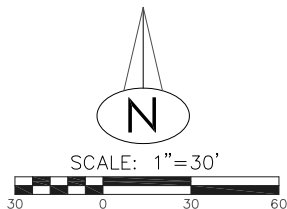
Daily trips for Automated Car Wash based on two similar existing sites in Riverside County. Peak hour trips kept the same as ITE for conservative peak hour analysis.



 Trip generation table

 revised in traffic study

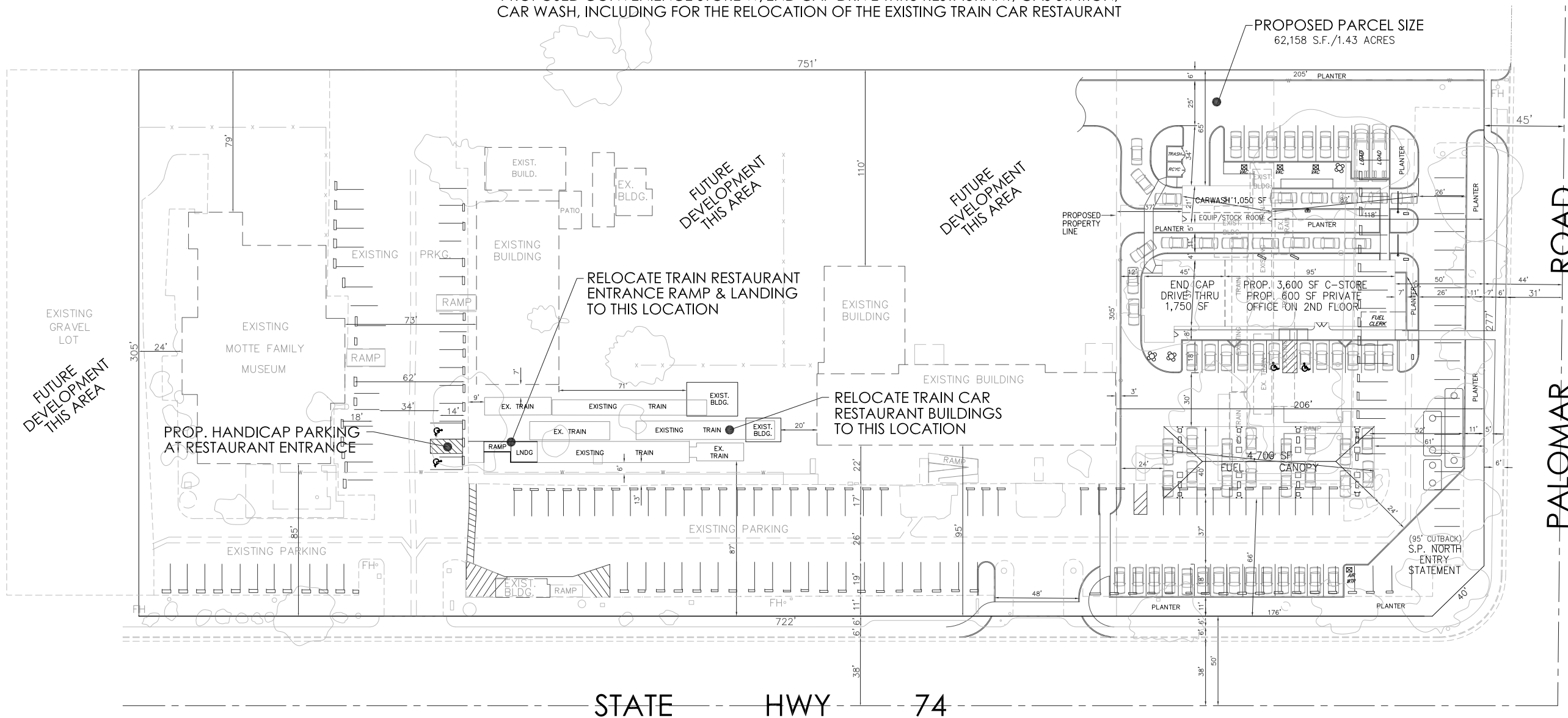
 report - 8/5/2020



SEPTEMBER 2017
CITY OF PERRIS, CALIFORNIA

MOTTE'S ROMOLA FARMS CONCEPTUAL DEVELOPMENT PLAN

PROPOSED CONVENIENCE STORE W/END CAP DRIVE THRU RESTAURANT, GAS STATION,
CAR WASH, INCLUDING FOR THE RELOCATION OF THE EXISTING TRAIN CAR RESTAURANT



PROPOSED PARCEL SIZE
62,158 S.F./1.43 ACRES

LEGAL DESCRIPTION:
PORTION OF LOTS 93 & 94, ROMOLA FARMS SUBDIVISION, RECORDED IN BOOK 12, PAGE 71, RECORDS OF RIVERSIDE COUNTY CALIFORNIA

A.P.N. (ENTIRE SITE)
329-110-19 & 23

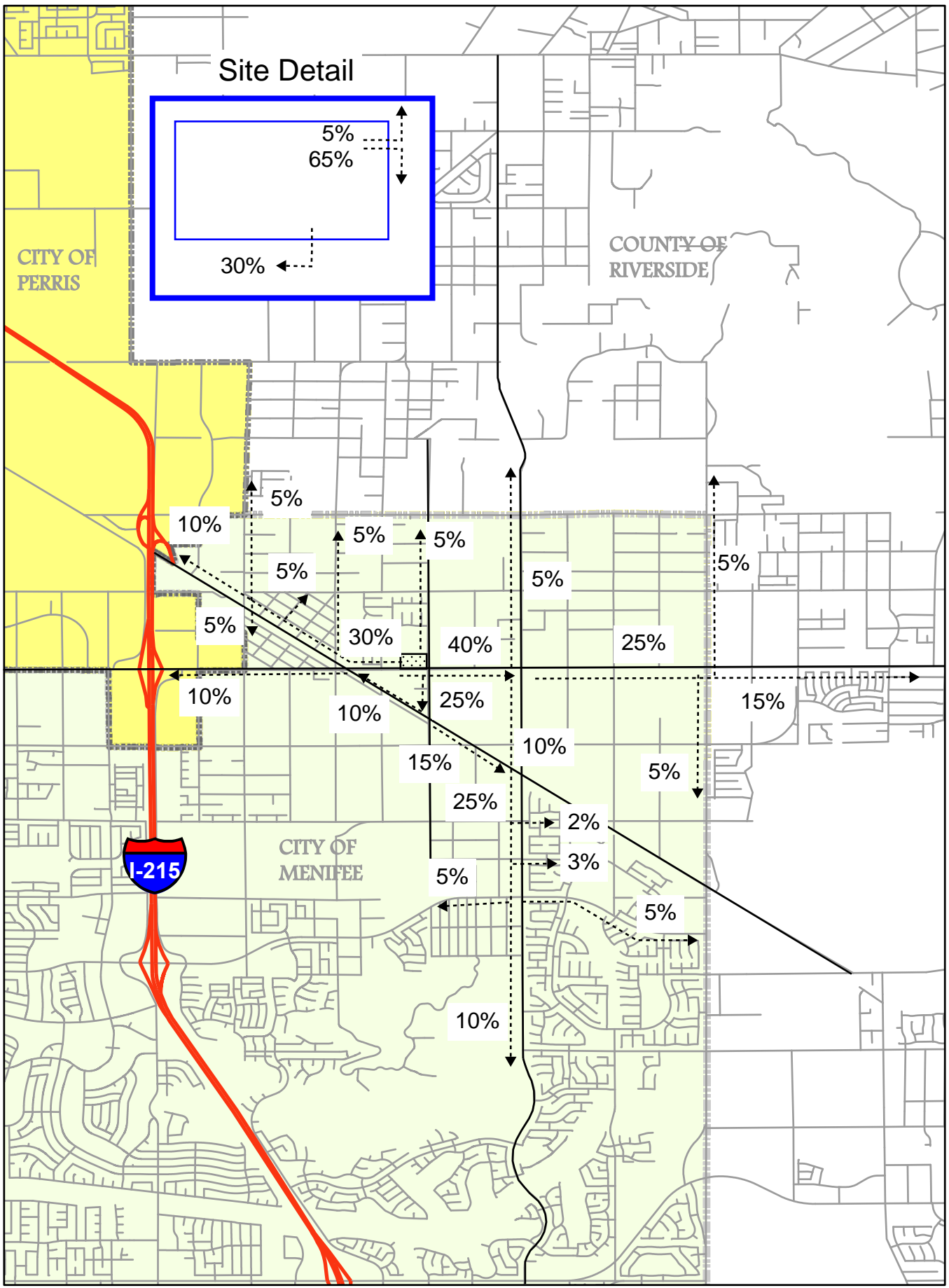
**PROPOSED PARCEL:
SITE COVERAGE DATA:**
LANDSCAPING (ONSITE): 12,432 SF / 62,158 SF = 20.0%
BUILDINGS / GAS CANOPY: 11,100 SF / 62,158 SF = 17.9%
CONCRETE / ASPHALT PAVING: 38,626 SF / 62,158 SF = 62.1%
TOTALS: 62,158 SF / 62,158 SF = 100.0%

**PROPOSED PARCEL:
CITY OF MENIFEE: (PARKING REQUIREMENTS)**

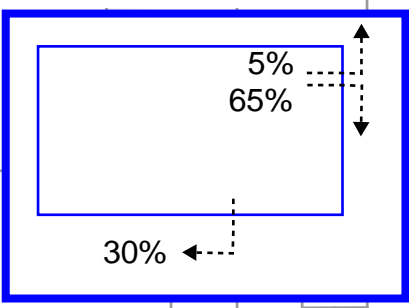
SERVICE STATION:	= 4 SPACES
CONVENIENCE STORE (1 SPACE/200 SF): 4,200 / 200	= 21 SPACES
RESTAURANT/DRIVE THRU (1 SPACE / 45 SF SERVING AREA (945 SF x 45))	= 21 SPACES
RESTAURANT/DRIVE THRU (1 SPACE / 2 EMPLOYEES): 4 EMPLOYEES	= 2 SPACES
AUTO WASHING (SELF SERVE) (2 SPACES PER STALL) 1 SINGLE STALL	= 2 SPACES
TOTAL PARKING REQUIRED:	= 50 SPACES
TOTAL PARKING PROVIDED:	= 50 SPACES

APPLICANT:
MAMCO, INC.
764 W. RAMONA EXPRESSWAY, SUITE C
PERRIS, CALIFORNIA 92572
CONTACT: MARWAN ALABBASI
(909) 262-8668

REPRESENTATIVE:
MIKE NAGGAR & ASSOCIATES, INC.
445 S. D ST.
PERRIS, CA 92570
CONTACT: MIKE NAGGAR
(951) 551-7730



Site Detail



CITY OF PERRIS

COUNTY OF RIVERSIDE

CITY OF MENIFEE



10%

5%

5%

5%

5%

5%

5%

30%

40%

25%

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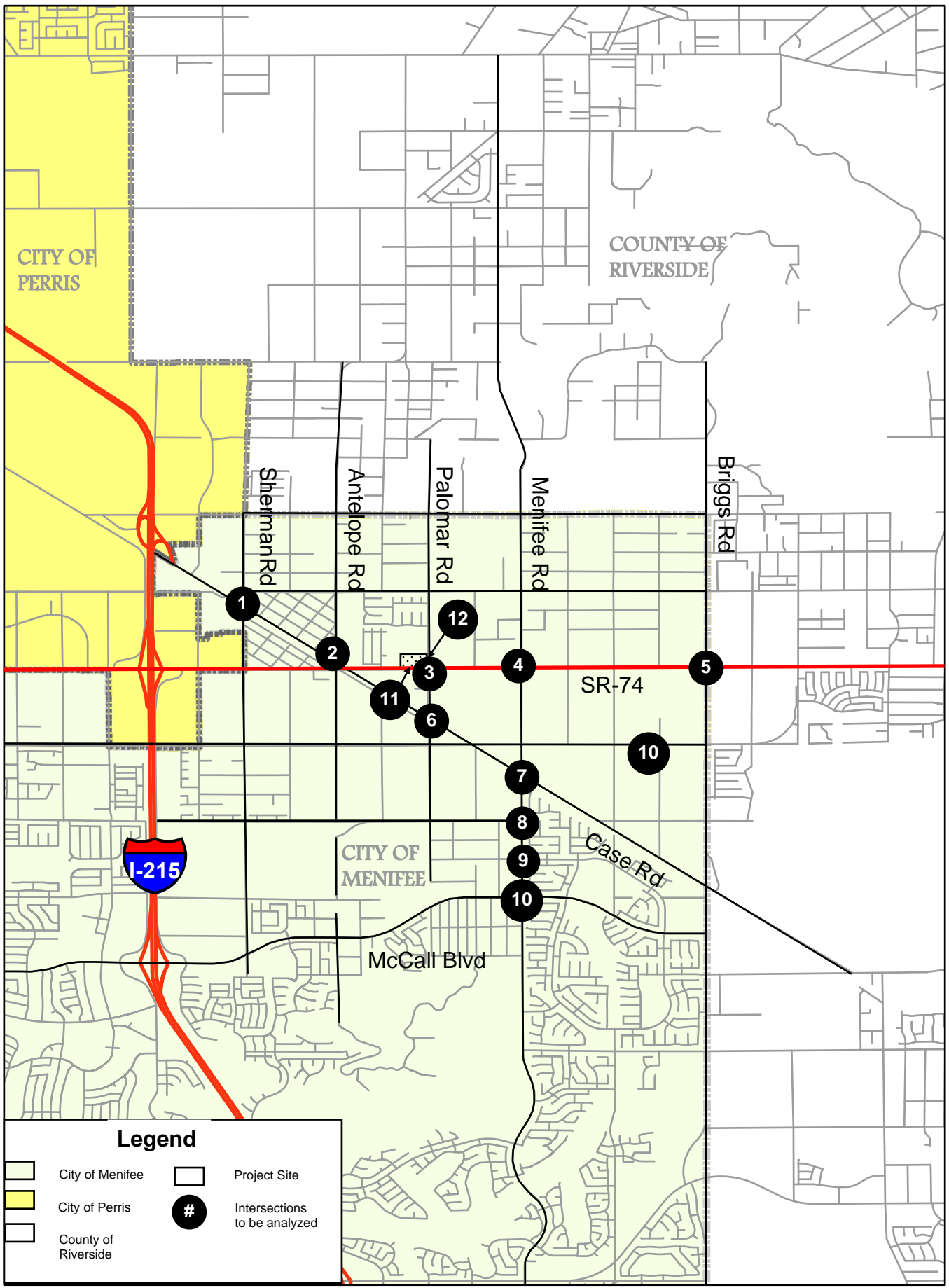
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10%



Legend

- | | | | |
|---|---------------------|---|------------------------------|
|  | City of Menifee |  | Project Site |
|  | City of Perris |  | Intersections to be analyzed |
|  | County of Riverside | | |

Nicholas Lowe

From: Nicholas Lowe
Sent: Tuesday, August 07, 2018 9:30 AM
To: Deborah Saulina
Subject: FW: Motte County Plaza Scoping Agreement

Please save this email in the project folder under Traffic ->Scoping

Nicholas R. Lowe, MS|PE - Associate Engineer
Albert A. Webb Associates
3788 McCray Street, Riverside, CA 92506
951-248-4289

From: Agyakwa, Kwasi@DOT [Kwasi.Agyakwa@dot.ca.gov]
Sent: Tuesday, August 07, 2018 8:52 AM
To: Nicholas Lowe
Cc: Mark Roberts
Subject: RE: Motte County Plaza Scoping Agreement

Good morning,

After review, the scoping agreement looks good. We have no further comments.

Thanks,

Kwasi

From: Nicholas Lowe [mailto:nick.lowe@webbassociates.com]
Sent: Thursday, July 26, 2018 11:15 AM
To: Agyakwa, Kwasi@DOT <Kwasi.Agyakwa@dot.ca.gov>
Cc: Roberts, Mark B@DOT <mark.roberts@dot.ca.gov>
Subject: RE: Motte County Plaza Scoping Agreement

Hi Kwasi,

Please see attached revised scoping agreement. We will include project trip-only exhibit in the report.

FYI, the City of Menifee has not been able to review the scoping agreement yet.

Thank you,

Nicholas R. Lowe, MS|PE - Associate Engineer
Albert A. Webb Associates
3788 McCray Street, Riverside, CA 92506
t: 951.248.4289
e: nick.lowe@webbassociates.com w: www.webbassociates.com
[LinkedIn](#) | [Twitter](#) | [Facebook](#) | [YouTube](#)

From: Agyakwa, Kwasi@DOT [<mailto:Kwasi.Agyakwa@dot.ca.gov>]
Sent: Wednesday, July 25, 2018 10:45 AM
To: Nicholas Lowe
Cc: Mark Roberts
Subject: RE: Motte County Plaza Scoping Agreement

APPENDIX B
CUMULATIVE PROJECT INFORMATION

COUNTY OF RIVERSIDE

Balraj More

From: Tadesse, Tesfu <TTADESSE@RIVCO.ORG>
Sent: Tuesday, October 09, 2018 7:50 AM
To: Balraj More
Cc: Nicholas Lowe; Tsang, Kevin; Tadesse, Tesfu
Subject: COMMERCIAL: RE: Request for Cumulative Project List
Attachments: Cummulative @ SH-74 and Palomar Rd.pdf

Hello Balraj,

Please find the attached cumulative project list.

Thank you

Tesfu Tadesse
County of Riverside Transportation Department
Development Review
4080 Lemon Street 8th Floor
Riverside, CA 92501

Office: 951-955-3789

Fax: 951- 955-0049

E-mail: ttadesse@rivco.org - (Note My New Email Address)



[How are we doing?](#) Click the link to tell us

From: Balraj More [mailto:balraj.more@webbassociates.com]
Sent: Monday, October 08, 2018 8:46 AM
To: Tadesse, Tesfu <TTADESSE@RIVCO.ORG>
Cc: Nicholas Lowe <nick.lowe@webbassociates.com>
Subject: Request for Cumulative Project List

Good Morning Tesfu,

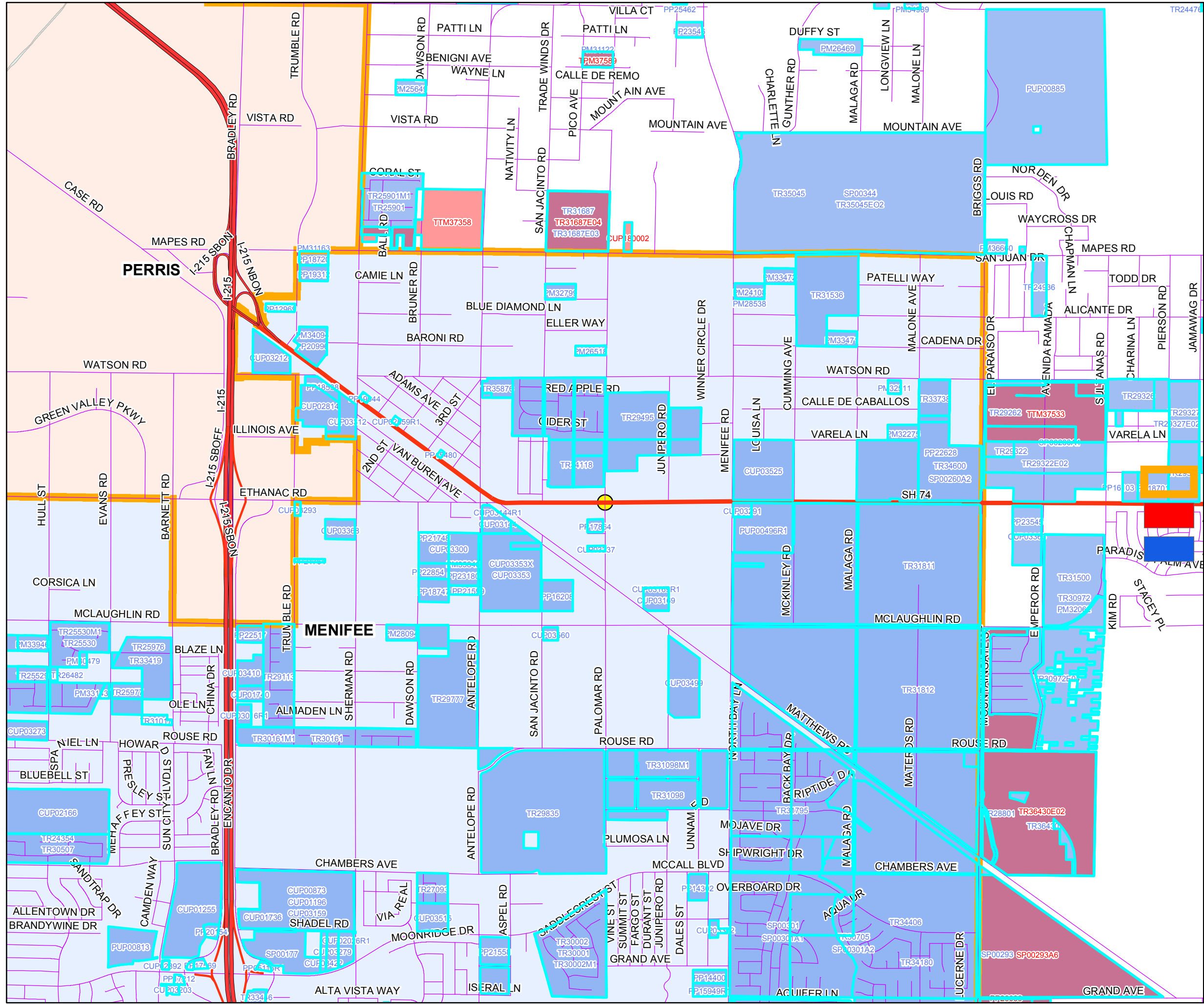
I hope you are doing good. I am working on a TIA located in Menifee at the north-west corner of Palomar Road and SR-74. The project is located within a mile radius of County. So, I was wondering if you will be able to provide the list of Cumulative Projects in the area so that we can add it to our analysis.

Thank You

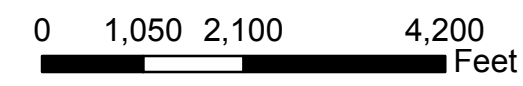
Best

Balraj More - Assistant Engineer
Albert A. Webb Associates
3788 McCray Street, Riverside, CA 92506
t: 951.320.6002

The County of Riverside assumes no warranty or legal responsibility for the information contained on this map. Data and information represented on this map is subject to updates, modifications and may not be complete or appropriate for all purposes. County GIS and other sources should be queried for the most current information. Do not copy or resell this map.



- Cities (Outline)
- Active Major Cases (CUP, PM, PP, PUP, SP, TR)
- Approved Major Cases (CUP, PM, PP, PUP, SP, TR)



Active Cases as of 10/9/2018

<u>CASE NAME</u>	<u>STATUS</u>	<u>APPLIED DATE</u>	<u>APPROVAL DATE</u>	<u>EXPIRED DATE</u>
CUP180002	LDC REVIEW	2/8/2018		
RV STORAGE FACILITY				
PP26039	APPLIED	6/6/2016		
CONTRACTOR SUPPLY/STORAGE, RV STORAGE/RENTAL YARD				
SP00293A6	LDC REVIEW	12/23/2015		
NEW PLANNING AREAS FOR GPA01162				
TPM37589	LDC REVIEW	7/23/2018		
DIVISION OF A SINGLE 4.72 ACRE LOT INTO 4 PARCELS				
TR31687E04	APPLIED	7/11/2018		
4TH EXTENSION OF TIME FOR TR31687				
TR36430E02	APPLIED	7/25/2018		
EXTENSION OF TIME TR36430E02				
TTM37358	LDC REVIEW	5/7/2018		5/6/2021
TENTATIVE TRACT MAP 37358 FOR 154 RES LOTS				
TTM37533	LDC REVIEW	8/7/2018		8/6/2021
TENTATIVE TRACT NO. 37533 - 363 SINGLE FAMILY RESIDENTIAL LOTS AND A PARK SITE IN THE MENIFEE NORTH SPECIFIC PLAN (SP 260)				

Approved Cases as of 10/09/2018

<u>CASE NAME</u>	<u>STATUS</u>	<u>APPLIED DATE</u>	<u>APPROVAL DATE</u>	<u>EXPIRED DATE</u>
CUP00873	APPROVED	2/21/2008		
PROPOSAL FOR 103 SPACE MOBILE HOME PARK				
CUP01196	APPROVED	2/14/2008		
PRPOSAL FOR MOBILE HOME PARK				
CUP01255	APPROVED	2/13/2008		
PROPOSAL FOR MOBILE HOME PARK				
CUP01425	APPROVED	2/6/2008		
PROPOSAL FOR CAR WASH				
CUP01736	APPROVED	1/31/2008		
PROPOSAL FOR MOBILE HOME AND RV PARK				
CUP01740	APPROVED	1/31/2008		
PROPOSED AUTO SALES				
CUP02026R1	APPROVED	10/31/1990		
EA 35573, CZ 5929 N/A				
CUP02086R1	APPROVED	5/30/2001		7/1/2006
TEMPORARY CONTRACTORS STORAGE YARD				
CUP02166	APPROVED	1/29/2008		
PROPOSAL FOR 392 SPACE MOBILE HOME PARK				
CUP02559R1	APPROVED	3/11/2005		6/22/2015
AUTO SALES AND REPAIR AND SERVICE CENTER				
CUP02814	APPROVED	12/21/2000		8/1/2011
PROPOSED CONCRETE BATCH PLANT				
CUP02892	APPROVED	12/19/2000		6/16/1987
PROPOSAL TO ADD CAR WASH TO EXISTING GAS STATION				
CUP03016R1	APPROVED	4/13/1998		
REV CUP FOR EXPANSION OF EXISTING CONTIG. SELF STO				
CUP03105	APPROVED	7/9/1990		6/25/1993
AUTO SERVICE STATION, MINI-MART, AUTO CAR WASH				
CUP03144	APPROVED	7/15/1991		7/14/1995
ASPHALT BATCH PLANT ASPHALT BATCH PLANT EA 35964 EXT 1035, CFG 111, BSA 48				
CUP03144R1	APPROVED	11/13/2003		6/6/2025
CUP03144 REVISE PERMIT TO EXTEND PERMIT LIFE				
CUP03159	APPROVED	4/27/1992		5/18/1995
TO ALLOW OFF PREMISES LIQUOR CONSUMPTION ADD HARD LIQUOR TO AN EXISTING MINI MARKET WITH BE ER & WINE EA 36244, VAR 1602				
CUP03169	APPROVED	11/18/1992		6/29/1995
WOOD RECYCLING WASTE LUMBER & WOOD PRODUCTS CREATION OF A WOOD RECYCLING CENTER FOR WASTE LUMBER & WOOD PRODUCTS EA 36406 GEO 867				
CUP03169R1	APPROVED	9/20/2001		1/30/2018
RELOCATE FLD CHANNEL/EASEMT, EXTEND DATE OF CUP				
CUP03203	APPROVED	8/16/1994		1/2/1997
THRIFTY DRUG STORE CUP TO PERMIT SALES OF ALCOHOLIC BEVERAGES FOR OFF -SITE CONSUMPTION IN MAJOR STORE EA 36726, VAR 1618				

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CUP03212	APPROVED	1/3/1995		3/14/1997
SOIL RECYCLING & PROCESSING FACILITY SOIL RECYCLING & PROCESSING PLANT-56,850 SQ. FT BL DG & 4,560 SQ. FT. SHED ON 3.27 AC OF 12.7 AC SITE EA 36800 NONE SEE FILE				
CUP03237	APPROVED	4/30/1997		8/26/1999
BUILD A MORTUARY/CREMATORIUM & INDUST. WAREHOUSE. PHASE I WILL CONSIST OF A 5,450 SQ. FT. MORTUARY/C EMATORIUM BUILDING, AND PHASE II WILL CONSIST OF A 8,655 SQ. FT. WAREHOUSE BUILDING.				
CUP03273	APPROVED	8/11/1998		10/19/2002
PHASE I OF MURRIETA MEMORIAL PARK				
CUP03279	APPROVED	1/8/1999		7/27/2001
MINI WAREHOUSE				
CUP03291	APPROVED	6/21/1999		3/14/2002
ARCO AM/PM MINI MART GAS STATION				
CUP03293	APPROVED	7/20/1999		5/18/2004
FAST FOOD RESTAURANT				
CUP03300	APPROVED	12/2/1999		
HEAVY EQUIPMENT STORAGE YARD/WAREHOUSE/OFFICES				
CUP03312	APPROVED	3/20/2000		
4 BLDGS TO MANUF AIR POLL EQUIP				
CUP03353	APPROVED	8/30/2001		
670 MEGEWATT NATURAL GAS FIRED POWER PLANT				
CUP03353X	APPROVED	12/10/2001		
NATURAL GAS COMPRESSER SITE (OFF-SITE FOR CUP03353				
CUP03363	APPROVED	2/22/2002		11/25/2005
SELF-STORAGE FACILITY & RV PARKING				
CUP03368	APPROVED	3/25/2002		
GUNITE AND CONCRETE BATCH PLAN				
CUP03372	APPROVED	5/13/2002		
RV STORAGE (TRAILER & BOAT STORAGE)				
CUP03410	APPROVED	9/9/2003		
RV DEALERSHIP & SERVICE CENTER PROPANE SALES				
CUP03422	APPROVED	1/15/2004		8/23/2008
STORAGE FACILTIY W/MANAGER'S APARTMENT/CAR WASH				
CUP03499	APPROVED	2/24/2006		
BLD SUN VALLEY ENERGY FOR NATURAL GAS-FIRED				
CUP03515	APPROVED	6/7/2006		9/19/2009
5 BLDGS W/PARKING FOR RESTAURANT RETAIL/MEDICAL				
CUP03525	APPROVED	9/5/2006		7/31/2009
COMML SHOPPING CENTER/14 BLGDS/GAS STATION/347,000 SF INCLUDES GAS STATION/ 14 BLDGS FOR RETAIL AND F OOD SERVICES				
CUP03560	APPROVED	8/22/2007		3/17/2011
CONCRETE BATCH FACILITY AND PRECAST MANUFACTURING EQUIPMENT FOR SPECIALIZED RETAINING WALL CONCRETE FORMS				
PM24108	APPROVED	1/20/1989		2/13/1996
DIVIDE 4.77 ACRES INTO 4 PARCELS EA 33511 EXT 428, EXT 783				

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PM25649	APPROVED	2/16/1990		1/8/2000
DIVIDE 5 ACRES INTO 4 LOTS DIVIDE 5 ACRES INTO 4 PARCELS EA 34823 EXT 728, EXT 1116 SEE FILE SEE FILE				
PM26469	APPROVED	7/26/1990		8/13/1997
DIVIDE APPROX 9 ACRES INTO 4 LOTS DIVIDE 9 ACRES INTO 4 PARCELS EA 35373				
PM26518	APPROVED	9/6/1990		5/21/1995
SPLIT 3.05 ACRES INTO 3 LOTS DIVIDE 3.05 ACRES INTO 3 PARCELS EA 35472 EXT 856				
PM27792	APPROVED	5/27/1993		8/9/1998
SUBDIVIDE 5.84 AC INTO COMMERCIAL 5 LOTS DIVIDE 5.84 ACRES INTO 5 COMMERCIAL LOTS WITH A 0.9 ACRE GROSS MINIMUM LOT SIZE EA 36506 SSR 562				
PM28094	APPROVED	2/6/1995		5/23/1999
PM TO DIVIDE APPROX 5 ACRES INTO 3 PARCELS DIVIDE 4.85 ACRES INTO 3 PARCELS EA 36811				
PM28386	APPROVED	7/17/1996		12/3/1999
SUBDIVIDE 3.11 ACRES INTO 2 PARCELS				
PM28538	APPROVED	4/10/1998		12/15/2002
DIVIDE 5 ACRES INTO 4 LOTS				
PM30213	APPROVED	5/18/2001		
DIVIDE 5 ACRES INTO 4 PARCELS				
PM30479	APPROVED	2/4/2002		
SUBDIVIDE 1.16 AC LOT INTO 2 RES LOTS W/WAIVER				
PM31122	APPROVED	11/6/2003		9/14/2007
TO DIVIDE 4.72 ACRES INTO 4 SFR ONE ACRE LOTS				
PM31163	APPROVED	5/6/2003		1/24/2009
SUBDIVIDE 4.0 ACRES INTO 2 INDUSTRIAL PARCELS				
PM32062	APPROVED	1/20/2004		3/22/2008
SUBDIVIDE 137.1 ACRES INTO 3 PARCELS FOR FINANCING				
PM32275	APPROVED	11/17/2004		7/12/2008
SCH H DIVISION OF 5 AC. INTO 4 1AC. MIN. PARCELS SIZE, REQUESTING WAIVER OF FINAL MAP, SCHEDULE H MAP				
PM32511	APPROVED	6/17/2004		1/25/2008
WAIVED PM TO SUBDIVIDE 2 AC LOT INTO TWO PARCELS 1 AC PARCELS, SCHEDULE H MAP				
PM32799	APPROVED	11/18/2005		7/2/2013
SCH H DIVISION OF 4.9 AC TO 4 PARCELS (SEWERED)				
PM33143	APPROVED	1/26/2005		8/27/2013
SCH F DIVISION OF 1.22 AC INTO 3 17,714 SF PARCELS				
PM33471	APPROVED	8/31/2005		10/16/2014
SCH H DIVISION OF 4.9 AC. INTO 4 1-AC. SFR PARCELS				
PM33472	APPROVED	8/31/2005		10/16/2014
SCH H DIVISION OF 4.9 AC INTO 4 1-AC SFR PARCELS.				
PM33946	APPROVED	9/14/2005		10/16/2012
SCH F DIVISION OF 1.43 AC. INTO 3 PARCELS.				
PM34094	APPROVED	10/28/2005		1/9/2015
SUBDIVIDE 10AC TO 13 PARCELS FOR LEASE OR SALE				
PM34989	APPROVED	6/29/2006		9/10/2011
SCH H DIVISION 4 AC. INTO 3 PARCELS.				

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PM35846	APPROVED	11/19/2007		2/3/2012
6.7 ACRE INDUSTRIAL CONDOMINIUM SITE WITH 4 BUILDING AND 35 UNITS				
PM36660	APPROVED	10/29/2013		1/26/2018
SCH.H DIVISION OF 3.6 AC INTO 3 RES PARCELS THE SIZES OF THE 3 PARCELS ARE 1.03 ACRES, 1.39 ACRES AND 1.17 ACRE S. THE EXISTING MOBILE HOME RESIDENCE WILL REMAIN AND WILL BE LOCATED IN PARCEL THREE				
PP05116R1	APPROVED	1/14/2004		7/28/2010
DENNY'S RESTAURANT & DRIVE THRU RESTAURANT				
PP12969	APPROVED	9/5/1991		11/30/1994
154' CELLULAR TELEPHONE MONOPOLE 154' CELLULAR TELEPHONE ANTENNA MONOPOLE EA 36068 SC 406 PARCEL 2, PARCEL MAP 18937				
PP14302	APPROVED	5/25/1995		12/19/1997
RETAIL NURSERY RETAIL NURSERY EA 36475, CZ 6182				
PP14400	APPROVED	9/7/1995		10/7/1998
PLOT PLAN FOR A CHURCH BRING EXISTING CHURCH INTO COMPLIANCE WITH CURRENT PLANNING. FUTURE 212 SEAT SANCTUARY W/PARKING EA 36906 SEE FILE				
PP15480	APPROVED	5/26/1998		
AUTO PARTS STORE 3000 SF				
PP15949R1	APPROVED	10/12/2000		
EXTEND LIFE OF PP15949(SEE FIRE COND'S-PP15949)				
PP16103	APPROVED	8/10/1999		
TRANSCONSTRUCT A 83,787 S.FT. MINI-STORAGE FACILITY.				
PP16208	APPROVED	10/12/1999		
CONTRACTOR STORAGE YARD W/CARETAKER UNIT.				
PP17212	APPROVED	7/6/2001		
9847 SF WALGREENS DRUGSTORE				
PP17569	APPROVED	12/19/2001		
COLOCATE THREE ANTENNAE/PREFABRICATED EQUIPMENT SH ELTER/6' CHAINLINK FENCING TO EXISTING 60' MONOPOLE				
PP17864	APPROVED	4/30/2002		
OFFICE/WAREHOUSE BUILDINGS--POLAR BEER SYSTEMS				
PP18538	APPROVED	3/27/2003		3/24/2010
LUMBER YARD W/ OFFICE TRAILER ON 3.69 AC				
PP18701	APPROVED	6/26/2003		
SELF STORAGE INCLUDING BOAT AND RV				
PP18720	APPROVED	7/3/2003		1/24/2008
2 20,000 SF LIGHT INDUSTRIAL BUILDINGS IN M-SC				
PP18747	APPROVED	7/16/2003		6/16/2011
EROSION CONTROL/CONTRACTOR STORAGE & FABRICATION YARD				
PP19044	APPROVED	12/3/2003		3/3/2011
REVIEW FOR AN EXISTING FOOD MARKET (CV033446)				
PP19312	APPROVED	3/23/2004		11/14/2007
WIRELESS COMMUNICATION FACILITY (A T & T)				
PP20154	APPROVED	1/7/2005		9/19/2007
UNMANNED CELLULAR TOWER (LIGHTPOLE)				

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PP20996	APPROVED	10/28/2005		1/9/2009
1 MULTIUSE COMMERCIAL & 10 LIGHT INDST/MANFCT BLDG				
PP21558	APPROVED	3/21/2006		6/5/2009
DIVIDE 19.06 AC INTO 248 UNIT APARTMENT COMPLEX				
PP21599	APPROVED	4/3/2006		2/26/2010
STORAGE PARKING OF RV VEHICLES				
PP21748	APPROVED	5/11/2006		2/25/2010
STRGE YD/HVY EQUIP PRKN/MECH EQUIP/EXST CRTKR TRL				
PP21764	APPROVED	5/18/2006		9/18/2009
PROPSD MANUFACTURING FOUNTAINS, BIRDBTHS ETC.				
PP22517	APPROVED	2/1/2007		9/8/2010
1 THREE STORY OFFICE BLDG, 2 SINGLE-STORY RETAIL BUILDINGS				
PP22628	APPROVED	3/13/2007		4/21/2011
COMMERCIAL SHOPPING CENTER				
PP22854	APPROVED	6/12/2007		2/17/2011
CONTRACTOR STORAGE YARD				
PP23180	APPROVED	11/19/2007		2/3/2011
6.7 ACRE INDUSTRIAL CONDOMINIUM SITE WITH 4 BUILDING AND 35 UNITS				
PP23545	APPROVED	6/26/2008		9/16/2011
INSTALL 57 FT MONOPINE W/6 PANEL ANTENNAS 1 MICRO DISH 4 EQUIPMENT CABS POWER/TELCO PANELS 1 GPS ANTENNA INSIDE A NEW 25 FT 4 IN BY 30 FT ENCLOSURE WITH 8 FT BLOCK WALL				
PP23546	APPROVED	6/26/2008		9/25/2010
INST 6 PANEL ANTENNAS 1 MICRO DISH IN FAUX WATER TANK				
PP25462	APPROVED	10/29/2013		
CLASS II KENNEL 11-25 DOGS (PASSION FOR PAWS)				
PUP00496R1	APPROVED	2/24/2005		9/12/2009
REV. PUP00496 EXPAND USE 2,188SF OFFICE/8751SF FABRICATION 3646SF STORAGE /PARKING TO EXISTING SITE				
PUP00608R1	APPROVED	3/7/2002		
RESIDENTIAL TRAINING AND COUNSELING FACILITY				
PUP00813	APPROVED	9/27/2000		7/3/2003
75' WIRELESS COMM. FACILITY AS MONOPALM (AT&T)				
PUP00885	APPROVED	9/6/2006		1/9/2011
POLICE/MILITARY&GOV TACTICAL FACILITY				
SP00134	APPROVED	9/6/1979		
SP ON 680 ACRES WITH 112 DU'S ON ENTIRE ACREAGE EA 10737 TR 14251				
SP00177	APPROVED	10/22/1982		
SP ON 22.4 ACRES FOR A COMMERCIAL SHOPPING CENTER ON THE ENTIRE ACREAGE WITH 226,775 OF BUILDING SF EA 16645, PM 18895 A#2				
SP00260A1	APPROVED	3/28/2002		4/3/2027
AMD SP260 - REDUCE COMMERCIAL/RESIDENTIAL/PARK REDUCE COMMERCIAL AND BUSINESS PARK ACRES FROM 363.4 TO 344.1 ACRES TO MEDIUM DENSITY RESIDENTIAL. INCREASE RESIDENTIAL UNITS FROM 2,390 TO 2,677 IN PLANNING AREA 5,6,10,25,26,28,42, AND 46. INCREASE COMMUNITY PARK FROM 12 ACRES TO 20.9 ACRES AND RELOCATE COMMUNITY CENTER. REMOVE SCHOOL SITE FROM PA 42 AND REPLACE WITH MEDIUM DENSITY. DECREASE SCHOOL ACRES FROM 28.7 TO 18.7. CONVERT BUSINESS PARK AREA (PA 26 AND 28) TO RESIDENTIAL.				

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SP00260A2	APPROVED	8/22/2005		
CASE DESCRIPTION SP PROPOSAL FOR APN 329-110-003/026/028/014/019/				
SP00293	APPROVED	5/3/1991		5/14/2016
MIXED USE SP WITH RES., COMMERCIAL & INDUSTRIAL US ES SP ON 1,995.3 ACRES WITH 5,6720 DU'S ON 1,173.3 AC RES, 62.8 ACRES OF COMMERCIAL, * EA 35857, EIR 380, CZ 6013, CGPA 336				
SP00301	APPROVED	4/5/1993		10/25/2005
MIXED USE DEVELOPMENT RESIDENTIAL AND COMMERCIAL SP ON 153 ACRES WITH 484 DU'S ON 104.5 ACRES, 4.5 ACRES OF COMMERCIAL/DAY CARE, * EA 36470, EIR 393, CGPA 375, CZ 6179 CGPA 375, CZ 6179, SP 259				
SP00301A1	APPROVED	5/25/1999		
AMENDMENT TO SP00301				
SP00301A2	APPROVED	5/31/2005		
AMENDMENT NO 2 TO SP 301				
SP00344	APPROVED	10/28/2004		
796 RES ON 318 AC W/PARK/OPEN SPACE/SCHOOL/BASIN				
TR14251	APPROVED	3/16/1979		10/7/1985
DIVIDE 680 ACRES INTO 112 LOTS (ONLY 78 RESIDENTIAL LOTS ON 461.49 ACRES RECORDED) EA 10737 SP 134				
TR24354	APPROVED	2/1/1989		2/13/2000
DIVIDE 40.6 ACRES INTO 151 RESIDENTIAL LOTS EA 33633, CZ 5416 EXT 436, EXT 745, EXT 1128				
TR24476	APPROVED	8/24/1989		1/29/1998
DIVIDE 218.6 ACRES INTO 36 LOTS EA 34227 EXT 743, EXT 1112, SP 134				
TR24936	APPROVED	10/11/1989		11/20/2000
SUBDIVIDE 7.58ACRES INTO 41 LOTS DIVIDE 7.58 ACRES INTO 38 LOTS EA 34372 EXT 704, EXT 1097				
TR25529	APPROVED	1/11/1990		9/24/2001
DIVIDE APPROX 41 ACRES INTO 168 LOTS DIVIDE 41 ACRES INTO 168 LOTS EA 34705, CZ 5689 EXT 1079, UPH 60, CFG 69				
TR25530	APPROVED	1/11/1990		9/24/2001
DIVIDE 25 ACRES INTO 99 LOTS DIVIDE 25 ACRES INTO 99 LOTS. EA 34706, CZ 5690 EAT 1080				
TR25530M1	APPROVED	2/13/2001		9/24/2002
REDUCE LOTS FROM 99 TO 76 AND ADD 3 ACRE PARK				
TR25901	APPROVED	5/8/1991		7/28/2003
SUBDIVIDE 39.5 AC INTO 152 LOTS DIVIDE 39.5 ACRES INTO 152 LOTS. EA 35861, CZ 6014 CFG 59, ASA 36, APP 77 SEE FILE				
TR25901M1	APPROVED	6/14/2002		
DELETE 28 LOTS TO DEDICATE PARK SPACE/BASIN				
TR25976	APPROVED	6/12/1990		9/15/1998
DIVIDE APPROX 27 ACRES INTO 106 LOTS DIVIDE 26.8 ACRES INTO 106 LOTS. EA 35226, TR 25977, CZ 5893 CFG 456				
TR25977	APPROVED	6/12/1990		9/15/1998
DIVIDE APPROX 9 ACRES INTO 36 LOTS DIVIDE 9 ACRES INTO 36 LOTS. EA 35226, TR 25976, CZ 5833 CFG 456				
TR26482	APPROVED	8/27/1990		7/28/1998
DIVIDE APPROX 5 ACRES INTO 20 LOTS DIVIDE 5 ACRES INTO 20 RESIDENTIAL LOTS EA 35452, CZ 5893				
TR27093	APPROVED	7/16/1991		9/29/1998
SUBDIVIDE 9.73 ACRES INTO 38 LOTS DIVIDE 9.73 ACRES INTO 38 RESIDENTIAL LOTS EA 35967, CZ 6060 CFG 214, ASA 66, UPH 105				

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TR28801	APPROVED	5/7/1998		4/20/2007
DVD 224.88AC/566 SFR/1 SCHOL/1 PRK/5 O-S/2 EQUUS TR				
TR29113	APPROVED	1/27/1999		8/1/2003
SUBDIVIDE 28.68 AC/138 SFR LOTS/1 REMAINDER				
TR29262	APPROVED	12/16/1999		2/22/2016
SCHD."A" SUBDIVISION OF 80 AC INTO 297 6000SF LOT				
TR29322	APPROVED	11/20/2003		4/3/2018
SUBDIVIDE 44 ACRES INTO 202 SFR, 4 OS LOTS				
TR29322E02	APPROVED	2/21/2018		4/3/2021
SECOND EXTENSION OF TIME FOR TR29322				
TR29326	APPROVED	12/3/2001		12/13/2020
DIVIDE 18.9 ACRES INTO 54 RES, 1 OPEN SPACE LOTS				
TR29327	APPROVED	11/27/2001		4/4/2017
DIVIDE 20.30 AC INTO 78 RES LOTS				
TR29327E02	APPROVED	3/12/2018		4/4/2021
2ND EXTENSION OF TIME FOR TR29327				
TR29328	APPROVED	11/27/2001		7/11/2017
DIVIDE 19.54 AC INTO 74 RES & 1 DETENTION BASIN				
TR29328E02	APPROVED	5/25/2018		7/11/2021
TR29328 SECOND EXTENSION OF TIME				
TR29495	APPROVED	3/31/2000		7/25/2013
DIV 87 AC INTO 321 RES,2 DET BSNS, 1 OS LOTS				
TR29777	APPROVED	3/1/2002		5/17/2008
DIV 63.48 AC INTO 173 RES,1 OS,1 PARK & 1 WTR BSN				
TR29835	APPROVED	4/25/2002		8/29/2014
DIV 236.08 AC INTO 543 RES,1 PARK,1 DET BSN, 1 OS				
TR29965	APPROVED	10/31/2000		
SUBDIVIDE 21.67 ACRES INTO 79 SINGLE FAMILY LOTS				
TR30001	APPROVED	3/14/2001		
SUBDIVIDE 56 ACRES 177 LOTS/OPEN SPACE/COMN AREA				
TR30002	APPROVED	12/13/2001		2/5/2006
DIVIDE 56 ACRES INTO 172 LOTS				
TR30002M1	APPROVED	12/10/2004		1/19/2011
MODIFY 50.TRANS.13 TO READ IN ITS ENTIRETY AS SET				
TR30161	APPROVED	9/25/2001		
SUBDIVIDE 29.90 ACRES INTO 99 SINGLE FAMILY LOTS				
TR30161M1	APPROVED	7/30/2002		
TO REMOVE CONDITION 10.TRANS.8 FROM TR30161 (99 DUS)				
TR30507	APPROVED	2/5/2002		10/21/2006
DIVIDE 40.35 ACRES INTO 176 SENIOR ONLY RES. LOTS				
TR30705	APPROVED	12/17/2002		
SUBD 255 AC TO 639 LOTS W/REC AREA/2 PK/2 PASEOS				
TR30926	APPROVED	10/14/2003		12/4/2020
SCH "A" SUBDIVISION-79.90 ACRES INTO 330 R-4 LOTS ONE PARK SITE (5AC) AND DRAINAGE				

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TR30972	APPROVED	11/1/2002		5/11/2018
SUBDIVIDE 72.9ACRES INTO 91 RES LOTS, 3 MINI-PARK S, 1 DETENTION BASIN, AND 4 OPEN SPACE				
TR30972E04	APPROVED	4/10/2018		5/11/2021
FOURTH EXTENSION OF TIME TR30972				
TR31017	APPROVED	1/29/2003		11/9/2007
TO DIVIDE 2.74 AC INTO 8 RES LOTS				
TR31098	APPROVED	6/12/2003		4/19/2008
SCHEDULE A MAP DIVIDE 71 ACRES IN 264 SFR R-1 LOTS				
TR31098M1	APPROVED	10/27/2005		8/15/2009
CHG TO TR/ADD BLK WALL TO REVSE FRONTAGE WALL. TO AMEND THE CONDITIONS.				
TR31500	APPROVED	12/24/2003		4/5/2019
TO DIVIDE 53.7 AC INTO 182 LOTS 1 PK,1 MINI PK/PKG LOT, 1 PARK				
TR31536	APPROVED	6/26/2003		12/7/2013
CREATE 44 RESIDENTIAL LTS ON 49.47 AC				
TR31687	APPROVED	11/19/2003		5/25/2017
SUBDIVIDE 40.17 ACRES INTO 65 SFR LOTS AND 2 OPEN SPACE LOT				
TR31687E03	APPROVED	5/25/2018		5/25/2018
3RD EXTENSION OF TIME FOR TR31687				
TR31795	APPROVED	10/22/2003		11/16/2007
DIV 139.3 ACRES INTO 493 SFR & 1 GREEN BELT				
TR31811	APPROVED	4/14/2004		9/27/2013
SUB 205.2 AC INTO 559 RES, 15 OS & 1 PARK LOTS				
TR31812	APPROVED	5/24/2004		3/22/2014
DIV 364.4 AC INTO 742 RES, 8 OS & 6 FUTURE TRIPLEX				
TR31820	APPROVED	2/5/2004		5/2/2017
DIV 5.84 ACRES INTO 17 SFR,1 OPEN SPACE LOTS				
tr31820E03	APPROVED	3/12/2018		5/2/2021
THIRD EXTENSION OF TIME TO TR31820				
TR32664	APPROVED	11/21/2005		9/12/2009
PROPOSED 184 SFR/ 8 OPEN SPACE LOTS				
TR33419	APPROVED	2/2/2005		5/8/2015
SUBDIVIDE 36.4 ACRES INTO 157 SF RES LOTS AND 1 DETENTION BASIN, SCHEDULE A MAP				
TR33446	APPROVED	4/19/2005		7/25/2012
DIVIDE 10 ACRES INTO 2 LOTS 178 CONDOS-SCHEDULE A				
TR33738	APPROVED	8/11/2005		6/14/2016
SCH A MAP SUBDVD INTO 52 SFR LOTS & 2 O/S LOT				
TR34118	APPROVED	3/3/2006		2/5/2017
SUBDIVIDE 27.58 ACRES INTO 172 SFR/OPEN SPACE/PARK				
TR34180	APPROVED	1/18/2006		11/21/2009
SUBDVD 319.89/483 SFR/1 SCHOL/1PRK/25 O-S/1 REMND				
TR34406	APPROVED	2/27/2007		4/30/2015
SUBDIVIDE 231.9 AC INTO 820 RESIDENTAL LOTS				
TR34600	APPROVED	4/18/2006		2/5/2017
SUBDIVIDE 19.9 ACRES INTO 153 SFR LOTS				

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TR35045	APPROVED	7/27/2007		5/5/2018
712 SINGLE FAM LOTS AND 1 SCHOOL AND 1 PARK				
TR35045EO2	APPROVED	4/16/2018		5/5/2021
EXTENTION OF TIME 2ND REQUEST FOR TR35045				
TR35876	APPROVED	12/19/2007		2/17/2012
DIVIDE 5.6AC INTO 17 SFR SCHEDULE A				
TR36430	APPROVED	5/23/2012	11/13/2017	9/9/2018
SUBDVD 180AC TO 340 RES LOTS,8 OS,1 SCHOOL,1 PRK,1 TRL OF MENIFEE NORTH SP260				

CITY OF PERRIS

Balraj More

From: Kenneth Phung <Kphung@cityofperris.org>
Sent: Tuesday, October 09, 2018 3:35 PM
To: Balraj More
Subject: RE: Regarding Cumulative Projects List
Attachments: 2018.9.6 Industrial Project Summary Matrix.xlsx; 2018.9.6 Commercial Project Summary Matrix.xlsx; Tract Map Tracking 2018.9.6.xlsx

Hi Balraj,

Attached are projects in the City of Perris. Please review list to determine project proximity to the proposed site in Menifee.

Kenneth

From: Balraj More [mailto:balraj.more@webbassociates.com]
Sent: Tuesday, October 09, 2018 11:09 AM
To: Kenneth Phung <Kphung@cityofperris.org>
Subject: Regarding Cumulative Projects List

Hi Kenneth,

I hope you are doing good. I am working on a TIA located in Menifee at the north-west corner of Palomar Road and SR-74. The project is located within a mile radius of the City of Perris. So, I was wondering if you will be able to provide the list of Cumulative Projects in the area of Perris so that we can add it to our analysis.

Thank You

Best

Balraj More - Assistant Engineer
Albert A. Webb Associates
3788 McCray Street, Riverside, CA 92506
t: 951.320.6002
e: balraj.more@webbassociates.com w: www.webbassociates.com
[LinkedIn](#) | [Twitter](#) | [Facebook](#) | [YouTube](#)



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Commercial	Sq. Ft.	Acreage	Location	Entitlement Status	Status	Case Number(s)	Planner
Classic Pacific (PUD)	387,993	27	E of I-215 btw Watson and Ethanac Rd	Entitled 2006.4.11	Partially completed (2009)	DPR 05-0335	
Quick Quack Carwash	3,600	1	E of Case Rd north of Ethanac Rd	Entitled 2018.7.18	Dormant	CUP 18-05045	DS
March Plaza	47,253	8	NW corner of Perris Blvd & Harley Knox	Entitled 2017.3.15	Dormant	CUP 16-05165	DS
Motte Town Center (MTC)	484,300	59	SE corner of Ethanac and Trumble	Entitled 2008.5.13	Dormant	DPR 06-0337	DS
Partial MTC	10,000	2.4	SE corner of Ethanac and Trumble	Entitled 2017.3.15	Vertical construction	CUP 16-05168	KP
Perris Common	35,000	5.5	SW corner San Jacinto and Redlands	Entitled 2018.4.10	Plan check	MAJ MOD 18-05004	NP
Perris Plaza - Build-out	173,000	42	NE of Nuevo and Frontage	Entitled	Grading	MIN MOD 17-05178	NP
Perris Venue	643,000	68	SE corner of San Jacinto and Redlands	Entitled 2009.8.13	Dormant	DPR 08-04-0015	KP
Weinerschnitzel	2,000	1	W side of Perris Blvd & S. of Placentia	Entitled 2017.11.15	Plan check	CUP 17-05083	DS
Behavioral Health Clinic	37,000	4	NW San Jacinto & Redlands	Entitled 2017.7.19	Vertical construction	CUP 16-05189	BM
DTSP Mixed Use	10,834	1	SW corner of Tenth and D	Entitled 2017.11.5	Plan check	DPR 16-00014	BM
7-Eleven	3,000	1	NE corner of Ethanac and Case	Entitled 2017.1.18	Vertical construction	CUP 16-05074	NP
Autozone	19,000	2	NE corner of Perris Crossing Center	Entitled 2017.10.4	Vertical construction	ADPR 16-05074	NP
Carwash	5,600	1	NW corner of Ramona and Perris	Entitled 2018.10.18	Dormant	CUP 16-05258	DS
Total	1,861,580						

PVCC SP

Industrial Projects	Sq. Ft.	Acreage	Location	Entitlement Status	Status	Case Number(s)	
BI (Bargemann Industrial)	173,000	9	Btw Harely Knox & Nance W of Webster	Entitled 2008.11.25	Completed (April 2018)	DPR 07-09-0018	
Canyon Steel	25,000	4	NWC of Patterson and California	Not entitled	In process	DPR 18-00006	Need to include on m:
Burge Indus 1	18,000	2.5	E. of Perris Blvd. & N of Commerce Dr	Not entitled	In process	DPR 18-00001	Need to include on m:
Burge Indus 2	19,000	3	E. Perris Blvd. and S of Commerce Dr	Not entitled	In process	DPR 18-00007	Need to include on m:
Circle Industrial II	172,000	10	NW corner of Nance & Redlands	Entitled 2016.5.18	Dormant	DPR 15-0010	
Circle Industrial III	211,000	10	NW corner of Nance & Redlands	Not entitled	In process	DPR 17-00006	
Circle Industrial	600,000	31	NW corner of Markham & Redlands	Entitled 2013.11.12	Completed (March 2017)	DPR 13-02-00005	
Duke 2	669,000	31	SE corner of Indian & Markham	Entitled 2017.10.18	Vertical Constructin	DPR 16-00008	
Duke @ Patterson	811,000	37	SE corner of Patterson & Markham	Not entitled	In process	DPR 17-00001	
Duke @ Perris Blvd	1,070,000	54	E of Perris Blvd btw Markham & Perry	Entitled 2017.8.28	Prepare improvement plans	DPR 17-00002	
First Perry	240,000	11	SW corner of Perry & Redlands	Entitled 2017.11.15	Plan check	DPR 16-00013	
Gateway	400,000	22	SE corner of I-215 & Harley Knox	Entitled 2017.1.31	Vertical Constructin	DPR 16-00003	
General Mills	1,600,000	70	Btw Markham and Ramona W of Indian	Entitled 2009.12.8	Completed (November 2016)	DPR 07-07-0029	
Home Depot (IDI)	1,750,000	90	Btw Nance & Markham W of Perris Blvd	Entitled	Completed (March 2014)	DPR 15-0113	
Home Depot (SR)	1,700,000	91	E of Redlands north of Perry	Entitled 2012.11.27	Completed (May 2017)	DPR 11-12-0004	
IDI	426,000	24	NW corner of Ramona and Indian	Not entitled	In process	DPR 18-00002	
Indian Palms	39,000	2	W of Indian bt Rider and Walnut	Entitled 2016.1.31	Completed (2009)	DPR 05-0285	
Integra	864,000	43	Btw Markham & Nance E of Webster	Entitled 2015.1.27	Near completion	DPR 14-02-0014	
Lowe's	1,200,000	120	Btw Ramona & Morgan W of Indian	Entitled	Completed (2001)		
OLC 1	1,455,000	69	NW corner of Webster & Ramona	Entitled 2016.1.12	Vertical Constructin	DPR 12-10-0005	
OLC 2	1,037,000	49	NE corner of Patterson & Markham	Entitled 2016.1.12	Vertical Constructin	DPR 14-01-0015	
Pulliam Indus	16,000	0.5	Lots 10 & 12 on Commerce Dr, E of Perris	Entitled 2018.6.20	Plan check	DPR 17-00007 & 9	Need to include on m:
Markham East	460,000	22	NW corner of Redlands & Perry	Entitled 2007.6.20	Completed	DPR 05-0477	
MI (Markham Industrial)	170,000	9	NE corner of Indian & Markham	Entitled 2017.8.16	Grading	DPR 16-00015	
Rados	1,200,000	83	SW corner of Rider & Indian	Entitled 2011.7.12	Dormant	DPR 07-0119	
Rider 1	350,000	16	SW corner of Rider & Redlands	Entitled 2007.6.20	Grading	DPR 06-0365	
Rider 2	379,000	17	NE corner of Rider & Redlands	Entitled 2008.6.18	Dormant	DPR 07-06-0030	
Rider 3	640,000	30	NW corner of Rider & Redlands	Entitled 2009.3.31	Grading	DPR 06-0432	
Ridge (Fallas & Hanes)	1,900,000	90	NW corner of Perris & Morgan	Entitled 2007.3.27	Completed (2012)	DPR 05-0493	
Ross (Oakmont 2)	700,000	37	SW corner of Perris & Markham	Entitled 2007.3.27	Completed (2013)	DPR 05-0192	
Ross	1,600,000	83	SW corner of Indian & Morgan	Entitled date ?	Completed (2002)	?	
Wayfair (Duke 1)	2,000,000	96	NE corner of Indian & Rider	Entitled 2009.8.25	Completed (October 2017)	DPR 06-0417	
Whirlpool (IDS)	1,700,000	80	NE corner of Perris & Morgan	Entitled 2005.8.17	Completed (2006)	DPR 04-0464	
WT (Westcoast Textile)	180,000	9	SW corner of Indian & Nance	Entitled 2016.7.20	Dormant	DPR 16-00001	
Total	25,774,000						

TRACT	DEVELOPER	PROJECT	LOCATION	DU	TYPE	TTM Approval Date	Status	Planner
30850-4	PULTE HOMES	AVELINA	NW Citrus & Evans	126	SFD	7/11/2003	Vertical construction start Oct 2014; 80+ units remaining	
31157	Palin Enterprises	Parkwest	S of Nuevo Road & E. PVSD	529	SFD	1/3/2018	Dormant (DA extension until 1/27/2028)	KP
31225	Pacific Communities	Pacific Heritage 2	NW Metz & A St.	57	SFD	10/15/2003	Vertical construction anticipated November 2018	DS
31226	Pacific Communities	Pacific Heritage 1	SW Nuevo & McKimball	82	SFD	10/15/2003	Vertical construction in process	DS
31304	Pacific Communities		NE McPherson & Mtn	123	SFD	5/24/2004	Has received various 1 year extensions. Valid until 5/24/2018	NP/BE
31407	CT CAPITAL (Nelson Chung)		SW Metz & Webster	243	SFD	7/13/2004	Has received various 1 year extensions. Valid until 7/13/2018	NP
31497	Pacific Communities PUD		SW Orange & Medical				Active as of 4-10-2018	DS
31650	Sunwest Enterprises		SW Van Wy & De Lines	61	SFD	7/13/2004	FTM approved 6-13-2006 No Construction Started Only 3 houses built	DS
31651	Sunwest Enterprises		SEC Nuevo & Wilson	57	SFD		FTM approved 4/10/17. No Construction Started	DS
31659	Jason Keller/John Ford		NEC Citrus & Evans	189	SFD		FTM approved 2/28/2006 No Construction Started	
31912	TKC		7th & Clayton vacant land	8	SFD		FTM approved 4/24/2007 No Construction Started	
32032	Lansing Industries Inc		SE Ellis & A St.	108	SFD	6/28/2005	Expires 1/8/2018	NP
32041	Jason Keller/John Ford		NWC Citrus & Dunlap	122	SFD		FTM approved 5/24/2007 No Construction Started Right below School located at 1400 Orange Ave	NP
32406	Sunwest Enterprises		SE Bowen & Windflower	15	SFD	1/5/2005	FTM approved 11-28-2006 No Construction Started	DS
32666	WSI Mojave Inv	Riverwood	Mapes & Ethanac	665	SFD	12/14/2004	Other TTMs created to build portions of Riverwood. Ex)TTM 33042	BE
33199	MR-10, LLC		NW of Metz and Webster Ave	26	SFD	8/30/2005	Expires 08/30/2018	RZ
33338	Rastogi Family LTD /John Ford		NWC Nuevo & Evans	75	SFD	4/11/2006	FTM approved 4/24/2007 No Construction Started	NP
33549	Perris Investment Group	Village Walk	NE Perris & Commercial	129	SFD	1/30/2007	FTM approved 7/27/2011 No Construction Started	SC
33900	WSI Mojave Inv		SE Ethanac & McPherson	198	SFD	5/27/200	EOT18-05014 is proposing another year extension till 04/10/2019	RZ
33973	County Lands PIP IV		W McPherson & S Ethanac	384	SFD	5/27/2008	Has received various 1 year extensions. Valid until 5/27/2018	RZ
34267	Yousef Audi	Townhomes	Dunlap Dr S of Nuevo	60	APT		EOT18-05001 is proposing another year extension till 2/9/2019	
36647	John Abel	Stratford Ranch	W of Evans Road and N of Ramona Exp	70	SFD	Entitlement	Entitlement Phase	
36648	John Abel	Stratford Ranch	W of Evans Road @ northern City Limits	130	SFD	8/29/2017	Final Map in process	NP
36648-1	John Abel	Stratford Ranch	W of Evans Road @ northern City Limits	140	SFD	8/29/2017	Final Map in process	NP
36988	Raintree Investments GVSP	GVSP	N of Ethanac Rd & W of Murrieta Rd	169	SFD	8/29/2017	Grading; vertical construction anticipated September 2018	KP
36989	Raintree Investments GVSP	GVSP	N of Ethanac Rd & W of Murrieta Rd	145	SFD	8/29/2017	Grading; vertical construction anticipated December 2018	KP
37014	JD Pierce	Barrett Apt	Btw Barrett & Perris Blvd	202	APT	10/25/2016	Plan check; grading anticipated January 2019	KP
37181	Metz and A LLC	Villa Verona Apt	NE A & Metz	360	APT	8/29/2017	Dormant	
37223	Raintree Investments GVSP	GVSP	Watson & Murrieta	258	SFD	Entitlement	Entitlement Phase	NP
37262	Raintree Investments GVSP	GVSP	Ethanac & Goetz	212	SFD	Entitlement	Entitlement Phase	NP
?	Richland	Riverwoods SP	N. side of Ethanac & E. of SJ River	696	SFD ?		Final Map recorded (option to increase units to 750)	?
				Total	5639			

CITY OF MENIFEE

Map ID #	Project Reference	Name	Approved By	Status	Description
1	TTM 34037	Developer: Capstone	County	C/E	Tentative Tract Map No. 34037 is a proposal for a Schedule 'A' subdivision and development of approximately 28.88 acres project site into 132 single-family residential lots with a minimum lot size of 5,500 square feet. In addition the development of this project will include a 1.66 acre neighborhood park, a 0.9 acre water quality basin and a 10-foot wide community trail along Wheat Street. Access to the site will be provided via two access points, one to the west of the project along Wheat Street and the other to the east of the site along Byers Street.
2	TTM 31856	Developer: Sunwood	County	U/F	The project proposes to change the zoning from Rural Residential (R-R) to One Family Dwellings (R-1) and a Schedule A subdivision of 24.11 acres into 79 single family lot with a 7,200 sq. ft. minimum lot size and a 1.3 acre park. The project site is located southerly of Ethanac Road, northerly of McLaughlin Road and westerly of Murrieta Road
4	TTM 35876	Romoland Ranch LLC	City	EXPIRED	The land division hereby permitted is a Schedule A subdivision of 5.58 acres into 17 single family residential lots with a minimum lot size of 7,200 square feet and one lot for a water quality basin.
5	TTM 34118	MR-27 LLC (Rancon)	County	U/E	The land division hereby permitted is to subdivide 27.58 acres into 85 single family residential lots with a minimum lot size of 4,000 square feet, 87 garden court condominium homes, 1 clubhouse, 1 pool, and 2 parks for an overall density of 6.24 dwelling units per acre.
6	TTM 33738	MR 56 LLC (Rancon)	County	C/E	The land division hereby permitted is to subdivide 11.37 acres into 52 residential lots with a minimum lot size of 5,000 square feet and two open space lots for a detention basin and a paseo connection.
7	TTM 34600	MR-27 LLC (Rancon)	County	C/E	The land division hereby permitted is to subdivide 18.3 acres into 153 condominium units on one lot, one recreational center and one pool for an overall density of 8.36 dwelling units per acre.
9	TTM 31811	Heritage Lakes (Brookfield)	County	U/E	The land division hereby permitted is to subdivide 205.2 acres into 559 single family residential lots, 15 open space lots for 3 parks, paseos, and drainage. This project is located east of Briggs Road, north of Matthews Road, east of Menifee Road, and south of Pinacate Road.
10	TTM 36657 / PM 36658	Cimarron Ridge (Van Daele)	City	U/F	Planning Case No. 2013-247 (Specific Plan) proposes a Specific Plan establishing a land use plan, circulation plan, design standards and guidelines for a 240.3 acre area. The Specific Plan has a maximum of 756 single-family residential dwelling units between seven (7) residential Planning Areas on 226.3 acres, a total of 10.9 acres of open space-recreational land use between three (3) Planning Areas, and 3.1 acres of open space-conservation in one (1) Planning Area. Planning Case No. 2014-017 (Change of Zone) proposes to change the zoning of the subject site from One-Family Dwellings (R-1), One-Family Dwellings 10,000 square foot minimum (R-1-10,000), and Open Area Combining Zone (R-5) to Specific Plan (SP) to reflect the proposed Specific Plan and its land use designations and development standards. The Specific Plan creates its own zoning ordinance for the property that will be used for setbacks, lot sizes, lot coverage, etc. Planning Case No. 2013-208 (Tentative Tract Map) (TR 36658) proposes a Schedule A subdivision of 240.3 gross acres into 756 single-family residential lots and 111 lots for park, landscape, monumentation, drainage, and storm drain purposes, including one 10.0 acre park, one 0.64 acre park, and one 0.195 acre park. Single-family residential lots will have a minimum lot size ranging from 5,000 square feet, 5,500 square feet, 6,500 square feet, and 10,000 square feet. The Tentative Tract Map is proposed to be recorded in seven (7) phases, generally following the phasing of the Specific Plan. Planning Case No. 2013-209 (Tentative Parcel Map) (PM 36657) proposes a Schedule I subdivision of 240.3 gross acres into 7 parcels with a minimum lot size of 26.2 acres for financing purposes.
11	TTM 29777	Talavera (True Life Companies)	County). TR29777 was approved by the County of Riverside Board of Supervisors on May 17, 2005. TR29777 originally was approved for a Schedule A subdivision of 63.48 acres into 173 single family residential lots with a minimum lot size of 7,200 sq. ft. and included a 2.7 acre park, paseos and 10.65 acre open space lot.

12	TTM 29835	Underwood (CV Communities)	County	C/E	The land division hereby permitted is to divide the 236.08 gross acre site into 543 residential lots with a minimum lot size of 5,000 square feet, a 9.4 acre park site, a detention basin and 71.6 acres of natural open space. Minor Change 2016-103, UPH 2016-010 and 2 extensions of time (extending the life of the map to 2018) were approved by the Planning Commission on May 24, 2017. Final map and grading plans submitted for phase 1 of the map. A parcel map will be submitted for the area of the TTM in August to further phase the development.
13	TTM 31098	2014-204 MC (Strata Equity)	County	C/F	TR 31098 was approved for the subdivision of 91.2 gross acres into 264 residential lots with a minimum lot size of 7,200 sq. ft., four (4) drainage channel lots, two (2) park lots, and two (2) drainage/trail easement lots with offsite grading to the south of the project site.
14	CUP 3549/PP 2009-051/CUP 2017-089	Heritage Square (Rancon)	City	U/E	<p>Plot Plan No. 2009-051 proposes a 132,580 sq. ft. retail center. The project will include:</p> <ul style="list-style-type: none"> • 43,830 sq. ft. grocery store, • one (1) 15,661 sq. ft. major retail building with drive through • two (2) buildings for multi-tenant shops totaling 15,600 sq. ft. • one (1) 9,973 sq. ft. retail pad building • one (1) 6,240 sq. ft. retail pad building • 3,860 sq. ft. fast food restaurant building pad with a drive through, • 3,878 sq. ft. gas station and convenience store including a drive through car wash and six (6) fueling pumps • three (3) major retail buildings totaling 33,629 sq. ft. • 719 parking spaces. <p>The project also includes a recyclable collections area and seasonal sales located in the parking areas.</p> <p>Conditional Use Permit No. 3549 proposes to allow for the convenience store, car wash and gasoline service station with the concurrent sale of beer and wine for off-premises consumption. Revision in process to modify the site to add self storage facility (has not been approved on PC1).</p>
15	TTM 31812	Developer: Brookfield	County	U/E	The land division hereby permitted is to subdivide 346.4 acres into 737 single family residential lots with a minimum lot size of 5000 sq. ft., 6 lots for future triplex development, and 8 open space lots for active and passive recreation uses. A PAR was recently prepared for the project that proposed an entirely new design for the area. The applicant was advised that a SPA would be needed in order to move forward with the new design and that changes constituted a new map and that a subsequent or supplemental EIR was likely.
16	TTM 34406	Heritage Lakes (Standard Pacific)	County	C/F	The land division hereby permitted is a schedule A subdivision of 231.89 gross acres into 817 residential lots (69 lots with a minimum lot size of 7200 sq ft in PA 14, 113 lots with a minimum lot size of 6000 sq ft in PA 18, 117 lots with a minimum lot size of 6000 sq ft in PA 19, 187 lots with a minimum lot size of 5000 sq ft in PA 20, 116 lots with a minimum lot size of 7200 sq ft in PA 24, 215 lots with a minimum lot size of 5000 sq ft in PA 25), 19.71 acres of open space and 15.00 acres for future commercial development. Approximately 150 homes have been constructed in TR34406 (of the 817 noted above), the rest remain undeveloped.

17	TR 32794	Quail Hill (Repke)	City		Change of Zone No. 7051 modifies the existing zoning classification on approximately 13 acres adjacent to Goetz Road from General Residential (R-3) to One Family Dwellings (R-1) and to change approximately 18.88 acres associated with the on-site mountain and open space lot adjacent to Palm Drive (Street "D") from One Family Dwellings (R-1) to Open Area Combining Zone Residential Developments (R-5). 2009-007 Quail Hill Repke (TR32794) subdivides 64.30 gross acres into 152 single-family residential lots, two lots to be dedicated to a home owners association consisting of Lot "A" and "B" and 13.86 acres of road right-of-way and utility dedications. The subdivision is required to have lots no smaller than 7,200 square feet. The actual lots range from 7,234 (Lot 49) to 17,933 (Lot 46) square feet with an average lot size of 8,831 square feet. The pad sizes range from 6,502 (Lot 95) to 16,346 (Lot 47) square feet.
18	TTM 31456	Stonegate (Gordon Youde)	County	U/E	The project is a Schedule A tract map proposing to subdivide 161.34 gross acres into 177 residential lots with a minimum lot size of 7,200 square feet, one (1) 2.60 acre basin, one (1) 3.32 acre park and 96.83 acres of open space.
19	TR 2015-108	Rowland (Rowland Development)	City	C/E	Planning Application TR No. 2015-108 (TTM No. 36803) proposes to subdivide 30 gross acres into 80 single family residential lots with a minimum size of 7,200 square feet and three lettered lots consisting of a 0.73 acre open space park lot, a 0.61 acre detention basin, and a 0.62 acre remainder lot for a site located south of Holland Road, north of Corson Road, and east of Evans Road (APN: 360-150-019).
20	PP 19469	Kensington Apartments (Bob Love)	City		Plot Plan No. 19469 Revised Permit No. 1 is for the first revised permit for Plot Plan No. 19469 which was originally approved in April of 2006 for a senior apartment complex consisting of 31 apartment buildings (25 one-story buildings and 6 two-story buildings) with 148 dwelling units, a club house with swimming pool, putting green, pitching tee and shuffle board area and 305 parking spaces. The revised permit is proposing to reduce the number of apartment buildings to 26 and increase the density of the buildings by allowing for 154 one-bedroom units and 67 two-bedroom units for a total of 221 units. Buildings 11-13 and 20-23 are proposed for "12-Plex" buildings and will be two-stories in height (previously approved for one-story). Buildings 24-26 are proposed for "15 Plex" Buildings and will be three-stories in height (previously approved for one-story). The project now proposes 381 parking spaces (210 garage spaces, 54 covered spaces, and 117 non-covered spaces).
22	TR 34180	Heritage Lake (Standard Pacific)	County		The land division hereby permitted is to subdivide 319.89 acres into 173.18 acres for 483 single family residential lots with a minimum lot size of 7,200 square feet and 6,000 square feet, a 20.0 acre school site, a 7.69 acre park site, three open space areas totaling 3.99 acres for 40' to 90' wide paseo areas, six open space lots for pedestrian access to the adjacent lake area, one lot for entry monumentation, fifteen lots for expanded landscaped parkways/slopes outside of the dedicated right of way, and one 146.71 acre remainder lot for future development. About 50 lots in TR34180 are undeveloped.
23	TR 32100/32102	Developer: Rancon	City	U/E	The land division hereby permitted is to subdivide 68.61 acres into 165 schedule "A" residential lots (minimum lot size 7,200 s.f.) and 11 open space lots. The land division hereby permitted is to subdivide 82.06 acres into 277 single family lots and 11 open space lots.
24	TTM 32186	Mahogany (DR Horton)	County	Built OUT	The land division hereby permitted is to subdivide 33.7 acres into 108 single-family residence lots, 3 open space lots, and 1 park site.
26	SP 209, TR31390, TR31391, TR31392, TR31393, TR36485, TR36484	Audie Murphy Ranch (Brookfield)	County	C/F	Planning Case No. 2012-033 (Specific Plan Amendment) proposes a fifth amendment to the Audie Murphy Ranch Specific Plan No. 209. SPA 2012-033 consists of a proposal to reconfigure planning area boundaries within the portion of the Specific Plan area located north of Salt Creek; modify the range of lot sizes available within the plan; and incorporate minor changes to the recreational amenities provided within the community. Proposed Amendment No. 5 primarily would affect approximately 400 acres, concentrated in the northwestern portion of the Specific Plan area. The maximum developable number of dwelling units within the Specific Plan would decrease from 2,190 to 2,157. Acreage allocated to residential use would decrease from 600.6 acres to 567.6 acres and non-residential uses would increase from 512.58 acres to 545.8 acres. Of the non-residential land uses, community recreation center would remain at 4.9 acres, parks would increase from 24.0 acres to 28.3 acres, linear parks/paseos would decrease from 35.2 acres to 26.2 acres, floodplain/riparian area would increase from 105.5 acres to 120.4 acres, conserved open space would increase from 248.1 acres to 266.6 acres, school sites would increase in size from 28.8 acres to 32.8 acres, sewer lift station would increase from 0 acres to 0.9 acres, and roadways would decrease from 66.3 acres to 65.7 acres. There have also been several revisions to the parks within the community. The following two tables show the number of units per minimum lot size and the changes between the prior March 5th City Council version and the current proposed version of the Specific Plan. TR31391 is built out, TR31390 has approximately 30 lots undeveloped, TR31392 has approximately 65 lots that are undeveloped, TR31393 is built out. Tracts north of Newport/Salt Creek under construction now - no permits issued.

27	TR 32025	Canyon Cove (Brookfield)	County	<p>Minor Change No. 2015-028 proposes a Minor Change (MC) to the previously approved Tentative Tract Map No. 32025 (TR32025). TR32025 was approved by the County of Riverside Board of Supervisors on April 4, 2006. TR32025 originally was approved for a Schedule A subdivision of 130 acres into 198 single family residential lots ranging in size from 5,500 to 6,500 square feet and seven lots for open space and/or landscaping (76.9 acres).</p> <p>Under the minor change, the subdivision would include 198 single family residential lots ranging in size from a minimum of 5,500 square feet to over 10,000 square feet and thirteen (13) lots for open space (83.05). The thirteen lots for landscaped areas are noted below:</p> <ol style="list-style-type: none"> 1. Lot 199 – 1.01 acre Slope Landscaping along Newport Road behind Lots 1-13 2. Lot 200 – 0.95 acre Slope Landscaping between lots 26-37 and lots 38-49 3. Lot 201 – 1.03 acre Slope Landscaping adjacent to Hidden Timber Lane, behind Lots 50-56 4. Lot 202 – 0.22 acre Passive park area between Lots 56 and 57 5. Lot 203 – 0.99 acre Slope Landscaping adjacent to lots 66-82 6. Lot 204 – 0.10 acre Landscaping over drainage lot between lots 77 and 78 7. Lot 205 – 0.81 acre Passive park area adjacent to lots 83, 92, and 93 8. Lot 206 – 0.99 acre Passive park area adjacent to lots 148-152 9. Lot 207 – 4.32 acre Slope Landscaping and trail behind lots 113 to 137 10. Lot 208 – 0.51 acre Passive park area adjacent to lot 25 11. Lot 209 – 71.6 acre Primarily open space with some slope landscaping and two basins 12. Lot 210 – 0.49 acre Slope Landscaping behind lots 153-167 13. Lot 211 – 0.03 acre Slope Landscaping adjacent to lot 177 <p>All of the lots are proposed to be maintained by the Homeowner’s Association. A regional trail (12 feet wide and within the right-of-way) is proposed along the west side of Lone Pine Drive. Local trails (8 feet wide) are proposed within some open space lots, connecting the western portion of the development, east through the park site (205/206) and to the regional trail. Approximately 60 building permits have been issued.</p>
28	TR 30812	Boulder Creek (JCA Homes)	County	<p>The land division hereby permitted is to subdivide 18.62 gross acres into 29 residential lots with a minimum lot size of 20,000 sq. ft.</p>
29	2014-091 / PM 36728	Stater Brothers	City	<p>C/F</p> <p>Planning Case No. 2014-091 (Plot Plan) is a proposal for a 121,277 square foot commercial retail center consisting of ten (10) buildings on 14.04 acres. Development of the center is proposed in two phases (Phase I – 97,131 square feet maximum, Phase II – 24,146 square feet maximum). Phase I would consist of the majority of the site with Phase II including proposed Shops 3 and 4 located in the southeast portion of the site. All road improvements would be completed with Phase I along with all Phase I area on-site drive aisles and parking areas, excluding the minor drive aisles and parking areas located in Phase II that would be constructed in Phase II to serve Shops 3 and 4. Buildings would consist of a 45,112 square feet grocery store (Stater Bros.), four (4) Shops buildings totaling 40,946 square feet, and five (5) Pad buildings totaling 35,219 square feet. Within these buildings uses would include the grocery store (Stater Bros.), drive-thru fast food and coffee, pharmacy (CVS), restaurant and retail. Stater Brothers, CVS, Del Taco and Shops building open or under construction.</p>

31	SP 2009-069 (CUP 2016-130 - Krikorian, PP 2017-123 - Medical Office Building, PP 2017-137 - Fairfield Hotel, PP 2017-005 - MBK Apts, TR 2015-238 - DA 1 & 4, PP 2016-239 - Cortona Club Recreation Center, TR 2017-094 - Lennar Condos, and PP 2014-009 - Town Center Marketplace, are all implementing projects within the Specific Plan)	Town Center (Regent)	City	C/E	<p>Specific Plan Amendment 2009-069 Town Center. 2015-238 proposes a Schedule A subdivision of Planning Areas 1, 2 and 4 of the Town Center Specific Plan into a total of 452 residential lots</p> <p>The Town Center Specific Plan is designed to allow the development of a master planned community comprised of complimentary commercial, recreational, civic, residential and educational land uses. The Specific Plan envisions development at a scale, mix, intensity and design that departs from the typical suburban residential development proposed under the original Countryside Specific Plan No. 194. The central location of the project and its proximity to Countryside Marketplace provides a unique opportunity to establish a landmark place to serve as the City's future center of activity.</p> <p>The Specific Plan covers approximately 168 acres located at the southwest corner of Newport Road and Haun Road. The Specific Plan establishes three land use categories:</p> <ul style="list-style-type: none"> • Mixed Use (113 acres): allows a mix of civic, office, retail, service, restaurant, hospitality, open space/park and residential uses with densities ranging from 5 to 36 dwelling units per acre, including live/work or senior housing, to create a lively and dynamic urban center; • Office/Commercial (12 acres): permits a mix of office, retail, service, restaurant and hospitality uses adjacent to the existing Countryside Marketplace; and • Residential (33 acres): permits exclusively residential with densities ranging from 5 to 24 dwelling units per acre with a target density of 10 dwelling units per acre to allow a transition from the existing residential neighborhoods to the west to the more dense mixed use core. <p>The Preferred Plan reflects the applicant preference of development. The goal of the specific plan was to provide a planning document that had sufficient flexibility to respond to changing market demands and conditions. In response to this, the EIR analyzed the preferred plan as well as several alternatives.</p> <p>The thresholds established by the EIR reflect the maximum intensity of these alternatives. The applicant intends to pursue the preferred plan allowing for 1,052 units and 560,000 sq. ft. of commercial and office development. The mitigation</p>
32	PP 2014-113, CUP 2016-289 - Revision	Menifee Lakes Plaza (Menifee Lakes LLP)	City	U/C	<p>The Menifee Lakes Shopping Center project will now include the following:</p> <p>The LA Fitness and Chevron are under construction.</p> <ol style="list-style-type: none"> 1. Hotel (four (4)-stories, approximately 48,500 sq. ft. with 70 rooms) 2. 3,440 sq. ft. Gas station and Convenience Store with car wash and 1,475 sq. ft. lube center 3. Four pads (Outparcels 1-4) <ol style="list-style-type: none"> a. Outparcel 1-4,200 sq. ft. b. Outparcel 2-6,000 sq. ft. c. Outparcel 3-4,200 sq. ft. d. Outparcel 4-5,000 sq. ft. e. Outparcel 3 has the option to add a 50 sq. ft. drive-thru window on the northeastern elevation (facing Antelope Road). The optional drive-thru would increase the square footage from 4,200 sq. ft. to 4,250 sq. ft. 4. 5,200 sq. ft. Shops Building 5. 3,314 sq. ft. drive-thru (Raising Cane's) 6. 38,000 sq. ft. LA Fitness 7. Four Majors <ol style="list-style-type: none"> a. Major 1-13,283 sq. ft. b. Major 2 (Barons)-17,854 sq. ft. c. Major 3-12,580 sq. ft. d. Major 4-21,420 sq. ft. e. Major 1 has an option to be separated into two units (Major 1A-6,958 sq. ft. and Major 1B-6,325 sq. ft.) 8. Approved Cart Corral location and design 9. Outdoor plaza area between Outparcel 3 and Outparcel 4 10. Approved Master Sign Program <p>LA Fitness and Chevron are under construction.</p>
33	TTM 32101	Developer: Rancon	County	U/F	The land division hereby permitted is to subdivide 69.32 acres into 197 schedule "A" residential lots (minimum lot size 6000 sq.ft. and 5 open space lots including a 1.52-acre park and trail system.

34	PUP 2009-077	His Light (His Light) - Expired	City	EXPIRED	<p>Public Use Permit 2009-77 proposes several buildings that will constitute the new His Light on the Hill church. The entire facility is proposed to be constructed in two phases with the following buildings are proposed:</p> <p>Phase I, Building I (initial sanctuary, future gymnasium conversion): 12,310 square feet (s.f).</p> <p>Phase I, Building II (two classroom / meeting room buildings of about 2,750 s.f. each): 5,512 s.f. total</p> <p>Phase II, Building III (main sanctuary building): 26,328 square feet</p> <p>Phase II, Building IV (maintenance building): 2,880 square feet</p> <p>Ancillary actions requested in this application include: two driveway entrances, one on Holland Road, and a right-in-right-out driveway on Murrieta Road. The grading and exporting of 15,650 cubic yards of dirt, the architecture of each of the buildings, the conceptual landscaping, and the proposed signage of the site</p>
35	TR 28786	Pacific Communities	County		The subdivision hereby permitted is to subdivide 24.1 acres into 72 single-family lots. This tract is located within Planning Area 3 of SP 140-S1.
36	TR 30422	The Lakes (Pulte and Lennar)	County/City	C/F	The land division hereby permitted is to SUBVIDE 399-acres into 992 single family residential units with a commercial, school, park, lake/greenbelt, and multi-family/day care lots. TR30422-1 and -2 have been developed. About 50% of the lots in TR30422-3 have been developed.
37	TTM 31229	Menifee Nautical's Cove (Rancon)	City	U/E	Tentative Tract Map No. 2009-114 (County Case No. TR31229) is hereby approved for a Schedule A subdivision of 77.15 gross acres into 239 single-family residential lots and 14 open space/recreational lots at an overall density of 3.10 dwelling units per acre. A minimum lot size of 6,000 square feet is proposed with the exception of the lots adjacent to Briggs Road which are required to be a minimum of 10,000 square feet to provide a compatible buffer to the larger lots of the east side of Briggs Road. Three of the 14 open space lots are comprised of active amenities including a 12.38-gross-acre community lake (Lot 250), a 5,188 square foot community center on 0.95 acres (Lot 251), and a 0.72-gross-acre community park (Lot 252). The remaining 11 lots include access roads, trails, drainage swales, landscaped areas, bio-swales and storm drain easements. All 14 open space lots will be maintained by a homeowners association.
38	TTM 32277, 2012-045	Menifee Heights (CV Communities)	County	U/F	<p>Planning Application No. 2012-045 proposes revisions to the County-approved Tentative Tract Map No. 32277.</p> <p>The County of Riverside Board of Supervisors approved the tentative tract map on September 16, 2008. The County approved map proposed a Schedule A subdivision of 158.75 acres into 359 residential lots ranging in size from 6,000 to 35,496 sq. ft. The subdivision included sixteen (16) open space lots for landscaping open space and drainage: one (1) 10.22 net acre park and fifteen (15) additional lots for landscaping, open space and drainage which included a 12-foot multipurpose trail along Holland and Briggs Road.</p> <p>The revised tentative tract map has the same number of residential lots, but the sizes of the lots now range from 6,000 to 18,165 sq. ft. Specifically, the sizes of the lots were reduced along the eastern and southern boundaries of the tract. A large basin was removed from the northern portion of the site and was replaced with three smaller basins in the same general location. The street and lot layout has been reconfigured for the lots in the northern and southeastern portion of the tract. The park has been reduced in size from 10.22 to 9.97 acres due to more detailed engineering design (the overall function of the park has not changed). A paseo has also been removed due to the steep slope that was originally proposed. The number of lots for open space, landscaping and drainage has increased to 17 lots. The revised tentative map includes a 15-foot multipurpose trail along Holland and Briggs Road and seventeen (17) open space lots for landscaping open space and drainage: one (1) central park, four (4) lots for water quality basins, eight (8) lots for perimeter and main entryway landscaping, two (2) lots for drainage, one (1) lot for trails (along the southerly project boundary), one (1) 39.18-acre hillside open space lot in the southwesterly portion of the site.</p>
39	TTM 29636	Calder Ranch (Classic Pacific)	County	Built OUT?	The land division hereby permitted is to subdivide 76.87 gross acres into 72 residential lots with the minimum lot size of 1 gross acres and four detention basins. The map is designed in accordance with the Schedule "B" map and Residential Agricultural- 1 Acre Minimum (R-A-1) zone.
40	TR 30142	KB Hidden Hills (KB Homes)	County	C/F	The land division hereby permitted is for a Schedule A subdivision of 166.3 acres into 523 single family lots with 409 lots with a 7200 square foot minimum and 114 lots with a 6000 square foot minimum, a 5.3 acre park. 3 detention basins totaling 2 acre, 11 acres of open space (paseo) lots and a 3.3 acre hillside area. 114 lots have been constructed in this tract.

41	TR 30664	Gallery States (Pacific Communities)	County		The project is a Schedule B tract map proposing to subdivide 58.5 acres into 34 lots. The proposed tract map lots will vary from 1 to 5 acres and include one detention basin. 10 lots have been developed.
42	TTM 31194	Golden Meadows (Richland Comm.)	County		The land division hereby permitted is to do a schedule "A" tract map that would subdivide 206.8-acres into 474 residential lots with a minimum lot size of 6,000 square feet and an average lot size of 8,439 square feet, 3 detention basin lots, 6 open space lots and 3 parks (7.4 acres).
43	2014-146	Menifee Unified School district HQ	City	BUILT	Planning Application Plot Plan No. 2014-146 proposes the construction and operation of a two-story 44,932 square-foot (first floor: 30,789 sq. ft.; second floor: 14,143 sq. ft.) concrete tilt-up office building for the Menifee Union School District to serve as the District Education Center. The office building includes offices, conference rooms, a boardroom, restrooms, staff lounge, training room, lobby and enclosed patio. The project proposes 177 parking spaces, including six (6) ADA accessible spaces. The project site is 6.1 acres in size.
44	2013-210	Int'l Auto Crafters	City	BUILT	Planning Application No. 2013-210 (Plot Plan) is hereby approved for International Auto Crafters to construct a new commercial building on 1.37 acres on the northeast corner of Haun Road and New Hub Drive. A 17,007 square foot automotive body shop will be located on the western portion of the project site with the entrance facing Haun Road. The building will consist of various sections of an automotive body shop and two floors of office space. 1,300 square feet is proposed on the first floor and 950 square feet proposed on the second floor.
45	TTM 32628	Christensen Ranch (Breson Comm.)	County	U/E	General Plan Amendment No. 702 proposes to change the existing land use designation from Business Park (BP) to High Density Residential (HDR). The Riverside County Integrated Project (RCIP) General Plan Foundation Component will remain Community Development. Change of Zone No. 6993 proposes to change the existing Industrial Park (I-P) zone to General Residential (R-3) zone. Tentative Tract Map No. 32628 proposes to subdivide 30.54 acres into five (5) multi-family parcels with a minimum lot size of 5 acres. This proposal also included the development of a residential condominium project comprised of 327 condominium attached units for sale. The residential two and three story units are comprised of three different building types with three different floor plans. The building units are dispersed throughout the site as triplexes and sixplexes compounds and each are clustered around a motor-courtyard. The proposed building's architecture provides a blend of Craftsman, Spanish, and Ranch styles. A recreational complex is proposed in the center of the project site. It includes a 5,763 sq. ft. community building, a pool, exercise room, a tennis court, and an open space play area. The proposed development will be served by 666 covered parking spaces, 97 uncovered parking spaces and 80 parking spaces for street parking. There will be 13.06 gross acres of open space and landscaping that include common areas, exterior and interior parkways. The proposal includes two water detention ponds for flood control purposes.
46	TTM 28206, DA 2015-111	Terra Bella/Mosaic (DR Horton, Watt Comm.)	County	C/F	The subdivision hereby permitted is consists of the development of 277 single-family residential lots averaging 8402 square feet, four open space lots totaling 30,126 square feet, and three detention basins on 79.82 acres. 131 of the lots have been developed.
47	TTM 33732	Cantelena (Richland Communities)	County	C/E	The land division hereby permitted is a Schedule A subdivision of 94.3 acres into 296 single-family residential lots, one 13.97 acre park, 38 open space lots for additional landscaping, drainage easements/pedestrian access, detention basins and drainage channels. This proposal would implement the development of Planning Areas (PA) 1, 2, 7, 8, and 9 of Specific Plan No. 334. The following is a breakdown of the dwelling units proposed within each Planning Area: PA 1 includes 47 dwelling units (DUs); PA 2 includes 80 DUs; PA 7 includes 74 DUs; and PA 8 includes 95 DUs. This proposal includes the development of the Paloma Wash and mass grading of the entire Specific Plan area. Extension of time for unerlying Parcel Map for project site being processsed in August. Grading plans and Final Map being processed currently.
48	TR 33511	Granite (Granite Investments)	County		The land division hereby permitted is for a Schedule "A" subdivision of 27.30 acres into 71 Single-Family Residential lots with a minimum lot size of 7,200 square feet, three (3) detention basins and a foot-path along an existing dry channel.
49	PP 2014-009	Shopping Center (Rich Dev)	City	BUILT	Plot Plan No. 2014-009 proposes the development of a retail shopping center totaling 100,024 sq. ft. (not including outdoor patio(s)) on 12.42 net acres. Five (5) buildings are proposed for major tenants, ranging in size from 7,000 to 18,440 sq. ft. Additional buildings are proposed for shops, retail and food, ranging in size from 2,400 sq. ft. to 12,545 sq. ft. Four (4) restaurant pads are proposed: three (3) fast food restaurants with drive throughs and one (1) sit down restaurant. There are a total of 522 parking spaces provided, including twenty-one (21) parking spaces for persons with disabilities and two (2) electric vehicle charging spaces. Access to the site is proposed from a driveway on Newport Road and two (2) driveways on Haun Road which are aligned with existing driveways at the "Countryside Marketplace."

51	CUP 2015-157	Cal Cruz Express	In progress	U/C	<p>Planning Application Conditional Use Permit No. 2015-157 proposes the construction and operation of a new 4,392 sq. ft. self-service, drive-thru car wash and a 6,166 sq. ft. tire shop with 1,225 sq. ft. attached retail tenant space within a .80 acre site located at the southwest corner of Newport Road and Winterhawk Road (APN 360-020-030 and -031). The project proposal includes 12,789 sq. ft. of landscaping and 26 parking spaces.</p>
53	PP 2009-006 (PP 22280 and P	Commerce Pointe (PacTen)	City	U/C	<p>85. Project Description The proposed project is for the development of two light industrial parks totaling ±827,777 square-feet of building floor area within 51 individual buildings plus a total of 1,362 parking spaces (Attachment 5 – Project Plans). The buildings range in size from ±5,475 square-feet to ±36,360 square-feet and would accommodate research and development uses, warehouse uses, and associated office uses. Specifically, each development is proposed as follows:</p> <ol style="list-style-type: none"> 1. Commerce Pointe I - ±617,919 square-feet of floor area within 33 buildings, plus 1,035 parking spaces; and 2. Commerce Pointe II - ±209,858 square-feet of floor area within 18 buildings, plus 327 parking spaces. <p>The buildings are both single story and two stories of concrete tilt-up construction. Landscaping will surround the perimeter of each development and will surround each building. Landscaping also acts as a buffer between the Commerce Pointe I development and the I-215 Freeway.</p> <p>Commerce Pointe I includes the conservation and enhancement of an open space area for an existing riparian/riverine habitat. The habitat feature is sited on the eastern boundary of the site, adjacent to I-215 freeway.</p> <p>The site plan shows one entry drive to each project site along Zeiders Road and one entry drive each along Ciccotti Street. Commerce Pointe II will also have an entry drive along Bailey Park Boulevard. The proposed project also includes the installation of new utilities and road improvements.</p> <p>Planning Application No. 2016-126 (Minor Revision) hereby approves a revision to Commerce Pointe II, originally approved under Plot Plan No. 2009-006 (PP 22280) and subsequently revised under Plot Plan No. 2011-023. The project will be revised as follows: a) The total number of buildings for the project will be reduced from eighteen (18) buildings totaling 209,858 square feet to two (2) buildings totaling 157,147 square feet.</p> <ol style="list-style-type: none"> i. Building No. 1 will total 72,835 square feet. ii. Building No. 2 will total 84,312 square feet. <p>b) The total number of parking stalls will be reduced from 327 parking spaces to 231 parking spaces. The project site is located south of Scott Road, north of Keller Road, east of Zeiders Road and west of Bailey Park Boulevard, APN 384-180-</p>
54	SP 2009-025, SP 2017-187	Fleming Ranch (Fleming)	In progress	U/E	<p>Specific Plan No. 2017-187 proposes a Specific Plan encompassing 332 gross acres located south of Rouse Road, west of Antelope Road and east of Encanto Drive.</p> <p>The current proposed land use plan includes the following:</p> <ul style="list-style-type: none"> • Total Residential: 1,074 dwelling units, 217.4 acres <ul style="list-style-type: none"> o West Village: 501 dwelling units/99.8 acres <ul style="list-style-type: none"> ▣ 6,500 sq. ft. lots (65'x100') – 66 ▣ 6,000 sq. ft. lots (60'x100') – 129 ▣ 5,500 sq. ft. lots (55'x100') – 134 ▣ 5,000 sq. ft. lots (50'x100') – 172 o East Village: 573 dwelling units/117.6 acres <ul style="list-style-type: none"> ▣ 7,000 sq. ft. lots (70'x100') - 47 ▣ 6,500 sq. ft. lots (65'x100') – 97 ▣ 5,500 sq. ft. lots (55'x100') – 279 ▣ 5,000 sq. ft. lots (50'x100') – 150 • Public Open Space: <ul style="list-style-type: none"> o 12.9 acre Sports Park o Paseos and landscaped areas • Water Quality Basins/Drainage: 27.8 acres • Commercial: 20.9 acres • Streets: 35.8 acres

55	PP 2010-022	The Junction (PacTen)	City	Approved	<p>Plot Plan No. 2010-022 is for the construction of a 526,800 square foot shopping center consisting of eighteen (18) buildings for future commercial and retail uses within a 50.28 gross acre site located north of Scott Road, east of Howard Way and west of Haun Road. The buildings include the following:</p> <ul style="list-style-type: none"> • Building 1 – 160,000 sq. ft. o Includes gas station with 10 fuel pumps • Building 2 – 106,110 sq. ft. o Includes attached 34,650 sq. ft. Garden Center • Building 3 – 35,000 sq. ft. • Building 4 – 30,000 sq. ft. • Building 5 – 20,000 sq. ft. • Building 6 – 24,800 sq. ft. (intended for multiple tenants) • Building 7 – 32,800 sq. ft. (intended for multiple tenants) • Building 8 – 18,300 sq. ft. (intended for multiple tenants) • Building 9 – 19,640 sq. ft. (intended for multiple tenants) • Building 10 – 5,000 sq. ft. • Building 11 – 5,000 sq. ft.
56	PP 2009-121	Walmart	City	U/F	<p>Plot Plan No. 2009-121 proposes the construction and operation of a shopping center totaling 240,980 sq. feet. The shopping center consists of the following:</p> <ul style="list-style-type: none"> • "Major" retail anchor (Walmart) totaling approximately 205,000 square feet, including outdoor garden center uses; o The Walmart is proposed to operate 24 hours a day o Walmart will offer groceries and general retail merchandise, including, but not limited to alcohol for off-site consumption, pool chemicals, petroleum products, pesticides, paint, and ammunition. o The garden center will include an exterior customer pick-up facility for prepaid bagged garden supplies, such as potting soil and mulch. o Includes five (5) signs affixed to the Walmart building: <ul style="list-style-type: none"> ☒ 8' x 37' 3" "Walmart" sign on the south elevation ☒ 3' 5 ½" x 29' 8 ½" "Market & Pharmacy" sign on the south elevation ☒ 3' 4" x 21' 9 ½" "Home & Living" sign on the south elevation ☒ 3' 5" x 22' 8" "Outdoor Living" sign on the south elevation ☒ 5' 6" x 8' "Walmart" sign on the west elevation • 3,200-square-foot fast food restaurant with drive-through; • 2,800-square-foot convenience store with 16-pump fueling station and a drive-through car wash; • 3,000-square-foot fast food restaurant with drive-through; • 6,500-square-foot high turnover sit-down restaurant; • 13,800 square feet of retail shops; • 6,680-square-foot automobile service and repair.
57	PAR 2016-154/PP2017-021	Newport Town Square II	City	In progress	<p>Plot Plan No. 2017-021 proposes the construction and operation of a commercial center anchored by an approximately 29,536-sq. ft. Smart and Final Market (Major A) on an approximately 5.36 acre site. The center will also include a 17,000-sq. ft. retail building (Major B) and a pad for an 8,700-sq. ft. sit down restaurant (Pad 1)</p> <p>The project site is located on the northwest corner of Newport Road and Haun Road within the New Hub Specific Plan (APNs 336-380-071). CASE PLACED ON HOLD BY APPLICANT</p>
58	PP 2014-237	Thorton Terraces (Sudweeks Development)	In progress	WITHDRAWN	<p>Tentative Tract Map No. 2014-225 proposes a Schedule 'A' subdivision of 2.65 gross acres into 19-multi-family residential townhome (condominium) units.</p> <p>Plot Plan No. 2014-237, which implements Tentative Tract Map No. 2014-225, and proposes a site plan for a gated residential townhouse (condominium) project, private streets, floor plans and elevations for seven (7) two-story buildings containing the nineteen (19) units (totaling 42,213 square feet of building area, wherein the buildings will range in size from 4,534 sq. ft. to 6,629 sq. ft.), five (5) guest parking stalls, one (1) open space lot to serve as community open space in the central portion of the project site, and one (1) infiltration basin in the southeast corner of the site</p> <p>The project is located at the northwest corner of Murrieta Road and Thornton Avenue (APN: 335-481-015).</p>

59	2013-040	Chaparral Apartments (Chaparral LLC)	In progress	NOT ACTIVE	<p>Planning Application Specific Plan No. 2013-039 proposes the seventh amendment to the Menifee Lakes Specific Plan No. 158. The amendment proposes to increase the overall number of dwelling units by 228 from 5,344 to 5,572; reduce the land area associated with Planning Area 5-2 from 89.5 acres to 43.5 acres; create a new Planning area (Planning area 5-7) consisting of 46.0 acres and designate as Medium Density Residential (2-5 du/acre) and establish development standards for the Planning Area 5-7; Amend the Circulation Plan for a portion of Menifee Road from north of Aldergate Drive to the project site's northern boundary to an Arterial Highway (128' ROW); and make minor technical changes to the Specific Plan text and graphics for consistency with the built environment.</p> <p>Planning Application Plot Plan No. 2013-040 proposes an age restricted/senior apartment project including 228 units in 21 buildings with a total building square footage of 136,227 sq. ft. within a 46.0-acre site. The buildings proposed are 2 and 3 stories in height. A total of 531 parking spaces are proposed and divided between dedicated garage parking and open parking stalls. The project also includes multiple outdoor recreation facilities including two pools, two spas, tot lot, putting green, bbq equipment, shuffle board and recreation building with fitness center room and multi-purpose room. 22.3-acres of the 46.0-acre site will remain as natural open space.</p> <p>Planning Application Tentative Tract Map No. 2013-203 (TR36645) proposes to subdivide the 46.0-acre site into 5 lots for 228 condominium units and 6 lettered lots for private roads as proposed by the associated Plot Plan.</p>
60	2012-120	Walmart	In progress	C/E	<p>Plot Plan No. 2012-122 proposes the construction of an approximately 208,371 sq. ft. shopping center on approximately 24.5 gross acres. The shopping center will include the following buildings: a 182,171 sq. ft. Walmart shopping center, including seasonal garden center, pharmacy and tire and lube center; three (3) buildings with drive-thrus ranging in size from 3,000 sq. ft. to 5,500 sq. ft.; and 12,000 sq. ft. of shops.</p> <p>The Walmart garden center will include an exterior pick-up facility for prepaid bagged garden supplies, such as potting soils, mulch and manure. The exterior pick-up facility will have an attendant for customer loading, but will not accommodate direct sales, as all supplies picked up from the exterior pick-up facility will be prepaid. The Walmart will have a pharmacy with a drive-through. The Walmart may also include a medical clinic; vision and hearing care center; food service; a photo studio and photo finishing center; a banking center and other similar accessory uses. The Walmart will include truck doors and loading facilities. The Walmart is proposing to operate 24 hours a day.</p>
61	2009-111	UPS Expansion (UPS)	City	BUILT	<p>Planning Case No. 2009-111 (Plot Plan) the use hereby permitted is to permit the expansion of an existing parcel delivery facility on the 9.33 gross acre subject parcels of land bounded by Trumble Road on the west and Sherman Road on the east. The project will be dedicating 0.17 acre of right-of-way resulting in a 9.16 net acre development site. The eastern half of the project site that has the frontage onto Sherman Road is occupied by the existing operational UPS facility entitled under Plot Plan No. 6581 on February 17, 1982. This existing facility has originally approved for a total floor area of 18,750 square feet. In September of 1982, a Substantial Conformance was processed to add an additional 1,080 square feet to the northern portion of the existing building, to add a car wash area adjacent to the western side of the building and to add a fuel dispensing island to northeast of the building adjacent to the employee parking area.</p> <p>The expansion will predominately involve the construction of a new building on the western half of the site. A total of 30,654 square feet of additional floor area is proposed within a new building. The proposed building has a maximum height of 32 feet with the main structure standing at 28 feet and a four foot mechanical screen atop the roof to shield equipment. The first floor is committed to 28,228 square feet of operations area with a new conveyor area, employee locker rooms, restrooms, an employee break room and offices. The second floor is comprised of 2,426 square feet of offices and a conference room. The facility will include two run-out services areas for loading vehicles. The expanded facility will include 15 tractor trailer docks, 17 long haul trailer parking spaces, 93 parcel van docks, 222 automobile parking spaces, a truck washing area, a below ground fuel tank and four fuel islands. The new construction will also involve the construction of an outdoor employee lunch area adjacent to the new building.</p> <p>In addition, the current application includes the following additional modifications:</p> <ul style="list-style-type: none"> • Adding a new auto shop in the existing building. • Relocating the outside vehicle wash area to inside the existing structure. • Relocating an existing office to the new building. • Relocating employee parking area. • Removing the northern 1,080 square foot portion of the building and replacing it with a new run-out. • Removing an existing covered dock on the south side of the existing building. • Removing the two existing fuel islands. • Relocating two on-site fire hydrants and protective bollards. • Relocating existing bicycle racks.

62	2010-057/058	Jack in the Box and Gas Station	City	BUILT	Plot Plan 2010-057 is a proposal for the construction of a new Jack in the Box fast food restaurant with a drive-thru on a 0.54 net acre vacant parcel (0.62 gross acre). The 2,599 square foot rectangular-shaped structure is to be located in the northern portion of the site. A concrete drive-thru lane is proposed along the northeast and northwest sides of the building. The remainder of the site will be developed with asphaltic concrete pavement for 26 parking spaces and drive aisles, decorative flatwork and landscaped areas. Access to the site requires off-site improvements to adjacent parcels (APN 329-030-075 to the west and 329-030-071 to the east). Plot Plan 2010-058 is a proposal for the construction of a new gasoline station and convenience store on a 0.74 net acre vacant parcel. The 3,000 square foot rectangular-shaped structure is to be located in the northwestern portion of the site. The plan includes a fuel sales area canopy for six (6) fuel pumps. There will be two underground storage tanks located adjacent to the pump island canopy and two new trash enclosures. The remainder of the site will be developed with asphaltic concrete pavements for 16 parking spaces and drive aisles, decorative flatwork and landscaped areas. Access to the site requires off-site improvements to an adjacent parcel (APN 329-030-073 to the east). The proposal includes off-site drainage improvements to the parcel to the north (APN 329-030-071).
63	2010-090	Menifee North SP (Vonham Inc.-Romola General)	In progress	U/E	Planning Application No. 2010-090 (Specific Plan) proposes to amend the existing Menifee North Specific Plan (Specific Plan No. 260) by changing the land use designations of Planning Areas 11, 12, 13, and a portion of 14 from Business Park, Commercial/Business Park, and Commercial to High Density Residential, Mixed-Use, and Commercial and reconfiguring the boundaries of these Planning Areas. The project site is located north of Highway 74, south of Stone Lane, west of Junipero Road and east of Palomar Road. APNs: 329-090-069, -070, -071, -072, and 329-100-025, -026, -027, -030, -031 and -032. Specific Plan document comments returned to applicant in April 2017. Environmental studies need updating as well as market study. Have not heard back from applicant.
64	2016-038 TR	Ridgemoore Investments LLC	City	U/F	The subdivision hereby permitted is to subdivide 5.59 acres into 18 residential lots.
65	TM 31582	El Dorado (Rancon and Lennar)	County	C/E	The land division hereby permitted is to subdivide 89.96 open space acres into 271 Schedule "A" residential lots, 21 open space lots, one (1) basin lot and one (1) park. Approximately 150 lots have been developed.
66	PM 36135	Sweetwater Canyon Rd (Mr. Cook)	County		Subdivision of five parcels - 2 acre minimums on Sweetwater Canyon Road, south of Scott Rd.
67	TM 30554	Alasia - Meritage Homes	County	BUILT	The project is a Schedule A tract map proposing to subdivide 35.4 gross acres into 86 single-family residential lots and two detention basin lots.
68	TM 28787	Pacific Communities	County	BUILT	The subdivision hereby permitted is to subdivide 32.7 acres into one school lot, 67 single family lots and two landscape lots. The residential units and landscape lots of this tract are located in Planning Area 1; the school lot is located in Planning Area 5.
69	TM 28788	Pacific Communities	County	C/F	The subdivision hereby permitted is to subdivide 36.6 acres into 1 park site/detention basin and 123 single family lots. The residential units of this tract (TR 28788) are located in Planning Area 1; the park/detention basin site is located in Planning Area 6C. Approximately 75 permits issued.
70	TM 28789	Pacific Communities	County	C/F	The subdivision hereby permitted is to subdivide 28.0 acres into 131 single-family lots and two landscape lots. This tract (TR 28789) is located in Planning Area 2 of SP 140-S1.
71	TM 28790	Pacific Communities	County	C/F	The subdivision hereby permitted is to subdivide 30.6 acres into 156 single-family lots, one landscape lot and one recreational center lot. These lots are all located within Planning Area 2 of SP 140-S1. Approximately 109 permits issued.
72	2016-057PP; -058 CZ	Rancho Bonito	In progress		Planning Application Plot Plan No. 2016-057 proposes the development of a vacant 17.04 acre property into a 196-unit apartment complex and a separate 26,909 square foot commercial center. The 196-unit apartment complex consists of forty-five (45) two-story residential buildings, a 1,972 square foot 1-story recreation building, and three (3) large open space areas containing recreational amenities including a pool, tot lots, community garden, basketball court and volleyball court. Parking for the apartment complex consists of individual two-car garages attached to each unit (392 stalls) and 121 uncovered stalls for guest parking. Access to the development is provided from a main driveway entrance located near the center of the project frontage on Garbani Road. A second driveway is located at the southwest corner of the development for emergency access off of Sherman Road. The apartment complex would occupy the westerly 13.91 acres of the site. The proposed commercial center consists of two (2) 1-story buildings having areas of 20,509 and 6,400 square feet. The parking field is located behind (west) of the buildings and contains 148 stalls and three (3) loading spaces. Access to the commercial center is provided from two (2) driveways, one (1) located on Haun Road and one (1) on Garbani Road. The commercial center would occupy the easterly 3.13 acres of the site. The project site is located within the City of Menifee. The site is bounded as follows: Garbani Road and a single family residential neighborhood to the north, vacant land to the south, Haun Road and vacant land to the east and Sherman Road and vacant land to the west. The project site APN is 360-350-006.

73	TR 28859	Ascho	County	U/F	This subdivision will result in 246 single family residential lots with a minimum parcel size of 7,200 square feet. There will also be a 25.0 acre remainder parcel. (Amended, 3/23/99) - About 75% has been developed.
74	PP 2012-056		County	BUILT	Planning Case No. 2012-056 (Plot Plan) is hereby approved for the establishment of a 6,214 sq. ft. freestanding building for the sale of automobile parts and supplies within a 0.58-acre site within an existing shopping center (i.e., Stater Bros. Shopping Center). As previously stated, the existing shopping center was entitled under Riverside County Plot Plan No. 10666 in 1990. No fencing or walls were approved as part of this project. The hours of operation, including loading, unloading, and deliveries, shall be limited to 7:00 a.m. to 10:00 p.m. seven days a week.
76	CUP 2013-157	American Tire Depot	In progress		Planning Application No. 2013-157 proposes a conditional use permit for the construction and operation of a new 7,171 sq. ft. building for tire installation and other minor automobile repair on a 0.79-acre parcel. Access to the project site is proposed via the adjacent site to the east and the existing driveway on Newport Road for the adjacent site. The site is located northerly of Newport Road, easterly of Bradley Road, southerly of Park Avenue, and westerly of Calle Tomas on APN 336-180-018.
77	PP 2014-189	(North Bayport Industrial Park II, LTD)	In progress	U/E	Planning Application No. PP 2014-189 proposes an apartment project including 240 units in 24 two-story buildings with a total building square footage of 317,472 sq. ft. and 6,440 sq. ft. leasing/clubhouse building on a 19.25-acre site. A total of 577 parking spaces are proposed and divided between dedicated garage parking and open parking stalls. Planning Application No. CZ 2014-190 proposes to change the zoning of the subject site from One-Family Dwellings (R-1) to Multiple Family Dwellings (R-2) for consistency with the General Plan land use and proposed project. The site is located westerly of Menifee Road, northerly of McCall Boulevard, easterly of Junipero Road, and southerly of Rouse Road on APNs 333-070-018, 333-070-019, 333-070-053.
78	PAR 2014-188	(Southern CA Properties)	In progress	NOT ACTIVE	Pre-Application Review No. 2014-188 proposes a Schedule 'A' gated subdivision of 19.98 gross acres into 128 lots with a density range of 2 to 5 dwelling units per acre. The project is located along the south side of Scott Road approximately 650 feet east of Briggs Road in the City of Menifee (APN: 472-010-009). The subdivision includes a detention basin on the north side of the tract, a clubhouse, pool, and tot lot/playground.
79	PP 2015-164 / TR 2015-165	Market Rate Apartments, Senior Independent Living and Single-Family Subdivision (Strata Equity)	In progress	C/E	Tentative Tract Map No. 2015-165 proposes a Schedule 'A' subdivision of 20.0 gross (16.4 net) acres (south of Holland Road) into 68 single-family residential lots and one (1) sand filter basin. The single-family residential subdivision has a proposed density of 3.94 dwelling units per acre and a minimum lot size of 7,200 square feet. The single-family subdivision is proposed to be accessed via two (2) entry points: one (1) mid-block entry off of Holland Road between Hanover Lane and Palomar Road; and one (1) entry off of Palomar Road south of Holland Road. Plot Plan No. 2015-165 is a proposal for the construction and operation of a 238-unit market-rate apartment complex and a 100-unit senior (independent) living facility on 17.2 gross acres (north of Holland Road). The 238-unit apartment complex consists of fourteen (14) three-story apartment buildings, two (2) one-story recreational buildings, two (2) pool facilities, and 450 (including in-garage) parking spaces on 8.8 acres. The senior living facility would consist of one (1) 102-unit, three-story building, a pool facility, community gardens, and 189 parking spaces on 4.8 acres. The apartment complex is proposed to be accessed via two (2) driveways: one (1) off of Hanover Lane north of Holland Road; and one (1) mid-block driveway off of Holland Road between Hanover Lane and Palomar Road. The senior facility is proposed to be accessed via a primary driveway off of Palomar Road north of Holland Road and a secondary (emergency vehicle only access) driveway off of Holland Road west of Palomar Road. The project site include one (1) proposed bus stop on the north side of Holland Road.

81	PP 2011-093, EOT 2015-012	Motte Town Center	In progress	U/E	<p>2. Planning Case No. 2011-093 (Plot Plan) is a proposal to permit the construction of four industrial buildings totaling 97,564 square feet on the 6.71 gross acre subject parcel of land. The project will be dedicating 0.21 acre of right-of-way resulting in a 6.50 net acre development site. The applicant is proposing the division of the buildings into 35 individual condominium units. The applicant has not identified specific tenants for the individual units or for the separate buildings. The site plan delineates that Building A will consist of seven units, Building B will have eight units, Building C is comprised of nine units and Building D is proposed for eleven units.</p> <p>The industrial buildings are proposed to be one-story with a maximum height of 28 feet. The individual units will have pedestrian/employee access through the front with service entrances at the rear. Access from the rear will be provided by both man doors and overhead rolling doors. The building shall be protected with a fire sprinkler system. The balance of the site will contain a four trash enclosures, landscaped areas, parking areas and drive aisles. The site plan also delineates four precast concrete picnic tables. Their locations are at the southern end of Buildings A and C and the northern end of Buildings B and D.</p>
82	2015-031	Rite Aid/Archibald's Restaurant	City	BUILT	<p>Planning Application Plot Plan No. 2015-031 is for the proposed construction and operation of a new 17,185 sq. ft. Rite Aid drug store and pharmacy with drive-thru and a new 3,634 sq. ft. fast food restaurant with drive-thru on a 2.62 gross acre (2.4 net acre) project site. The project proposes 135 parking spaces, including eight (8) ADA accessible spaces. The site is located on the southwest corner of the intersection of Newport Road and Menifee Road (APN: 364-030-004 & -005). Access to the project site is proposed off of Newport Road and Menifee Road. The project site is currently vacant.</p>
83	PUP 2013-146	SCE Expansion	In progress	BUILT	<p>Planning Application No. 2013-146 proposes a public use permit for the construction and operation of a new 10,287 sq. ft. freestanding "control building" and demolition of an existing maintenance building as part of Southern California Edison's existing Valley Substation within a 0.96-acre project site on a 73.62 gross acre parcel. The proposed project would also involve revisions to internal drive aisles, additional parking, but would retain the existing driveway on Menifee Road. No existing Public Use Permit is on record for the existing facility. The Public Use Permit would only address the current proposed building, demolition, and associated on-site changes.</p> <p>The site is located on the southwest corner of Ethanac Road and Menifee Road on APNs 331-230-003.</p>
84	TR 2014-073	DCI Investments	City	U/C	<p>Planning Case No. 2014-073 (Tentative Tract Map) (TR 36788) proposes a Schedule A subdivision of 9.2 gross acres into 30 single-family residential lots with a minimum lot size of 7,200 square feet and one open space lot for water quality/detention. Access to the project site is proposed via a new intersection on Garbani Road and connection to Garlington Street to the north.</p> <p>Planning Case No. 2014-072 (Change of Zone) proposes to change the zoning of the subject site from Industrial Park (I-P) to One-Family Dwellings (R-1) for consistency with the General Plan land use and the proposed project. Grading plans issued for project. Per inspectors grading activities have stopped without being completed.</p>
85	PP 22946	Shops at Scott (Menifee Partners LP)	City		<p>The use hereby permitted is for the development of a retail center comprised of 10 buildings totaling 87,733 square feet ranging in size from 3,500 to 18,850 square feet and includes 486 parking stalls. 1/2 built</p>
86	PAR2015-053 / TR 36684	(Bundy Canyon Development Co)	In progress	U/F	<p>Planning Application TR No. 2015-053 (Tentative Tract No. 36684) proposes to subdivide three (3) existing lots (384-060-002, 007, and 009) with a net cumulative area of approximately 52 acres into ten (10) single family residential lots. The subdivision is located south of Scott Road, west of Sweetwater Canyon Road, and is north of (abuts) the southerly City limit line. Lots range in size from 4.5 to 6.43 net acres. Access to lots will be via dedicated but unimproved streets: Wild Lilac Road, Buckwheat Road, and Pinewood Lane. Grading is limited to driveways and building pad areas with a majority of the natural topography on each lot being retained. As part of the project a dedicated but unimproved 1341 foot long segment of Keller Road will be vacated located at the southerly boundary of the tract. In addition, portions of Wild Lilac Road and Pinewood Lane south of Buckwheat Road will be vacated and converted to private access roads. The project site is zoned Residential Agricultural, Two and One Half Acre Minimum Lot Size (R-A-21/2).</p>
87	PP 2015-099	Shops at Newport (Newport Road LP)	City	C/E	<p>Planning Application Plot Plan No. 2015-099 proposes a 9,750 sq. ft. commercial/retail building on a 1.30 gross acre parcel. The proposed building is anticipated to be used for a 2,200 sq. ft. restaurant with drive-thru, 3,490 sq. ft. of office and 4,060 sq. ft. of retail use. Ninety-Nine (99) parking spaces and 6,028 square feet of landscaping are proposed.</p> <p>The project site is located south of Newport Road, west of Bradley and east of Winterhawk Road within the City of Menifee. The site is bounded as follows: Newport Plaza Shopping Center to the north, vacant property to the south, an existing Arco gas station, including convenience store to the east and McDonald's and a gas station with convenience store, cash for gold shop, car wash and drive-thru restaurant (Los Primos) to the west. The project site APN is 360-030-025.</p>

88	PP 2015-115	Menifee Village (Pechanga Dev Corp.)	In progress	U/E	<p>Planning Application Plot Plan No. 2015-115 proposes the development of a retail shopping center including ten (10) buildings totaling 231,600 sq. ft. on a 27.3 gross acre site. The following buildings are proposed: Bldg. A: 41,000 sq. ft. major retail Bldg. B: 50,000 sq. ft. major retail Bldg. C: 60,000 sq. ft. major retail Bldg. D: 20,000 sq. ft. major retail Bldg. E: 18,400 sq. ft. major retail Bldg. F: 15,200 sq. ft. Pharmacy with Drive-thru Bldg. G: 3,600 sq. ft. Financial (bank) Bldg. H: 7,400 sq. ft. Shops Bldg. I: 8,500 sq. ft. Shops Bldg. J: 7,500 sq. ft. Restaurant</p> <p>The project proposal includes 114,127 sq. ft. of landscaping and 1,275 parking spaces.</p> <p>The project site is located within the City of Menifee. The site is bounded as follows: Countryside Marketplace shopping center to the north; vacant land to the south, Interstate 215 to the east, and the Paloma Wash Channel and Santa Rosa Academy beyond to the west. The project site APNs are 360-110-012,-004, -005, -006, and -007. Met with project manager June of 2016 to discuss last set of plan revisions and future environmental review requirements. Have not heard back since.</p>
89	PP 2015-130	El Ranchito Market	In progress		<p>Planning Application Plot Plan No. 2015-130 proposes to convert an existing 1,655 sq. ft. commercial building into a market including deli, and sale of produce and dry goods. The site contains an existing patio and storage building. The project also includes adding a new 20'x20' patio cover and deck to the front of the store and exterior upgrades to the building. The applicant also proposes the sale of beer and wine for off-site consumption.</p> <p>The project site is located within the City of Menifee; more specifically, north of Newport drive at west of Palm Drive. The address is 23980 Newport Drive. The project site APNs are 350-254-033, -031 and -014.</p>
90	TR 2015-250	McLaughlin Village	In progress	U/E	<p>Planning Application No. TR 2015-250 (TR 36937) proposes a Schedule A subdivision of 14.34 net acres into one (1) airspace condominium map for 126 dwelling units.</p> <p>Planning Application No. PP 2015-251 proposes to develop 14.34 net acres of into a 126-unit detached townhouse development with open space areas reserved water quality treatment improvements and recreational amenities.</p> <p>The project site is located within the City of Menifee. The site is bounded as follows: McLaughlin Road to the north, an existing single family residential development to the south, Barnett Road to the east, and the Interstate 215 Freeway to the west. The project site APN is 331-090-008.</p>
91	TR 31536		City	U/F	<p>The land division hereby permitted is to subdivide 49.47 gross acres into 44 single family residential lots with one acre minimum lot size and one 1.14 acre detention basin (LOT 45).</p>
92	PP 2015-156	All Star Super Storage	In progress		<p>Project Description: Planning Application No. 2015-156 proposes the development of a fifteen (15) building, 242,150 square foot public storage facility on 9.77 acres. The project is located within the City of Menifee. The site is bounded as follows: an existing self storage facility (All Star Super Storage) to the north, vacant land formerly used as a nursery to the south, Haun Road to the west, and the Interstate 215 Freeway to the east. The project site APN is 360-350-029. Grading plans under review. minor revision being processed to revise conditions of approval.</p>
93	TTM 2015-165	2015-165 (Strata Equity)	In progress		<p>Tentative Tract Map No. 2015-165 proposes a Schedule 'A' subdivision of 20.0 gross acres (south of Holland Road) into 68 single-family residential lots and one (1) sand filter basin. The single-family residential subdivision has a proposed density of 3.94 dwelling units per acre and a minimum lot size of 7,200 square feet.</p>
94	2015-195 PAR	Womble Property (MDMG, Inc)	In progress	NOT ACTIVE	<p>Pre-Application Review No. 2015-195 proposes the preliminary review for the subdivision of 15.81 gross acres for 207 condominium units with a community center and pool facility located west of Bradley Road, north of Lazy Creek Road, and south of Salt Creek. (APNs: 338-150-029 and 338-150-031).</p>

95	2011-003	Trumble Offices and warehouse	In progress		<p>Planning Case No. 2011-003 (Plot Plan) is hereby approved for the construction of two industrial buildings and outdoor equipment storage on the 5.01 gross acre subject parcel of land.</p> <p>The plans for the site delineate two distinct areas for development that are separated by security fencing. The eastern ¼ of the site will include a 21,730 square foot building to be utilized with a combination of one caretaker's unit, seven showroom offices, and eight warehouse/storage units. The floor plans for the project identify the following square footage by suite:</p> <p>Suite Square Footage 101 1,052 102 4,280 103 2,713 104 2,713 105 2,713 106 2,713 107 2,713 108 2,726 Utility Rooms 107 Total 21,730</p> <p>The office/warehouse building is proposed to be one-story with a maximum height of 24 feet. Suite 101 will be designated as a caretaker's unit with living, eating, private restroom, and sleeping areas in addition to an office area and public restroom. Suites 102 through 108 will have pedestrian/employee access to the offices through the front (eastern elevation) with equipment entrances at the rear (western elevation). Access from the rear will be provided by both man doors and 18 foot by 14-foot overhead rolling doors. The rear units will also include roof mounted skylights. The building shall be protected with a fire sprinkler system. Air conditioning units will be ground mounted. The balance of the site will contain a trash enclosure, a recycling bin, landscaped areas, parking areas and drive aisles. The eastern portion of the site will provide a total of 55 parking spaces including four that are designated as disabled accessible.</p>
96	2015-211	Valley Blvd. Tract Map	City	C/E	<p>Proposed Tentative Tract Map on 21.6 acres consisting of 75 residential lots and a water quality and detention basin. Comment letter sent August 2016. No further activity from applicant</p>
97	PAR 2016-039/TR33511	Tract Map - single family homes	In progress	C/E	<p>"PAR 2016-039" proposes the preliminary review of a proposal to revise County-approved Tentative Tract Map No. 33511 (approved by the County Board of Supervisors on September 18, 2007). The previously approved map proposed a Schedule "A" subdivision of 27.3 acres into 71 single-family residential lots with a minimum lot size of 7,200 square feet, three (3) detention basins, and a foot-path along an existing dry channel.</p> <p>The revise tentative tract map would increase the number of residential lots from 71 to 98 units, but the minimum lot size of 7,200 square feet would remain the same. The revised map would reduce the number of basins from three (3) to two (2), eliminate the foot path, and convert the dry channel into an underground storm drain system.</p>
98	2016-110 CUP	Fast food	Approved		<p>Conditional Use Permit No. 2016-110 proposes a 2,400 square foot fast food restaurant on a 0.52-gross acre parcel located at 26820 McCall Boulevard. The fast food restaurant includes a drive-thru, 16 parking spaces, and 4,197 sq. ft. of onsite landscaping.</p> <p>A Pre-application Review (PAR 2015-246) was previously submitted for the proposal on November 10, 2015 and a Development Review Committee meeting took place with the Applicant and staff on December 10, 2015.</p>
99	2016-021 PM	CP Menifee DPSS	In progress		<p>Project Description: Parcel Map No. 2016-021 proposes a Schedule E Subdivision of 10.2 acres into four commercial parcels. Parcel 1 is 4.3 gross acres; Parcel 2 is 2.3 gross acres; Parcel 3 is 2.3 gross acres; and Parcel 4 is 1.3 gross acres.</p> <p>The property is located on the southwest corner of Newport and Evans Road. The project site is vacant. APN 360-020-051.</p> <p>No development of the site is proposed at this time.</p>

100	2016-061 GPA; -062 SPA; -063 TR	Pulte Homes	Approved	<p>Planning Application Tentative Tract Map No. 2016-063 (Tentative Tract Map No. 37161) proposes a Schedule "A" subdivision of 14.67 gross acres (12.43 net acres) into fifty-four (54) single-family residential lots with a minimum lot size of 5,000 square feet and an overall density of 4.3 dwelling units per acre. The tentative map includes six (6) Open Space lots for a drainage and utility corridor, slope maintenance, a playground and two (2) parks. A conceptual landscape plan was also included with the project. The site is located south of Newport Road, north of Rockport Road and east of Laguna Vista Drive. (APNs: 364-190-021 and 364-190-026). Planning Application Specific Plan Amendment No. 2016-062 proposes an amendment to the Menifee East Specific Plan No. 247 to eliminate Planning Area 3 (Day Care) and combine the acreage of the deleted Planning Area 3 with Planning Area 2. The amendment also includes reducing the density of Planning Area 2 from Very High Density Residential (17 dwelling units an acre) tect manager June of 2016 to discuss last set of plan revisions and future enviromental review requirements. Have not heard back since.</p> <p>The apartment complex is proposed to be accessed via two (2) driveways: one (1) off of Hanover Lane north of Holland Road; and one (1) mid-block driveway off of Holland Road between Hanover Lane and Palomar Road. The senior facility is proposed to be accessed via a primary driveway off of Palomar Road north of Holland Road and a secondary (emergency vehicle only access) driveway off of Holland Road west of Palomar Road. The project site include one (1) proposed bus stop on the north side of Holland Road.</p> <p>site APN is 360-350-006</p>
101	PP 2016-124	McCall & Sherman Retail Center	In progress	<p>Plot Plan No. 2016-124 proposes an 18,255 sq. ft. retail center on 4.71 acres located on the southeast corner of McCall Boulevard and Sherman Road. The following buildings/uses are proposed:</p> <ol style="list-style-type: none"> 1. Conveniences Store – 2,900 sq. ft. 2. Fast Food with Drive-Thru – 3,000 sq. ft. 3. Carwash – 2,080 sq. ft. 4. 8-Pump Gas Station Canopy – 4,395 sq. ft. 5. Fast Food with Drive-Thru - 3,200 sq. ft. 6. Retail Store – 1,000 sq. ft. 7. 4-Pump Diesel Gasoline Canopy – 1,680 sq. ft.
102	CUP 2016-130	Krikorian Theatre	Approved	<p>Conditional Use Permit No. 2016-130 proposes the construction and operation of a commercial center anchored by an approximately 114,392-sq. ft. Krikorian Premiere Theater containing twelve (12) theater auditoria on an 80,000 sq. ft. pad. The theater will include dining services, a 9,700-sq. ft. sports-themed restaurant/bar, 6,300-sq. ft. gaming area, 550-sq. ft. party room, and a twenty-two (22) lane bowling alley.</p> <p>The overall center will also include four (4) additional building pads. Sit-down and quick-serve restaurant, retail, and service retail uses will occupy these four (4) pads. All pad sizes are listed below including the Cinema:</p> <ul style="list-style-type: none"> • Cinema 80,000 square feet • Pad 1 7,000 square feet • Pad 2 7,000 square feet • Pad 3 8,600 square feet • Pad 4 12,500 square feet <p>The proposed uses require 1,015 parking spaces. The project proposes 553 onsite parking space. There are an additional 240 temporary offsite parking spaces proposed on APN 360-080-084 and 240 long-term offsite parking spaces proposed on APN 360-080-076. The project site is located on the southwest corner of Newport Road and Town Center Drive within the Menifee Town Center Specific Plan. The 10.18-net-acre site is located on Parcels 13, 14 and 15 of Parcel Map No. 36299-1 (APNs 360-080-077 through -079).</p>

103	MC 2016-107	Pacific Communities	Country	C/E	<p>Minor Change No. 2016-107 proposes a Minor Change (MC) to the previously approved Tentative Tract Map Nos. 28791 (TR28791), 28792 (TR28792) and 28793 (TR28793). TR28791, TR28792 and TR28793 were all approved by the County of Riverside Board of Supervisors on July 17, 2001. TR28791 was originally approved for a Schedule A subdivision of 22.2 acres into 80 single family residential lots. TR28792 was originally approved for a Schedule A subdivision of 23.8 acres into 85 single family residential lots. TR28793 was originally approved for a Schedule A subdivision of 21.4 acres into 77 single family residential lots.</p> <p>Under the minor change, portions of the above mentioned tracts will have revisions to their current elevations in an effort to minimize blasting during grading efforts and to reduce the overall amount of grading needed for the project.</p>
104	PM 2016-185	JPN Corporation Inc.	City	C/E	<p>Tentative Parcel Map No. 2016-185 proposes a Schedule E Subdivision of 37.06 gross acres into eleven (11) commercial/industrial parcels. The parcels range in size from 5.05 to 1.06 acres. The subdivision also includes dedications on Haun and Holland Road and a new proposed public street off of Haun Road. No development or site plan has been submitted at this time; however, the project proposal includes the construction of five (5) water quality bioretention facilities and mass grading of the site.</p> <p>The property is located north of Holland Road, west of I-215 and east of Haun Road. The project site is vacant. APN 360-130-003.</p>
105	2016-078 CUP	Zeiders Rd. CUP	Built	LT, but not FINAL	<p>Conditional Use Permit No. 2016-078 proposes the development of a 14,000 square foot (sq. ft.) warehouse and office facility with a gravel yard on a 3.86 net acre site (4.26 gross). In addition to the gravel yard, outdoor storage is proposed to the north and west of the warehouse building. The warehouse and office building is existing and was permitted by the County in 2005 as a "private garage." A six (6) foot tall block wall is proposed along the west boundary of the site and an eight (8) foot tall block wall is proposed along the north, east, and south boundaries. The site proposes two (automatic) gated entrances off of Zeiders Road.</p> <p>The site is bounded as follows: vacant land to the north (entitled for shopping center under Plot Plan No. 22946), vacant land to the south, Zeiders Road to the west, and a contractor's storage yards to the east. The project site APNs are 384-180-035 and -036.</p> <p>The project site is currently used for outdoor storage. The entire site has been disturbed as a result of current outdoor storage use. Potential impacts of the project will be analyzed in compliance with the requirements of the California Environmental Quality Act (CEQA).</p> <p>Related Cases: Plot Plan No. 21141 (processed at County, but not approved).</p>
106	PP 22628 - EOT 2016-102	Harvest Glen Marketplace		EOT 2016-102 APPROVED AT THE 1/11/17 PC MTG.	<p>Project Description: Parcel Map No. 2016-185 proposes a Schedule E Subdivision of 37.06 gross acres into eleven (11) commercial/industrial parcels. The parcels range in size from 5.05 to 1.06 acres. The subdivision also includes dedications on Haun and Holland Road and a new proposed public street off of Haun Road. No development or site plan has been submitted at this time; however, the project proposal includes the construction of five (5) water quality bioretention facilities and mass grading of the site.</p> <p>The property is located north of Holland Road, west of I-215 and east of Haun Road. The project site is vacant. APN 360-130-003.</p>

107	Specific Plan No. 2016-246, TR 2017-165, 2017-166, 2017-167, 2016-057 and 2016-058	Mill Creek/Rancho Bonito		In Progress	<p>Planning Application No. 2016-135 is for the proposed construction and operation of one new 25,698 sq. ft. (gross building area) medical office building on a 1.81-gross acre project site. The project proposes 120 parking spaces, including eight (8) ADA accessible spaces. The site is located north of Newport Road and east of Haun Road (APN: 336-380-058 and -059). Access to the project site is proposed via one (1) existing and one (1) proposed driveway off of Haun Road. The project site is currently being used for a construction staging yard during construction of the Newport Road/I-215 bridge expansion.</p> <p>The project site is located within the City of Menifee. The site is located on the south side of Garbani Road, the west side of Haun Road, the east side of Sherman Road and is immediately north of an existing Verizon equipment yard. The project site APNs are 360-350-006, 360-350-011, and 360-350-017. 1st round of comments on Specific Plan returned to applicant December 2016. Meeting with environmental consultant to discuss future EIR. Applications for 2 TTM and Plot Plan for overall site submitted. Comments returned in June to applicant on development applications. Meeting on July 25 2017 to discuss project's consistency with GP moving forward. Written analysis submitted by applicant's attorney for the City's review. Will respond within 2 weeks.</p> <p>Planning Application No. 2017-165 (Tentative Tract Map) proposes a Schedule A subdivision of 21.72 gross acres (20.61 net) into 204 single family residential lots and six (6) common area lots. The subdivision has a proposed density of 9.39 dwelling units per gross acre and a minimum lot size of 2,363 square feet. The subdivision is located on the east side of Sherman Road and south of Garbani Road.</p> <p style="text-align: right;">Planning</p>
108	2016-135 PP	Haun Professional Building		In Progress	<p>Planning Application Plot Plan No. 2016-135 is for the proposed construction and operation of one new 25,698 sq. ft. (gross building area) medical office building on a 1.81-gross acre project site. The project proposes 120 parking spaces, including eight (8) ADA accessible spaces. The site is located north of Newport Road and east of Haun Road (APN: 336-380-058 and -059). Access to the project site is proposed via one (1) existing and one (1) proposed driveway off of Haun Road. The project site is currently being used for a construction staging yard during construction of the Newport Road/I-215 bridge expansion.</p>
109	2016-154 PAR	Newport Towne Square Phase II		Complete	<p>Pre-Application Review No. 2016-154 is the preliminary review of a proposal for the construction and operation of a new retail shopping center with two (2) free-standing buildings. The first building includes "Major A" which is a 29,936 sq. ft. market, "Shops" which are 3,000 sq. ft. and "Major B" which is 9,997 sq. ft. of additional retail space. The second building, "Pad Restaurant," is 8,646 sq. ft. of restaurant space. The center is being proposed on a 5.36 acre project site. The site is located on west of Haun Road and north of Newport Road, just north of the existing Newport Towne Square. (APN: 336-380-071).</p>
110	2016-164 PP	Popeyes	In progress		<p>Plot Plan No. 2016-164 proposes a 2,730 sq. ft. fast food restaurant with drive-thru on 1.00 gross acre located east of Winterhawk Road, south of Newport Road, and west of Bradley Road in between the existing McDonald's Restaurant and Mobile Gas Station (APN: 360-030-014 and -026). The project includes 22 parking spaces.</p>
111	2016-183 CUP	Sun City Senior Care	In progress		<p>Planning Application Conditional Use Permit No. 2016-183 proposes the development of an assisted living facility and retail/offices. The assisted living facility consists of a four (4) story, 45,246 sq. ft. building (1st Floor: 12,471 sq. ft.; 2nd, 3rd, and 4th Floor: 10,925 sq. ft. on each). The assisted living includes 58 single units, six (6) double units, eight (8) handicap units, offices, laundry, dining, kitchen, and a library. The office and retail building consists of a two (2) story, 10,368 sq. ft. building (5,181 sq. ft. on each floor). Thirty-eight parking spaces are provided for the retail/office building and thirty-five (35) parking spaces are provided for the assisted living facility. The project site is 1.83 gross acres.</p> <p>The project site is located within the City of Menifee. The site is bounded as follows: McCall Boulevard to the south, Chatham Lane to the west, vacant land to the east and vacant land to the north. The project site APN: 333-050-035.</p>
112	2016-187 PP	So Cal Mulch		Withdrawn	<p>Planning Application Plot Plan No. 2016-187 proposes a mulch and garden materials sales yard on 10.02 acres located south of Ethanac Road, west of Antelope Road, and east of Dawson Road. The project is proposed to be developed in two phases. The first phase proposes development of the portion of the site adjacent to Antelope Road and includes a 1,400 sq. ft. modular sales office, eighteen (18) parking spaces, area for product sample boxes, mulch bins, soil area, loading area, flagstone area, rock and aggregate bins, driveways and landscaping. The second phase proposes development of the western half of the site adjacent to Dawson Road and includes additional storage of mulch and materials, a bioretention basin and driveway. The applicant proposes to utilize the existing gravel surface for vehicular circulation throughout the site. Chain link fencing is proposed and existing around the site on the side property line and along Dawson Road. Wrought iron fencing is proposed along Antelope Road.</p> <p>The project site is located within the City of Menifee. The site is bounded as follows: residential and businesses to the north, vacant properties previously used for construction storage yards to the south, Inland Empire Energy Center and a ready mix concrete supplier to the east and vacant land to the west. The project site APNs are 331-150-040 and 039.</p>

113	2016-197 CUP	4th St. Auto Repair			<p>Planning Application for Conditional Use Permit (CUP) No. 2016-197 proposes the request for approval of an existing unpermitted auto repair shop located at 27902 HWY 74, City of Menifee. The current 14,375 square foot site is an active code violation as the property owners have not received the CUP or building permits required to operate an auto repair facility at the site. The Applicants are proposing a 40' by 50' (2,000 square foot) structure that houses an office, a restroom, a storage room and an auto repair garage area. The proposal includes fourteen (14) parking spaces along with one (1) ADA parking space. The site is surrounded by an existing chain link fence that allows for two access points to the property, one along HWY 74 and the second along Fourth Street. No building permits have been issued for existing structures on the project site.</p> <p>The site is bounded as follows: Residential property to the north, HWY 74 to the south, an used tire shop to the east and a blighted commercial site to the west, across Fourth Street. The project site APN is 329-132-031.</p>
114	PP 2016-213 - TR30507	Retreat at Holiday	In progress		<p>TR30507 "The Retreat" within Holiday Lots 1-44, Lots 47-82, Lot 85, Lots 138-152, Lots 103-113, Lots 163-166. The project is located on the northeast corner of Chambers and Murrieta Road.</p>
115	CUP 2017-055	Goetz Road Gas and Retail	In progress		<p>Plot Plan No. 2017-056 proposes the development of a gas station and commercial center on 2 gross acres. The project proposal includes a 3,800 square foot convenience store, 1,152 sq. ft. carwash and gas station that includes four dual pumps along with a fueling canopy, and a 3,200 square foot fast food restaurant with drive-thru located on the corner of Goetz Road and Vista Way. A total of 51 parking spaces are proposed.</p> <p>Conditional Use Permit No. 2017-055 proposes the sale of beer and wine for off-premises consumption at the gas station convenience store.</p> <p>Tentative Parcel Map No. 2017-057 proposes the subdivision of the 2 acre site into two (2) commercial parcels (Schedule E subdivision).</p> <p>The project site is the location of the "Bailywick Mobile Home Park" (now abandoned) and it appears that some of the mobile homes/recreational vehicles still occupy the site. The CUP for the mobile home park was revoked by the City of Menifee in 2010.</p> <p>The project site is located within the City of Menifee. The site is bounded as follows: vacant property to the northwest, Goetz Road to the southwest, Vista Way to the southeast, and a residential property to the northeast. The project site APNs are 351-074-016 and 021.</p>
116	CUP 2017-060	Ethanac/Barnett Gas and Retail	In progress		<p>Planning Application No. 2017-061 PP propose the development of a gas station and commercial center on the southwest corner of Ethanac Road and Barnett Road. The project will consist of new development of the following: a 3,800 square foot convenience store, along with a fueling canopy that houses eight (8) dual pumps, a 2,080 square foot carwash and a 4,365 square foot restaurant with drive-thru.</p> <p>2017-060 CUP - The Applicant is proposing the sale of beer and wine at the convenience store.</p> <p>2017-062 PM - The Applicant is proposing to subdivide the 15.33 acre parcel into three parcels: Parcel 1 - .94 acres, Parcel 2 - 1.56 acres and Parcel 3 12.83 acres.</p> <p>The proposed development is to take place on Parcels 1 and 2. The site is bounded as follows: Ethanac Road to the north (northern City boundary), Barnett Road to the east (city boundary), vacant property to the south and a Riverside County Flood Control channel (Line A) to the west. The current APN is 331-060-027.</p>
117	2016-233 CUP	RV Super Center	In progress		<p>Conditional Use Permit No. 2016-233 proposes the construction and operation of a recreational vehicle (RV) sales and service center containing a 17,600 sq. ft. steel building (10,400 sq. ft. for service bays and 7,200 sq. ft. for sales and office use) on a 4.43-gross-acre site. The project proposes 48 parking spaces and would be accessed via two driveways along Encanto Drive. The project includes 161,288 sq. ft. of onsite A/C pavement (for drive aisles, RV display areas, and parking spaces) across the entire site (85%) and 9,969 sq. ft. of landscaping (5%). The building and sidewalks comprise the remaining 10% of the site (9% and 1%, respectively).</p> <p>The project site is located at the southeast corner of McLaughlin Road and Encanto Drive (APN 331-120-066). The project site is currently vacant.</p>

118	PP 2016-239	Town Center Private Recreation Center	In progress	<p>Plot Plan No. 2016-239 proposes a Recreation Center called "Cortana Club" within the Menifee Town Center Specific Plan No. 2009-069. Specifically, the Recreation Center is located north of north of Park Plaza Avenue, west of Civic Plaza Drive, south of City Hall Drive. The Recreation Center includes one (1) pool, one (1) spa, one (1) Recreation Center Building with Gym/Fitness, Portico, Kitchen, Entertainment Room, Pool Equipment Room, restrooms, and outdoor seating, fireplace event space, a tot lot, bocce court, half-court basketball court and passive turf area and on-site parking. The recreation center is meant to serve the residential homes within the Specific Plan and will be a private facility.</p> <p>APN: 360-080-086.</p>
119	CUP 2016-263	Forterra	Approved	<p>Conditional Use Permit No. 2016-263 proposes a revision to the previous County-approved Plot Plan No. 10557, by constructing a new 12,323 metal building addition which will enclose new pipe manufacturing equipment. The new building will be constructed adjacent to the existing metal building facility and will comprise a single connected building enclosing all new equipment. The exterior of the existing building will be refurbished to match the new addition construction.</p> <p>In addition, the existing block storage areas will be used to store pipe products. While the application does not make reference to expanded storage areas, the proposed site plan does show expansion of storage areas beyond what was previously approved under PP 10557 and PP 10557S1, particularly within the northerly edge of the project site.</p> <p>The Conditional Use Permit is required, because the new metal building addition will exceed the 50' height limit allowed under the Medium Manufacturing (M-M) zone. The building is proposed to be 59'-4" tall.</p> <p>The project site is located at the northwest corner of the intersection of Matthews Road and Palomar Road (APN 331-220-022 through -025, -037, and -040).</p>

120	TR 2016-285, SP 2016-286, GPA 2016-287 and CZ 2016-288	Rockport Ranch	In progress	<p>General Plan Amendment No. 2016-287 proposes to amend the general plan land use designation of 78.8 acres on the southwest corner of Briggs Road and Old Newport Road/Rockport Road (APNs 364-190-005 and -004) from Agriculture (AG) to Specific Plan (SP).</p> <p>Change of Zone No. 2016-288 proposes to change the zoning classification of 78.8 acres on the southwest corner of Briggs Road and Old Newport Road/Rockport Road (APNs 364-190-005 and -004) from Heavy Agriculture – 10 Acre Minimum (A-2-10) to Specific Plan (SP).</p> <p>Specific Plan No. 2016-286 proposes establishment of a Specific Plan on a total 78.8 acres for 305 single-family residential lots, 20.1 acres of open space and 20.3 acres of road and easements.</p> <p>Tentative Tract Map No. 2016-285 (TM37131) proposes the subdivision of 78.8 gross acres into a total of 305 single family residential lots, with 20.1 acres of trails, open space and recreation and 20.3 acres of roads, easements and other. The residential lots include the following:</p> <ul style="list-style-type: none"> • 60 lots with a minimum lot size of 5,000 sq. ft. • 79 lots with a minimum lot size of 6,000 sq. ft. • 42 lots with a minimum lot size of 6,500 sq. ft. • 27 lots with a minimum lot size of 7,000 sq. ft. • 96 courtyard type lots (all take access off single private drive - 8 packs) <p>The open space lots include lots for recreation (.3 acre private pool, and 1.2 acre park, .1 acre tot lot), two (2) lakes comprising 5.2 acres, .6 acre water quality basin, and 8.5 acres of landscaping throughout the development for paseos and additional perimeter landscaping.</p> <p>The development is proposed to be a gated community.</p> <p>The project site is located within the City of Menifee. The site is bounded as follows: Old Newport Road and Tierra Shores residential development to the north, Wilderness Lakes RV Resort to the south, Briggs Road, Ramona Egg Ranch and agricultural land to the east and The Lakes residential development to the west. The project site APNs are 364-190-005 and -004.</p>
121	CUP 2016-290 and PM 2016-291	Hwy. 74 and Trumble Hotel and Retail Center		Proposal for a 120 room hotel, sit down restaurant, fast food restaurant with drive through and a gas station with convenience store and car wash. No exhibits have been submitted, so no square footage is available. APN 329-020-009 and 022.
122	PP 2016-292	Kiewitt		Contractor's storage yard - outdoor storage of construction equipment. APN 331-150-036.
123	CUP 2016-299	Cook Automotive		Planning Application Conditional Use Permit No. 2016-299 proposes to establish an auto body repair shop on a 0.45 acre site improved with an existing parking lot and an 18,000 square foot building located at 29060 Goetz Road in the City of Menifee. The project site APN is 341-133-041.
124	PP 2017-005	Town Center Apartments	In progress	<p>Project Description:</p> <p>Planning Case No. 2017-005 (Plot Plan) proposes a 330 unit apartment complex on two adjacent sites with a combined area of 12.71 acres identified as Development Area 3 on the attached Site Plan and designated as Planning Area 2 -Mixed Use of the Town Center Specific Plan.</p> <p>For Site A, the project proposes the development of 220 apartments on 8.47 acres within twenty-one (21) three-story buildings and five (5) two-story buildings. A combined leasing office and recreation building with swimming pool is also proposed. A reduction in the required number of parking stalls is also being requested from the required total of 476 stalls to a proposed total of 454 parking stalls. Parking spaces are provided in the form of attached garages, detached car ports, and uncovered stalls. Access to the site is provided at one (1) location on Town Center Drive and one (1) location on Park Plaza Avenue.</p> <p>For Site B, the project proposes the development of 110 unit apartments on 4.24 acres within eleven (11) three-story buildings. A recreation building with swimming pool is also proposed. A reduction in the required number of parking stalls is also being requested from the required total of 235 stalls to a proposed total of 224 parking stalls. Parking spaces are provided in the form of attached garages, detached car ports, and uncovered stalls. Access to the site is provided at one (1) location on City Hall Drive and one (1) location on Park Plaza Avenue. A large recreation center shown immediately east of Site B is not part of this proposal.</p> <p>The project site is located within the City of Menifee. The site is located north of La Piedra Road, south of Newport Road and west of the Paloma Wash. The project site APNs are 360-080-088, 089. Comments on Parking and architectural design have been addressed by the applicant. Applicant in the process of updating plans for resubmittal and administrative approval. Building plans already submitted to building and safety.</p>

125	PP 2017-042	Gallery Senior Living	In progress	<p>Planning Case No. 2017-042 (Conditional Use Permit) proposes the construction and operation of a gated 118-unit assisted living facility on a 4.86 acre property located on the east side of Antelope Road and immediately north of Adergate Drive. The facility consist of one (1) three-story building with two (2) interior courtyards. Access into and out of the site is provided at one (1) location on Antelope Road. An emergency only exit gate is provided at the north end of the project site proving access onto Antelope Road. A total of 92 parking stalls are proposed for the facility. The project site APN is 340-010-002.</p>
	PP 2017-217	McCall Blvd. and Sun City Blvd Jack in the Box	In Progress	<p>Planning Application Plot Plan No. 2017-217 proposes the demolition of an existing commercial building and existing site improvements (parking and landscaping) to be replaced by a new 2,742 sq. ft. Jack in the Box restaurant with a drive-thru and related improvements (including 27 parking stalls) on a 0.58 acre parcel. The project site is located within the City of Menifee. The site is bounded as follows: McCall Boulevard to the south, North Golf course to the north, Sun City Boulevard to the east and the North Golf Course parking lot to the west. The project site APN is 335-171-013.</p>
	PM 2017-210	Castaneda Parcel Map	In Progress	<p>Project Description: Planning Application Tentative Parcel Map No. 2017-210 proposes a Schedule H subdivision of 5.07 gross acres into two (2) residential parcels with a minimum lot size of one (1) gross acre. Proposed Parcel 1 and Parcel 2 contain existing single family residences. The project site is located south of Scott Road, east of Helen Lane, west of Daily Road and North of Krimson Lane. APN: 384-010-015.</p>
	TR 2017-094 and PP 2017-095	Lennar Condos	In Progress	<p>Tentative Tract Map No. 2017-094 proposes a subdivision for condominium purposes of 20.3 acres into one (1) lot to accommodate the proposed condominium project consisting of 218 dwelling units.</p> <p>Plot Plan No. 2017-095 proposes the development of the site with 218 dwelling units, including architecture and floor plans, landscaping, parking, streets, and open space. 436 garage spaces and 106 uncovered guest spaces have been proposed.</p> <p>The project site is located within the City of Menifee. The site is located north of La Piedra Road, south of Newport Road, east of Great Oak Drive and west of Town Center Drive (previously Sherman Road). The project site APNs: 360-080-073, -074, and -075.</p>
	2017-101 CUP	AT&T 60 ft. Monopine	In Progress	<p>Conditional Use Permit No. 2017-101 proposes a new wireless communication facility that will be disguised as a 60' monopine. The facility will include 12-8' antennas, supporting equipment and a prefab shelter. The monopine as proposed is similar to the existing monopine at the subject site.</p> <p>The project site is located within the City of Menifee. The site is bounded as follows: vacant property to the north, existing commercial shopping center to the south, Murrieta Road to the east and existing single family residences to the west. The project site APN is 339-200-009.</p>
	2017-113 TUP	Temporary Materials Yard - SCE	In Progress	<p>Temporary Use Permit No. 2017-113 proposes a temporary lay down yard that will be used during the repair or construction of a public utility project. The applicant will be identifying the specific public utility project at a later date. The project site is located within the City of Menifee. The project site APN is 331-240-005.</p>
	2017-123 PP	Menifee MOB	In Progress	<p>Plot Plan No. 2017-123 proposes the construction and operation of a two-story 33,800 sq. ft. medical office building (16,900 sq. ft. on each floor). A total of 150 parking spaces are proposed, including seven electric vehicle charging parking stalls, four clean air vehicle stalls and twenty-nine compact parking stalls. Access is provided via Town Center Drive and a driveway to the north to connect to Newport Road.</p> <p>The project site is located within the City of Menifee. The site is located north of La Piedra Road, south of Newport Road, east of Town Center Drive (previously Sherman Road) and west of the Paloma Wash. The project site APNs: 360-080-081.</p>
	2017-137 PP	Fairfield Hotel	In Progress	<p>Plot Plan No. 2017-137 proposes the construction and operation of a four-story, 20,122 sq. ft., 99 room hotel. A total of 149 parking spaces are proposed. Access is provided via Town Center Drive and a driveway to the north to connect to Newport Road (not currently shown on site plan).</p> <p>The project site is located within the City of Menifee. The site is located north of La Piedra Road, south of Newport Road, east of Town Center Drive (previously Sherman Road) and west of the Paloma Wash. The project site APNs: 360-080-083.</p>

	2016-139 TR	Heritage Lakes SPA		In Progress	<p>family residential lots with a minimum lot size of 4,500 square feet, one (1) lot (Lot 81) containing a 1.1-acre recreation facility, two (2) lots (Lot 82 and 85) for the entry monuments, and two (2) open space lots (Lots 83 and 84) for perimeter slopes/landscaping. The subject site is located within the Heritage Lakes community and within the Menifee Valley Ranch Specific Plan (SP 301) Planning Area 41.</p> <p>The site is bounded as follows: Briggs Road to the east, McCall Boulevard to the south, Heritage Lakes Drive to the West and a residentially zoned property to the north (APN: 333-180-028). The project site is currently vacant, but has been recently mass graded.</p> <p>Specific Plan Amendment No. 2016-140 (Specific Plan No. 301, Amendment No. 3) proposes to modify Planning Area 41 in the Menifee Valley Ranch Specific Plan (SP 301) by dividing it into Planning Areas 41A (13.9 acres) and 41B (1.1 acres). The existing land use designation of Planning Area 41 is "Commercial". The proposed land use designation of Planning Area 41A is "Medium High Density Residential" (4,500 sq. ft. min) and the proposed designation of Planning Area 41B is "Recreation Center".</p>
	2017-173 CUP, 2017-174 TR and 2017-175 PP	Menifee Meadows		In Progress	<p>acres. The project includes a plot plan and conditional use permit due to the zoning of the property (CUP). The medical office uses are proposed on the northern parcel of the project site and are allowed with a plot plan application. The assisted living, memory care and a medical office building are proposed on the southern parcel of the project site and are allowed with a conditional use permit. A map has also been proposed. More detailed descriptions are provided below, but the information above was meant to clarify the application types involved.</p> <p>Conditional Use Permit No. 2017-173 proposes the development of a two-story 158,247 sq. ft. assisted living facility (79,960 1st floor and 78,287 2nd floor), a one-story 25,711 sq. ft. memory care facility and a two-story 21,722 sq. ft. office building (10,861 sq. ft. per story) on 10.02 gross acres. The total building square footage is 205,680. 281 parking spaces have been proposed.</p> <p>The assisted living facility contains 142 rooms and the memory care facility includes 36 rooms. The plans indicate that the units are considered efficiency units, including studios and open-one bedrooms which are a minimum of 400 sq. ft., one bedroom units are a minimum of 550 sq. ft. an 2 bedroom units are a minimum of 700 sq. ft. The memory care includes a mix of 26 private rooms and 10 semi-private rooms.</p> <p>The assisted living facility includes a kitchen, dining area, bar and lounge, café, living rooms, activity room, art room, laundry rooms, fitness rooms, salon, theater and visiting doctor's rooms.</p> <p>Plot Plan No. 2017-175 proposes the development of six (6) medical office buildings (3 1-story and 3 2-story) ranging in size from 10,176 sq. ft. to 21,722 sq. ft. on 10.02 gross acres. The total building square footage is 101,018. 464 parking spaces have been proposed.</p> <p>Tentative Tract Map No. 2017-174 (TR 37345) proposes to create a condominium map for the medical office buildings in Lot 1 (northern parcel). The map also proposes to re-subdivide the underlying parcel map (PM12802 – these parcels were Parcels 3 & 4 of that map) and create Lot 1 and 2 under TR 37345.</p> <p>The project site is located within the City of Menifee. The site is located south of Holland Road, east of Sherman Road and west of Haun Road. The project site APNs are 360-230-001 and -004.</p>
	2017-194 CUP	Cold Springs		In Progress	<p>Conditional Use Permit No. 2017-194 (Cold Springs) proposes the construction and operation of an unmanned telecommunications facility consisting of a 70-foot-tall mono tower (stealthed as a "mono-palm"), with a 400 square foot ground equipment enclosure that consist of three (3) equipment cabinets and a backup generator located at ground level within the 20' x 20' lease area enclosed by a proposed chain-link fence. The facility will be constructed on the grounds of an existing single-family residence located at 27860 Goetz Road (APN 335-040-011).</p> <p>The cell tower would include the installation of two (2) sectors of four (4) antennas per sector (eight [8] antennas total) at a height of 70'-0" (vertical center of antennas above ground level), two (2) remote radio units (RRUs) per sector (eight [8] RRUs total). The telecommunications facility would be accessed via an existing driveway which connects to Goetz Road and is accessed via an easement across an adjacent lot. The proposed lease area for the cellular facility is currently undeveloped.</p>

	2017-202 GPA, 2017-203 CZ, 2017-204 PM, 2017-205 CUP, 2017-206 PP, 2017-207 EA	Hitching Post Plaza		<p>Plot Plan (PP) No. 2017-206 proposes a 27,000(+/-) square foot shopping center located on 3.88 acres. The proposed shopping center consist of three stand-alone retail commercial buildings and one gas station with a gas-island canopy and an attached carwash. The applicant is proposing two phases of the project; Phase I is consists of three buildings:</p> <ul style="list-style-type: none"> • Building A – a 14,143 square foot building for single or multi-tenant use; • Building B – a 3,828 square foot single-tenant stand-alone retail building; and • Building C – a 3,955 square foot single-tenant stand-alone retail building; and <p>Phase II consist if a 4,679 square gas station convenience store with an attached carwash and a detached gas-island canopy. The project site is an underdeveloped rural property that once existed as a small ranch and includes an existing vacant single-family dwelling and associated accessory structures. The project site is currently listed as 33111 Leon Road or approximately at the southwest corner of Scott Road and Leon Road (APN: 472-020-016).</p> <p>Conditional Use Permit (CUP) 2017-205 proposes allow for the sale of beer and wine for off-site consumption for the gas station convenience store located in proposed Phase II of the project.</p> <p>Parcel Map (PM) No. 2017-204 proposes Tentative Parcel Map 37353 for the purpose of right-of-way dedication for three existing roads/streets that are adjacent to the property. The existing site is a 3.88 single-lot parcel with frontage onto Scott Road (to the east), Leon Road (to the south) and Perrine Street (to the west). The parcel only shares one boundary with an adjacent residential lot. The parcel map is necessary because the development of the property into a retail shopping center will require the dedication of street rights-of-way. No additional lots will be created by the parcel map, which will result in a net site of 3.68 acres.</p> <p>Change of Zone (CZ) No. 2017-203 proposes a change to the City’s official zoning map from the designation of Rural Residential (RR) 2 ½ to a designation of General Commercial (C-1/C-P) for the purpose of allowing the proposed shopping center. The current zone designation allows for residential uses on lots with a size of no less than 2.5 acres. Commercial uses within the current zone are limited to season fruit sales and minor agricultural uses. The proposed change to the zone designation would allow for the retail shopping center and proposed gas station.</p> <p>General Plan Amendment No. 2016-202 proposes an amendment to the General Plan changing the use of the property from Rural Residential (one dwelling unit per 2 acres) to General Commercial. The proposed General Plan amendment is necessary as part of the requested change to the official zoning map.</p>
	2017-208	Fortunato Tower	In Progress	<p>Conditional Use Permit No. 2017-208 (Fortunato) proposes the construction and operation of an unmanned telecommunications facility consisting of a 75-foot-tall mono tower (stealthed as a “mono-pine”), on a 5.3 acre vacant lot within a 1,899 square foot lease area that contains a 300 square foot (approximately) ground equipment enclosure surrounded by a 6-foot tall split-face CMU wall that surrounds the proposed tower and three (3) equipment cabinets and a backup generator. Also within the lease area is an existing water tank (to remain), electrical meter and pedestal, proposed landscaping, and existing T-Mobile equipment. The property also contains an existing temporary wireless facility that will be moved to another location within the lease area, and removed upon completion and operation of the proposed permanent wireless facility. The project site is located next to an existing single-family residence located on an adjacent lot at 30705 Scott Road (APN 472-020-013).</p> <p>The proposed cell tower includes the installation of three (3) sectors with two (2) antenna per sector (six [6] antennas total) at a height of 75’-0” (vertical center of antennas above ground level). The proposed telecommunications facility is accessed via an existing driveway (marked “Warm Springs Way”) which extends from Scott Road and is accessed via an easement across an adjacent lot that fronts onto Scott Road. The proposed lease area for the cellular facility is currently partially developed and contains an existing water tower and a temporary unmanned wireless facility.</p>

					<p>Plot Plan (PP) No. 2017-237 proposes a 9,100 square foot “Dollar General” retail commercial building with 38 parking spaces on 1.27 acres. The proposed use is a stand-alone retail commercial building located on a currently vacant parcel of land at approximately the southeast intersection of Goetz Road and Juanita Drive, and on the southwest corner of Juanita Drive and (APN: 351-074-001 & 351-074-002).</p> <p>Parcel Map (PM) No. 2017-238 proposes a Parcel Map to adjust the existing two-lot parcel from its current horizontal split (north to south), into a vertical split (east to west). The project site is a vacant rural property consisting of two existing lots consisting of 2.47 acres with frontage onto Goetz Road (to the west), Juanita Drive (to the north) and Conejo Drive (to the west). The parcel only shares one boundary with an adjacent vacant lot. The parcel map is necessary because the development of the property into a retail development will require the dedication of street rights-of-way. No additional lots will be created by the parcel map, which will result in two parcels of 1.27 and 1.20 acres each. The proposed Dollar General will be located on Parcel 1, and Parcel 2 is for a future commercial use.</p> <p>General Plan Amendment (GPA) No. 2017-239 proposes an amendment to the General Plan changing the designation of the current northeast corner (APN 351-074-002) from the Residential 2.1-5 General Plan Designation to the Commercial-Retail (CR) General Plan Designation. Although both parcel are currently zoned C1, the general plan designation splits the property. The proposed GPA will resolve this issue.</p>
	2017-237	Dollar General		In Progress	



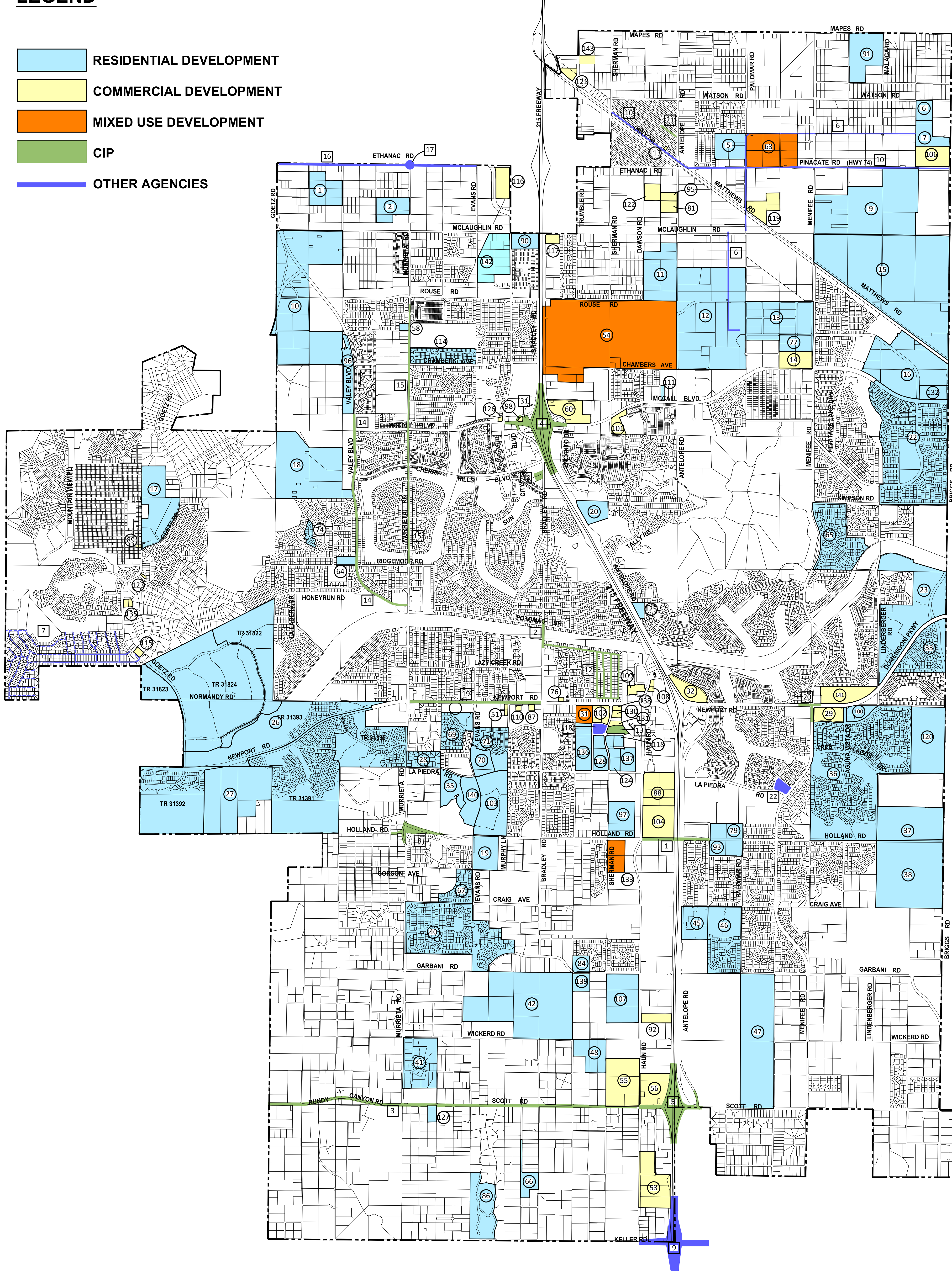
CITY OF MENIFEE

LAND DEVELOPMENT / CIP PROJECTS

MAY 2018

LEGEND

- RESIDENTIAL DEVELOPMENT
- COMMERCIAL DEVELOPMENT
- MIXED USE DEVELOPMENT
- CIP
- OTHER AGENCIES



Map ID #	Project Reference	Name	Approved By	Status
1	TTM 34037	Developer: Capstone	County	C/E
2	TTM 31856	Developer: Sunwood	County	U/F
5	TTM 34118	MR-27 LLC (Rancon)	County	U/E
6	TTM 33738	MR 56 LLC (Rancon)	County	C/E
7	TTM 34600	MR-27 LLC (Rancon)	County	C/E
9	TTM 31811	Heritage Lakes (Brookfield)	County	U/E
10	TTM 36657 / PM 36658	Cimarron Ridge (Van Daele)	City	U/F
11	TTM 29777	Talavera (True Life Companies)	County	
12	TTM 29835	Underwood (CV Communities)	County	C/E
13	TTM 31098	2014-204 MC (Strata Equity)	County	C/F
14	CUP 3549/2017-089	Menifee Square (Rancon)	City	U/E
15	TTM 31812	Developer: Brookfield	County	U/E
16	TTM 34406	Heritage Lakes (Standard Pacific)	County	C/F
17	TR 32794	Quail Hill (Respeke)	City	
18	TTM 31456	Stonegate (Gordon Youde)	County	U/E
19	2019-108	Rowland (Rowland Development)	City	C/E
20	PP 19469	Kensington Apartments (Bob Love)	County	
22	TR 34180/TR34406	Heritage Lake (Standard Pacific)	County	
23	TR 32100/32102	Developer: Rancon	County	U/E
26	SP 209	Audie Murphy Ranch (Brookfield)	County	C/F
27	TR 32025	Canyon Cove (Brookfield)	County	
28	TR 30812	Boulder Creek (JCA Homes)	County	
29	2014-091 / PM 36728	Stater Brothers	City	C/F
31	SP 2009-069	Town Center-no projects in process	City	C/E
32	PP2014-113, CUP2016-289	Menifee Lakes Plaza (Menifee Lakes LLP)	City	
33	TTM 32101	Developer: Rancon	County	U/F
35	TR 28786	Pacific Communities	County	
36	TR 30422	The Lakes (Pulte and Lennar)	County/City	C/F
37	TTM 31229	Menifee Nautical's Cove (Rancon)	City	U/E
38	TTM 32277	Menifee Heights (CV Communities)	County	U/F
40	TR 30142	KB Hidden Hills (KB Homes)	County	C/F
41	TR 30664	Gallery States (Pacific Communities)	County	
42	TTM 31194	Golden Meadows (Richland Comm.)	County	
45	TTM 32628	Christensen Ranch (Breson Comm.)	County	U/E
46	TTM 28206	Terra Bella/Mosaic (DR Horton, Watt Comm.)	County	C/F
47	TTM 33732	Cantelena (Richland Communities)	County	C/E
48	TR 33511	Granite (Granite Investments)	County	
51	CUP 2015-157	Cal Cruz Express	In progress	C/E
53	PDS-CP	Commerce Pointe (PacTen)	City	U/F
54	2017-189	Fleming Ranch (Fleming)	In progress	U/E
55	2017-287	The Junction (PacTen)	City	U/E
56	PP 2009-121	Walmart	City	U/F
58	PP 2014-237	Thornton Terraces (Sudweeks Development)	City	U/F
60	2012-120	Walmart	In progress	C/E
63	2010-090	Menifee North SP (Vonham Inc.)	In progress	U/E
64	2016-038 TR	Ridgemoore Investments LLC	City	U/E
65	TM 31582	El Dorado (Lennar)	County	C/E
66	PM 36135	Sweetwater Canyon Rd (Mr. Cook)	County	
67	TM 30554	Alasia - Meritage Homes	County	
69	TM 28788	Pacific Communities	County	C/F
70	TM 28789	Pacific Communities	County	C/F
71	TM 28790	Pacific Communities	County	C/F
74	TR 28859-1		County	
76	CUP 2013-157	American Tire Depot	In progress	C/E
77	PP 2014-189	(North Bayport Industrial Park II, LTD)	In progress	U/E
79	PP 2015-164	Strata Equity - Apartments	City	
81	EOT 2015-012	Motte Town Center	City	
84	TR 2014-073	DCI Investments	City	
86	PAR2015-053 / TR 36684	(Bundy Canyon Development Co)	In progress	U/F
87	PP 2015-099	Shops at Newport (Newport Road LP)	City	C/E
88	PP 2015-115	Menifee Village (Pechanga Dev. Corp.)	In progress	U/E
89	PP 2015-130	Si Rancho Market	In progress	
90	PAR 2015-250	McLaughlin Village	In progress	U/E
91	TR 31536		City	U/F
92	PP 2015-156	All Star Super Storage	In progress	
93	TTM 2015-165	Strata Equity	In progress	
95	2011-003	Trumble Offices and warehouse	In progress	
96	2015-211	Valley Blvd. Tract Map	City	C/E
97	2015-239	Single family homes - 155 lots		
98	2016-110 CUP	Fast food	In progress	
100	2016-061 GPA, -062 SPA	Pulte Homes	In progress	C/E
101	PP 2016-124	McCall & Sherman Retail Center	In progress	C/F
102	CUP 2016-130	Krikorian Theatre	In progress	C/E
103	MC 2016-107	Pacific Communities	County	C/E
104	PM 2016-185	JPN Corporation Inc.	City	C/E
106	PP 22628 / 2017-225	Harvest Glen Marketplace		
107	2016-246 PA	Mill Creek		
108	2016-135 PP	Haun Professional Building		
109	2017-021	Newport Towne Square Phase II		
110	2016-164 PP	Popeyes		
111	2016-183 CUP	Sun City Senior Care		
113	2016-197 CUP	4th St. Auto Repair		
114	2016-213 PP	TR30507 "The Retreat at Holiday"	In progress	
115	2017-055	Goetz Road Gas and Retail	In progress	
116	2017-060	Ethanac/Barnett Gas and Retail	In progress	
117	2016-233 CUP	RV SupeCenter	In progress	
118	2016-239 PP	Town Ctr. Private Recreation Center	In progress	
119	2016-263 CUP	Forterra	In progress	
120	2016-286 SP, -287 GPA	Rockport Ranch	In progress	
121	2016-290 CUP, 2016-291 PM	Hwy 74 and Trumble. Hotel & Retail	In progress	
122	2016-291 CUP	Kiewitt	In progress	
123	2016-299 CUP	Cook Automotive	In progress	
124	2017-005 PP	Town Center Apartments	In progress	
125	2017-042 PP	Gallery Senior Living	In progress	
126	m	Jack In The Box - Sun City	In progress	
127	2017-210 PM	Castaneda Parcel Map	In progress	
128	2017-094TR, 2017-095PP	Lennar Condos	In progress	
130	2017-123 PP	Menifee Medical Office Building	In progress	
131	2017-137 PP	Fairfield Hotel	In progress	
132	2016-139 TR	Heritage Lakes SPA	In progress	
133	2017-173 CUP, 174 TR	Menifee Meadows	In progress	
134	2017-202 through 207	Hitching Post Plaza	In progress	
135	2017-237	Dollar General	In progress	
136	DA 1	151 lots		
137	DA 4	125 lots		
138	PP 2018-023	Retail - 14,000 sf		
139	2017-386 TR	29 lots		
140	TR 28790			
141	PM 2018-118	Newport and Menifee Commercial Subd.	City	
142	TR 37400/2018-065	Residential Development - 174 lots	City	
143	2018-093	SoCal Gas Refueling Station	City	

CIP				
Map ID #	Project #	Project Title	Agency	Project Status
1	CIP13-03	Holland Overpass	City	Final Design
2	CIP13-04	Bradley Bridge Design and Construction	City	Final Design
3	CIP13-14	Bundy / Scott Rd Widening	County	EIR
4	CIP14-01	I-215/McCall Interchange	City	Prelim. Design
5	CIP14-03	I-215/Scott Rd Interchange	City	Construction
6	LINE A	Storm Drain Channel	RCFCD	Construction
7	Quail Valley Sewer	Area 9 Phase 1 (continuous line) Area 9 Phase 2 (dashed line)	EMWD	Construction study
8	CIP	Holland Rd. Realignment	City	Study
9	CIP	Keller Road Interchange	Murrieta	Preliminary
10		Raised safety Medians	Caltrans	Design
11	CIP 16-08	Citywide Traffic Signal Interconnect	City	Design
12	CIP 18-01	Rustler's Ranch Phase 1	City	Final Design
13		Menifee City Town Hall	City	
14		Valley Boulevard Missing Link and Widening	City	
15		Murrieta Rd AC Overlay (Newport to Rouse)	City	
16-17		Ethanac Rd Widening / Murrieta-Ethanac TS	Perris	Construction
18		Court House	State	
19		Newport Safety Median / Widening	City	
20		Newport/Menifee Improvements	City	Final Design
21		Romoland Sidewalk project	City	
22		Library Building	County	

U/E = Upcoming for Entitlement
 C/E = Currently in-house for Entitlement
 U/F = Upcoming for Final Engineering and/or Project Entitlement Approved
 C/F = Currently in-house for Final Engineering

APPENDIX C
INTERSECTION COUNTS

County of Riverside
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

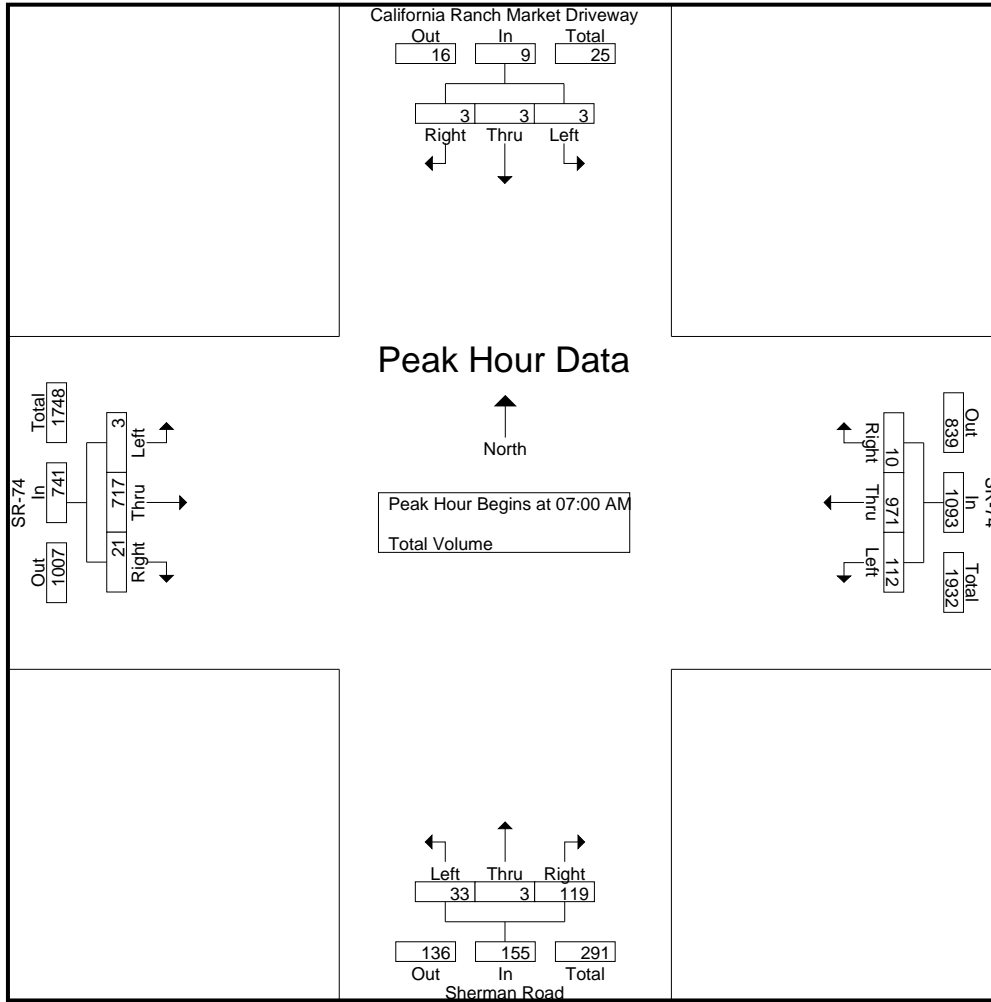
File Name : 01_CRV_Sherman_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	California Ranch Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	0	1	18	199	1	218	8	2	33	43	1	206	7	214	476
07:15 AM	0	2	0	2	30	255	2	287	6	0	24	30	0	205	3	208	527
07:30 AM	2	0	1	3	27	234	2	263	10	0	30	40	2	155	4	161	467
07:45 AM	0	1	2	3	37	283	5	325	9	1	32	42	0	151	7	158	528
Total	3	3	3	9	112	971	10	1093	33	3	119	155	3	717	21	741	1998
08:00 AM	1	1	4	6	22	255	4	281	16	0	15	31	0	133	8	141	459
08:15 AM	1	2	3	6	12	179	5	196	16	1	13	30	3	130	3	136	368
08:30 AM	2	1	1	4	16	205	1	222	5	1	21	27	2	141	4	147	400
08:45 AM	0	0	5	5	26	162	2	190	14	1	7	22	7	129	6	142	359
Total	4	4	13	21	76	801	12	889	51	3	56	110	12	533	21	566	1586
Grand Total	7	7	16	30	188	1772	22	1982	84	6	175	265	15	1250	42	1307	3584
Apprch %	23.3	23.3	53.3		9.5	89.4	1.1		31.7	2.3	66		1.1	95.6	3.2		
Total %	0.2	0.2	0.4	0.8	5.2	49.4	0.6	55.3	2.3	0.2	4.9	7.4	0.4	34.9	1.2	36.5	

Start Time	California Ranch Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	0	1	18	199	1	218	8	2	33	43	1	206	7	214	476
07:15 AM	0	2	0	2	30	255	2	287	6	0	24	30	0	205	3	208	527
07:30 AM	2	0	1	3	27	234	2	263	10	0	30	40	2	155	4	161	467
07:45 AM	0	1	2	3	37	283	5	325	9	1	32	42	0	151	7	158	528
Total Volume	3	3	3	9	112	971	10	1093	33	3	119	155	3	717	21	741	1998
% App. Total	33.3	33.3	33.3		10.2	88.8	0.9		21.3	1.9	76.8		0.4	96.8	2.8		
PHF	.375	.375	.375	.750	.757	.858	.500	.841	.825	.375	.902	.901	.375	.870	.750	.866	.946

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



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

	08:00 AM				07:15 AM				07:00 AM				07:00 AM			
+0 mins.	1	1	4	6	30	255	2	287	8	2	33	43	1	206	7	214
+15 mins.	1	2	3	6	27	234	2	263	6	0	24	30	0	205	3	208
+30 mins.	2	1	1	4	37	283	5	325	10	0	30	40	2	155	4	161
+45 mins.	0	0	5	5	22	255	4	281	9	1	32	42	0	151	7	158
Total Volume	4	4	13	21	116	1027	13	1156	33	3	119	155	3	717	21	741
% App. Total	19	19	61.9		10	88.8	1.1		21.3	1.9	76.8		0.4	96.8	2.8	
PHF	.500	.500	.650	.875	.784	.907	.650	.889	.825	.375	.902	.901	.375	.870	.750	.866

County of Riverside
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 01_CRV_Sherman_SR-74 PM
 Site Code : 06718684
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Groups Printed- Total Volume

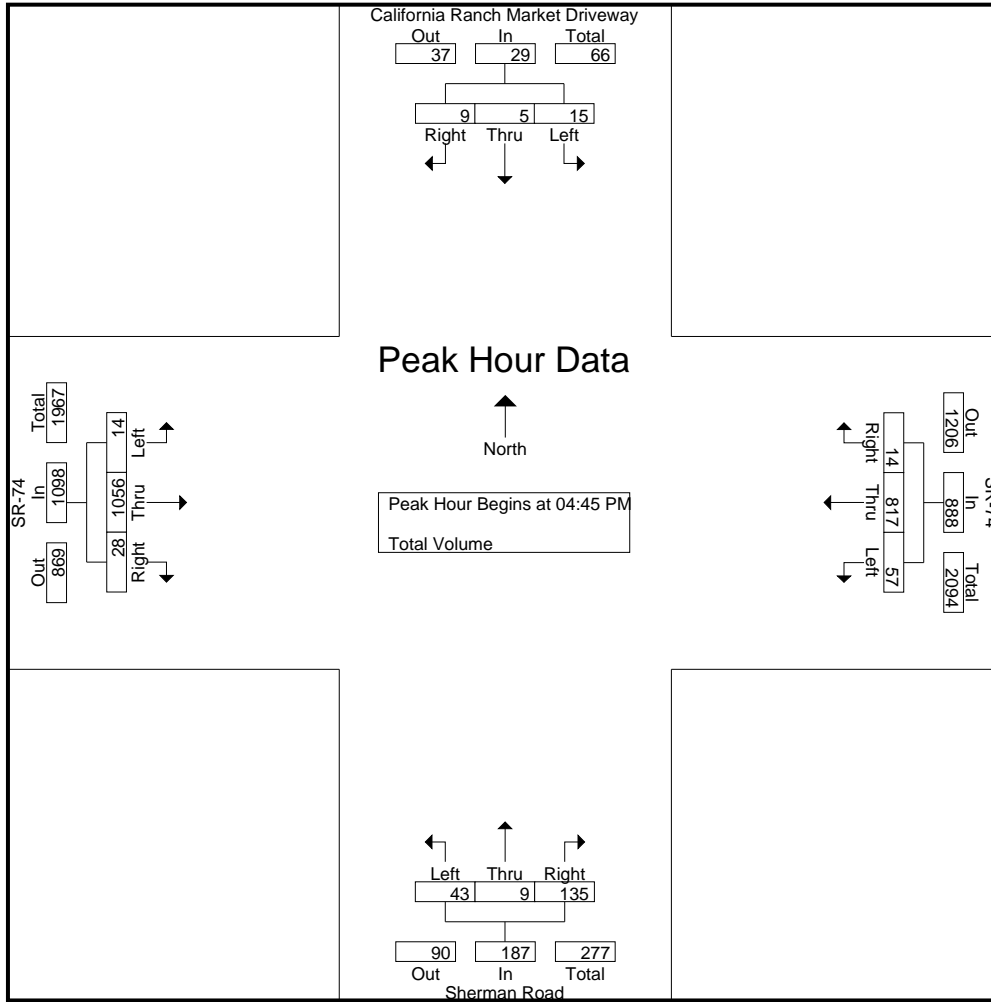
Start Time	California Ranch Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	0	0	3	19	183	1	203	11	4	42	57	7	246	10	263	526
04:15 PM	3	2	2	7	23	182	3	208	8	2	31	41	4	250	11	265	521
04:30 PM	5	2	3	10	28	211	3	242	16	6	30	52	4	261	3	268	572
04:45 PM	1	1	2	4	12	216	5	233	11	2	48	61	1	258	8	267	565
Total	12	5	7	24	82	792	12	886	46	14	151	211	16	1015	32	1063	2184
05:00 PM	6	1	4	11	14	182	2	198	7	5	23	35	5	259	6	270	514
05:15 PM	1	0	1	2	17	202	5	224	11	1	31	43	2	254	7	263	532
05:30 PM	7	3	2	12	14	217	2	233	14	1	33	48	6	285	7	298	591
05:45 PM	5	2	1	8	27	162	1	190	7	3	24	34	8	229	7	244	476
Total	19	6	8	33	72	763	10	845	39	10	111	160	21	1027	27	1075	2113
Grand Total	31	11	15	57	154	1555	22	1731	85	24	262	371	37	2042	59	2138	4297
Apprch %	54.4	19.3	26.3		8.9	89.8	1.3		22.9	6.5	70.6		1.7	95.5	2.8		
Total %	0.7	0.3	0.3	1.3	3.6	36.2	0.5	40.3	2	0.6	6.1	8.6	0.9	47.5	1.4	49.8	

Start Time	California Ranch Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	1	1	2	4	12	216	5	233	11	2	48	61	1	258	8	267	565
05:00 PM	6	1	4	11	14	182	2	198	7	5	23	35	5	259	6	270	514
05:15 PM	1	0	1	2	17	202	5	224	11	1	31	43	2	254	7	263	532
05:30 PM	7	3	2	12	14	217	2	233	14	1	33	48	6	285	7	298	591
Total Volume	15	5	9	29	57	817	14	888	43	9	135	187	14	1056	28	1098	2202
% App. Total	51.7	17.2	31		6.4	92	1.6		23	4.8	72.2		1.3	96.2	2.6		
PHF	.536	.417	.563	.604	.838	.941	.700	.953	.768	.450	.703	.766	.583	.926	.875	.921	.931

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

County of Riverside
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 01_CRV_Sherman_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	05:00 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	6	1	4	11	28	211	3	242	11	4	42	57	1	258	8	267
+15 mins.	1	0	1	2	12	216	5	233	8	2	31	41	5	259	6	270
+30 mins.	7	3	2	12	14	182	2	198	16	6	30	52	2	254	7	263
+45 mins.	5	2	1	8	17	202	5	224	11	2	48	61	6	285	7	298
Total Volume	19	6	8	33	71	811	15	897	46	14	151	211	14	1056	28	1098
% App. Total	57.6	18.2	24.2		7.9	90.4	1.7		21.8	6.6	71.6		1.3	96.2	2.6	
PHF	.679	.500	.500	.688	.634	.939	.750	.927	.719	.583	.786	.865	.583	.926	.875	.921

County of Riverside
 N/S: Antelope Road
 E/W: SR-74
 Weather: Clear

File Name : 02_CRV_Antelope_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

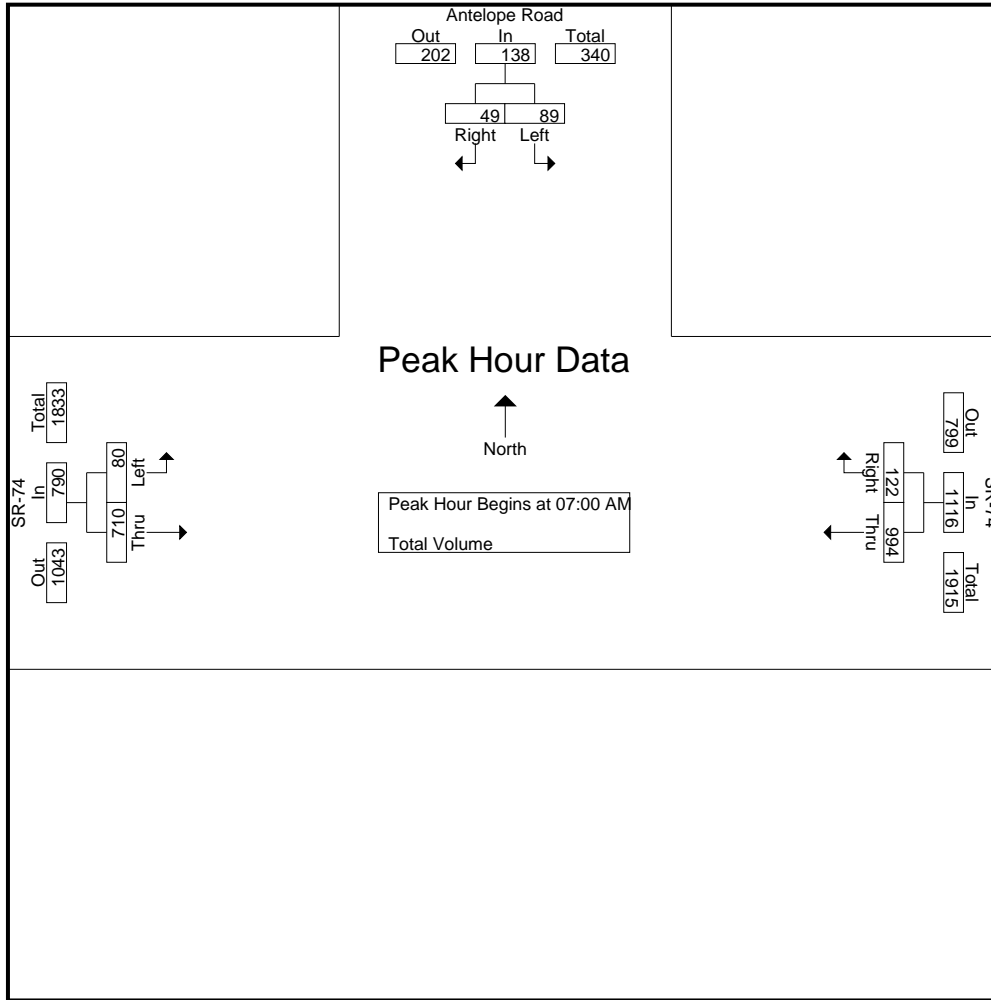
Groups Printed- Total Volume

Start Time	Antelope Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	29	2	31	210	11	221	16	216	232	484
07:15 AM	18	6	24	263	32	295	15	188	203	522
07:30 AM	16	15	31	273	52	325	29	160	189	545
07:45 AM	26	26	52	248	27	275	20	146	166	493
Total	89	49	138	994	122	1116	80	710	790	2044
08:00 AM	16	7	23	275	12	287	9	132	141	451
08:15 AM	11	4	15	177	9	186	4	128	132	333
08:30 AM	3	5	8	208	9	217	2	146	148	373
08:45 AM	9	4	13	180	2	182	2	125	127	322
Total	39	20	59	840	32	872	17	531	548	1479
Grand Total	128	69	197	1834	154	1988	97	1241	1338	3523
Apprch %	65	35		92.3	7.7		7.2	92.8		
Total %	3.6	2	5.6	52.1	4.4	56.4	2.8	35.2	38	

Start Time	Antelope Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	29	2	31	210	11	221	16	216	232	484
07:15 AM	18	6	24	263	32	295	15	188	203	522
07:30 AM	16	15	31	273	52	325	29	160	189	545
07:45 AM	26	26	52	248	27	275	20	146	166	493
Total Volume	89	49	138	994	122	1116	80	710	790	2044
% App. Total	64.5	35.5		89.1	10.9		10.1	89.9		
PHF	.767	.471	.663	.910	.587	.858	.690	.822	.851	.938

County of Riverside
 N/S: Antelope Road
 E/W: SR-74
 Weather: Clear

File Name : 02_CRV_Antelope_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM			07:15 AM			07:00 AM		
+0 mins.	29	2	31	263	32	295	16	216	232
+15 mins.	18	6	24	273	52	325	15	188	203
+30 mins.	16	15	31	248	27	275	29	160	189
+45 mins.	26	26	52	275	12	287	20	146	166
Total Volume	89	49	138	1059	123	1182	80	710	790
% App. Total	64.5	35.5		89.6	10.4		10.1	89.9	
PHF	.767	.471	.663	.963	.591	.909	.690	.822	.851

County of Riverside
 N/S: Antelope Road
 E/W: SR-74
 Weather: Clear

File Name : 02_CRV_Antelope_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

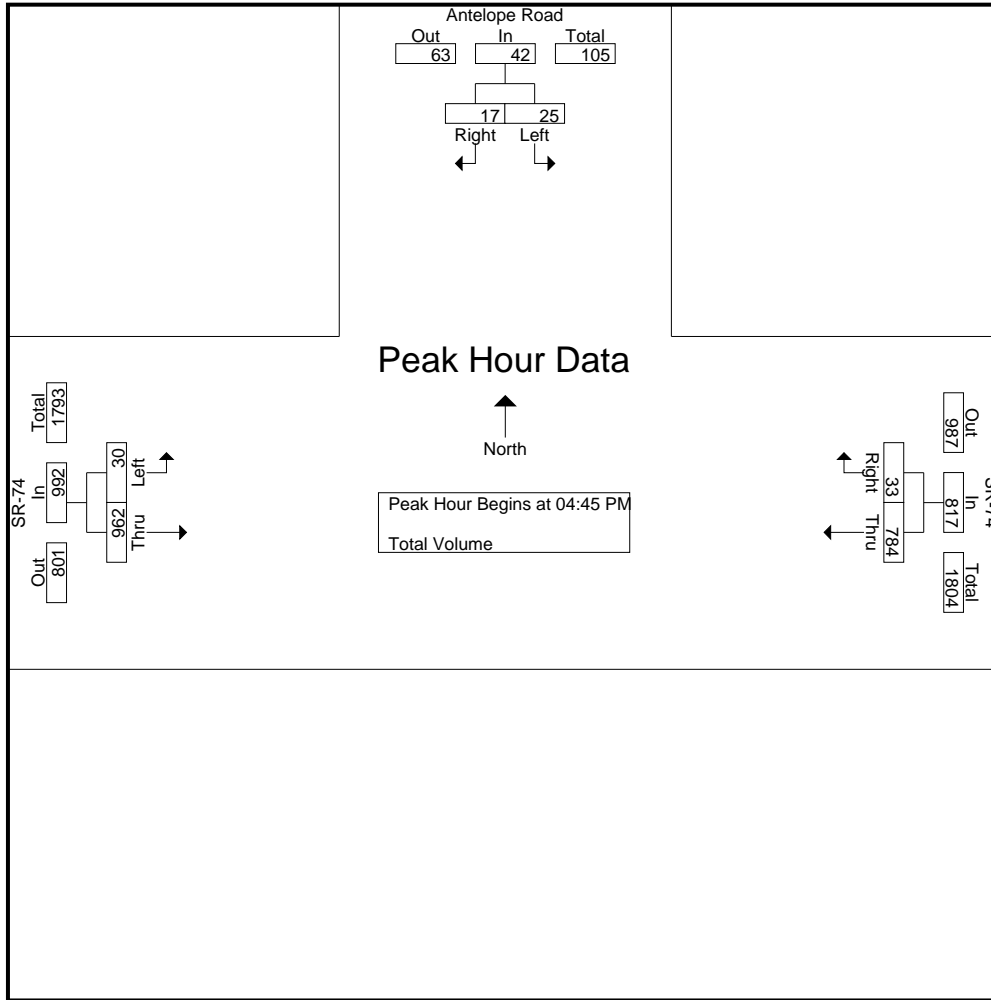
Groups Printed- Total Volume

Start Time	Antelope Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	6	5	11	171	3	174	3	229	232	417
04:15 PM	9	5	14	204	3	207	4	244	248	469
04:30 PM	4	5	9	192	3	195	3	221	224	428
04:45 PM	6	3	9	196	16	212	7	237	244	465
Total	25	18	43	763	25	788	17	931	948	1779
05:00 PM	7	4	11	179	9	188	10	234	244	443
05:15 PM	4	6	10	202	4	206	5	230	235	451
05:30 PM	8	4	12	207	4	211	8	261	269	492
05:45 PM	9	10	19	167	3	170	15	207	222	411
Total	28	24	52	755	20	775	38	932	970	1797
Grand Total	53	42	95	1518	45	1563	55	1863	1918	3576
Apprch %	55.8	44.2		97.1	2.9		2.9	97.1		
Total %	1.5	1.2	2.7	42.4	1.3	43.7	1.5	52.1	53.6	

Start Time	Antelope Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	6	3	9	196	16	212	7	237	244	465
05:00 PM	7	4	11	179	9	188	10	234	244	443
05:15 PM	4	6	10	202	4	206	5	230	235	451
05:30 PM	8	4	12	207	4	211	8	261	269	492
Total Volume	25	17	42	784	33	817	30	962	992	1851
% App. Total	59.5	40.5		96	4		3	97		
PHF	.781	.708	.875	.947	.516	.963	.750	.921	.922	.941

County of Riverside
 N/S: Antelope Road
 E/W: SR-74
 Weather: Clear

File Name : 02_CRV_Antelope_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	05:00 PM			04:45 PM			04:45 PM		
+0 mins.	7	4	11	196	16	212	7	237	244
+15 mins.	4	6	10	179	9	188	10	234	244
+30 mins.	8	4	12	202	4	206	5	230	235
+45 mins.	9	10	19	207	4	211	8	261	269
Total Volume	28	24	52	784	33	817	30	962	992
% App. Total	53.8	46.2		96	4		3	97	
PHF	.778	.600	.684	.947	.516	.963	.750	.921	.922

County of Riverside
 N/S: Palomar Road
 E/W: SR-74
 Weather: Clear

File Name : 03_CRV_Palomar_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Palomar Road Southbound				SR-74 Westbound				Palomar Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	15	20	4	39	25	211	4	240	19	8	48	75	3	234	10	247	601
07:15 AM	17	17	8	42	30	246	5	281	23	15	70	108	4	217	5	226	657
07:30 AM	16	26	13	55	28	274	13	315	31	16	36	83	2	163	7	172	625
07:45 AM	6	19	7	32	38	275	7	320	15	9	17	41	3	150	11	164	557
Total	54	82	32	168	121	1006	29	1156	88	48	171	307	12	764	33	809	2440
08:00 AM	6	11	12	29	21	213	4	238	15	10	19	44	5	126	7	138	449
08:15 AM	0	8	5	13	25	157	14	196	11	10	23	44	4	114	8	126	379
08:30 AM	4	7	8	19	16	168	4	188	11	5	27	43	3	150	5	158	408
08:45 AM	2	6	6	14	18	161	0	179	6	8	18	32	3	110	8	121	346
Total	12	32	31	75	80	699	22	801	43	33	87	163	15	500	28	543	1582
Grand Total	66	114	63	243	201	1705	51	1957	131	81	258	470	27	1264	61	1352	4022
Apprch %	27.2	46.9	25.9		10.3	87.1	2.6		27.9	17.2	54.9		2	93.5	4.5		
Total %	1.6	2.8	1.6	6	5	42.4	1.3	48.7	3.3	2	6.4	11.7	0.7	31.4	1.5	33.6	

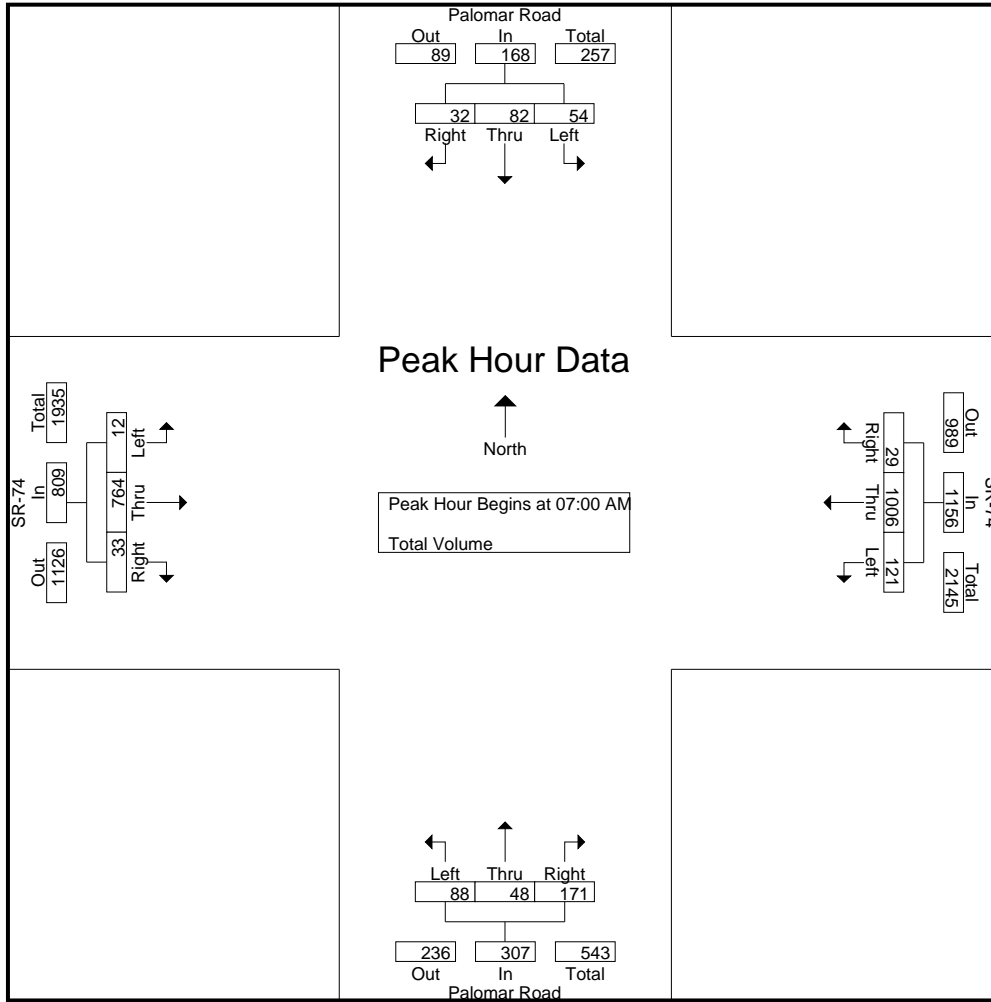
Start Time	Palomar Road Southbound				SR-74 Westbound				Palomar Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	15	20	4	39	25	211	4	240	19	8	48	75	3	234	10	247	601
07:15 AM	17	17	8	42	30	246	5	281	23	15	70	108	4	217	5	226	657
07:30 AM	16	26	13	55	28	274	13	315	31	16	36	83	2	163	7	172	625
07:45 AM	6	19	7	32	38	275	7	320	15	9	17	41	3	150	11	164	557
Total Volume	54	82	32	168	121	1006	29	1156	88	48	171	307	12	764	33	809	2440
% App. Total	32.1	48.8	19		10.5	87	2.5		28.7	15.6	55.7		1.5	94.4	4.1		
PHF	.794	.788	.615	.764	.796	.915	.558	.903	.710	.750	.611	.711	.750	.816	.750	.819	.928

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM

County of Riverside
 N/S: Palomar Road
 E/W: SR-74
 Weather: Clear

File Name : 03_CRV_Palomar_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	15	20	4	39	25	211	4	240	19	8	48	75	3	234	10	247
+15 mins.	17	17	8	42	30	246	5	281	23	15	70	108	4	217	5	226
+30 mins.	16	26	13	55	28	274	13	315	31	16	36	83	2	163	7	172
+45 mins.	6	19	7	32	38	275	7	320	15	9	17	41	3	150	11	164
Total Volume	54	82	32	168	121	1006	29	1156	88	48	171	307	12	764	33	809
% App. Total	32.1	48.8	19		10.5	87	2.5		28.7	15.6	55.7		1.5	94.4	4.1	
PHF	.794	.788	.615	.764	.796	.915	.558	.903	.710	.750	.611	.711	.750	.816	.750	.819

County of Riverside
 N/S: Palomar Road
 E/W: SR-74
 Weather: Clear

File Name : 03_CRV_Palomar_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

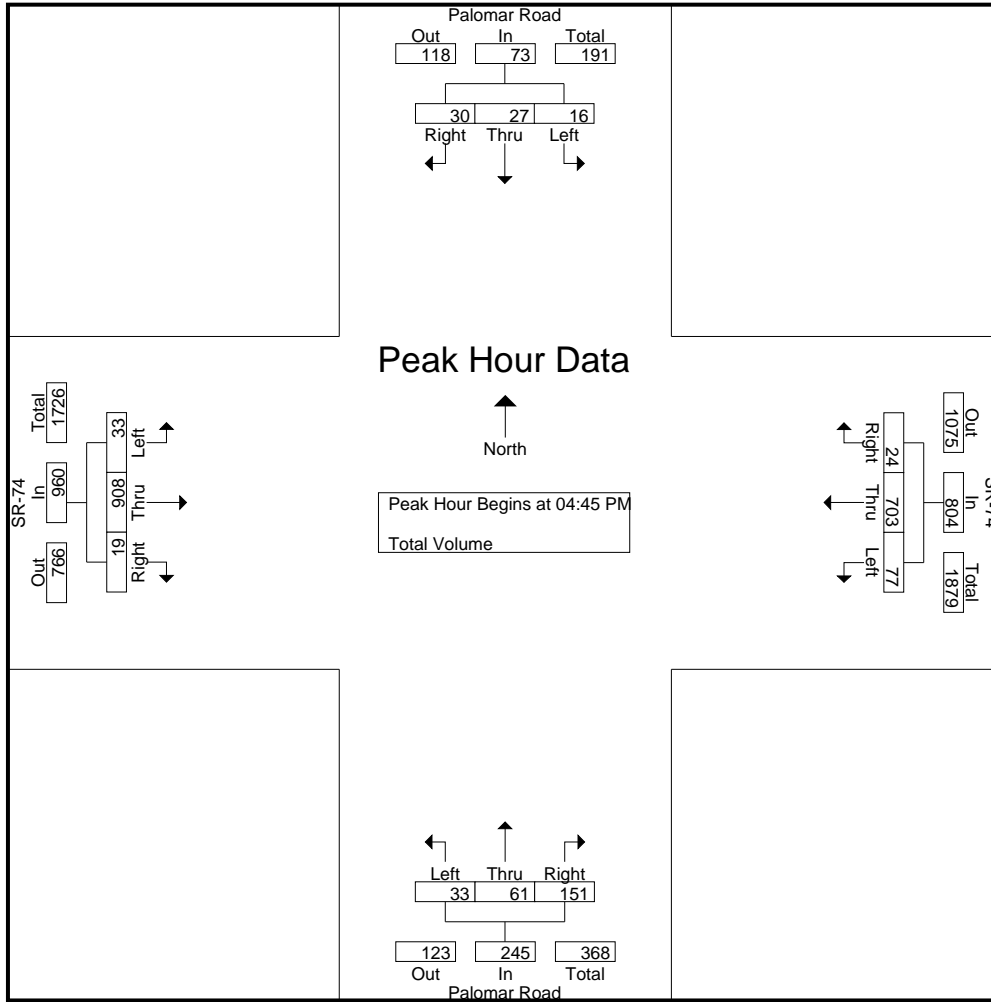
Groups Printed- Total Volume

Start Time	Palomar Road Southbound				SR-74 Westbound				Palomar Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	4	11	8	23	19	148	6	173	8	17	40	65	6	201	4	211	472
04:15 PM	4	7	7	18	22	166	5	193	8	22	39	69	4	226	3	233	513
04:30 PM	6	11	7	24	21	175	4	200	9	19	36	64	4	209	5	218	506
04:45 PM	5	8	10	23	15	195	1	211	6	23	38	67	6	241	5	252	553
Total	19	37	32	88	77	684	16	777	31	81	153	265	20	877	17	914	2044
05:00 PM	3	9	7	19	13	162	9	184	9	20	44	73	5	221	5	231	507
05:15 PM	5	9	8	22	24	164	5	193	11	5	40	56	15	211	5	231	502
05:30 PM	3	1	5	9	25	182	9	216	7	13	29	49	7	235	4	246	520
05:45 PM	2	8	4	14	12	169	12	193	1	12	35	48	7	212	2	221	476
Total	13	27	24	64	74	677	35	786	28	50	148	226	34	879	16	929	2005
Grand Total	32	64	56	152	151	1361	51	1563	59	131	301	491	54	1756	33	1843	4049
Apprch %	21.1	42.1	36.8		9.7	87.1	3.3		12	26.7	61.3		2.9	95.3	1.8		
Total %	0.8	1.6	1.4	3.8	3.7	33.6	1.3	38.6	1.5	3.2	7.4	12.1	1.3	43.4	0.8	45.5	

Start Time	Palomar Road Southbound				SR-74 Westbound				Palomar Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	5	8	10	23	15	195	1	211	6	23	38	67	6	241	5	252	553
05:00 PM	3	9	7	19	13	162	9	184	9	20	44	73	5	221	5	231	507
05:15 PM	5	9	8	22	24	164	5	193	11	5	40	56	15	211	5	231	502
05:30 PM	3	1	5	9	25	182	9	216	7	13	29	49	7	235	4	246	520
Total Volume	16	27	30	73	77	703	24	804	33	61	151	245	33	908	19	960	2082
% App. Total	21.9	37	41.1		9.6	87.4	3		13.5	24.9	61.6		3.4	94.6	2		
PHF	.800	.750	.750	.793	.770	.901	.667	.931	.750	.663	.858	.839	.550	.942	.950	.952	.941

County of Riverside
 N/S: Palomar Road
 E/W: SR-74
 Weather: Clear

File Name : 03_CRV_Palomar_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:00 PM				04:45 PM				04:15 PM				04:45 PM			
+0 mins.	4	11	8	23	15	195	1	211	8	22	39	69	6	241	5	252
+15 mins.	4	7	7	18	13	162	9	184	9	19	36	64	5	221	5	231
+30 mins.	6	11	7	24	24	164	5	193	6	23	38	67	15	211	5	231
+45 mins.	5	8	10	23	25	182	9	216	9	20	44	73	7	235	4	246
Total Volume	19	37	32	88	77	703	24	804	32	84	157	273	33	908	19	960
% App. Total	21.6	42	36.4		9.6	87.4	3		11.7	30.8	57.5		3.4	94.6	2	
PHF	.792	.841	.800	.917	.770	.901	.667	.931	.889	.913	.892	.935	.550	.942	.950	.952

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

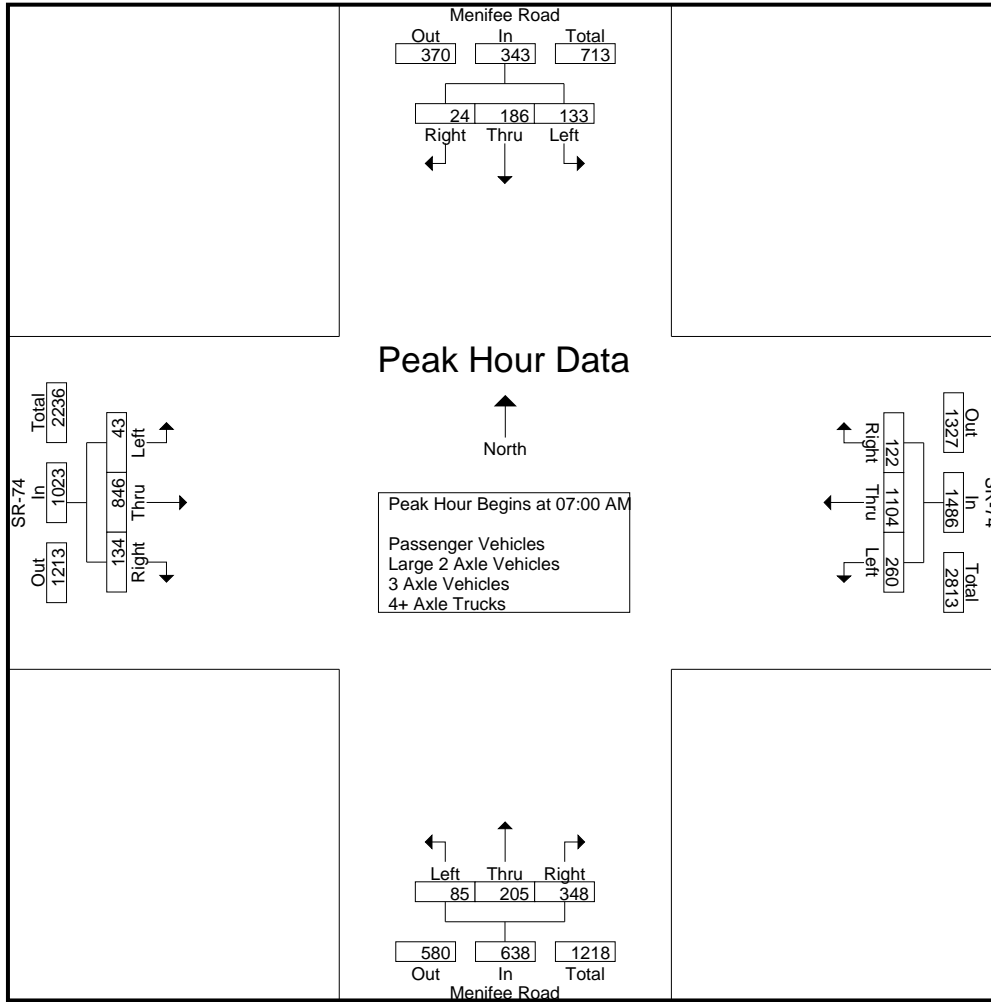
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	24	46	3	73	44	260	25	329	16	43	95	154	12	235	58	305	861
07:15 AM	27	47	3	77	73	279	28	380	13	56	115	184	10	278	28	316	957
07:30 AM	43	43	8	94	75	276	33	384	25	60	87	172	11	179	26	216	866
07:45 AM	39	50	10	99	68	289	36	393	31	46	51	128	10	154	22	186	806
Total	133	186	24	343	260	1104	122	1486	85	205	348	638	43	846	134	1023	3490
08:00 AM	12	26	13	51	29	197	14	240	24	30	64	118	3	139	15	157	566
08:15 AM	19	25	15	59	46	172	12	230	21	17	32	70	10	117	11	138	497
08:30 AM	22	29	10	61	47	187	15	249	16	19	44	79	6	163	18	187	576
08:45 AM	19	37	5	61	47	164	8	219	9	15	39	63	6	133	5	144	487
Total	72	117	43	232	169	720	49	938	70	81	179	330	25	552	49	626	2126
Grand Total	205	303	67	575	429	1824	171	2424	155	286	527	968	68	1398	183	1649	5616
Apprch %	35.7	52.7	11.7		17.7	75.2	7.1		16	29.5	54.4		4.1	84.8	11.1		
Total %	3.7	5.4	1.2	10.2	7.6	32.5	3	43.2	2.8	5.1	9.4	17.2	1.2	24.9	3.3	29.4	
Passenger Vehicles	201	285	56	542	416	1739	165	2320	138	278	519	935	51	1297	176	1524	5321
% Passenger Vehicles	98	94.1	83.6	94.3	97	95.3	96.5	95.7	89	97.2	98.5	96.6	75	92.8	96.2	92.4	94.7
Large 2 Axle Vehicles	3	11	2	16	9	50	6	65	14	5	6	25	5	68	7	80	186
% Large 2 Axle Vehicles	1.5	3.6	3	2.8	2.1	2.7	3.5	2.7	9	1.7	1.1	2.6	7.4	4.9	3.8	4.9	3.3
3 Axle Vehicles	0	5	1	6	3	12	0	15	3	0	2	5	2	14	0	16	42
% 3 Axle Vehicles	0	1.7	1.5	1	0.7	0.7	0	0.6	1.9	0	0.4	0.5	2.9	1	0	1	0.7
4+ Axle Trucks	1	2	8	11	1	23	0	24	0	3	0	3	10	19	0	29	67
% 4+ Axle Trucks	0.5	0.7	11.9	1.9	0.2	1.3	0	1	0	1	0	0.3	14.7	1.4	0	1.8	1.2

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	24	46	3	73	44	260	25	329	16	43	95	154	12	235	58	305	861
07:15 AM	27	47	3	77	73	279	28	380	13	56	115	184	10	278	28	316	957
07:30 AM	43	43	8	94	75	276	33	384	25	60	87	172	11	179	26	216	866
07:45 AM	39	50	10	99	68	289	36	393	31	46	51	128	10	154	22	186	806
Total Volume	133	186	24	343	260	1104	122	1486	85	205	348	638	43	846	134	1023	3490
% App. Total	38.8	54.2	7		17.5	74.3	8.2		13.3	32.1	54.5		4.2	82.7	13.1		
PHF	.773	.930	.600	.866	.867	.955	.847	.945	.685	.854	.757	.867	.896	.761	.578	.809	.912

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	24	46	3	73	44	260	25	329	16	43	95	154	12	235	58	305
+15 mins.	27	47	3	77	73	279	28	380	13	56	115	184	10	278	28	316
+30 mins.	43	43	8	94	75	276	33	384	25	60	87	172	11	179	26	216
+45 mins.	39	50	10	99	68	289	36	393	31	46	51	128	10	154	22	186
Total Volume	133	186	24	343	260	1104	122	1486	85	205	348	638	43	846	134	1023
% App. Total	38.8	54.2	7		17.5	74.3	8.2		13.3	32.1	54.5		4.2	82.7	13.1	
PHF	.773	.930	.600	.866	.867	.955	.847	.945	.685	.854	.757	.867	.896	.761	.578	.809

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	22	42	2	66	43	252	25	320	16	43	95	154	11	220	57	288	828
07:15 AM	27	45	3	75	73	268	25	366	11	56	115	182	8	264	26	298	921
07:30 AM	42	41	8	91	73	265	33	371	23	58	85	166	6	170	25	201	829
07:45 AM	39	48	7	94	63	279	35	377	26	43	50	119	9	144	21	174	764
Total	130	176	20	326	252	1064	118	1434	76	200	345	621	34	798	129	961	3342
08:00 AM	12	24	11	47	28	183	14	225	19	30	63	112	3	126	13	142	526
08:15 AM	18	24	13	55	44	160	10	214	18	15	31	64	8	106	11	125	458
08:30 AM	22	25	9	56	46	172	15	233	16	18	43	77	4	151	18	173	539
08:45 AM	19	36	3	58	46	160	8	214	9	15	37	61	2	116	5	123	456
Total	71	109	36	216	164	675	47	886	62	78	174	314	17	499	47	563	1979
Grand Total	201	285	56	542	416	1739	165	2320	138	278	519	935	51	1297	176	1524	5321
Apprch %	37.1	52.6	10.3		17.9	75	7.1		14.8	29.7	55.5		3.3	85.1	11.5		
Total %	3.8	5.4	1.1	10.2	7.8	32.7	3.1	43.6	2.6	5.2	9.8	17.6	1	24.4	3.3	28.6	

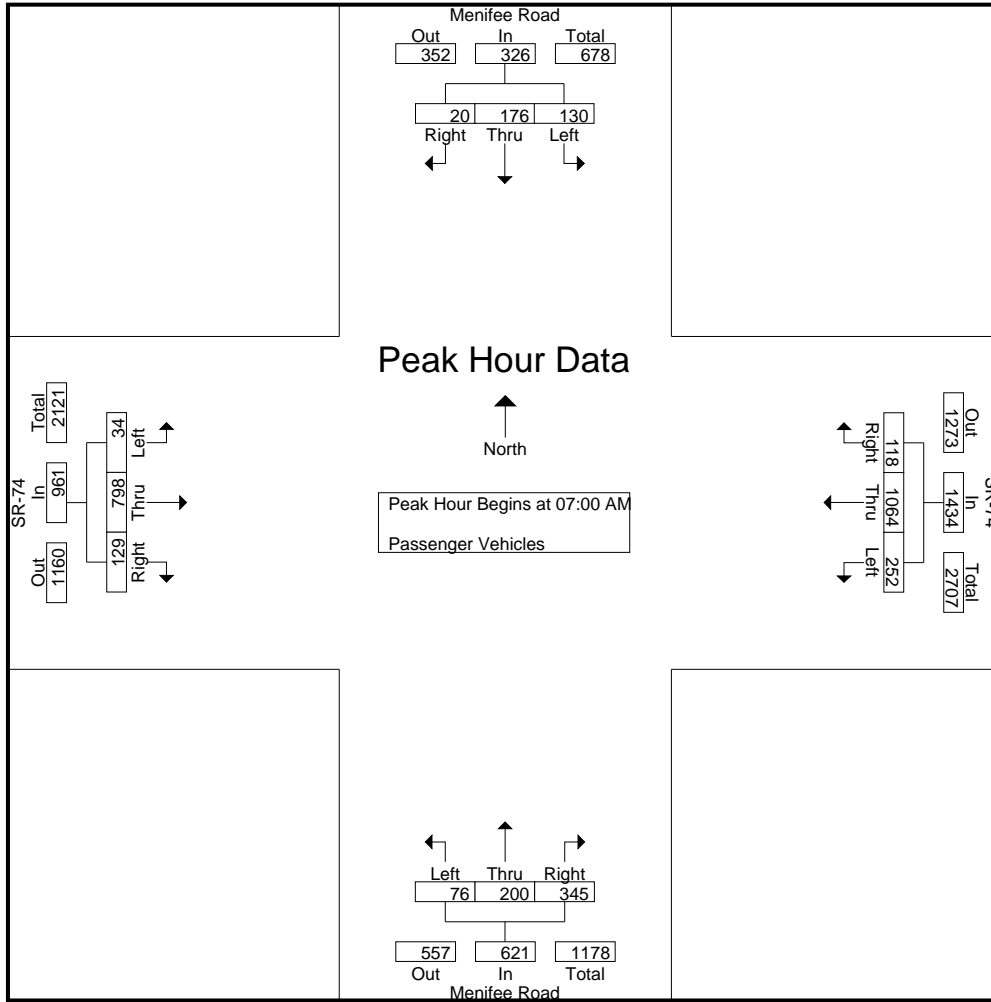
Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	22	42	2	66	43	252	25	320	16	43	95	154	11	220	57	288	828
07:15 AM	27	45	3	75	73	268	25	366	11	56	115	182	8	264	26	298	921
07:30 AM	42	41	8	91	73	265	33	371	23	58	85	166	6	170	25	201	829
07:45 AM	39	48	7	94	63	279	35	377	26	43	50	119	9	144	21	174	764
Total Volume	130	176	20	326	252	1064	118	1434	76	200	345	621	34	798	129	961	3342
% App. Total	39.9	54	6.1		17.6	74.2	8.2		12.2	32.2	55.6		3.5	83	13.4		
PHF	.774	.917	.625	.867	.863	.953	.843	.951	.731	.862	.750	.853	.773	.756	.566	.806	.907

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	22	42	2	66	43	252	25	320	16	43	95	154	11	220	57	288
+15 mins.	27	45	3	75	73	268	25	366	11	56	115	182	8	264	26	298
+30 mins.	42	41	8	91	73	265	33	371	23	58	85	166	6	170	25	201
+45 mins.	39	48	7	94	63	279	35	377	26	43	50	119	9	144	21	174
Total Volume	130	176	20	326	252	1064	118	1434	76	200	345	621	34	798	129	961
% App. Total	39.9	54	6.1		17.6	74.2	8.2		12.2	32.2	55.6		3.5	83	13.4	
PHF	.774	.917	.625	.867	.863	.953	.843	.951	.731	.862	.750	.853	.773	.756	.566	.806

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

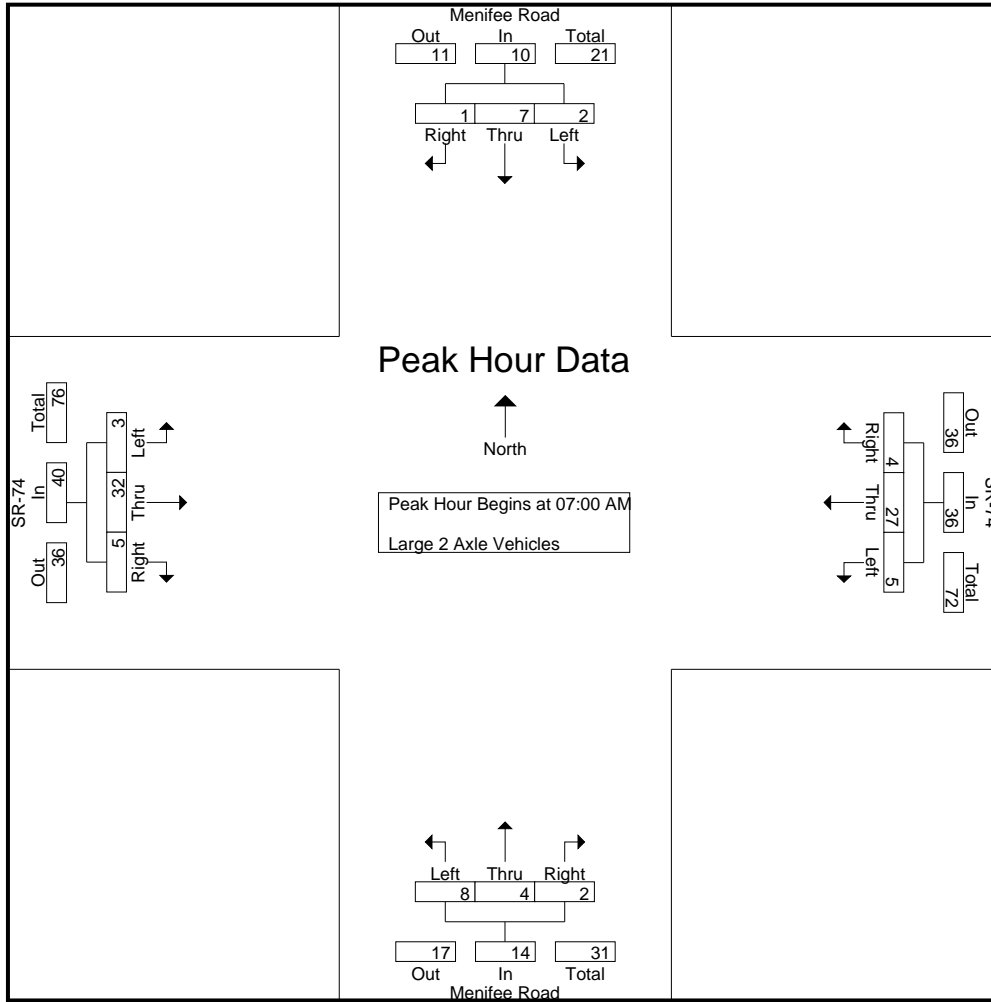
Groups Printed- Large 2 Axle Vehicles

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	1	0	3	1	6	0	7	0	0	0	0	0	8	1	9	19
07:15 AM	0	2	0	2	0	6	3	9	2	0	0	2	1	12	2	15	28
07:30 AM	0	2	0	2	1	8	0	9	2	2	2	6	1	7	1	9	26
07:45 AM	0	2	1	3	3	7	1	11	4	2	0	6	1	5	1	7	27
Total	2	7	1	10	5	27	4	36	8	4	2	14	3	32	5	40	100
08:00 AM	0	0	0	0	1	10	0	11	3	0	1	4	0	12	2	14	29
08:15 AM	1	1	0	2	1	3	2	6	3	1	1	5	1	6	0	7	20
08:30 AM	0	2	0	2	1	7	0	8	0	0	0	0	1	8	0	9	19
08:45 AM	0	1	1	2	1	3	0	4	0	0	2	2	0	10	0	10	18
Total	1	4	1	6	4	23	2	29	6	1	4	11	2	36	2	40	86
Grand Total	3	11	2	16	9	50	6	65	14	5	6	25	5	68	7	80	186
Apprch %	18.8	68.8	12.5		13.8	76.9	9.2		56	20	24		6.2	85	8.8		
Total %	1.6	5.9	1.1	8.6	4.8	26.9	3.2	34.9	7.5	2.7	3.2	13.4	2.7	36.6	3.8	43	

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	1	0	3	1	6	0	7	0	0	0	0	0	8	1	9	19
07:15 AM	0	2	0	2	0	6	3	9	2	0	0	2	1	12	2	15	28
07:30 AM	0	2	0	2	1	8	0	9	2	2	2	6	1	7	1	9	26
07:45 AM	0	2	1	3	3	7	1	11	4	2	0	6	1	5	1	7	27
Total Volume	2	7	1	10	5	27	4	36	8	4	2	14	3	32	5	40	100
% App. Total	20	70	10		13.9	75	11.1		57.1	28.6	14.3		7.5	80	12.5		
PHF	.250	.875	.250	.833	.417	.844	.333	.818	.500	.500	.250	.583	.750	.667	.625	.667	.893

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
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 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	1	0	3	1	6	0	7	0	0	0	0	0	8	1	9
+15 mins.	0	2	0	2	0	6	3	9	2	0	0	2	1	12	2	15
+30 mins.	0	2	0	2	1	8	0	9	2	2	2	6	1	7	1	9
+45 mins.	0	2	1	3	3	7	1	11	4	2	0	6	1	5	1	7
Total Volume	2	7	1	10	5	27	4	36	8	4	2	14	3	32	5	40
% App. Total	20	70	10		13.9	75	11.1		57.1	28.6	14.3		7.5	80	12.5	
PHF	.250	.875	.250	.833	.417	.844	.333	.818	.500	.500	.250	.583	.750	.667	.625	.667

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

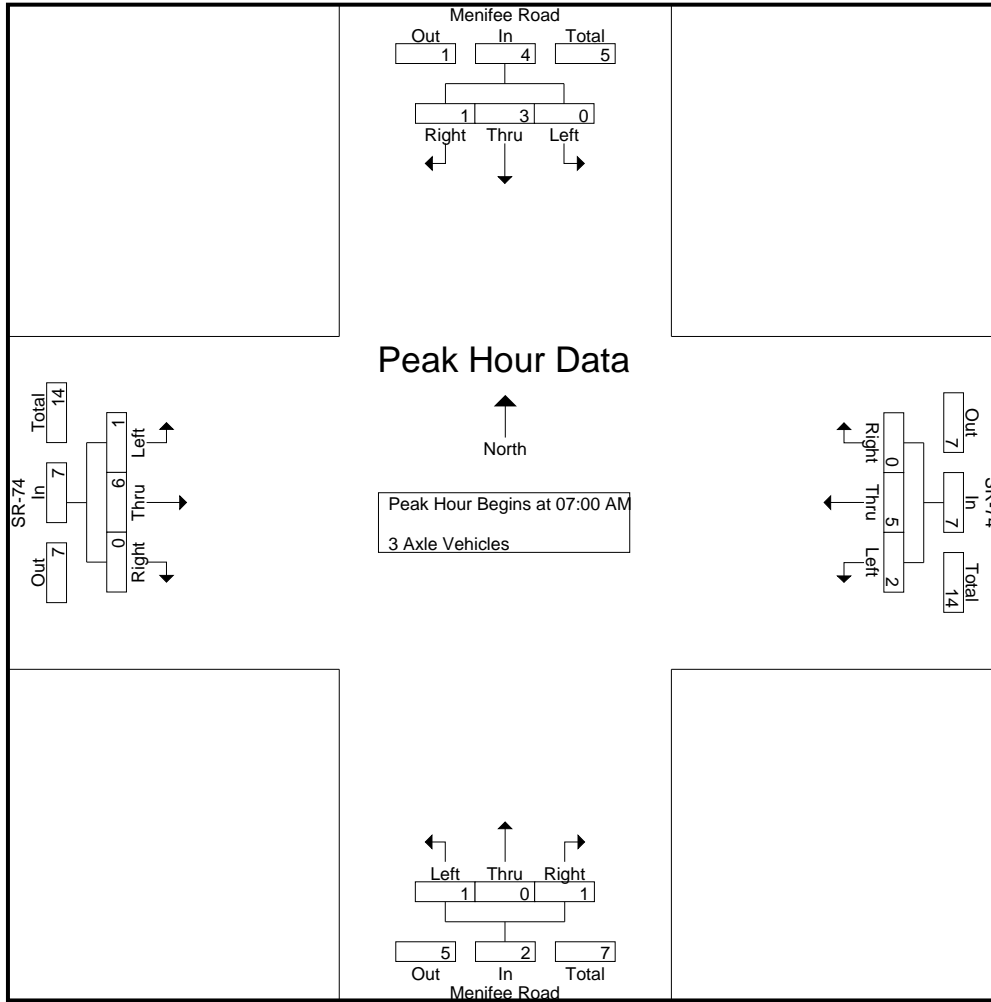
Groups Printed- 3 Axle Vehicles

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	3	0	3	6
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	1	2	0	3	0	0	0	0	1	1	0	2	5
07:45 AM	0	0	1	1	1	2	0	3	1	0	1	2	0	2	0	2	8
Total	0	3	1	4	2	5	0	7	1	0	1	2	1	6	0	7	20
08:00 AM	0	1	0	1	0	3	0	3	2	0	0	2	0	1	0	1	7
08:15 AM	0	0	0	0	1	4	0	5	0	0	0	0	1	2	0	3	8
08:30 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	2	0	2	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
Total	0	2	0	2	1	7	0	8	2	0	1	3	1	8	0	9	22
Grand Total	0	5	1	6	3	12	0	15	3	0	2	5	2	14	0	16	42
Apprch %	0	83.3	16.7		20	80	0		60	0	40		12.5	87.5	0		
Total %	0	11.9	2.4	14.3	7.1	28.6	0	35.7	7.1	0	4.8	11.9	4.8	33.3	0	38.1	

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	3	0	3	6
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	1	2	0	3	0	0	0	0	1	1	0	2	5
07:45 AM	0	0	1	1	1	2	0	3	1	0	1	2	0	2	0	2	8
Total Volume	0	3	1	4	2	5	0	7	1	0	1	2	1	6	0	7	20
% App. Total	0	75	25		28.6	71.4	0		50	0	50		14.3	85.7	0		
PHF	.000	.250	.250	.333	.500	.625	.000	.583	.250	.000	.250	.250	.250	.500	.000	.583	.625

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	3	0	3
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	1	2	0	3	0	0	0	0	1	1	0	2
+45 mins.	0	0	1	1	1	2	0	3	1	0	1	2	0	2	0	2
Total Volume	0	3	1	4	2	5	0	7	1	0	1	2	1	6	0	7
% App. Total	0	75	25		28.6	71.4	0		50	0	50		14.3	85.7	0	
PHF	.000	.250	.250	.333	.500	.625	.000	.583	.250	.000	.250	.250	.250	.500	.000	.583

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

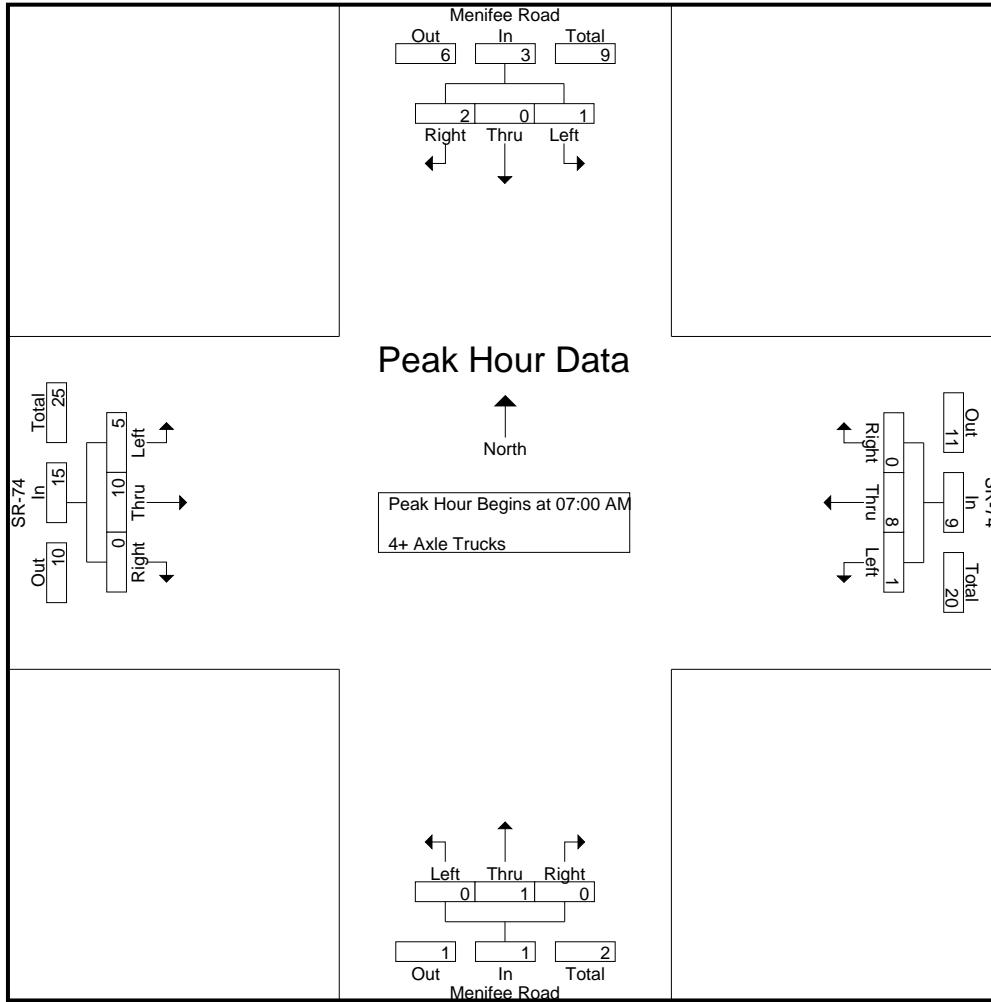
Groups Printed- 4+ Axle Trucks

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	1	1	0	2	0	2	0	0	0	0	1	4	0	5	8
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	1	2	0	3	7
07:30 AM	1	0	0	1	0	1	0	1	0	0	0	0	3	1	0	4	6
07:45 AM	0	0	1	1	1	1	0	2	0	1	0	1	0	3	0	3	7
Total	1	0	2	3	1	8	0	9	0	1	0	1	5	10	0	15	28
08:00 AM	0	1	2	3	0	1	0	1	0	0	0	0	0	0	0	0	4
08:15 AM	0	0	2	2	0	5	0	5	0	1	0	1	0	3	0	3	11
08:30 AM	0	1	1	2	0	8	0	8	0	1	0	1	1	2	0	3	14
08:45 AM	0	0	1	1	0	1	0	1	0	0	0	0	4	4	0	8	10
Total	0	2	6	8	0	15	0	15	0	2	0	2	5	9	0	14	39
Grand Total	1	2	8	11	1	23	0	24	0	3	0	3	10	19	0	29	67
Apprch %	9.1	18.2	72.7		4.2	95.8	0		0	100	0		34.5	65.5	0		
Total %	1.5	3	11.9	16.4	1.5	34.3	0	35.8	0	4.5	0	4.5	14.9	28.4	0	43.3	

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	1	1	0	2	0	2	0	0	0	0	1	4	0	5	8
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	1	2	0	3	7
07:30 AM	1	0	0	1	0	1	0	1	0	0	0	0	3	1	0	4	6
07:45 AM	0	0	1	1	1	1	0	2	0	1	0	1	0	3	0	3	7
Total Volume	1	0	2	3	1	8	0	9	0	1	0	1	5	10	0	15	28
% App. Total	33.3	0	66.7		11.1	88.9	0		0	100	0		33.3	66.7	0		
PHF	.250	.000	.500	.750	.250	.500	.000	.563	.000	.250	.000	.250	.417	.625	.000	.750	.875

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 AM
 Site Code : 06718684
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	1	1	0	2	0	2	0	0	0	0	1	4	0	5
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	1	2	0	3
+30 mins.	1	0	0	1	0	1	0	1	0	0	0	0	3	1	0	4
+45 mins.	0	0	1	1	1	1	0	2	0	1	0	1	0	3	0	3
Total Volume	1	0	2	3	1	8	0	9	0	1	0	1	5	10	0	15
% App. Total	33.3	0	66.7		11.1	88.9	0		0	100	0		33.3	66.7	0	
PHF	.250	.000	.500	.750	.250	.500	.000	.563	.000	.250	.000	.250	.417	.625	.000	.750

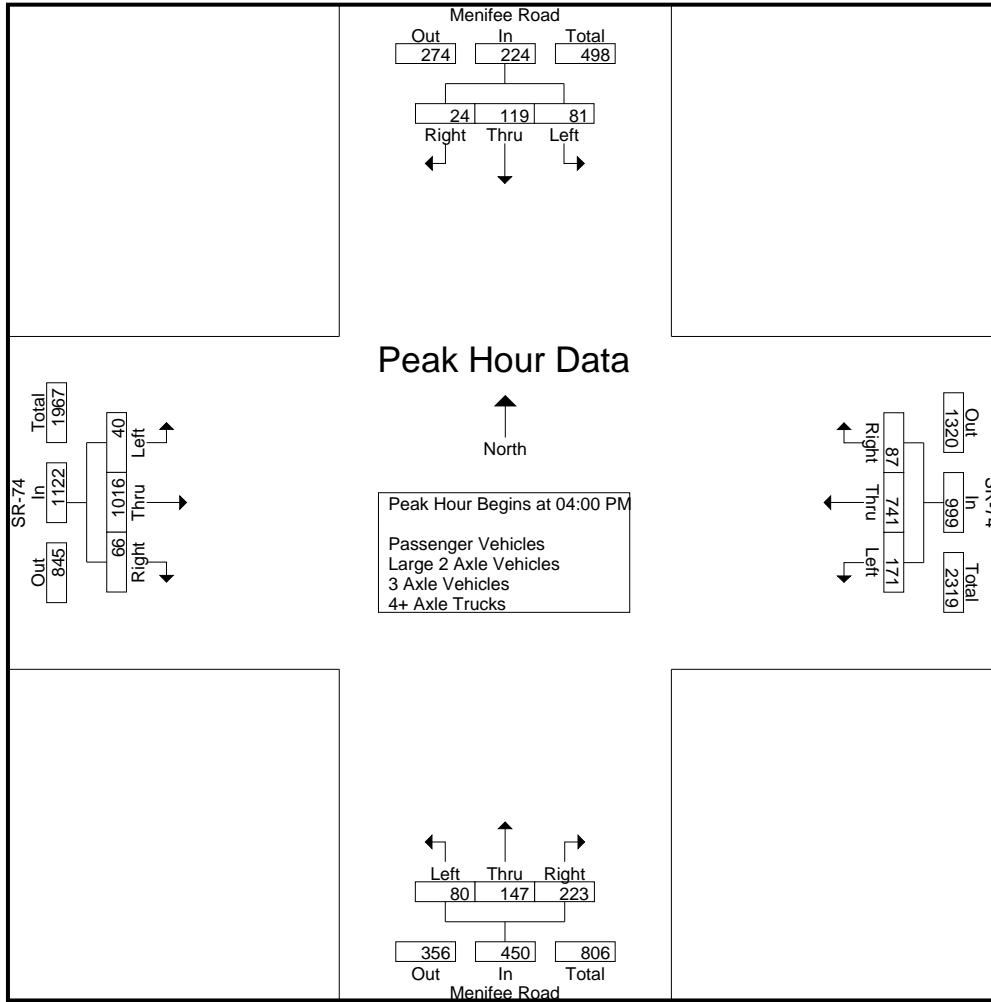
County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

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

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	28	30	9	67	31	178	19	228	28	46	49	123	9	249	17	275	693
04:15 PM	15	32	5	52	40	179	21	240	22	29	59	110	10	279	12	301	703
04:30 PM	13	40	4	57	54	201	19	274	14	37	62	113	9	236	18	263	707
04:45 PM	25	17	6	48	46	183	28	257	16	35	53	104	12	252	19	283	692
Total	81	119	24	224	171	741	87	999	80	147	223	450	40	1016	66	1122	2795
05:00 PM	17	28	5	50	45	165	18	228	19	28	61	108	10	224	25	259	645
05:15 PM	27	35	7	69	48	190	20	258	9	23	63	95	9	243	15	267	689
05:30 PM	16	31	5	52	55	208	19	282	20	36	64	120	7	268	23	298	752
05:45 PM	17	39	7	63	41	184	25	250	12	24	64	100	10	216	21	247	660
Total	77	133	24	234	189	747	82	1018	60	111	252	423	36	951	84	1071	2746
Grand Total	158	252	48	458	360	1488	169	2017	140	258	475	873	76	1967	150	2193	5541
Apprch %	34.5	55	10.5		17.8	73.8	8.4		16	29.6	54.4		3.5	89.7	6.8		
Total %	2.9	4.5	0.9	8.3	6.5	26.9	3	36.4	2.5	4.7	8.6	15.8	1.4	35.5	2.7	39.6	
Passenger Vehicles	153	250	47	450	353	1415	167	1935	126	256	472	854	69	1920	145	2134	5373
% Passenger Vehicles	96.8	99.2	97.9	98.3	98.1	95.1	98.8	95.9	90	99.2	99.4	97.8	90.8	97.6	96.7	97.3	97
Large 2 Axle Vehicles	4	2	1	7	1	32	2	35	8	1	2	11	3	34	1	38	91
% Large 2 Axle Vehicles	2.5	0.8	2.1	1.5	0.3	2.2	1.2	1.7	5.7	0.4	0.4	1.3	3.9	1.7	0.7	1.7	1.6
3 Axle Vehicles	1	0	0	1	4	29	0	33	6	1	1	8	1	2	1	4	46
% 3 Axle Vehicles	0.6	0	0	0.2	1.1	1.9	0	1.6	4.3	0.4	0.2	0.9	1.3	0.1	0.7	0.2	0.8
4+ Axle Trucks	0	0	0	0	2	12	0	14	0	0	0	0	3	11	3	17	31
% 4+ Axle Trucks	0	0	0	0	0.6	0.8	0	0.7	0	0	0	0	3.9	0.6	2	0.8	0.6

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	28	30	9	67	31	178	19	228	28	46	49	123	9	249	17	275	693
04:15 PM	15	32	5	52	40	179	21	240	22	29	59	110	10	279	12	301	703
04:30 PM	13	40	4	57	54	201	19	274	14	37	62	113	9	236	18	263	707
04:45 PM	25	17	6	48	46	183	28	257	16	35	53	104	12	252	19	283	692
Total Volume	81	119	24	224	171	741	87	999	80	147	223	450	40	1016	66	1122	2795
% App. Total	36.2	53.1	10.7		17.1	74.2	8.7		17.8	32.7	49.6		3.6	90.6	5.9		
PHF	.723	.744	.667	.836	.792	.922	.777	.911	.714	.799	.899	.915	.833	.910	.868	.932	.988



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

	05:00 PM				04:45 PM				04:00 PM				04:00 PM			
+0 mins.	17	28	5	50	46	183	28	257	28	46	49	123	9	249	17	275
+15 mins.	27	35	7	69	45	165	18	228	22	29	59	110	10	279	12	301
+30 mins.	16	31	5	52	48	190	20	258	14	37	62	113	9	236	18	263
+45 mins.	17	39	7	63	55	208	19	282	16	35	53	104	12	252	19	283
Total Volume	77	133	24	234	194	746	85	1025	80	147	223	450	40	1016	66	1122
% App. Total	32.9	56.8	10.3		18.9	72.8	8.3		17.8	32.7	49.6		3.6	90.6	5.9	
PHF	.713	.853	.857	.848	.882	.897	.759	.909	.714	.799	.899	.915	.833	.910	.868	.932

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

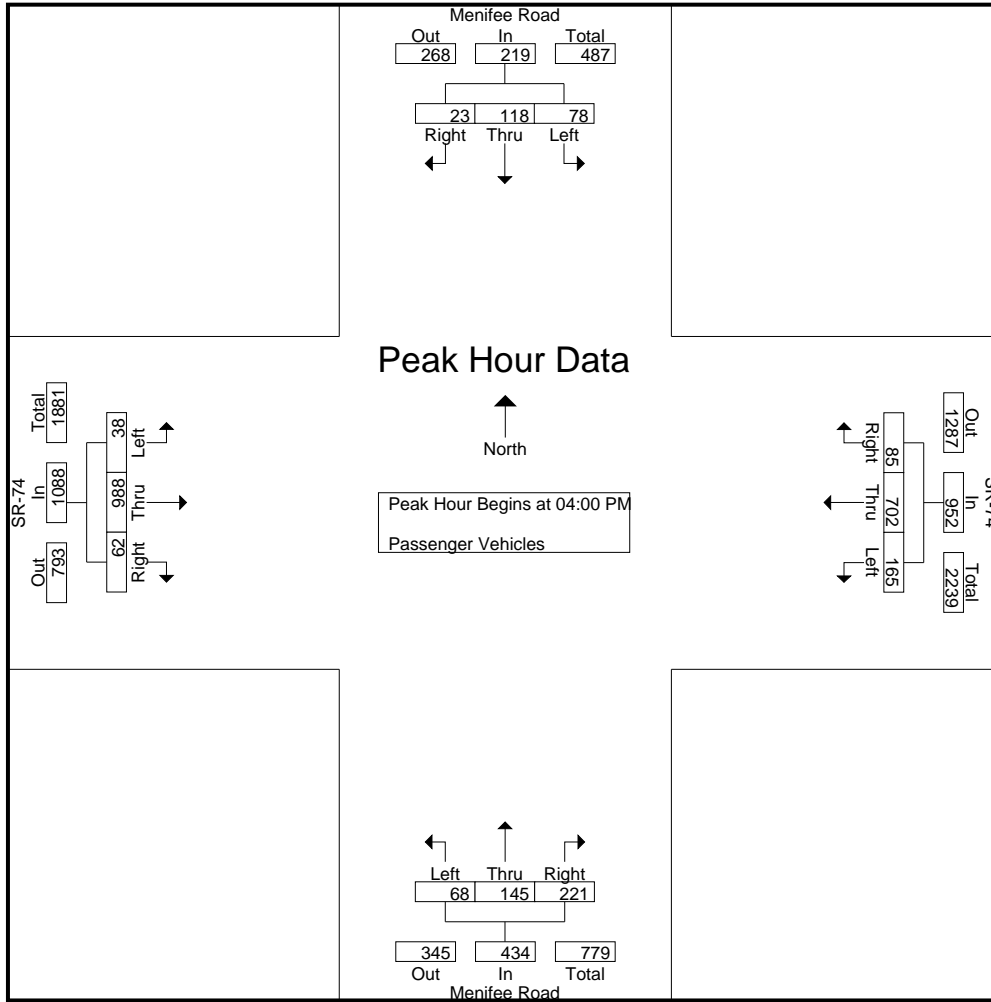
Groups Printed- Passenger Vehicles

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	27	29	9	65	29	172	19	220	23	45	49	117	9	246	15	270	672
04:15 PM	15	32	5	52	39	169	20	228	19	29	59	107	9	266	11	286	673
04:30 PM	12	40	3	55	52	184	18	254	12	36	62	110	9	231	17	257	676
04:45 PM	24	17	6	47	45	177	28	250	14	35	51	100	11	245	19	275	672
Total	78	118	23	219	165	702	85	952	68	145	221	434	38	988	62	1088	2693
05:00 PM	17	28	5	50	45	158	18	221	17	28	61	106	9	217	24	250	627
05:15 PM	27	35	7	69	47	179	20	246	9	23	62	94	6	238	15	259	668
05:30 PM	16	31	5	52	55	198	19	272	20	36	64	120	7	262	23	292	736
05:45 PM	15	38	7	60	41	178	25	244	12	24	64	100	9	215	21	245	649
Total	75	132	24	231	188	713	82	983	58	111	251	420	31	932	83	1046	2680
Grand Total	153	250	47	450	353	1415	167	1935	126	256	472	854	69	1920	145	2134	5373
Apprch %	34	55.6	10.4		18.2	73.1	8.6		14.8	30	55.3		3.2	90	6.8		
Total %	2.8	4.7	0.9	8.4	6.6	26.3	3.1	36	2.3	4.8	8.8	15.9	1.3	35.7	2.7	39.7	

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	27	29	9	65	29	172	19	220	23	45	49	117	9	246	15	270	672
04:15 PM	15	32	5	52	39	169	20	228	19	29	59	107	9	266	11	286	673
04:30 PM	12	40	3	55	52	184	18	254	12	36	62	110	9	231	17	257	676
04:45 PM	24	17	6	47	45	177	28	250	14	35	51	100	11	245	19	275	672
Total Volume	78	118	23	219	165	702	85	952	68	145	221	434	38	988	62	1088	2693
% App. Total	35.6	53.9	10.5		17.3	73.7	8.9		15.7	33.4	50.9		3.5	90.8	5.7		
PHF	.722	.738	.639	.842	.793	.954	.759	.937	.739	.806	.891	.927	.864	.929	.816	.951	.996

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	27	29	9	65	29	172	19	220	23	45	49	117	9	246	15	270
+15 mins.	15	32	5	52	39	169	20	228	19	29	59	107	9	266	11	286
+30 mins.	12	40	3	55	52	184	18	254	12	36	62	110	9	231	17	257
+45 mins.	24	17	6	47	45	177	28	250	14	35	51	100	11	245	19	275
Total Volume	78	118	23	219	165	702	85	952	68	145	221	434	38	988	62	1088
% App. Total	35.6	53.9	10.5		17.3	73.7	8.9		15.7	33.4	50.9		3.5	90.8	5.7	
PHF	.722	.738	.639	.842	.793	.954	.759	.937	.739	.806	.891	.927	.864	.929	.816	.951

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

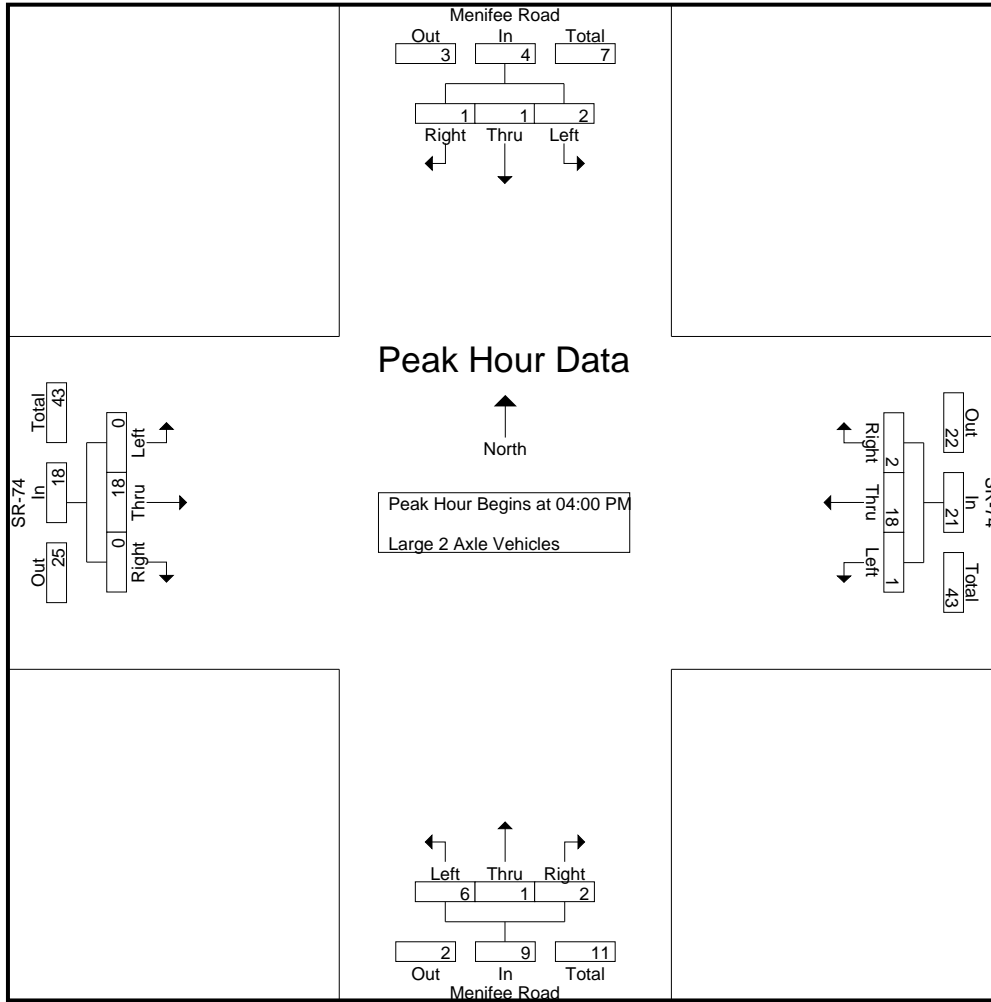
Groups Printed- Large 2 Axle Vehicles

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	1	0	2	0	2	0	2	1	0	0	1	0	2	0	2	7
04:15 PM	0	0	0	0	0	4	1	5	3	0	0	3	0	7	0	7	15
04:30 PM	1	0	1	2	1	8	1	10	0	1	0	1	0	5	0	5	18
04:45 PM	0	0	0	0	0	4	0	4	2	0	2	4	0	4	0	4	12
Total	2	1	1	4	1	18	2	21	6	1	2	9	0	18	0	18	52
05:00 PM	0	0	0	0	0	4	0	4	2	0	0	2	1	7	1	9	15
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4	7
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
05:45 PM	2	1	0	3	0	4	0	4	0	0	0	0	1	1	0	2	9
Total	2	1	0	3	0	14	0	14	2	0	0	2	3	16	1	20	39
Grand Total	4	2	1	7	1	32	2	35	8	1	2	11	3	34	1	38	91
Apprch %	57.1	28.6	14.3		2.9	91.4	5.7		72.7	9.1	18.2		7.9	89.5	2.6		
Total %	4.4	2.2	1.1	7.7	1.1	35.2	2.2	38.5	8.8	1.1	2.2	12.1	3.3	37.4	1.1	41.8	

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	1	0	2	0	2	0	2	1	0	0	1	0	2	0	2	7
04:15 PM	0	0	0	0	0	4	1	5	3	0	0	3	0	7	0	7	15
04:30 PM	1	0	1	2	1	8	1	10	0	1	0	1	0	5	0	5	18
04:45 PM	0	0	0	0	0	4	0	4	2	0	2	4	0	4	0	4	12
Total Volume	2	1	1	4	1	18	2	21	6	1	2	9	0	18	0	18	52
% App. Total	50	25	25		4.8	85.7	9.5		66.7	11.1	22.2		0	100	0		
PHF	.500	.250	.250	.500	.250	.563	.500	.525	.500	.250	.250	.563	.000	.643	.000	.643	.722

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	1	0	2	0	2	0	2	1	0	0	1	0	2	0	2
+15 mins.	0	0	0	0	0	4	1	5	3	0	0	3	0	7	0	7
+30 mins.	1	0	1	2	1	8	1	10	0	1	0	1	0	5	0	5
+45 mins.	0	0	0	0	0	4	0	4	2	0	2	4	0	4	0	4
Total Volume	2	1	1	4	1	18	2	21	6	1	2	9	0	18	0	18
% App. Total	50	25	25		4.8	85.7	9.5		66.7	11.1	22.2		0	100	0	
PHF	.500	.250	.250	.500	.250	.563	.500	.525	.500	.250	.250	.563	.000	.643	.000	.643

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	2	3	0	5	4	1	0	5	0	0	1	1	11
04:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
04:30 PM	0	0	0	0	0	7	0	7	2	0	0	2	0	0	0	0	9
04:45 PM	1	0	0	1	1	0	0	1	0	0	0	0	1	0	0	1	3
Total	1	0	0	1	3	15	0	18	6	1	0	7	1	1	1	3	29
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	1	7	0	8	0	0	1	1	0	0	0	0	9
05:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	14	0	15	0	0	1	1	0	1	0	1	17
Grand Total	1	0	0	1	4	29	0	33	6	1	1	8	1	2	1	4	46
Apprch %	100	0	0		12.1	87.9	0		75	12.5	12.5		25	50	25		
Total %	2.2	0	0	2.2	8.7	63	0	71.7	13	2.2	2.2	17.4	2.2	4.3	2.2	8.7	

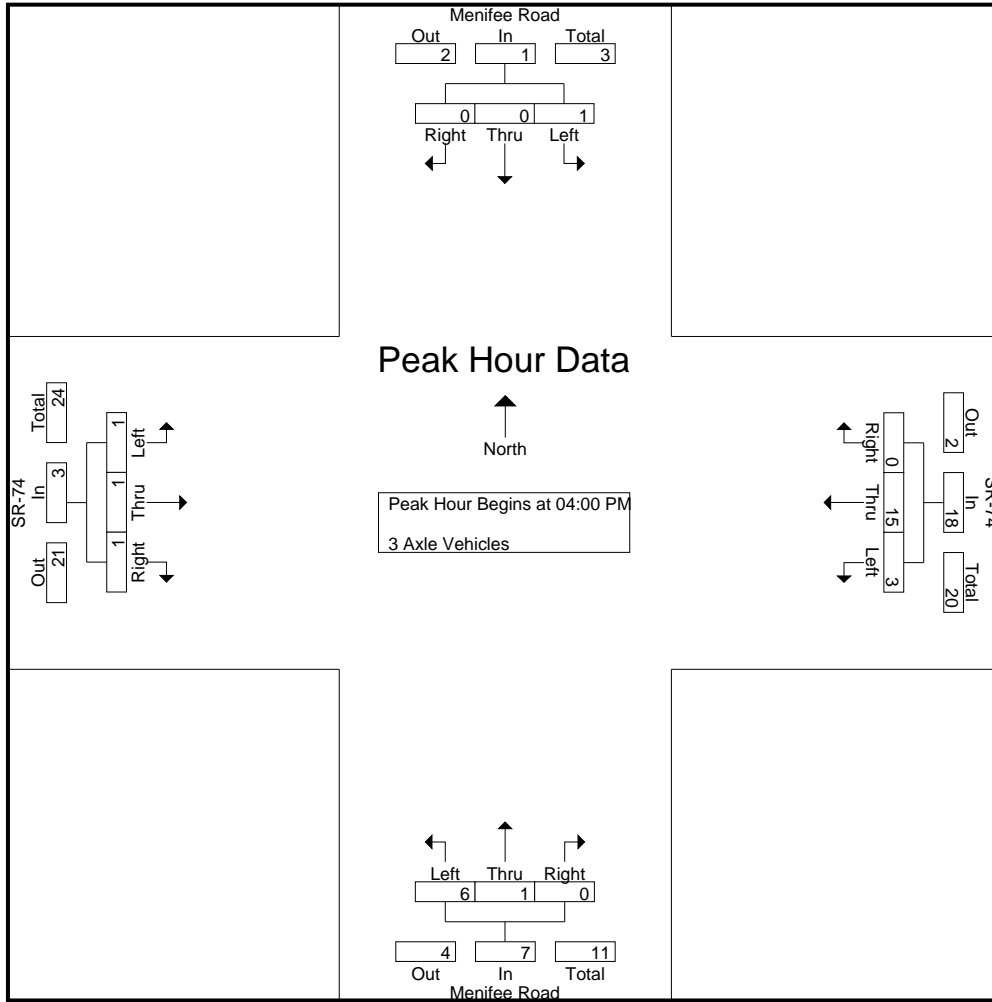
Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	2	3	0	5	4	1	0	5	0	0	1	1	11
04:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
04:30 PM	0	0	0	0	0	7	0	7	2	0	0	2	0	0	0	0	9
04:45 PM	1	0	0	1	1	0	0	1	0	0	0	0	1	0	0	1	3
Total Volume	1	0	0	1	3	15	0	18	6	1	0	7	1	1	1	3	29
% App. Total	100	0	0		16.7	83.3	0		85.7	14.3	0		33.3	33.3	33.3		
PHF	.250	.000	.000	.250	.375	.536	.000	.643	.375	.250	.000	.350	.250	.250	.250	.750	.659

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

Peak Hour for Entire Intersection Begins at 04:00 PM

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	2	3	0	5	4	1	0	5	0	0	1	1
+15 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	7	0	7	2	0	0	2	0	0	0	0
+45 mins.	1	0	0	1	1	0	0	1	0	0	0	0	1	0	0	1
Total Volume	1	0	0	1	3	15	0	18	6	1	0	7	1	1	1	3
% App. Total	100	0	0	0	16.7	83.3	0	0	85.7	14.3	0	0	33.3	33.3	33.3	0
PHF	.250	.000	.000	.250	.375	.536	.000	.643	.375	.250	.000	.350	.250	.250	.250	.750

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

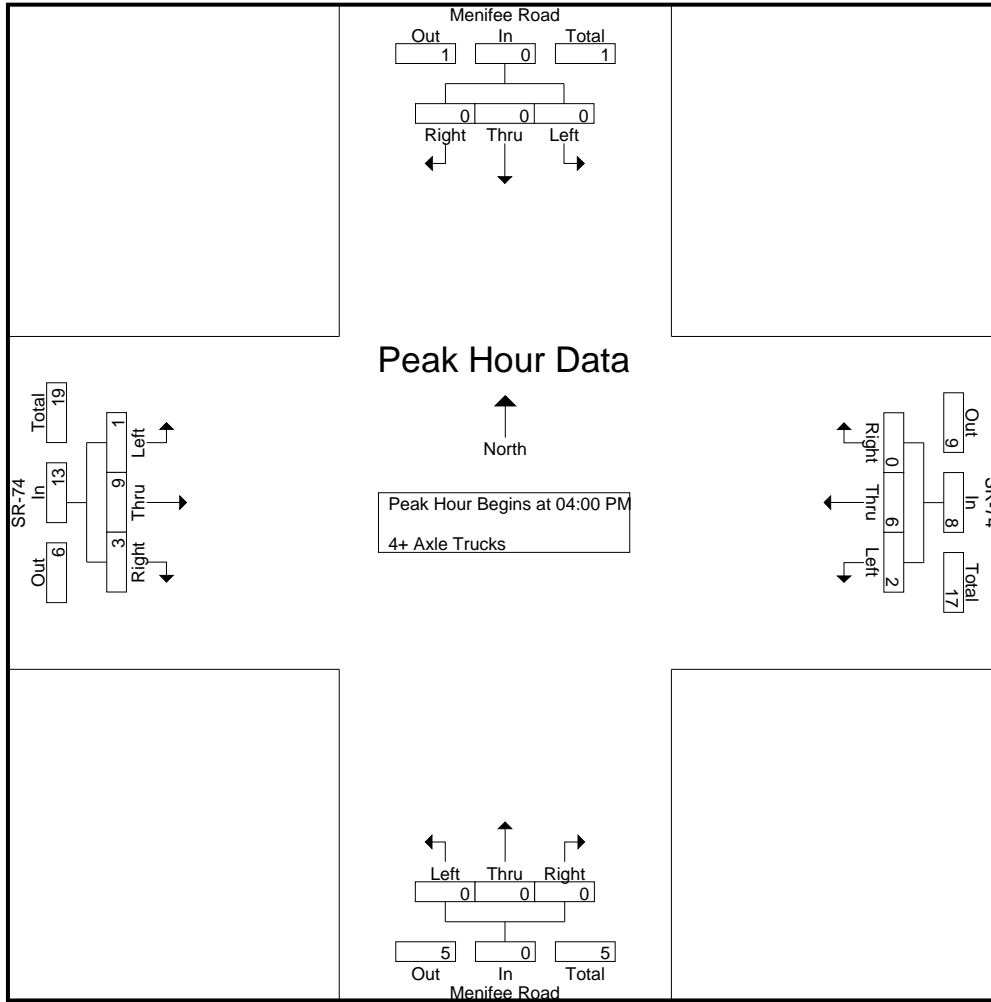
Groups Printed- 4+ Axle Trucks

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	2	3
04:15 PM	0	0	0	0	1	1	0	2	0	0	0	0	1	5	1	7	9
04:30 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	0	1	1	4
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	2	6	0	8	0	0	0	0	1	9	3	13	21
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	2	2	0	4	5
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	6	0	6	0	0	0	0	2	2	0	4	10
Grand Total	0	0	0	0	2	12	0	14	0	0	0	0	3	11	3	17	31
Apprch %	0	0	0		14.3	85.7	0		0	0	0		17.6	64.7	17.6		
Total %	0	0	0		6.5	38.7	0	45.2	0	0	0		9.7	35.5	9.7	54.8	

Start Time	Menifee Road Southbound				SR-74 Westbound				Menifee Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	2	3
04:15 PM	0	0	0	0	1	1	0	2	0	0	0	0	1	5	1	7	9
04:30 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	0	1	1	4
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total Volume	0	0	0	0	2	6	0	8	0	0	0	0	1	9	3	13	21
% App. Total	0	0	0		25	75	0		0	0	0		7.7	69.2	23.1		
PHF	.000	.000	.000	.000	.500	.750	.000	.667	.000	.000	.000	.000	.250	.450	.750	.464	.583

County of Riverside
 N/S: Menifee Road
 E/W: SR-74
 Weather: Clear

File Name : 04_CRV_Menifee_74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	2
+15 mins.	0	0	0	0	1	1	0	2	0	0	0	0	1	5	1	7
+30 mins.	0	0	0	0	1	2	0	3	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	2	6	0	8	0	0	0	0	1	9	3	13
% App. Total	0	0	0	0	25	75	0		0	0	0	0	7.7	69.2	23.1	
PHF	.000	.000	.000	.000	.500	.750	.000	.667	.000	.000	.000	.000	.250	.450	.750	.464

County of Riverside
 N/S: Briggs Road
 E/W: SR-74
 Weather: Clear

File Name : 05_CRV_Briggs_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

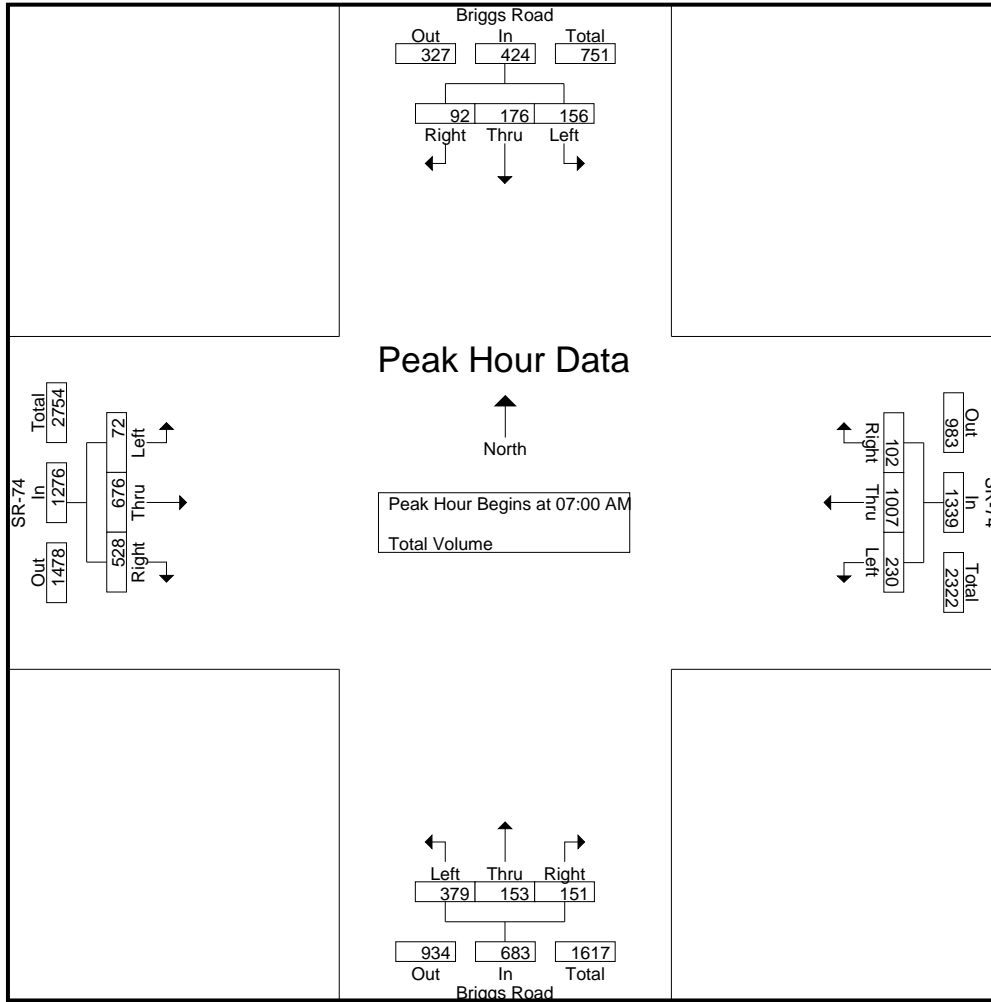
Groups Printed- Total Volume

Start Time	Briggs Road Southbound				SR-74 Westbound				Briggs Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	10	59	16	85	78	245	12	335	69	34	43	146	12	152	142	306	872
07:15 AM	20	52	16	88	71	270	31	372	90	44	41	175	19	183	172	374	1009
07:30 AM	59	36	34	129	62	222	29	313	117	45	44	206	19	151	155	325	973
07:45 AM	67	29	26	122	19	270	30	319	103	30	23	156	22	190	59	271	868
Total	156	176	92	424	230	1007	102	1339	379	153	151	683	72	676	528	1276	3722
08:00 AM	40	12	11	63	6	170	11	187	29	7	16	52	16	203	9	228	530
08:15 AM	29	7	11	47	6	210	13	229	13	5	6	24	7	138	11	156	456
08:30 AM	22	12	8	42	12	196	11	219	23	7	10	40	9	166	31	206	507
08:45 AM	12	5	15	32	4	194	4	202	16	4	11	31	12	173	15	200	465
Total	103	36	45	184	28	770	39	837	81	23	43	147	44	680	66	790	1958
Grand Total	259	212	137	608	258	1777	141	2176	460	176	194	830	116	1356	594	2066	5680
Apprch %	42.6	34.9	22.5		11.9	81.7	6.5		55.4	21.2	23.4		5.6	65.6	28.8		
Total %	4.6	3.7	2.4	10.7	4.5	31.3	2.5	38.3	8.1	3.1	3.4	14.6	2	23.9	10.5	36.4	

Start Time	Briggs Road Southbound				SR-74 Westbound				Briggs Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	10	59	16	85	78	245	12	335	69	34	43	146	12	152	142	306	872
07:15 AM	20	52	16	88	71	270	31	372	90	44	41	175	19	183	172	374	1009
07:30 AM	59	36	34	129	62	222	29	313	117	45	44	206	19	151	155	325	973
07:45 AM	67	29	26	122	19	270	30	319	103	30	23	156	22	190	59	271	868
Total Volume	156	176	92	424	230	1007	102	1339	379	153	151	683	72	676	528	1276	3722
% App. Total	36.8	41.5	21.7		17.2	75.2	7.6		55.5	22.4	22.1		5.6	53	41.4		
PHF	.582	.746	.676	.822	.737	.932	.823	.900	.810	.850	.858	.829	.818	.889	.767	.853	.922

County of Riverside
 N/S: Briggs Road
 E/W: SR-74
 Weather: Clear

File Name : 05_CRV_Briggs_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	10	59	16	85	78	245	12	335	69	34	43	146	12	152	142	306
+15 mins.	20	52	16	88	71	270	31	372	90	44	41	175	19	183	172	374
+30 mins.	59	36	34	129	62	222	29	313	117	45	44	206	19	151	155	325
+45 mins.	67	29	26	122	19	270	30	319	103	30	23	156	22	190	59	271
Total Volume	156	176	92	424	230	1007	102	1339	379	153	151	683	72	676	528	1276
% App. Total	36.8	41.5	21.7		17.2	75.2	7.6		55.5	22.4	22.1		5.6	53	41.4	
PHF	.582	.746	.676	.822	.737	.932	.823	.900	.810	.850	.858	.829	.818	.889	.767	.853

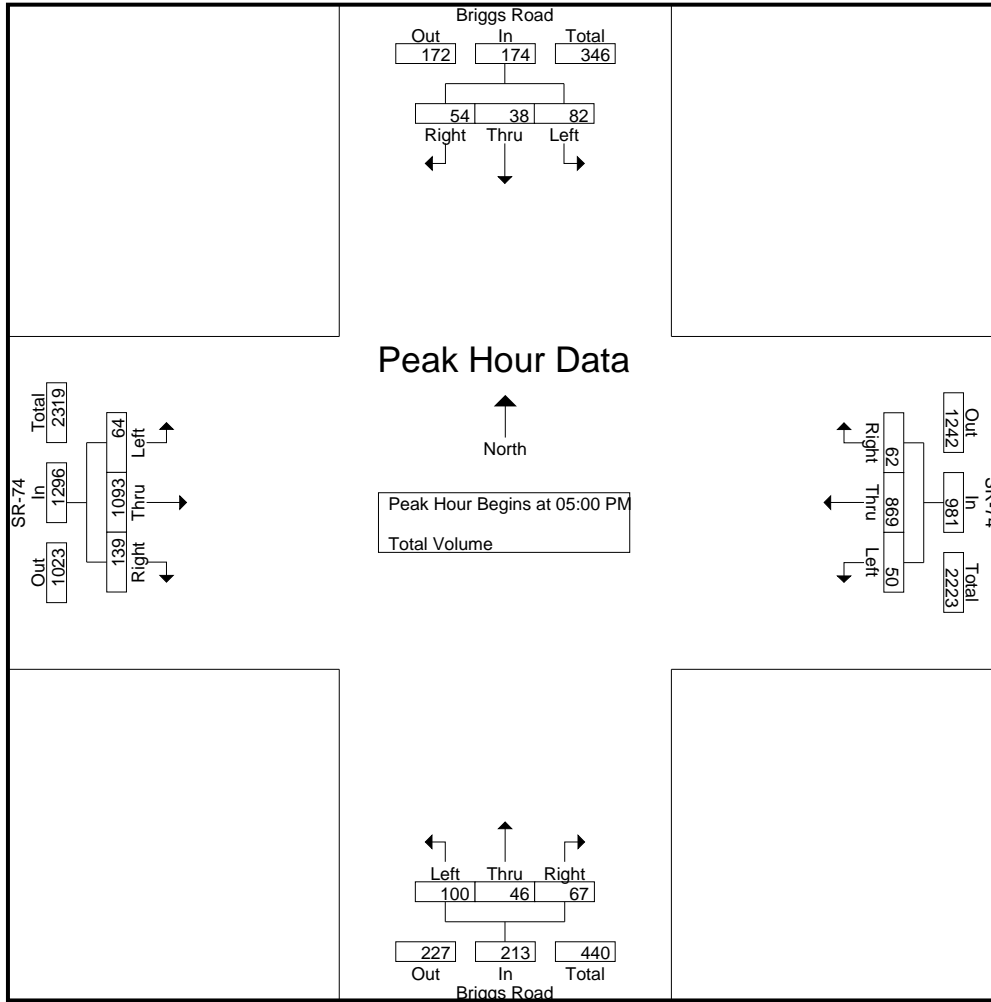
County of Riverside
 N/S: Briggs Road
 E/W: SR-74
 Weather: Clear

File Name : 05_CRV_Briggs_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Briggs Road Southbound				SR-74 Westbound				Briggs Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	22	12	10	44	14	158	14	186	36	13	13	62	5	295	27	327	619
04:15 PM	19	2	1	22	22	228	11	261	20	7	19	46	16	293	34	343	672
04:30 PM	22	9	18	49	7	235	11	253	24	10	13	47	16	272	31	319	668
04:45 PM	13	4	13	30	11	213	9	233	23	9	16	48	14	273	34	321	632
Total	76	27	42	145	54	834	45	933	103	39	61	203	51	1133	126	1310	2591
05:00 PM	27	13	15	55	11	180	14	205	30	13	14	57	13	273	35	321	638
05:15 PM	17	10	8	35	11	241	9	261	26	8	14	48	17	263	43	323	667
05:30 PM	21	10	16	47	13	223	12	248	26	7	16	49	20	267	33	320	664
05:45 PM	17	5	15	37	15	225	27	267	18	18	23	59	14	290	28	332	695
Total	82	38	54	174	50	869	62	981	100	46	67	213	64	1093	139	1296	2664
Grand Total	158	65	96	319	104	1703	107	1914	203	85	128	416	115	2226	265	2606	5255
Apprch %	49.5	20.4	30.1		5.4	89	5.6		48.8	20.4	30.8		4.4	85.4	10.2		
Total %	3	1.2	1.8	6.1	2	32.4	2	36.4	3.9	1.6	2.4	7.9	2.2	42.4	5	49.6	

Start Time	Briggs Road Southbound				SR-74 Westbound				Briggs Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	27	13	15	55	11	180	14	205	30	13	14	57	13	273	35	321	638
05:15 PM	17	10	8	35	11	241	9	261	26	8	14	48	17	263	43	323	667
05:30 PM	21	10	16	47	13	223	12	248	26	7	16	49	20	267	33	320	664
05:45 PM	17	5	15	37	15	225	27	267	18	18	23	59	14	290	28	332	695
Total Volume	82	38	54	174	50	869	62	981	100	46	67	213	64	1093	139	1296	2664
% App. Total	47.1	21.8	31		5.1	88.6	6.3		46.9	21.6	31.5		4.9	84.3	10.7		
PHF	.759	.731	.844	.791	.833	.901	.574	.919	.833	.639	.728	.903	.800	.942	.808	.976	.958



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

	05:00 PM				05:00 PM				05:00 PM				04:00 PM			
+0 mins.	27	13	15	55	11	180	14	205	30	13	14	57	5	295	27	327
+15 mins.	17	10	8	35	11	241	9	261	26	8	14	48	16	293	34	343
+30 mins.	21	10	16	47	13	223	12	248	26	7	16	49	16	272	31	319
+45 mins.	17	5	15	37	15	225	27	267	18	18	23	59	14	273	34	321
Total Volume	82	38	54	174	50	869	62	981	100	46	67	213	51	1133	126	1310
% App. Total	47.1	21.8	31		5.1	88.6	6.3		46.9	21.6	31.5		3.9	86.5	9.6	
PHF	.759	.731	.844	.791	.833	.901	.574	.919	.833	.639	.728	.903	.797	.960	.926	.955

County of Riverside
 N/S: Palomar Road
 E/W: Matthews Road
 Weather: Clear

File Name : 06_CRV_Palomar_Matthews AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

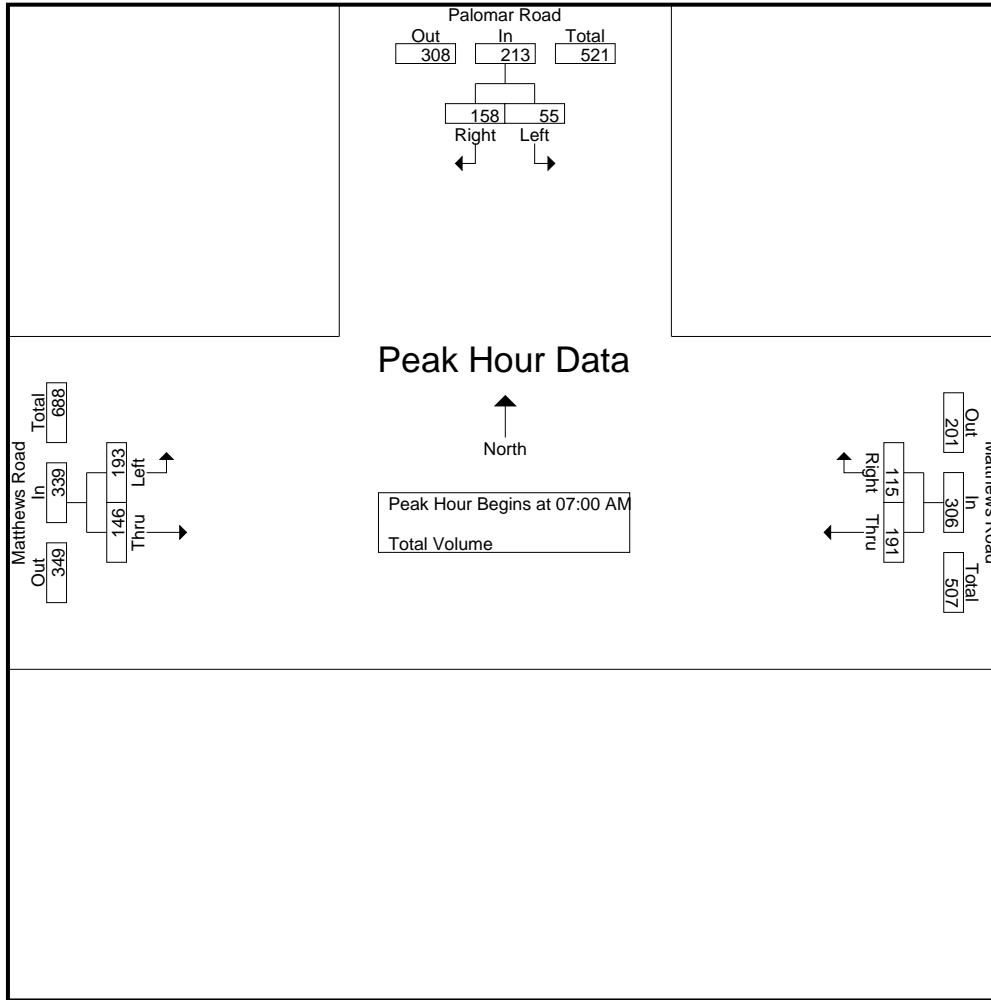
Groups Printed- Total Volume

Start Time	Palomar Road Southbound			Matthews Road Westbound			Matthews Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	20	30	50	35	24	59	57	58	115	224
07:15 AM	15	36	51	43	38	81	72	29	101	233
07:30 AM	10	43	53	71	33	104	42	29	71	228
07:45 AM	10	49	59	42	20	62	22	30	52	173
Total	55	158	213	191	115	306	193	146	339	858
08:00 AM	9	36	45	37	17	54	27	11	38	137
08:15 AM	5	31	36	29	3	32	33	12	45	113
08:30 AM	8	17	25	25	10	35	31	15	46	106
08:45 AM	4	28	32	17	6	23	28	7	35	90
Total	26	112	138	108	36	144	119	45	164	446
Grand Total	81	270	351	299	151	450	312	191	503	1304
Apprch %	23.1	76.9		66.4	33.6		62	38		
Total %	6.2	20.7	26.9	22.9	11.6	34.5	23.9	14.6	38.6	

Start Time	Palomar Road Southbound			Matthews Road Westbound			Matthews Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	20	30	50	35	24	59	57	58	115	224
07:15 AM	15	36	51	43	38	81	72	29	101	233
07:30 AM	10	43	53	71	33	104	42	29	71	228
07:45 AM	10	49	59	42	20	62	22	30	52	173
Total Volume	55	158	213	191	115	306	193	146	339	858
% App. Total	25.8	74.2		62.4	37.6		56.9	43.1		
PHF	.688	.806	.903	.673	.757	.736	.670	.629	.737	.921

County of Riverside
 N/S: Palomar Road
 E/W: Matthews Road
 Weather: Clear

File Name : 06_CRV_Palomar_Matthews AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	20	30	50	35	24	59	57	58	115
+15 mins.	15	36	51	43	38	81	72	29	101
+30 mins.	10	43	53	71	33	104	42	29	71
+45 mins.	10	49	59	42	20	62	22	30	52
Total Volume	55	158	213	191	115	306	193	146	339
% App. Total	25.8	74.2		62.4	37.6		56.9	43.1	
PHF	.688	.806	.903	.673	.757	.736	.670	.629	.737

County of Riverside
 N/S: Palomar Road
 E/W: Matthews Road
 Weather: Clear

File Name : 06_CRV_Palomar_Matthews PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

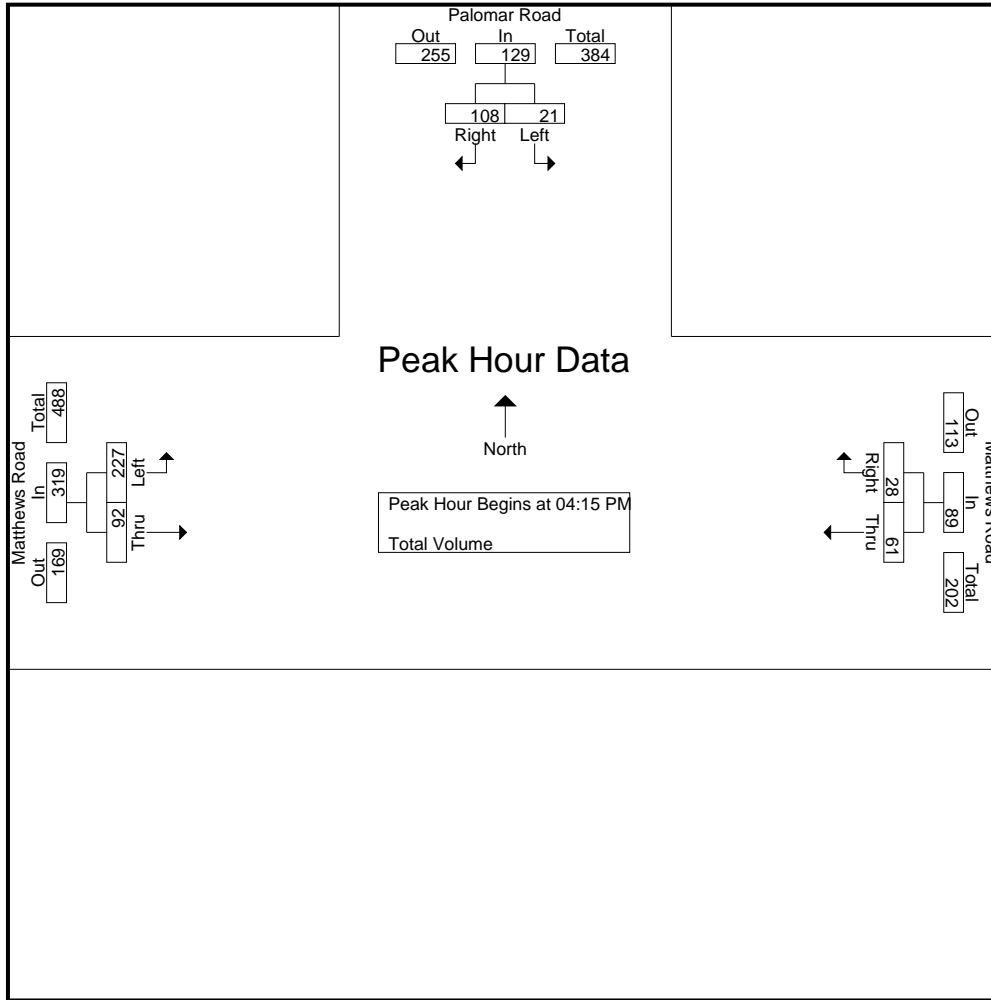
Groups Printed- Total Volume

Start Time	Palomar Road Southbound			Matthews Road Westbound			Matthews Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	5	26	31	13	10	23	48	30	78	132
04:15 PM	3	33	36	15	9	24	57	24	81	141
04:30 PM	6	29	35	18	7	25	54	23	77	137
04:45 PM	7	22	29	17	5	22	52	21	73	124
Total	21	110	131	63	31	94	211	98	309	534
05:00 PM	5	24	29	11	7	18	64	24	88	135
05:15 PM	7	33	40	13	7	20	49	32	81	141
05:30 PM	3	27	30	10	8	18	36	25	61	109
05:45 PM	3	24	27	18	0	18	51	17	68	113
Total	18	108	126	52	22	74	200	98	298	498
Grand Total	39	218	257	115	53	168	411	196	607	1032
Apprch %	15.2	84.8		68.5	31.5		67.7	32.3		
Total %	3.8	21.1	24.9	11.1	5.1	16.3	39.8	19	58.8	

Start Time	Palomar Road Southbound			Matthews Road Westbound			Matthews Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	3	33	36	15	9	24	57	24	81	141
04:30 PM	6	29	35	18	7	25	54	23	77	137
04:45 PM	7	22	29	17	5	22	52	21	73	124
05:00 PM	5	24	29	11	7	18	64	24	88	135
Total Volume	21	108	129	61	28	89	227	92	319	537
% App. Total	16.3	83.7		68.5	31.5		71.2	28.8		
PHF	.750	.818	.896	.847	.778	.890	.887	.958	.906	.952

County of Riverside
 N/S: Palomar Road
 E/W: Matthews Road
 Weather: Clear

File Name : 06_CRV_Palomar_Matthews PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:30 PM			04:00 PM			04:15 PM		
+0 mins.	6	29	35	13	10	23	57	24	81
+15 mins.	7	22	29	15	9	24	54	23	77
+30 mins.	5	24	29	18	7	25	52	21	73
+45 mins.	7	33	40	17	5	22	64	24	88
Total Volume	25	108	133	63	31	94	227	92	319
% App. Total	18.8	81.2		67	33		71.2	28.8	
PHF	.893	.818	.831	.875	.775	.940	.887	.958	.906

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

File Name : 07_MEN_Menifee_Matthews AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

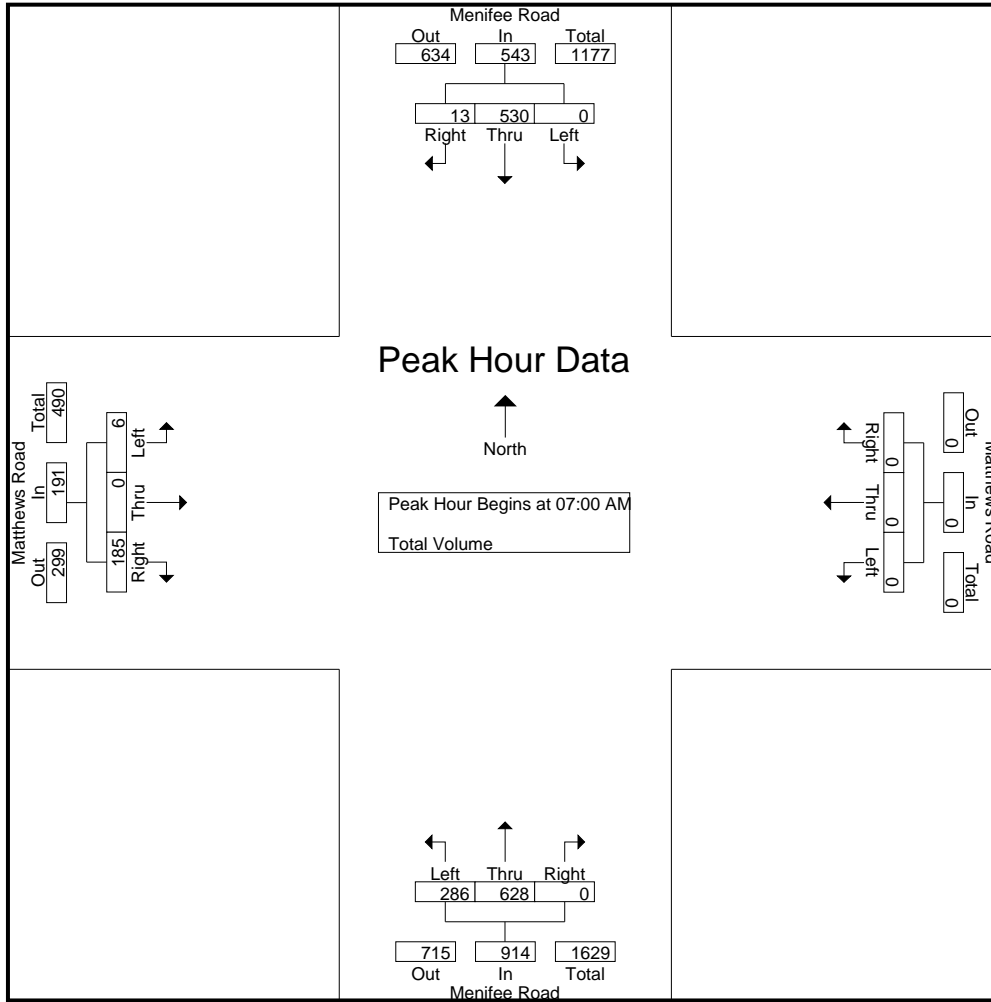
Groups Printed- Total Volume

Start Time	Menifee Road Southbound				Matthews Road Westbound				Menifee Road Northbound				Matthews Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	143	2	145	0	0	0	0	55	166	0	221	0	0	71	71	437
07:15 AM	0	146	2	148	0	0	0	0	84	190	0	274	2	0	48	50	472
07:30 AM	0	119	3	122	0	0	0	0	88	169	0	257	3	0	34	37	416
07:45 AM	0	122	6	128	0	0	0	0	59	103	0	162	1	0	32	33	323
Total	0	530	13	543	0	0	0	0	286	628	0	914	6	0	185	191	1648
08:00 AM	0	82	2	84	0	1	0	1	43	86	0	129	1	0	15	16	230
08:15 AM	0	81	3	84	0	0	0	0	28	69	0	97	4	0	11	15	196
08:30 AM	0	70	0	70	0	0	0	0	23	68	0	91	5	0	12	17	178
08:45 AM	0	102	1	103	0	0	0	0	21	46	0	67	0	0	9	9	179
Total	0	335	6	341	0	1	0	1	115	269	0	384	10	0	47	57	783
Grand Total	0	865	19	884	0	1	0	1	401	897	0	1298	16	0	232	248	2431
Apprch %	0	97.9	2.1		0	100	0		30.9	69.1	0		6.5	0	93.5		
Total %	0	35.6	0.8	36.4	0	0	0	0	16.5	36.9	0	53.4	0.7	0	9.5	10.2	

Start Time	Menifee Road Southbound				Matthews Road Westbound				Menifee Road Northbound				Matthews Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	143	2	145	0	0	0	0	55	166	0	221	0	0	71	71	437
07:15 AM	0	146	2	148	0	0	0	0	84	190	0	274	2	0	48	50	472
07:30 AM	0	119	3	122	0	0	0	0	88	169	0	257	3	0	34	37	416
07:45 AM	0	122	6	128	0	0	0	0	59	103	0	162	1	0	32	33	323
Total Volume	0	530	13	543	0	0	0	0	286	628	0	914	6	0	185	191	1648
% App. Total	0	97.6	2.4		0	0	0		31.3	68.7	0		3.1	0	96.9		
PHF	.000	.908	.542	.917	.000	.000	.000	.000	.813	.826	.000	.834	.500	.000	.651	.673	.873

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

File Name : 07_MEN_Menifee_Matthews AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	0	143	2	145	0	0	0	0	55	166	0	221	0	0	71	71
+15 mins.	0	146	2	148	0	0	0	0	84	190	0	274	2	0	48	50
+30 mins.	0	119	3	122	0	0	0	0	88	169	0	257	3	0	34	37
+45 mins.	0	122	6	128	0	1	0	1	59	103	0	162	1	0	32	33
Total Volume	0	530	13	543	0	1	0	1	286	628	0	914	6	0	185	191
% App. Total	0	97.6	2.4		0	100	0		31.3	68.7	0		3.1	0	96.9	
PHF	.000	.908	.542	.917	.000	.250	.000	.250	.813	.826	.000	.834	.500	.000	.651	.673

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

File Name : 07_MEN_Menifee_Matthews PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

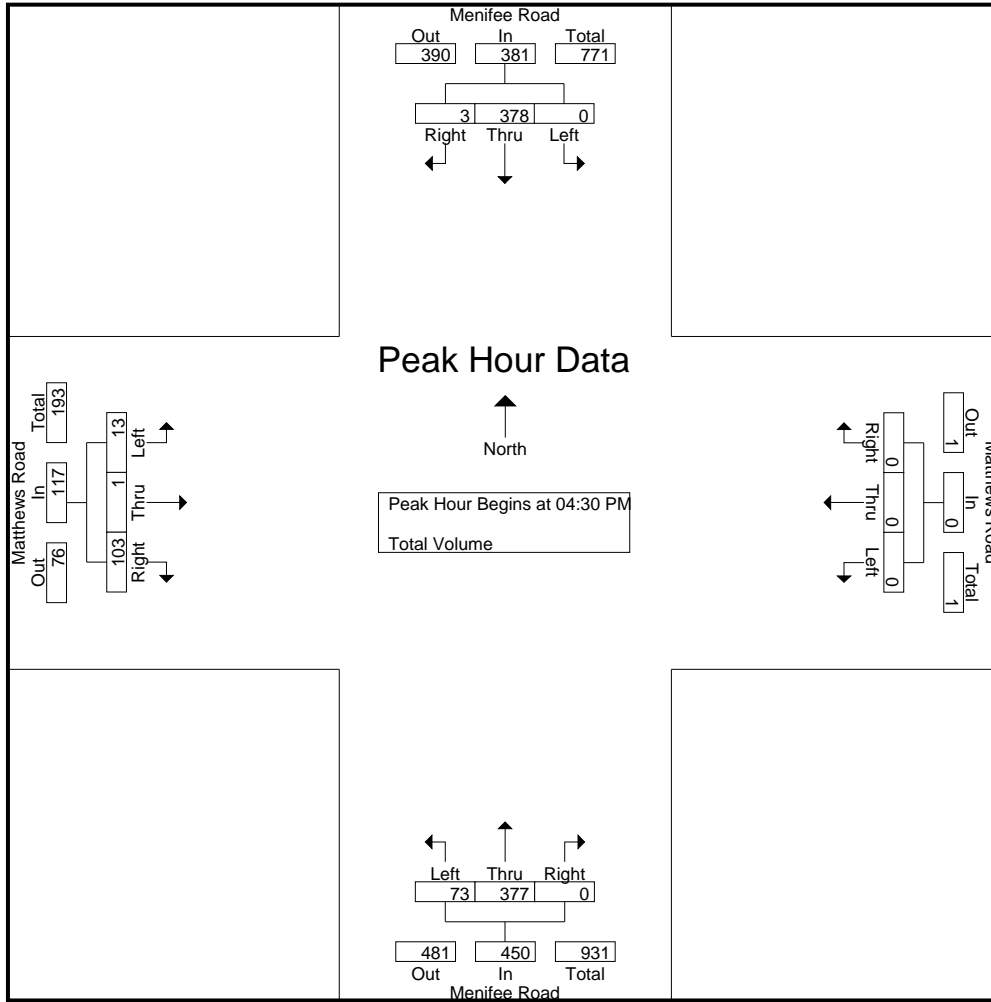
Groups Printed- Total Volume

Start Time	Menifee Road Southbound				Matthews Road Westbound				Menifee Road Northbound				Matthews Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	75	2	77	0	0	0	0	15	114	0	129	6	0	28	34	240
04:15 PM	0	77	1	78	0	0	0	0	21	92	0	113	2	1	24	27	218
04:30 PM	0	110	1	111	0	0	0	0	20	100	0	120	5	0	20	25	256
04:45 PM	0	91	0	91	0	0	0	0	15	94	0	109	2	0	26	28	228
Total	0	353	4	357	0	0	0	0	71	400	0	471	15	1	98	114	942
05:00 PM	0	98	0	98	0	0	0	0	18	98	0	116	3	1	25	29	243
05:15 PM	0	79	2	81	0	0	0	0	20	85	0	105	3	0	32	35	221
05:30 PM	0	98	0	98	0	0	0	0	15	104	0	119	3	0	27	30	247
05:45 PM	0	107	1	108	0	1	0	1	17	76	0	93	3	0	16	19	221
Total	0	382	3	385	0	1	0	1	70	363	0	433	12	1	100	113	932
Grand Total	0	735	7	742	0	1	0	1	141	763	0	904	27	2	198	227	1874
Apprch %	0	99.1	0.9		0	100	0		15.6	84.4	0		11.9	0.9	87.2		
Total %	0	39.2	0.4	39.6	0	0.1	0	0.1	7.5	40.7	0	48.2	1.4	0.1	10.6	12.1	

Start Time	Menifee Road Southbound				Matthews Road Westbound				Menifee Road Northbound				Matthews Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	110	1	111	0	0	0	0	20	100	0	120	5	0	20	25	256
04:45 PM	0	91	0	91	0	0	0	0	15	94	0	109	2	0	26	28	228
05:00 PM	0	98	0	98	0	0	0	0	18	98	0	116	3	1	25	29	243
05:15 PM	0	79	2	81	0	0	0	0	20	85	0	105	3	0	32	35	221
Total Volume	0	378	3	381	0	0	0	0	73	377	0	450	13	1	103	117	948
% App. Total	0	99.2	0.8		0	0	0		16.2	83.8	0		11.1	0.9	88		
PHF	.000	.859	.375	.858	.000	.000	.000	.000	.913	.943	.000	.938	.650	.250	.805	.836	.926

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

File Name : 07_MEN_Menifee_Matthews PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	05:00 PM				05:00 PM				04:00 PM				04:45 PM			
+0 mins.	0	98	0	98	0	0	0	0	15	114	0	129	2	0	26	28
+15 mins.	0	79	2	81	0	0	0	0	21	92	0	113	3	1	25	29
+30 mins.	0	98	0	98	0	0	0	0	20	100	0	120	3	0	32	35
+45 mins.	0	107	1	108	0	1	0	1	15	94	0	109	3	0	27	30
Total Volume	0	382	3	385	0	1	0	1	71	400	0	471	11	1	110	122
% App. Total	0	99.2	0.8		0	100	0		15.1	84.9	0		9	0.8	90.2	
PHF	.000	.893	.375	.891	.000	.250	.000	.250	.845	.877	.000	.913	.917	.250	.859	.871

City of Menifee
 N/S: Menifee Road
 E/W: Rouse Road/Turtle Point Drive
 Weather: Clear

File Name : 08_MEN_Menifee_Rouse AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Menifee Road Southbound				Turtle Point Drive Westbound				Menifee Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	198	1	199	5	0	9	14	1	214	1	216	0	0	0	0	429
07:15 AM	3	188	0	191	9	0	12	21	0	277	0	277	1	0	0	1	490
07:30 AM	8	151	2	161	2	0	10	12	1	231	5	237	0	0	0	0	410
07:45 AM	1	145	5	151	7	0	9	16	0	151	4	155	1	0	0	1	323
Total	12	682	8	702	23	0	40	63	2	873	10	885	2	0	0	2	1652
08:00 AM	2	102	0	104	3	0	4	7	1	124	4	129	0	0	0	0	240
08:15 AM	2	88	0	90	5	0	6	11	0	87	4	91	0	0	1	1	193
08:30 AM	4	78	0	82	7	0	5	12	1	88	0	89	0	0	0	0	183
08:45 AM	4	105	0	109	3	0	1	4	0	68	1	69	0	0	0	0	182
Total	12	373	0	385	18	0	16	34	2	367	9	378	0	0	1	1	798
Grand Total	24	1055	8	1087	41	0	56	97	4	1240	19	1263	2	0	1	3	2450
Apprch %	2.2	97.1	0.7		42.3	0	57.7		0.3	98.2	1.5		66.7	0	33.3		
Total %	1	43.1	0.3	44.4	1.7	0	2.3	4	0.2	50.6	0.8	51.6	0.1	0	0	0.1	

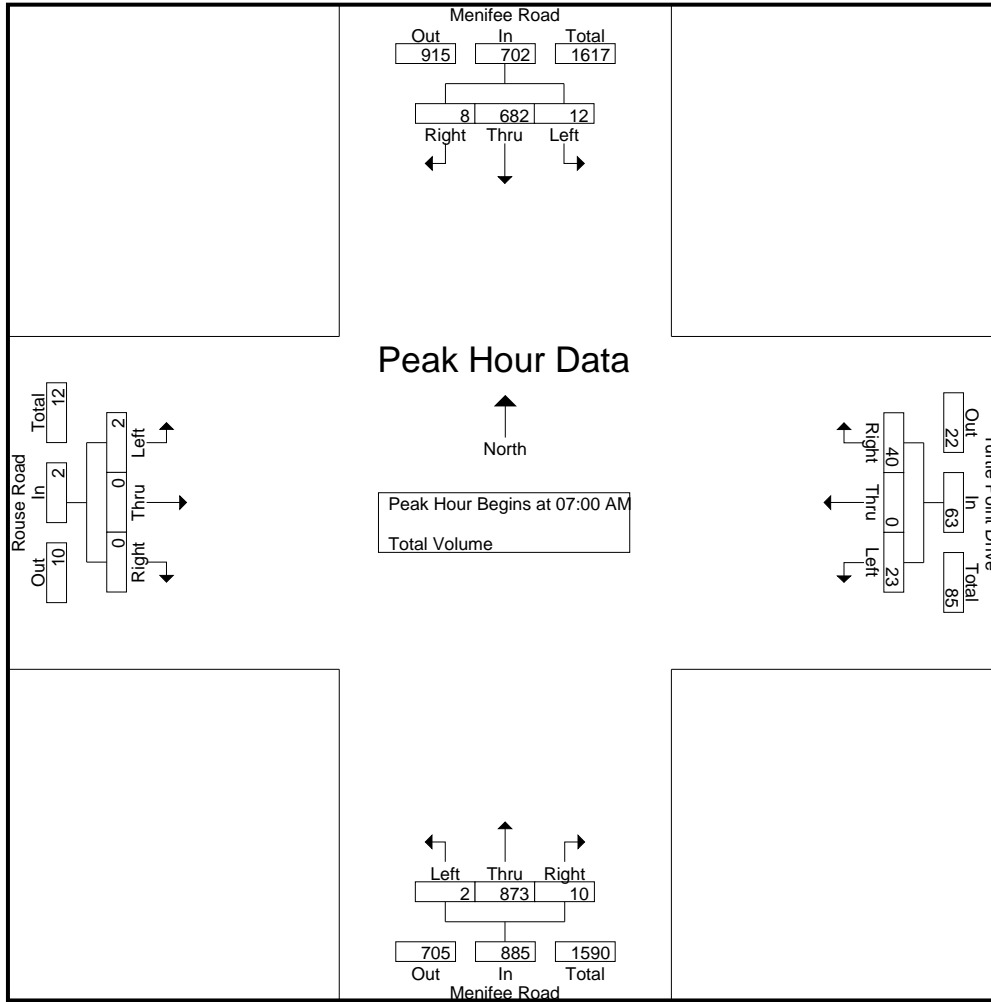
Start Time	Menifee Road Southbound				Turtle Point Drive Westbound				Menifee Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	198	1	199	5	0	9	14	1	214	1	216	0	0	0	0	429
07:15 AM	3	188	0	191	9	0	12	21	0	277	0	277	1	0	0	1	490
07:30 AM	8	151	2	161	2	0	10	12	1	231	5	237	0	0	0	0	410
07:45 AM	1	145	5	151	7	0	9	16	0	151	4	155	1	0	0	1	323
Total Volume	12	682	8	702	23	0	40	63	2	873	10	885	2	0	0	2	1652
% App. Total	1.7	97.2	1.1		36.5	0	63.5		0.2	98.6	1.1		100	0	0		
PHF	.375	.861	.400	.882	.639	.000	.833	.750	.500	.788	.500	.799	.500	.000	.000	.500	.843

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM

City of Menifee
 N/S: Menifee Road
 E/W: Rouse Road/Turtle Point Drive
 Weather: Clear

File Name : 08_MEN_Menifee_Rouse AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	198	1	199	5	0	9	14	1	214	1	216	0	0	0	0
+15 mins.	3	188	0	191	9	0	12	21	0	277	0	277	1	0	0	1
+30 mins.	8	151	2	161	2	0	10	12	1	231	5	237	0	0	0	0
+45 mins.	1	145	5	151	7	0	9	16	0	151	4	155	1	0	0	1
Total Volume	12	682	8	702	23	0	40	63	2	873	10	885	2	0	0	2
% App. Total	1.7	97.2	1.1		36.5	0	63.5		0.2	98.6	1.1		100	0	0	
PHF	.375	.861	.400	.882	.639	.000	.833	.750	.500	.788	.500	.799	.500	.000	.000	.500

City of Menifee
 N/S: Menifee Road
 E/W: Rouse Road/Turtle Point Drive
 Weather: Clear

File Name : 08_MEN_Menifee_Rouse PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

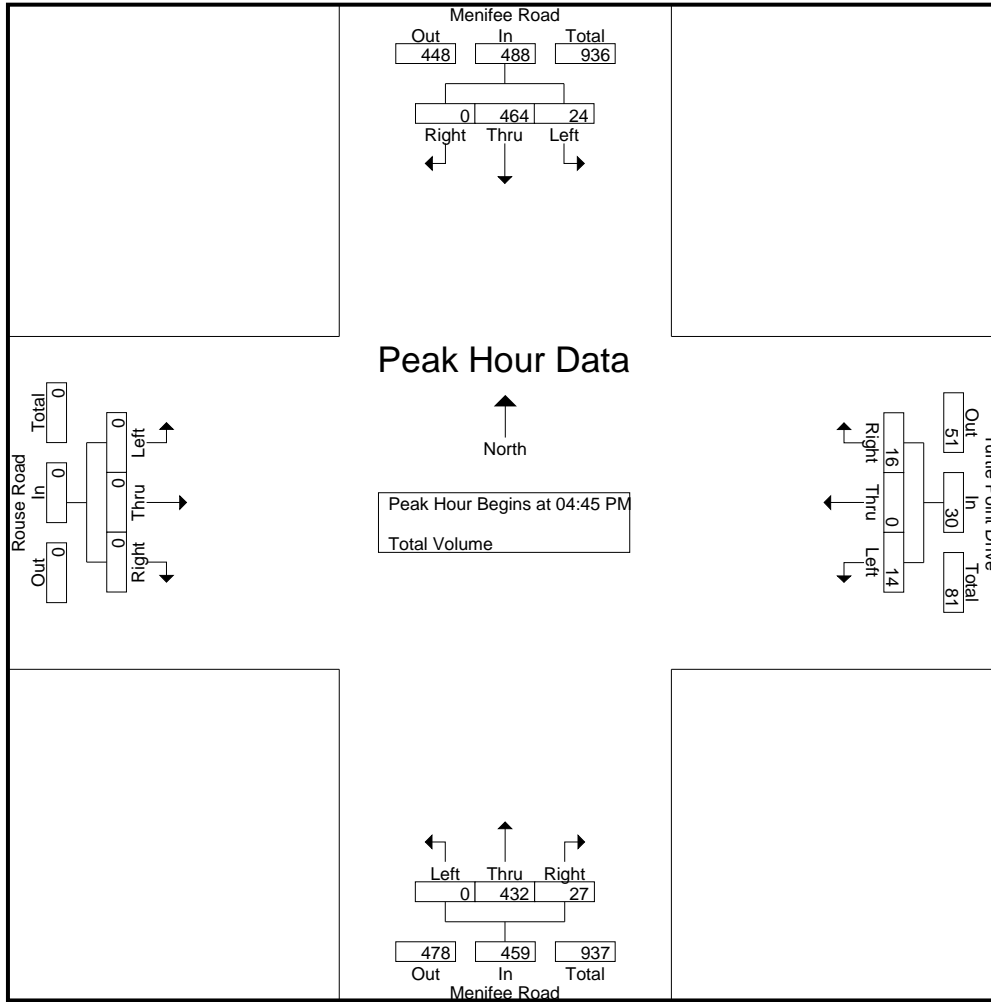
Groups Printed- Total Volume

Start Time	Menifee Road Southbound				Turtle Point Drive Westbound				Menifee Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	8	99	0	107	1	0	7	8	0	117	6	123	1	0	0	1	239
04:15 PM	3	102	0	105	2	0	5	7	0	109	4	113	0	0	0	0	225
04:30 PM	6	110	0	116	3	0	2	5	0	116	6	122	0	1	0	1	244
04:45 PM	5	124	0	129	3	0	3	6	0	106	10	116	0	0	0	0	251
Total	22	435	0	457	9	0	17	26	0	448	26	474	1	1	0	2	959
05:00 PM	6	104	0	110	4	0	7	11	0	107	5	112	0	0	0	0	233
05:15 PM	7	116	0	123	3	0	2	5	0	103	6	109	0	0	0	0	237
05:30 PM	6	120	0	126	4	0	4	8	0	116	6	122	0	0	0	0	256
05:45 PM	3	116	0	119	4	0	3	7	0	90	8	98	0	0	0	0	224
Total	22	456	0	478	15	0	16	31	0	416	25	441	0	0	0	0	950
Grand Total	44	891	0	935	24	0	33	57	0	864	51	915	1	1	0	2	1909
Apprch %	4.7	95.3	0		42.1	0	57.9		0	94.4	5.6		50	50	0		
Total %	2.3	46.7	0	49	1.3	0	1.7	3	0	45.3	2.7	47.9	0.1	0.1	0	0.1	

Start Time	Menifee Road Southbound				Turtle Point Drive Westbound				Menifee Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	5	124	0	129	3	0	3	6	0	106	10	116	0	0	0	0	251
05:00 PM	6	104	0	110	4	0	7	11	0	107	5	112	0	0	0	0	233
05:15 PM	7	116	0	123	3	0	2	5	0	103	6	109	0	0	0	0	237
05:30 PM	6	120	0	126	4	0	4	8	0	116	6	122	0	0	0	0	256
Total Volume	24	464	0	488	14	0	16	30	0	432	27	459	0	0	0	0	977
% App. Total	4.9	95.1	0		46.7	0	53.3		0	94.1	5.9		0	0	0		
PHF	.857	.935	.000	.946	.875	.000	.571	.682	.000	.931	.675	.941	.000	.000	.000	.000	.954

City of Menifee
 N/S: Menifee Road
 E/W: Rouse Road/Turtle Point Drive
 Weather: Clear

File Name : 08_MEN_Menifee_Rouse PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:45 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	5	124	0	129	4	0	7	11	0	117	6	123	1	0	0	1
+15 mins.	6	104	0	110	3	0	2	5	0	109	4	113	0	0	0	0
+30 mins.	7	116	0	123	4	0	4	8	0	116	6	122	0	1	0	1
+45 mins.	6	120	0	126	4	0	3	7	0	106	10	116	0	0	0	0
Total Volume	24	464	0	488	15	0	16	31	0	448	26	474	1	1	0	2
% App. Total	4.9	95.1	0		48.4	0	51.6		0	94.5	5.5		50	50	0	
PHF	.857	.935	.000	.946	.938	.000	.571	.705	.000	.957	.650	.963	.250	.250	.000	.500

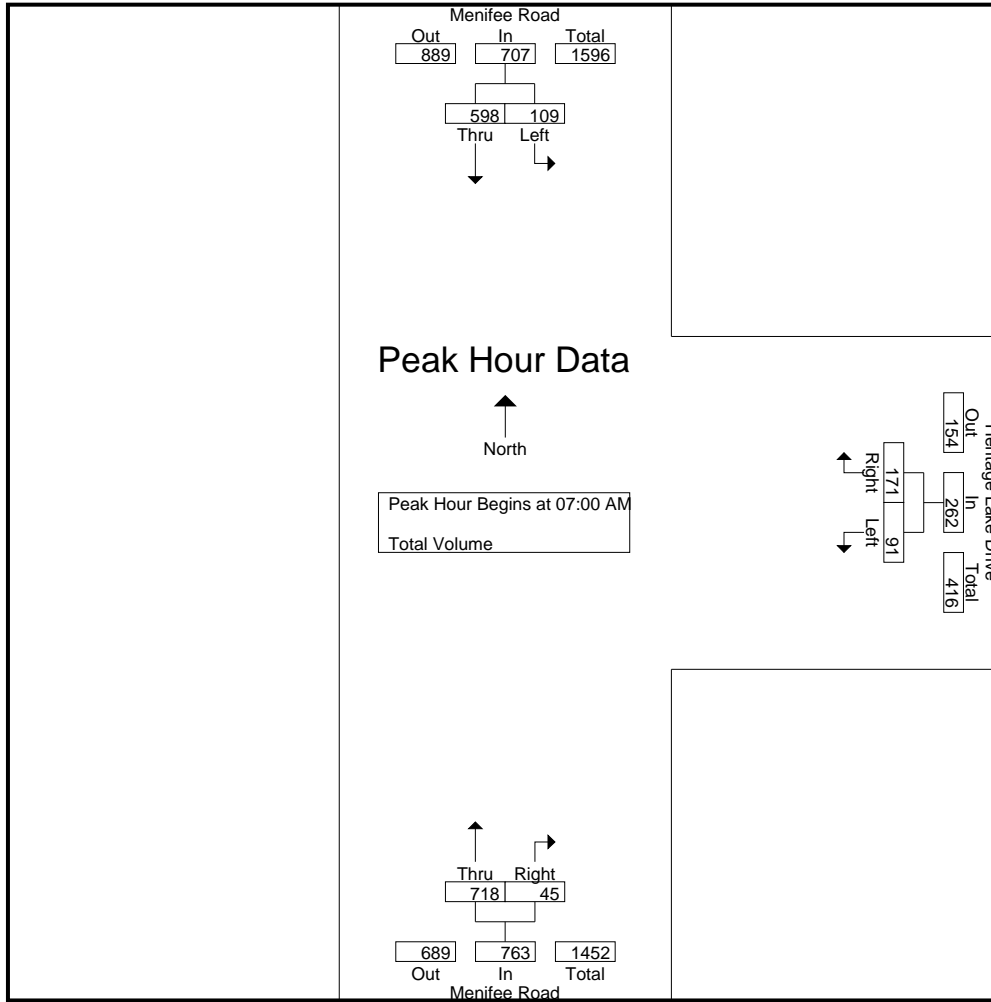
City of Menifee
 N/S: Menifee Road
 E/W: Heritage Lake Drive
 Weather: Clear

File Name : 09_MEN_Menifee_Heritage Lake AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Menifee Road Southbound			Heritage Lake Drive Westbound			Menifee Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	32	189	221	13	37	50	215	3	218	489
07:15 AM	32	160	192	14	51	65	201	8	209	466
07:30 AM	18	127	145	36	52	88	174	15	189	422
07:45 AM	27	122	149	28	31	59	128	19	147	355
Total	109	598	707	91	171	262	718	45	763	1732
08:00 AM	13	92	105	30	23	53	93	3	96	254
08:15 AM	8	89	97	2	9	11	80	5	85	193
08:30 AM	3	81	84	8	11	19	77	10	87	190
08:45 AM	1	108	109	8	7	15	57	5	62	186
Total	25	370	395	48	50	98	307	23	330	823
Grand Total	134	968	1102	139	221	360	1025	68	1093	2555
Apprch %	12.2	87.8		38.6	61.4		93.8	6.2		
Total %	5.2	37.9	43.1	5.4	8.6	14.1	40.1	2.7	42.8	

Start Time	Menifee Road Southbound			Heritage Lake Drive Westbound			Menifee Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	32	189	221	13	37	50	215	3	218	489
07:15 AM	32	160	192	14	51	65	201	8	209	466
07:30 AM	18	127	145	36	52	88	174	15	189	422
07:45 AM	27	122	149	28	31	59	128	19	147	355
Total Volume	109	598	707	91	171	262	718	45	763	1732
% App. Total	15.4	84.6		34.7	65.3		94.1	5.9		
PHF	.852	.791	.800	.632	.822	.744	.835	.592	.875	.885



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

	07:00 AM			07:15 AM			07:00 AM		
+0 mins.	32	189	221	14	51	65	215	3	218
+15 mins.	32	160	192	36	52	88	201	8	209
+30 mins.	18	127	145	28	31	59	174	15	189
+45 mins.	27	122	149	30	23	53	128	19	147
Total Volume	109	598	707	108	157	265	718	45	763
% App. Total	15.4	84.6		40.8	59.2		94.1	5.9	
PHF	.852	.791	.800	.750	.755	.753	.835	.592	.875

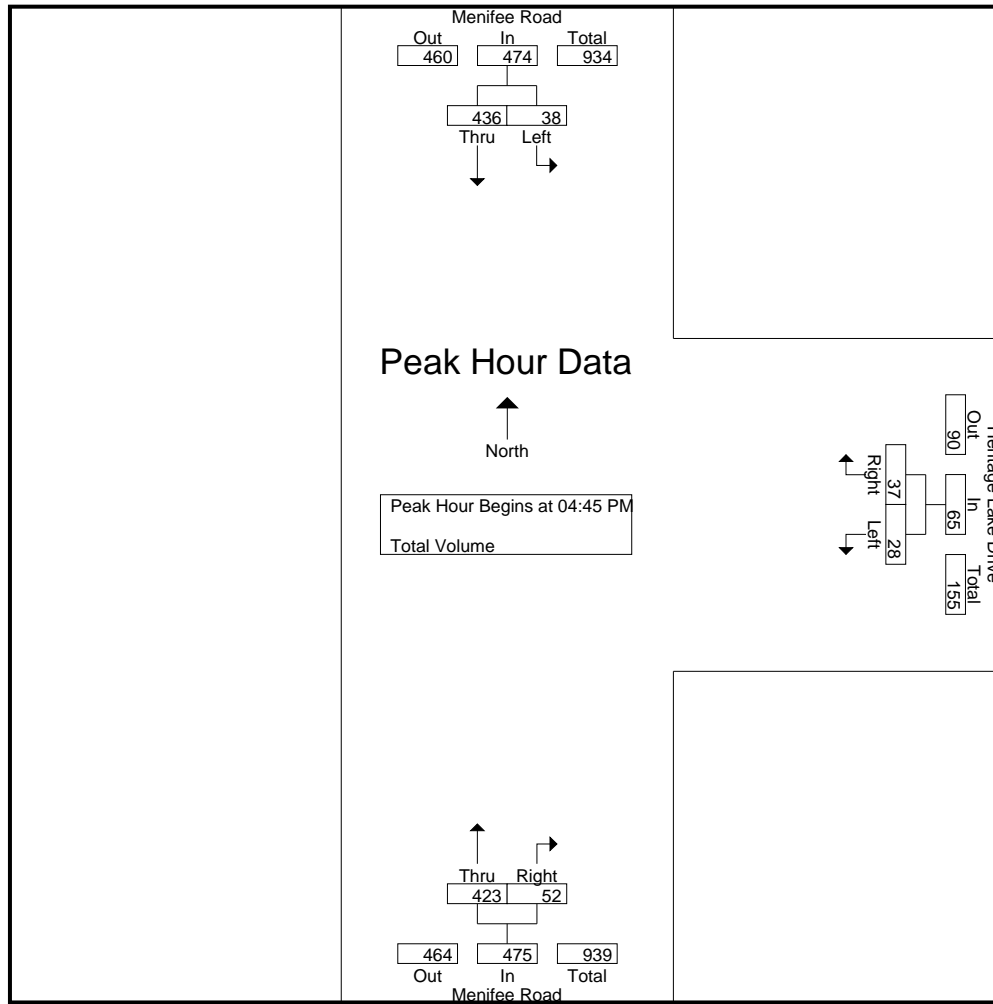
City of Menifee
 N/S: Menifee Road
 E/W: Heritage Lake Drive
 Weather: Clear

File Name : 09_MEN_Menifee_Heritage Lake PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Menifee Road Southbound			Heritage Lake Drive Westbound			Menifee Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	14	81	95	6	7	13	116	7	123	231
04:15 PM	11	92	103	7	8	15	104	13	117	235
04:30 PM	6	108	114	11	4	15	115	7	122	251
04:45 PM	10	115	125	9	8	17	112	13	125	267
Total	41	396	437	33	27	60	447	40	487	984
05:00 PM	12	98	110	5	11	16	97	13	110	236
05:15 PM	6	111	117	4	8	12	98	9	107	236
05:30 PM	10	112	122	10	10	20	116	17	133	275
05:45 PM	8	114	122	9	6	15	89	12	101	238
Total	36	435	471	28	35	63	400	51	451	985
Grand Total	77	831	908	61	62	123	847	91	938	1969
Apprch %	8.5	91.5		49.6	50.4		90.3	9.7		
Total %	3.9	42.2	46.1	3.1	3.1	6.2	43	4.6	47.6	

Start Time	Menifee Road Southbound			Heritage Lake Drive Westbound			Menifee Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	10	115	125	9	8	17	112	13	125	267
05:00 PM	12	98	110	5	11	16	97	13	110	236
05:15 PM	6	111	117	4	8	12	98	9	107	236
05:30 PM	10	112	122	10	10	20	116	17	133	275
Total Volume	38	436	474	28	37	65	423	52	475	1014
% App. Total	8	92		43.1	56.9		89.1	10.9		
PHF	.792	.948	.948	.700	.841	.813	.912	.765	.893	.922



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

	04:45 PM			04:45 PM			04:00 PM		
+0 mins.	10	115	125	9	8	17	116	7	123
+15 mins.	12	98	110	5	11	16	104	13	117
+30 mins.	6	111	117	4	8	12	115	7	122
+45 mins.	10	112	122	10	10	20	112	13	125
Total Volume	38	436	474	28	37	65	447	40	487
% App. Total	8	92		43.1	56.9		91.8	8.2	
PHF	.792	.948	.948	.700	.841	.813	.963	.769	.974

City of Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 10_MEN_Menifee_McCall AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

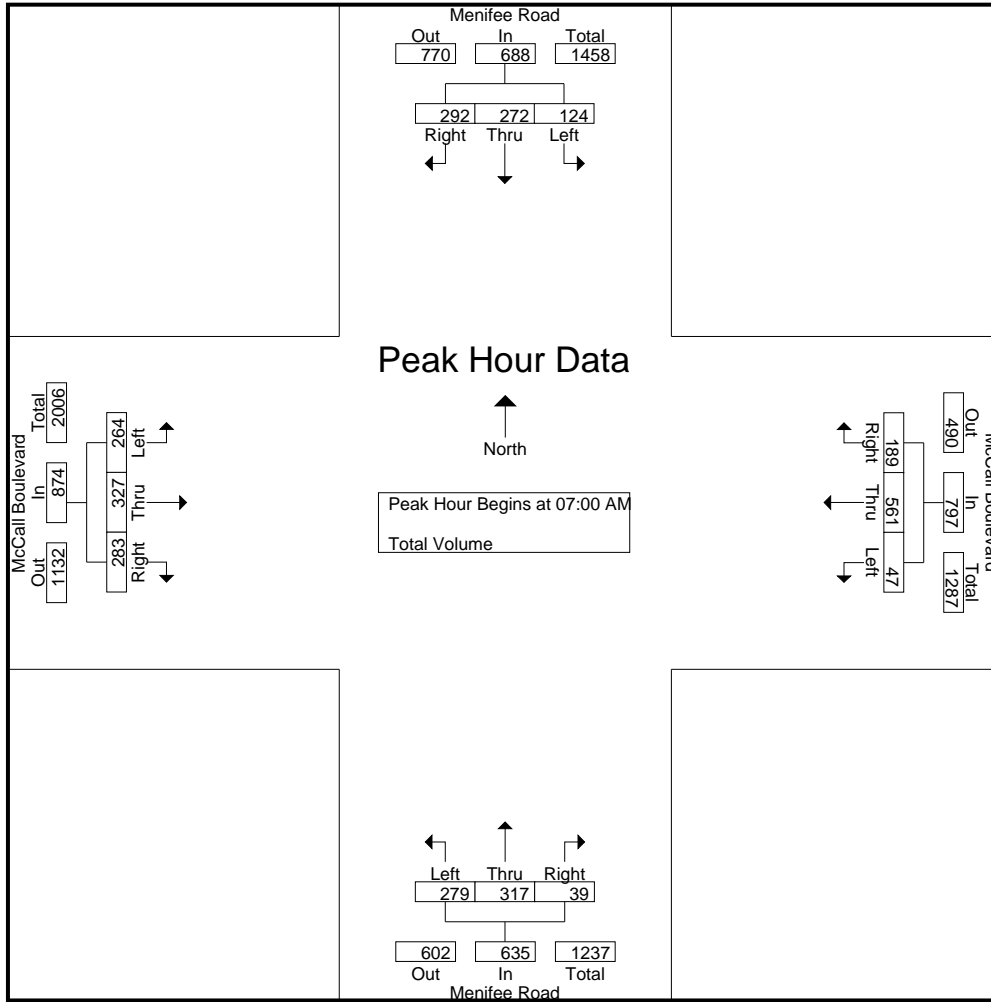
Groups Printed- Total Volume

Start Time	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	74	72	45	191	4	107	60	171	40	77	8	125	71	128	63	262	749
07:15 AM	30	75	74	179	19	170	55	244	81	95	10	186	71	123	106	300	909
07:30 AM	13	60	81	154	12	166	51	229	86	76	8	170	56	43	76	175	728
07:45 AM	7	65	92	164	12	118	23	153	72	69	13	154	66	33	38	137	608
Total	124	272	292	688	47	561	189	797	279	317	39	635	264	327	283	874	2994
08:00 AM	16	42	72	130	7	58	12	77	57	38	5	100	44	32	42	118	425
08:15 AM	4	39	44	87	2	50	15	67	57	36	4	97	39	35	36	110	361
08:30 AM	12	33	48	93	4	59	7	70	54	31	4	89	46	42	54	142	394
08:45 AM	3	64	52	119	7	57	11	75	35	32	0	67	23	23	39	85	346
Total	35	178	216	429	20	224	45	289	203	137	13	353	152	132	171	455	1526
Grand Total	159	450	508	1117	67	785	234	1086	482	454	52	988	416	459	454	1329	4520
Apprch %	14.2	40.3	45.5		6.2	72.3	21.5		48.8	46	5.3		31.3	34.5	34.2		
Total %	3.5	10	11.2	24.7	1.5	17.4	5.2	24	10.7	10	1.2	21.9	9.2	10.2	10	29.4	

Start Time	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	74	72	45	191	4	107	60	171	40	77	8	125	71	128	63	262	749
07:15 AM	30	75	74	179	19	170	55	244	81	95	10	186	71	123	106	300	909
07:30 AM	13	60	81	154	12	166	51	229	86	76	8	170	56	43	76	175	728
07:45 AM	7	65	92	164	12	118	23	153	72	69	13	154	66	33	38	137	608
Total Volume	124	272	292	688	47	561	189	797	279	317	39	635	264	327	283	874	2994
% App. Total	18	39.5	42.4		5.9	70.4	23.7		43.9	49.9	6.1		30.2	37.4	32.4		
PHF	.419	.907	.793	.901	.618	.825	.788	.817	.811	.834	.750	.853	.930	.639	.667	.728	.823

City of Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 10_MEN_Menifee_McCall AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	74	72	45	191	4	107	60	171	40	77	8	125	71	128	63	262
+15 mins.	30	75	74	179	19	170	55	244	81	95	10	186	71	123	106	300
+30 mins.	13	60	81	154	12	166	51	229	86	76	8	170	56	43	76	175
+45 mins.	7	65	92	164	12	118	23	153	72	69	13	154	66	33	38	137
Total Volume	124	272	292	688	47	561	189	797	279	317	39	635	264	327	283	874
% App. Total	18	39.5	42.4		5.9	70.4	23.7		43.9	49.9	6.1		30.2	37.4	32.4	
PHF	.419	.907	.793	.901	.618	.825	.788	.817	.811	.834	.750	.853	.930	.639	.667	.728

City of Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 10_MEN_Menifee_McCall PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	12	38	40	90	6	47	8	61	41	53	5	99	63	80	47	190	440
04:15 PM	11	52	46	109	5	31	13	49	27	53	9	89	54	62	41	157	404
04:30 PM	15	56	49	120	3	57	17	77	32	40	6	78	59	69	66	194	469
04:45 PM	12	57	55	124	7	57	9	73	45	50	7	102	61	79	65	205	504
Total	50	203	190	443	21	192	47	260	145	196	27	368	237	290	219	746	1817
05:00 PM	7	52	41	100	1	40	9	50	36	49	7	92	62	73	60	195	437
05:15 PM	13	54	48	115	6	58	6	70	39	47	9	95	51	77	57	185	465
05:30 PM	20	53	48	121	5	55	5	65	29	50	4	83	73	59	59	191	460
05:45 PM	15	54	58	127	2	39	6	47	36	49	9	94	50	79	46	175	443
Total	55	213	195	463	14	192	26	232	140	195	29	364	236	288	222	746	1805
Grand Total	105	416	385	906	35	384	73	492	285	391	56	732	473	578	441	1492	3622
Apprch %	11.6	45.9	42.5		7.1	78	14.8		38.9	53.4	7.7		31.7	38.7	29.6		
Total %	2.9	11.5	10.6	25	1	10.6	2	13.6	7.9	10.8	1.5	20.2	13.1	16	12.2	41.2	

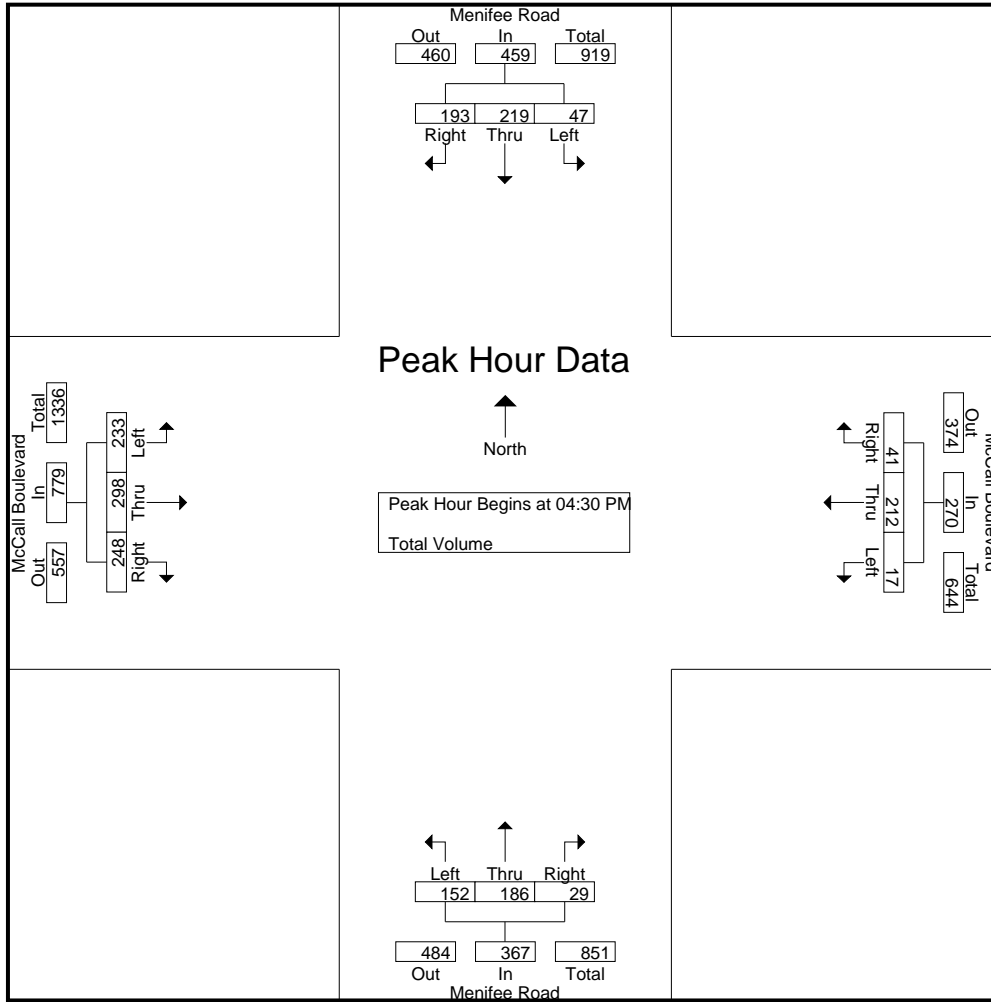
Start Time	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	15	56	49	120	3	57	17	77	32	40	6	78	59	69	66	194	469
04:45 PM	12	57	55	124	7	57	9	73	45	50	7	102	61	79	65	205	504
05:00 PM	7	52	41	100	1	40	9	50	36	49	7	92	62	73	60	195	437
05:15 PM	13	54	48	115	6	58	6	70	39	47	9	95	51	77	57	185	465
Total Volume	47	219	193	459	17	212	41	270	152	186	29	367	233	298	248	779	1875
% App. Total	10.2	47.7	42		6.3	78.5	15.2		41.4	50.7	7.9		29.9	38.3	31.8		
PHF	.783	.961	.877	.925	.607	.914	.603	.877	.844	.930	.806	.900	.940	.943	.939	.950	.930

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 10_MEN_Menifee_McCall PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	05:00 PM				04:30 PM				04:45 PM				04:30 PM			
+0 mins.	7	52	41	100	3	57	17	77	45	50	7	102	59	69	66	194
+15 mins.	13	54	48	115	7	57	9	73	36	49	7	92	61	79	65	205
+30 mins.	20	53	48	121	1	40	9	50	39	47	9	95	62	73	60	195
+45 mins.	15	54	58	127	6	58	6	70	29	50	4	83	51	77	57	185
Total Volume	55	213	195	463	17	212	41	270	149	196	27	372	233	298	248	779
% App. Total	11.9	46	42.1		6.3	78.5	15.2		40.1	52.7	7.3		29.9	38.3	31.8	
PHF	.688	.986	.841	.911	.607	.914	.603	.877	.828	.980	.750	.912	.940	.943	.939	.950

County of Riverside
 N/S: Project Driveway South
 E/W: SR-74
 Weather: Clear

File Name : 11_CRV_Project DW South_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

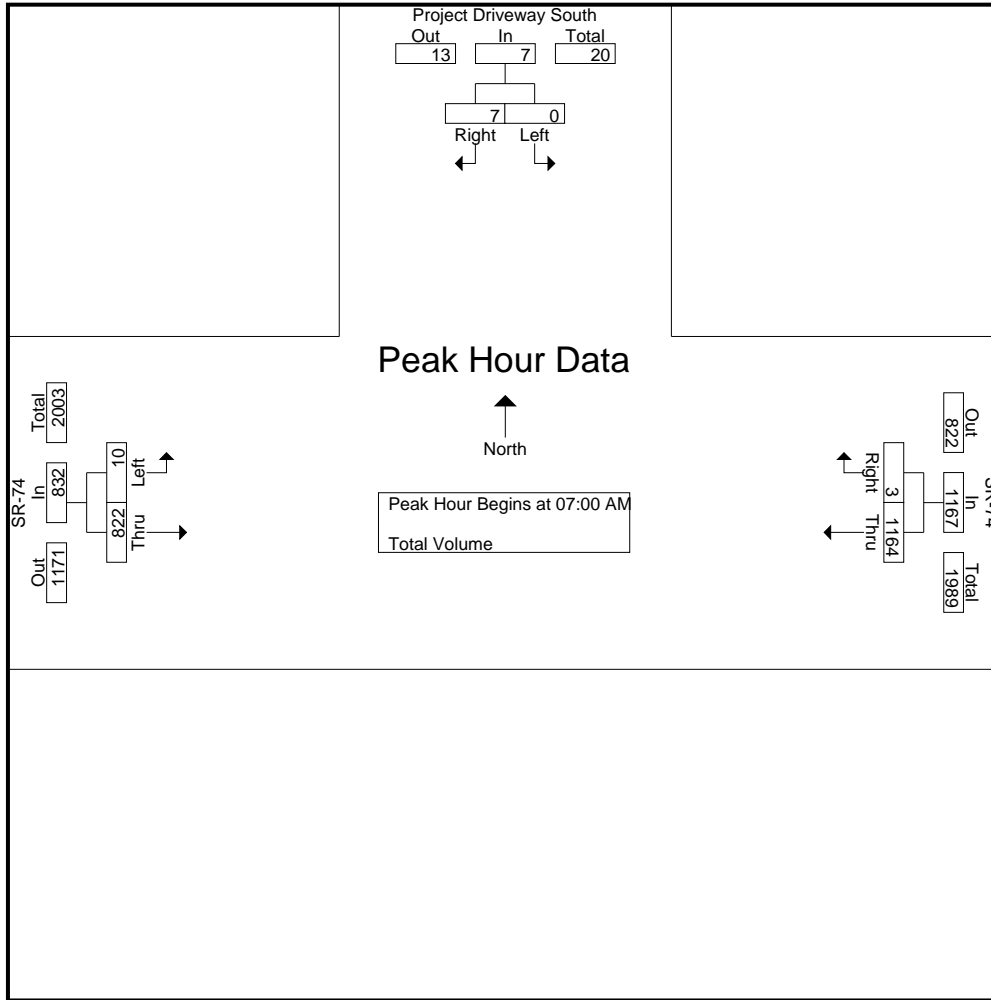
Groups Printed- Total Volume

Start Time	Project Driveway South Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	2	2	239	1	240	5	256	261	503
07:15 AM	0	1	1	289	0	289	0	225	225	515
07:30 AM	0	3	3	327	1	328	0	177	177	508
07:45 AM	0	1	1	309	1	310	5	164	169	480
Total	0	7	7	1164	3	1167	10	822	832	2006
08:00 AM	1	3	4	244	3	247	2	144	146	397
08:15 AM	2	6	8	190	2	192	1	131	132	332
08:30 AM	0	3	3	194	1	195	2	153	155	353
08:45 AM	0	3	3	180	2	182	3	125	128	313
Total	3	15	18	808	8	816	8	553	561	1395
Grand Total	3	22	25	1972	11	1983	18	1375	1393	3401
Apprch %	12	88		99.4	0.6		1.3	98.7		
Total %	0.1	0.6	0.7	58	0.3	58.3	0.5	40.4	41	

Start Time	Project Driveway South Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	2	2	239	1	240	5	256	261	503
07:15 AM	0	1	1	289	0	289	0	225	225	515
07:30 AM	0	3	3	327	1	328	0	177	177	508
07:45 AM	0	1	1	309	1	310	5	164	169	480
Total Volume	0	7	7	1164	3	1167	10	822	832	2006
% App. Total	0	100		99.7	0.3		1.2	98.8		
PHF	.000	.583	.583	.890	.750	.889	.500	.803	.797	.974

County of Riverside
 N/S: Project Driveway South
 E/W: SR-74
 Weather: Clear

File Name : 11_CRV_Project DW South_SR-74 AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	08:00 AM			07:15 AM			07:00 AM		
+0 mins.	1	3	4	289	0	289	5	256	261
+15 mins.	2	6	8	327	1	328	0	225	225
+30 mins.	0	3	3	309	1	310	0	177	177
+45 mins.	0	3	3	244	3	247	5	164	169
Total Volume	3	15	18	1169	5	1174	10	822	832
% App. Total	16.7	83.3		99.6	0.4		1.2	98.8	
PHF	.375	.625	.563	.894	.417	.895	.500	.803	.797

County of Riverside
 N/S: Project Driveway South
 E/W: SR-74
 Weather: Clear

File Name : 11_CRV_Project DW South_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

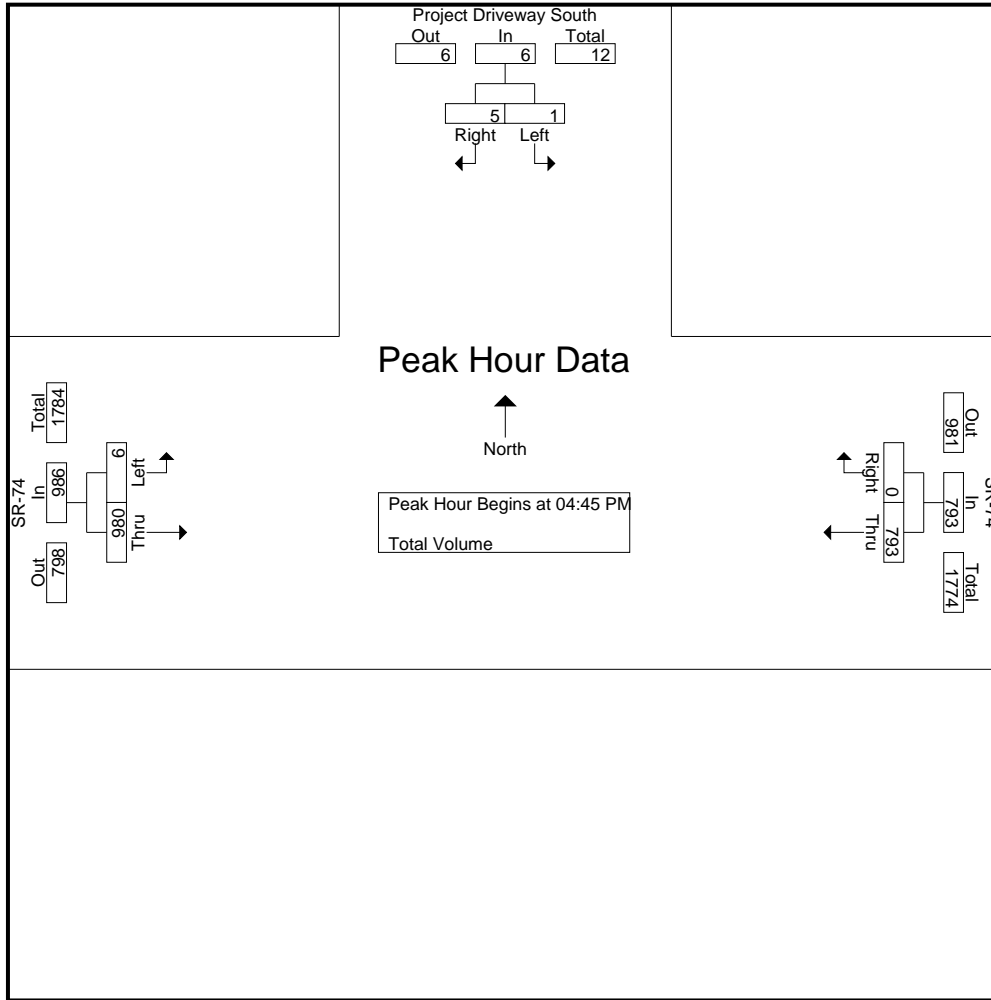
Groups Printed- Total Volume

Start Time	Project Driveway South Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	2	2	176	0	176	2	224	226	404
04:15 PM	0	1	1	198	0	198	2	239	241	440
04:30 PM	0	2	2	201	0	201	1	228	229	432
04:45 PM	1	2	3	212	0	212	2	260	262	477
Total	1	7	8	787	0	787	7	951	958	1753
05:00 PM	0	0	0	178	0	178	1	228	229	407
05:15 PM	0	2	2	198	0	198	0	241	241	441
05:30 PM	0	1	1	205	0	205	3	251	254	460
05:45 PM	0	2	2	185	0	185	3	223	226	413
Total	0	5	5	766	0	766	7	943	950	1721
Grand Total	1	12	13	1553	0	1553	14	1894	1908	3474
Apprch %	7.7	92.3		100	0		0.7	99.3		
Total %	0	0.3	0.4	44.7	0	44.7	0.4	54.5	54.9	

Start Time	Project Driveway South Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	1	2	3	212	0	212	2	260	262	477
05:00 PM	0	0	0	178	0	178	1	228	229	407
05:15 PM	0	2	2	198	0	198	0	241	241	441
05:30 PM	0	1	1	205	0	205	3	251	254	460
Total Volume	1	5	6	793	0	793	6	980	986	1785
% App. Total	16.7	83.3		100	0		0.6	99.4		
PHF	.250	.625	.500	.935	.000	.935	.500	.942	.941	.936

County of Riverside
 N/S: Project Driveway South
 E/W: SR-74
 Weather: Clear

File Name : 11_CRV_Project DW South_SR-74 PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:00 PM			04:45 PM			04:45 PM		
+0 mins.	0	2	2	212	0	212	2	260	262
+15 mins.	0	1	1	178	0	178	1	228	229
+30 mins.	0	2	2	198	0	198	0	241	241
+45 mins.	1	2	3	205	0	205	3	251	254
Total Volume	1	7	8	793	0	793	6	980	986
% App. Total	12.5	87.5		100	0		0.6	99.4	
PHF	.250	.875	.667	.935	.000	.935	.500	.942	.941

County of Riverside
 N/S: Palomar Road
 E/W: Project Driveway East
 Weather: Clear

File Name : 12_CRV_Palomar_Project DW East AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

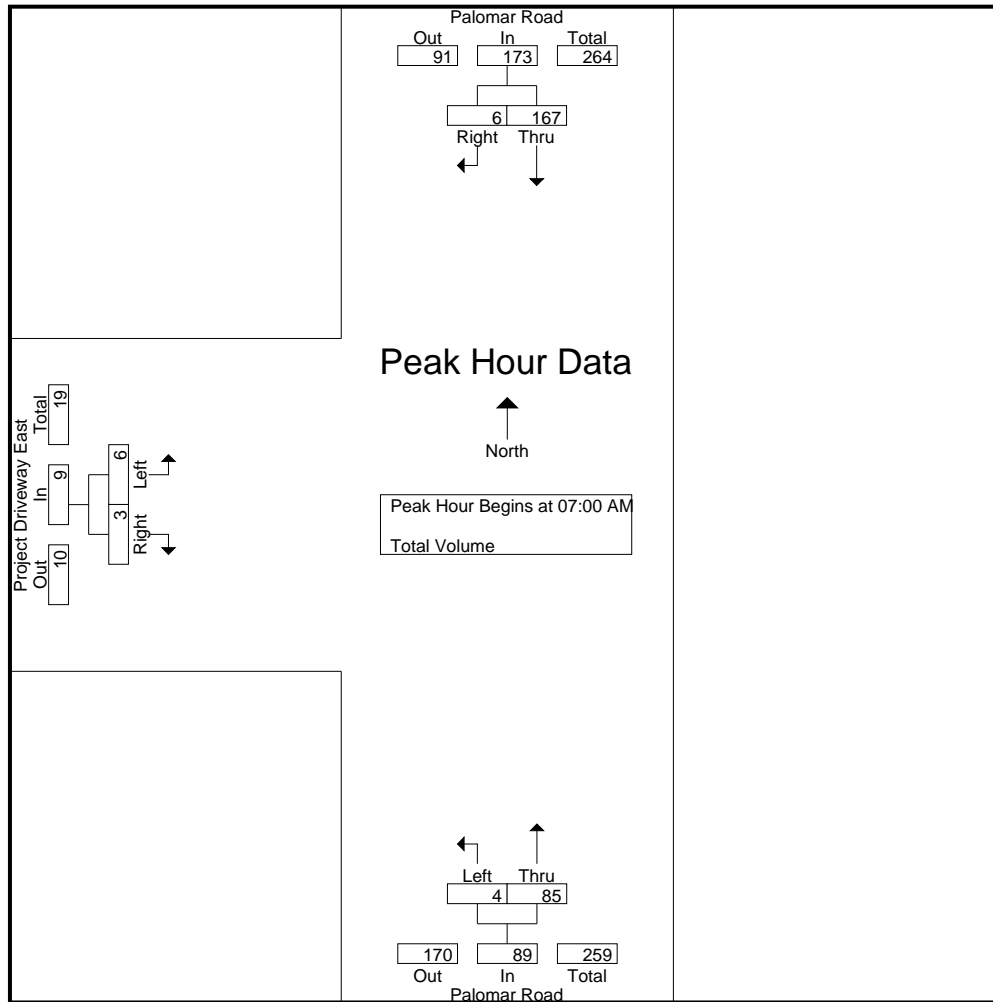
Groups Printed- Total Volume

Start Time	Palomar Road Southbound			Palomar Road Northbound			Project Driveway East Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	42	0	42	1	14	15	1	0	1	58
07:15 AM	39	1	40	1	23	24	1	2	3	67
07:30 AM	53	3	56	1	30	31	2	1	3	90
07:45 AM	33	2	35	1	18	19	2	0	2	56
Total	167	6	173	4	85	89	6	3	9	271
08:00 AM	24	3	27	2	17	19	0	5	5	51
08:15 AM	13	2	15	3	13	16	0	0	0	31
08:30 AM	18	2	20	2	11	13	2	1	3	36
08:45 AM	13	1	14	0	11	11	0	3	3	28
Total	68	8	76	7	52	59	2	9	11	146
Grand Total	235	14	249	11	137	148	8	12	20	417
Apprch %	94.4	5.6		7.4	92.6		40	60		
Total %	56.4	3.4	59.7	2.6	32.9	35.5	1.9	2.9	4.8	

Start Time	Palomar Road Southbound			Palomar Road Northbound			Project Driveway East Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	42	0	42	1	14	15	1	0	1	58
07:15 AM	39	1	40	1	23	24	1	2	3	67
07:30 AM	53	3	56	1	30	31	2	1	3	90
07:45 AM	33	2	35	1	18	19	2	0	2	56
Total Volume	167	6	173	4	85	89	6	3	9	271
% App. Total	96.5	3.5		4.5	95.5		66.7	33.3		
PHF	.788	.500	.772	1.00	.708	.718	.750	.375	.750	.753

County of Riverside
 N/S: Palomar Road
 E/W: Project Driveway East
 Weather: Clear

File Name : 12_CRV_Palomar_Project DW East AM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	07:00 AM			07:15 AM			07:45 AM		
+0 mins.	42	0	42	1	23	24	1	2	3
+15 mins.	39	1	40	1	30	31	2	1	3
+30 mins.	53	3	56	1	18	19	2	0	2
+45 mins.	33	2	35	2	17	19	0	5	5
Total Volume	167	6	173	5	88	93	5	8	13
% App. Total	96.5	3.5		5.4	94.6		38.5	61.5	
PHF	.788	.500	.772	.625	.733	.750	.625	.400	.650

County of Riverside
 N/S: Palomar Road
 E/W: Project Driveway East
 Weather: Clear

File Name : 12_CRV_Palomar_Project DW East PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 1

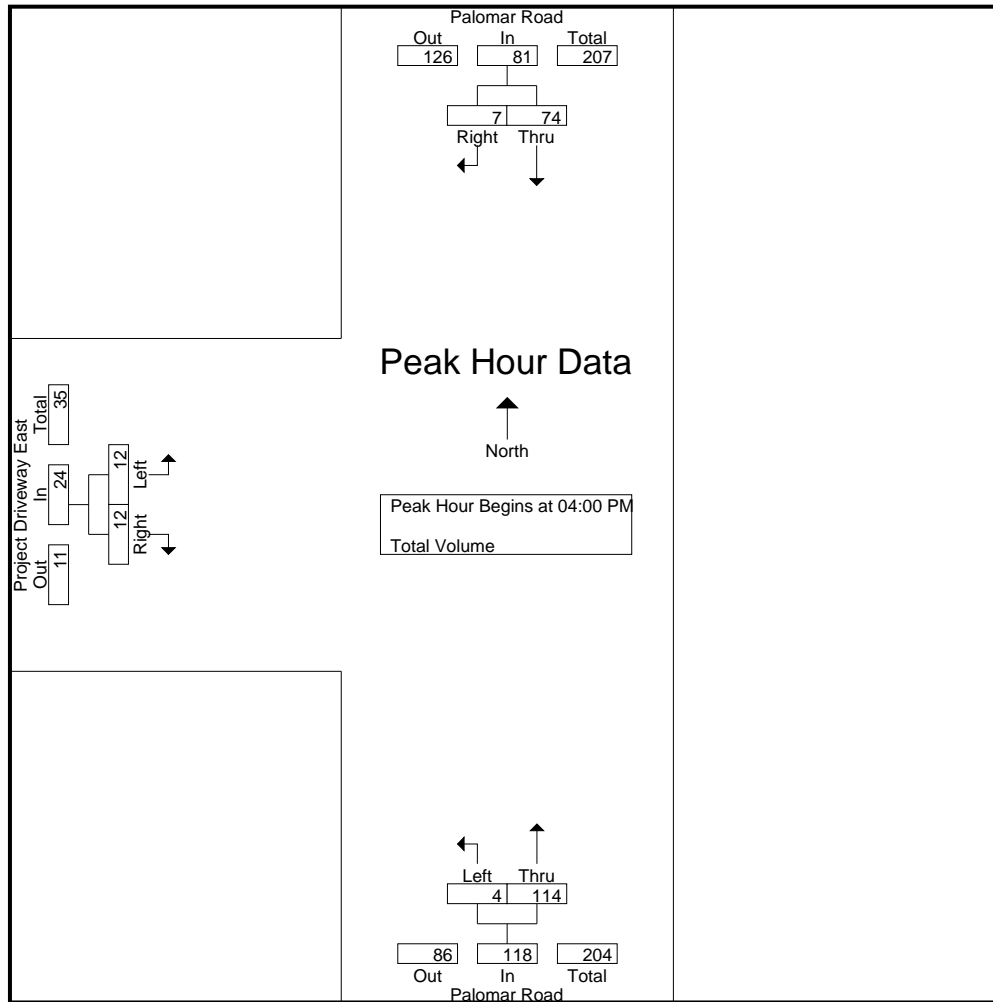
Groups Printed- Total Volume

Start Time	Palomar Road Southbound			Palomar Road Northbound			Project Driveway East Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	17	2	19	2	27	29	10	4	14	62
04:15 PM	17	3	20	1	30	31	1	3	4	55
04:30 PM	21	1	22	1	26	27	1	1	2	51
04:45 PM	19	1	20	0	31	31	0	4	4	55
Total	74	7	81	4	114	118	12	12	24	223
05:00 PM	18	3	21	1	33	34	3	4	7	62
05:15 PM	14	2	16	3	22	25	2	6	8	49
05:30 PM	7	0	7	4	25	29	3	0	3	39
05:45 PM	13	0	13	1	23	24	2	2	4	41
Total	52	5	57	9	103	112	10	12	22	191
Grand Total	126	12	138	13	217	230	22	24	46	414
Apprch %	91.3	8.7		5.7	94.3		47.8	52.2		
Total %	30.4	2.9	33.3	3.1	52.4	55.6	5.3	5.8	11.1	

Start Time	Palomar Road Southbound			Palomar Road Northbound			Project Driveway East Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	17	2	19	2	27	29	10	4	14	62
04:15 PM	17	3	20	1	30	31	1	3	4	55
04:30 PM	21	1	22	1	26	27	1	1	2	51
04:45 PM	19	1	20	0	31	31	0	4	4	55
Total Volume	74	7	81	4	114	118	12	12	24	223
% App. Total	91.4	8.6		3.4	96.6		50	50		
PHF	.881	.583	.920	.500	.919	.952	.300	.750	.429	.899

County of Riverside
 N/S: Palomar Road
 E/W: Project Driveway East
 Weather: Clear

File Name : 12_CRV_Palomar_Project DW East PM
 Site Code : 06718684
 Start Date : 9/20/2018
 Page No : 2



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

	04:15 PM			04:15 PM			04:00 PM		
+0 mins.	17	3	20	1	30	31	10	4	14
+15 mins.	21	1	22	1	26	27	1	3	4
+30 mins.	19	1	20	0	31	31	1	1	2
+45 mins.	18	3	21	1	33	34	0	4	4
Total Volume	75	8	83	3	120	123	12	12	24
% App. Total	90.4	9.6		2.4	97.6		50	50	
PHF	.893	.667	.943	.750	.909	.904	.300	.750	.429

APPENDIX C
ROADWAY ADT COUNTS

Counts Unlimited, Inc

County of Riverside
 Menifee Road
 B/ Rouse Road - Heritage Lake Drive
 24 Hour Directional Volume Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV009
 Site Code: 067-18687

Start Time	9/20/2018 Thu	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		11	83			12	83				
12:15		6	88			8	76				
12:30		9	93			5	77				
12:45		11	78	37	342	5	76	30	312	67	654
01:00		7	84			12	86				
01:15		5	87			8	110				
01:30		4	82			1	127				
01:45		3	85	19	338	7	177	28	500	47	838
02:00		6	193			4	154				
02:15		3	241			4	138				
02:30		6	187			4	142				
02:45		4	155	19	776	6	127	18	561	37	1337
03:00		8	150			6	101				
03:15		10	166			9	134				
03:30		9	142			9	164				
03:45		10	122	37	580	17	125	41	524	78	1104
04:00		18	128			19	102				
04:15		20	125			25	104				
04:30		22	120			26	136				
04:45		30	115	90	488	31	97	101	439	191	927
05:00		34	103			21	123				
05:15		47	127			36	114				
05:30		44	117			54	129				
05:45		71	98	196	445	43	95	154	461	350	906
06:00		80	83			51	118				
06:15		83	105			88	98				
06:30		106	88			99	94				
06:45		136	98	405	374	188	93	426	403	831	777
07:00		276	92			224	82				
07:15		245	69			165	83				
07:30		203	78			153	66				
07:45		157	72	881	311	149	50	691	281	1572	592
08:00		108	62			77	56				
08:15		95	58			95	49				
08:30		91	43			112	60				
08:45		70	47	364	210	92	50	376	215	740	425
09:00		72	39			94	41				
09:15		69	59			76	37				
09:30		70	48			90	30				
09:45		69	27	280	173	65	18	325	126	605	299
10:00		60	19			57	25				
10:15		70	29			70	25				
10:30		75	15			77	21				
10:45		82	24	287	87	66	28	270	99	557	186
11:00		78	12			86	13				
11:15		79	11			85	12				
11:30		88	17			66	11				
11:45		96	11	341	51	73	7	310	43	651	94
Total		2956	4175	2956	4175	2770	3964	2770	3964	5726	8139
Combined Total		7131		7131		6734		6734		13865	
AM Peak	-	07:00	-	-	-	06:45	-	-	-	-	-
Vol.	-	881	-	-	-	730	-	-	-	-	-
P.H.F.	-	0.798	-	-	-	0.815	-	-	-	-	-
PM Peak	-	-	02:00	-	-	-	01:45	-	-	-	-
Vol.	-	-	776	-	-	-	611	-	-	-	-
P.H.F.	-	-	0.805	-	-	-	0.863	-	-	-	-
Percentage		41.5%	58.5%			41.1%	58.9%				
ADT/AADT		ADT 13,865		AADT 13,865							

Counts Unlimited, Inc

County of Riverside
 Menifee Road
 B/ State Route 74 - Matthews Road
 24 Hour Directional Volume Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV007
 Site Code: 067-18687

Start Time	9/20/2018 Thu	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		9	82			10	65				
12:15		9	75			9	72				
12:30		6	87			4	68				
12:45		7	82	31	326	6	60	29	265	60	591
01:00		8	68			7	52				
01:15		5	79			5	93				
01:30		4	68			5	85				
01:45		3	76	20	291	5	129	22	359	42	650
02:00		5	97			5	100				
02:15		5	163			4	99				
02:30		4	150			4	114				
02:45		5	137	19	547	2	98	15	411	34	958
03:00		4	109			3	83				
03:15		8	145			7	99				
03:30		8	134			9	131				
03:45		4	120	24	508	11	124	30	437	54	945
04:00		19	114			16	77				
04:15		19	101			23	84				
04:30		16	108			21	109				
04:45		21	99	75	422	24	91	84	361	159	783
05:00		24	101			21	101				
05:15		31	87			25	80				
05:30		38	108			44	98				
05:45		46	86	139	382	35	109	125	388	264	770
06:00		55	83			48	91				
06:15		58	83			65	81				
06:30		71	96			75	82				
06:45		102	76	286	338	116	76	304	330	590	668
07:00		151	82			149	82				
07:15		193	65			147	70				
07:30		167	69			111	54				
07:45		104	71	615	287	134	45	541	251	1156	538
08:00		95	61			88	42				
08:15		68	52			85	43				
08:30		77	43			76	47				
08:45		51	44	291	200	102	56	351	188	642	388
09:00		55	39			76	43				
09:15		67	45			81	38				
09:30		51	45			77	26				
09:45		61	29	234	158	67	17	301	124	535	282
10:00		63	22			63	24				
10:15		51	22			48	17				
10:30		74	18			70	17				
10:45		60	19	248	81	55	21	236	79	484	160
11:00		63	8			74	15				
11:15		65	18			61	8				
11:30		76	11			67	14				
11:45		85	16	289	53	60	8	262	45	551	98
Total		2271	3593	2271	3593	2300	3238	2300	3238	4571	6831
Combined Total		5864		5864		5538		5538		11402	
AM Peak	-	07:00	-	-	-	07:00	-	-	-	-	-
Vol.	-	615	-	-	-	541	-	-	-	-	-
P.H.F.	-	0.797	-	-	-	0.908	-	-	-	-	-
PM Peak	-	-	02:15	-	-	-	01:45	-	-	-	-
Vol.	-	-	559	-	-	-	442	-	-	-	-
P.H.F.	-	-	0.857	-	-	-	0.857	-	-	-	-
Percentage		38.7%	61.3%			41.5%	58.5%				
ADT/AADT		ADT 11,402		AADT 11,402							

Counts Unlimited, Inc

County of Riverside
 State Route 74
 B/ Sherman Road - Antelope Road
 24 Hour Directional Volume Count

PO Box 1178
 Corona, CA 92878
 Phone: 951-268-6268
 email: counts@countsunlimited.com

CRV001
 Site Code: 067-18687

Start Time	9/20/2018 Thu	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		41	165			22	206				
12:15		56	194			20	227				
12:30		27	173			17	197				
12:45		46	213	170	745	25	220	84	850	254	1595
01:00		39	211			26	213				
01:15		28	166			24	221				
01:30		32	193			9	202				
01:45		28	228	127	798	30	194	89	830	216	1628
02:00		17	242			22	197				
02:15		21	213			26	251				
02:30		29	235			43	267				
02:45		29	279	96	969	39	234	130	949	226	1918
03:00		21	248			46	245				
03:15		26	255			80	249				
03:30		24	260			108	271				
03:45		28	286	99	1049	111	267	345	1032	444	2081
04:00		33	254			148	219				
04:15		27	313			204	211				
04:30		41	252			241	236				
04:45		76	301	177	1120	223	255	816	921	993	2041
05:00		64	261			221	195				
05:15		71	270			241	235				
05:30		94	305			265	245				
05:45		110	231	339	1067	271	182	998	857	1337	1924
06:00		113	268			212	202				
06:15		135	241			227	208				
06:30		178	245			298	189				
06:45		198	218	624	972	238	145	975	744	1599	1716
07:00		249	212			240	173				
07:15		219	223			298	171				
07:30		215	150			285	142				
07:45		194	208	877	793	345	142	1168	628	2045	1421
08:00		144	185			301	141				
08:15		153	179			226	130				
08:30		165	157			235	121				
08:45		148	145	610	666	216	115	978	507	1588	1173
09:00		158	112			206	93				
09:15		157	146			188	100				
09:30		162	136			190	64				
09:45		187	125	664	519	209	92	793	349	1457	868
10:00		149	119			212	77				
10:15		139	106			186	67				
10:30		154	88			205	59				
10:45		161	130	603	443	205	49	808	252	1411	695
11:00		151	89			206	39				
11:15		203	63			222	47				
11:30		178	53			213	40				
11:45		174	65	706	270	196	41	837	167	1543	437
Total		5092	9411	5092	9411	8021	8086	8021	8086	13113	17497
Combined Total		14503		14503		16107		16107		30610	
AM Peak	-	06:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	881	-	-	-	1229	-	-	-	-	-
P.H.F.	-	0.885	-	-	-	0.891	-	-	-	-	-
PM Peak	-	-	04:45	-	-	-	03:00	-	-	-	-
Vol.	-	-	1137	-	-	-	1032	-	-	-	-
P.H.F.	-	-	0.932	-	-	-	0.952	-	-	-	-
Percentage		35.1%	64.9%			49.8%	50.2%				
ADT/AADT		ADT 30,610		AADT 30,610							

APPENDIX D
SIGNAL WARRANT WORKSHEETS

EXISTING CONDITION

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	306	339	213
2	294	325	204
3	288	319	200
4	245	271	170
5	233	258	162
6	208	231	145
7	193	214	134
8	184	203	128
9	147	163	102
10	138	153	96
11	138	153	96
12	132	146	92
13	119	132	83
14	110	122	77
15	110	122	77
16	107	119	75
17	61	68	43
18	34	37	23
19	31	34	21
20	12	14	9
21	9	10	6
22	9	10	6
23	6	7	4
24	6	7	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	645	1	213	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
2	2	619	1	204	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No
3	2	607	1	200	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No
4	2	516	1	170	No	Yes	Yes	Yes	No	No	No	Yes	No	No
5	2	491	1	162	No	Yes	Yes	Yes	No	No	No	No	No	No
6	2	439	1	145	No	No	Yes	Yes	No	No	No	No	No	No
7	2	407	1	134	No	No	No	Yes	No	No	No	No	No	No
8	2	387	1	128	No	No	No	Yes	No	No	No	No	No	No
9	2	310	1	102	No	No	No	No	No	No	No	No	No	No
10	2	291	1	96	No	No	No	No	No	No	No	No	No	No
11	2	291	1	96	No	No	No	No	No	No	No	No	No	No
12	2	278	1	92	No	No	No	No	No	No	No	No	No	No
13	2	251	1	83	No	No	No	No	No	No	No	No	No	No
14	2	232	1	77	No	No	No	No	No	No	No	No	No	No
15	2	232	1	77	No	No	No	No	No	No	No	No	No	No
16	2	226	1	75	No	No	No	No	No	No	No	No	No	No
17	2	129	1	43	No	No	No	No	No	No	No	No	No	No
18	2	71	1	23	No	No	No	No	No	No	No	No	No	No
19	2	65	1	21	No	No	No	No	No	No	No	No	No	No
20	2	26	1	9	No	No	No	No	No	No	No	No	No	No
21	2	19	1	6	No	No	No	No	No	No	No	No	No	No
22	2	19	1	6	No	No	No	No	No	No	No	No	No	No
23	2	13	1	4	No	No	No	No	No	No	No	No	No	No
24	2	13	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					3	5	6	8	0	0	1	4	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	17.4
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	1:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	213
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	858
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	914	543	191
2	877	521	183
3	859	510	180
4	731	434	153
5	695	413	145
6	622	369	130
7	576	342	120
8	548	326	115
9	439	261	92
10	411	244	86
11	411	244	86
12	393	233	82
13	356	212	74
14	329	195	69
15	329	195	69
16	320	190	67
17	183	109	38
18	101	60	21
19	91	54	19
20	37	22	8
21	27	16	6
22	27	16	6
23	18	11	4
24	18	11	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1457	1	191	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1398	1	183	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1369	1	180	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1165	1	153	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	2	1108	1	145	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
6	2	991	1	130	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
7	2	918	1	120	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
8	2	874	1	115	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
9	2	700	1	92	No	No	No	Yes	No	No	Yes	Yes	No	No
10	2	655	1	86	No	No	No	Yes	No	No	Yes	Yes	No	No
11	2	655	1	86	No	No	No	Yes	No	No	Yes	Yes	No	No
12	2	626	1	82	No	No	No	No	No	No	No	Yes	No	No
13	2	568	1	74	No	No	No	No	No	No	No	Yes	No	No
14	2	524	1	69	No	No	No	No	No	No	No	Yes	No	No
15	2	524	1	69	No	No	No	No	No	No	No	Yes	No	No
16	2	510	1	67	No	No	No	No	No	No	No	Yes	No	No
17	2	292	1	38	No	No	No	No	No	No	No	No	No	No
18	2	161	1	21	No	No	No	No	No	No	No	No	No	No
19	2	145	1	19	No	No	No	No	No	No	No	No	No	No
20	2	59	1	8	No	No	No	No	No	No	No	No	No	No
21	2	43	1	6	No	No	No	No	No	No	No	No	No	No
22	2	43	1	6	No	No	No	No	No	No	No	No	No	No
23	2	29	1	4	No	No	No	No	No	No	No	No	No	No
24	2	29	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					4	7	8	11	7	8	11	16	5	3

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	36.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	1:55
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	191
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1648
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	1167	832	7
2	1120	799	7
3	1097	782	7
4	934	666	6
5	887	632	5
6	794	566	5
7	735	524	4
8	700	499	4
9	560	399	3
10	525	374	3
11	525	374	3
12	502	358	3
13	455	324	3
14	420	300	3
15	420	300	3
16	408	291	2
17	233	166	1
18	128	92	1
19	117	83	1
20	47	33	0
21	35	25	0
22	35	25	0
23	23	17	0
24	23	17	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	5	1999	1	7	No	No	No	No	No	No	No	No	No	No
2	5	1919	1	7	No	No	No	No	No	No	No	No	No	No
3	5	1879	1	7	No	No	No	No	No	No	No	No	No	No
4	5	1600	1	6	No	No	No	No	No	No	No	No	No	No
5	5	1519	1	5	No	No	No	No	No	No	No	No	No	No
6	5	1360	1	5	No	No	No	No	No	No	No	No	No	No
7	5	1259	1	4	No	No	No	No	No	No	No	No	No	No
8	5	1199	1	4	No	No	No	No	No	No	No	No	No	No
9	5	959	1	3	No	No	No	No	No	No	No	No	No	No
10	5	899	1	3	No	No	No	No	No	No	No	No	No	No
11	5	899	1	3	No	No	No	No	No	No	No	No	No	No
12	5	860	1	3	No	No	No	No	No	No	No	No	No	No
13	5	779	1	3	No	No	No	No	No	No	No	No	No	No
14	5	720	1	3	No	No	No	No	No	No	No	No	No	No
15	5	720	1	3	No	No	No	No	No	No	No	No	No	No
16	5	699	1	2	No	No	No	No	No	No	No	No	No	No
17	5	399	1	1	No	No	No	No	No	No	No	No	No	No
18	5	220	1	1	No	No	No	No	No	No	No	No	No	No
19	5	200	1	1	No	No	No	No	No	No	No	No	No	No
20	5	80	1	0	No	No	No	No	No	No	No	No	No	No
21	5	60	1	0	No	No	No	No	No	No	No	No	No	No
22	5	60	1	0	No	No	No	No	No	No	No	No	No	No
23	5	40	1	0	No	No	No	No	No	No	No	No	No	No
24	5	40	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	7
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2006
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	89	173	9
2	85	166	9
3	84	163	8
4	71	138	7
5	68	131	7
6	61	118	6
7	56	109	6
8	53	104	5
9	43	83	4
10	40	78	4
11	40	78	4
12	38	74	4
13	35	67	4
14	32	62	3
15	32	62	3
16	31	61	3
17	18	35	2
18	10	19	1
19	9	17	1
20	4	7	0
21	3	5	0
22	3	5	0
23	2	3	0
24	2	3	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	262	1	9	No	No	No	No	No	No	No	No	No	No
2	3	251	1	9	No	No	No	No	No	No	No	No	No	No
3	3	247	1	8	No	No	No	No	No	No	No	No	No	No
4	3	209	1	7	No	No	No	No	No	No	No	No	No	No
5	3	199	1	7	No	No	No	No	No	No	No	No	No	No
6	3	179	1	6	No	No	No	No	No	No	No	No	No	No
7	3	165	1	6	No	No	No	No	No	No	No	No	No	No
8	3	157	1	5	No	No	No	No	No	No	No	No	No	No
9	3	126	1	4	No	No	No	No	No	No	No	No	No	No
10	3	118	1	4	No	No	No	No	No	No	No	No	No	No
11	3	118	1	4	No	No	No	No	No	No	No	No	No	No
12	3	112	1	4	No	No	No	No	No	No	No	No	No	No
13	3	102	1	4	No	No	No	No	No	No	No	No	No	No
14	3	94	1	3	No	No	No	No	No	No	No	No	No	No
15	3	94	1	3	No	No	No	No	No	No	No	No	No	No
16	3	92	1	3	No	No	No	No	No	No	No	No	No	No
17	3	53	1	2	No	No	No	No	No	No	No	No	No	No
18	3	29	1	1	No	No	No	No	No	No	No	No	No	No
19	3	26	1	1	No	No	No	No	No	No	No	No	No	No
20	3	11	1	0	No	No	No	No	No	No	No	No	No	No
21	3	8	1	0	No	No	No	No	No	No	No	No	No	No
22	3	8	1	0	No	No	No	No	No	No	No	No	No	No
23	3	5	1	0	No	No	No	No	No	No	No	No	No	No
24	3	5	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	9
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	271
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	89	319	129
2	85	306	124
3	84	300	121
4	71	255	103
5	68	242	98
6	61	217	88
7	56	201	81
8	53	191	77
9	43	153	62
10	40	144	58
11	40	144	58
12	38	137	55
13	35	124	50
14	32	115	46
15	32	115	46
16	31	112	45
17	18	64	26
18	10	35	14
19	9	32	13
20	4	13	5
21	3	10	4
22	3	10	4
23	2	6	3
24	2	6	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	408	1	129	No	No	No	Yes	No	No	No	No	No	No
2	2	391	1	124	No	No	No	Yes	No	No	No	No	No	No
3	2	384	1	121	No	No	No	Yes	No	No	No	No	No	No
4	2	326	1	103	No	No	No	No	No	No	No	No	No	No
5	2	310	1	98	No	No	No	No	No	No	No	No	No	No
6	2	278	1	88	No	No	No	No	No	No	No	No	No	No
7	2	257	1	81	No	No	No	No	No	No	No	No	No	No
8	2	244	1	77	No	No	No	No	No	No	No	No	No	No
9	2	196	1	62	No	No	No	No	No	No	No	No	No	No
10	2	184	1	58	No	No	No	No	No	No	No	No	No	No
11	2	184	1	58	No	No	No	No	No	No	No	No	No	No
12	2	175	1	55	No	No	No	No	No	No	No	No	No	No
13	2	159	1	50	No	No	No	No	No	No	No	No	No	No
14	2	147	1	46	No	No	No	No	No	No	No	No	No	No
15	2	147	1	46	No	No	No	No	No	No	No	No	No	No
16	2	143	1	45	No	No	No	No	No	No	No	No	No	No
17	2	82	1	26	No	No	No	No	No	No	No	No	No	No
18	2	45	1	14	No	No	No	No	No	No	No	No	No	No
19	2	41	1	13	No	No	No	No	No	No	No	No	No	No
20	2	17	1	5	No	No	No	No	No	No	No	No	No	No
21	2	13	1	4	No	No	No	No	No	No	No	No	No	No
22	2	13	1	4	No	No	No	No	No	No	No	No	No	No
23	2	8	1	3	No	No	No	No	No	No	No	No	No	No
24	2	8	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	3	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:22
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	129
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	537
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	450	381	116
2	432	366	111
3	423	358	109
4	360	305	93
5	342	290	88
6	306	259	79
7	284	240	73
8	270	229	70
9	216	183	56
10	203	171	52
11	203	171	52
12	194	164	50
13	176	149	45
14	162	137	42
15	162	137	42
16	158	133	41
17	90	76	23
18	50	42	13
19	45	38	12
20	18	15	5
21	14	11	3
22	14	11	3
23	9	8	2
24	9	8	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	831	1	116	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
2	2	798	1	111	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
3	2	781	1	109	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
4	2	665	1	93	No	No	No	Yes	No	No	Yes	Yes	No	No
5	2	632	1	88	No	No	No	Yes	No	No	Yes	Yes	No	No
6	2	565	1	79	No	No	No	No	No	No	No	Yes	No	No
7	2	524	1	73	No	No	No	No	No	No	No	Yes	No	No
8	2	499	1	70	No	No	No	No	No	No	No	No	No	No
9	2	399	1	56	No	No	No	No	No	No	No	No	No	No
10	2	374	1	52	No	No	No	No	No	No	No	No	No	No
11	2	374	1	52	No	No	No	No	No	No	No	No	No	No
12	2	358	1	50	No	No	No	No	No	No	No	No	No	No
13	2	325	1	45	No	No	No	No	No	No	No	No	No	No
14	2	299	1	42	No	No	No	No	No	No	No	No	No	No
15	2	299	1	42	No	No	No	No	No	No	No	No	No	No
16	2	291	1	41	No	No	No	No	No	No	No	No	No	No
17	2	166	1	23	No	No	No	No	No	No	No	No	No	No
18	2	92	1	13	No	No	No	No	No	No	No	No	No	No
19	2	83	1	12	No	No	No	No	No	No	No	No	No	No
20	2	33	1	5	No	No	No	No	No	No	No	No	No	No
21	2	25	1	3	No	No	No	No	No	No	No	No	No	No
22	2	25	1	3	No	No	No	No	No	No	No	No	No	No
23	2	17	1	2	No	No	No	No	No	No	No	No	No	No
24	2	17	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	3	5	0	3	5	7	0	0

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:26
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	116
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	947
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	793	986	6
2	761	947	6
3	745	927	6
4	634	789	5
5	603	749	5
6	539	670	4
7	500	621	4
8	476	592	4
9	381	473	3
10	357	444	3
11	357	444	3
12	341	424	3
13	309	385	2
14	285	355	2
15	285	355	2
16	278	345	2
17	159	197	1
18	87	108	1
19	79	99	1
20	32	39	0
21	24	30	0
22	24	30	0
23	16	20	0
24	16	20	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	5	1779	1	6	No	No	No	No	No	No	No	No	No	No
2	5	1708	1	6	No	No	No	No	No	No	No	No	No	No
3	5	1672	1	6	No	No	No	No	No	No	No	No	No	No
4	5	1423	1	5	No	No	No	No	No	No	No	No	No	No
5	5	1352	1	5	No	No	No	No	No	No	No	No	No	No
6	5	1209	1	4	No	No	No	No	No	No	No	No	No	No
7	5	1121	1	4	No	No	No	No	No	No	No	No	No	No
8	5	1068	1	4	No	No	No	No	No	No	No	No	No	No
9	5	854	1	3	No	No	No	No	No	No	No	No	No	No
10	5	801	1	3	No	No	No	No	No	No	No	No	No	No
11	5	801	1	3	No	No	No	No	No	No	No	No	No	No
12	5	765	1	3	No	No	No	No	No	No	No	No	No	No
13	5	694	1	2	No	No	No	No	No	No	No	No	No	No
14	5	640	1	2	No	No	No	No	No	No	No	No	No	No
15	5	640	1	2	No	No	No	No	No	No	No	No	No	No
16	5	623	1	2	No	No	No	No	No	No	No	No	No	No
17	5	356	1	1	No	No	No	No	No	No	No	No	No	No
18	5	195	1	1	No	No	No	No	No	No	No	No	No	No
19	5	178	1	1	No	No	No	No	No	No	No	No	No	No
20	5	71	1	0	No	No	No	No	No	No	No	No	No	No
21	5	54	1	0	No	No	No	No	No	No	No	No	No	No
22	5	54	1	0	No	No	No	No	No	No	No	No	No	No
23	5	36	1	0	No	No	No	No	No	No	No	No	No	No
24	5	36	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	6
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1785
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	118	81	24
2	113	78	23
3	111	76	23
4	94	65	19
5	90	62	18
6	80	55	16
7	74	51	15
8	71	49	14
9	57	39	12
10	53	36	11
11	53	36	11
12	51	35	10
13	46	32	9
14	42	29	9
15	42	29	9
16	41	28	8
17	24	16	5
18	13	9	3
19	12	8	2
20	5	3	1
21	4	2	1
22	4	2	1
23	2	2	0
24	2	2	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	199	1	24	No	No	No	No	No	No	No	No	No	No
2	3	191	1	23	No	No	No	No	No	No	No	No	No	No
3	3	187	1	23	No	No	No	No	No	No	No	No	No	No
4	3	159	1	19	No	No	No	No	No	No	No	No	No	No
5	3	152	1	18	No	No	No	No	No	No	No	No	No	No
6	3	135	1	16	No	No	No	No	No	No	No	No	No	No
7	3	125	1	15	No	No	No	No	No	No	No	No	No	No
8	3	120	1	14	No	No	No	No	No	No	No	No	No	No
9	3	96	1	12	No	No	No	No	No	No	No	No	No	No
10	3	89	1	11	No	No	No	No	No	No	No	No	No	No
11	3	89	1	11	No	No	No	No	No	No	No	No	No	No
12	3	86	1	10	No	No	No	No	No	No	No	No	No	No
13	3	78	1	9	No	No	No	No	No	No	No	No	No	No
14	3	71	1	9	No	No	No	No	No	No	No	No	No	No
15	3	71	1	9	No	No	No	No	No	No	No	No	No	No
16	3	69	1	8	No	No	No	No	No	No	No	No	No	No
17	3	40	1	5	No	No	No	No	No	No	No	No	No	No
18	3	22	1	3	No	No	No	No	No	No	No	No	No	No
19	3	20	1	2	No	No	No	No	No	No	No	No	No	No
20	3	8	1	1	No	No	No	No	No	No	No	No	No	No
21	3	6	1	1	No	No	No	No	No	No	No	No	No	No
22	3	6	1	1	No	No	No	No	No	No	No	No	No	No
23	3	4	1	0	No	No	No	No	No	No	No	No	No	No
24	3	4	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	24
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	223
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

**EXISTING PLUS PROJECT
CONDITION**

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	306	349	239
2	294	335	229
3	288	328	225
4	245	279	191
5	233	265	182
6	208	237	163
7	193	220	151
8	184	209	143
9	147	168	115
10	138	157	108
11	138	157	108
12	132	150	103
13	119	136	93
14	110	126	86
15	110	126	86
16	107	122	84
17	61	70	48
18	34	38	26
19	31	35	24
20	12	14	10
21	9	10	7
22	9	10	7
23	6	7	5
24	6	7	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	655	1	239	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
2	2	629	1	229	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No
3	2	616	1	225	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No
4	2	524	1	191	No	Yes	Yes	Yes	No	No	No	Yes	No	No
5	2	498	1	182	No	Yes	Yes	Yes	No	No	No	No	No	No
6	2	445	1	163	No	No	Yes	Yes	No	No	No	No	No	No
7	2	413	1	151	No	No	No	Yes	No	No	No	No	No	No
8	2	393	1	143	No	No	No	Yes	No	No	No	No	No	No
9	2	315	1	115	No	No	No	No	No	No	No	No	No	No
10	2	295	1	108	No	No	No	No	No	No	No	No	No	No
11	2	295	1	108	No	No	No	No	No	No	No	No	No	No
12	2	282	1	103	No	No	No	No	No	No	No	No	No	No
13	2	255	1	93	No	No	No	No	No	No	No	No	No	No
14	2	236	1	86	No	No	No	No	No	No	No	No	No	No
15	2	236	1	86	No	No	No	No	No	No	No	No	No	No
16	2	229	1	84	No	No	No	No	No	No	No	No	No	No
17	2	131	1	48	No	No	No	No	No	No	No	No	No	No
18	2	72	1	26	No	No	No	No	No	No	No	No	No	No
19	2	66	1	24	No	No	No	No	No	No	No	No	No	No
20	2	26	1	10	No	No	No	No	No	No	No	No	No	No
21	2	19	1	7	No	No	No	No	No	No	No	No	No	No
22	2	19	1	7	No	No	No	No	No	No	No	No	No	No
23	2	13	1	5	No	No	No	No	No	No	No	No	No	No
24	2	13	1	5	No	No	No	No	No	No	No	No	No	No
Hours Met					3	5	6	8	0	0	1	4	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	19.4
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	1:17
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	239
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	894
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	80%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	940	553	207
2	902	531	199
3	884	520	195
4	752	442	166
5	714	420	157
6	639	376	141
7	592	348	130
8	564	332	124
9	451	265	99
10	423	249	93
11	423	249	93
12	404	238	89
13	367	216	81
14	338	199	75
15	338	199	75
16	329	194	72
17	188	111	41
18	103	61	23
19	94	55	21
20	38	22	8
21	28	17	6
22	28	17	6
23	19	11	4
24	19	11	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1493	1	207	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1433	1	199	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1404	1	195	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1194	1	166	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	2	1134	1	157	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
6	2	1015	1	141	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
7	2	940	1	130	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
8	2	896	1	124	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
9	2	716	1	99	No	No	No	Yes	No	No	Yes	Yes	No	No
10	2	672	1	93	No	No	No	Yes	No	No	Yes	Yes	No	No
11	2	672	1	93	No	No	No	Yes	No	No	Yes	Yes	No	No
12	2	642	1	89	No	No	No	Yes	No	No	Yes	Yes	No	No
13	2	583	1	81	No	No	No	No	No	No	No	Yes	No	No
14	2	537	1	75	No	No	No	No	No	No	No	Yes	No	No
15	2	537	1	75	No	No	No	No	No	No	No	Yes	No	No
16	2	523	1	72	No	No	No	No	No	No	No	Yes	No	No
17	2	299	1	41	No	No	No	No	No	No	No	No	No	No
18	2	164	1	23	No	No	No	No	No	No	No	No	No	No
19	2	149	1	21	No	No	No	No	No	No	No	No	No	No
20	2	60	1	8	No	No	No	No	No	No	No	No	No	No
21	2	45	1	6	No	No	No	No	No	No	No	No	No	No
22	2	45	1	6	No	No	No	No	No	No	No	No	No	No
23	2	30	1	4	No	No	No	No	No	No	No	No	No	No
24	2	30	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					5	8	8	12	7	8	12	16	5	3

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	43.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	2:30
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	207
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1700
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	1167	822	85
2	1120	789	82
3	1097	773	80
4	934	658	68
5	887	625	65
6	794	559	58
7	735	518	54
8	700	493	51
9	560	395	41
10	525	370	38
11	525	370	38
12	502	353	37
13	455	321	33
14	420	296	31
15	420	296	31
16	408	288	30
17	233	164	17
18	128	90	9
19	117	82	9
20	47	33	3
21	35	25	3
22	35	25	3
23	23	16	2
24	23	16	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	1989	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
2	4	1909	1	82	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
3	4	1870	1	80	No	No	No	No	Yes	Yes	Yes	Yes	No	No
4	4	1592	1	68	No	No	No	No	No	Yes	Yes	Yes	No	No
5	4	1512	1	65	No	No	No	No	No	Yes	Yes	Yes	No	No
6	4	1353	1	58	No	No	No	No	No	No	Yes	Yes	No	No
7	4	1253	1	54	No	No	No	No	No	No	Yes	Yes	No	No
8	4	1193	1	51	No	No	No	No	No	No	No	Yes	No	No
9	4	955	1	41	No	No	No	No	No	No	No	No	No	No
10	4	895	1	38	No	No	No	No	No	No	No	No	No	No
11	4	895	1	38	No	No	No	No	No	No	No	No	No	No
12	4	855	1	37	No	No	No	No	No	No	No	No	No	No
13	4	776	1	33	No	No	No	No	No	No	No	No	No	No
14	4	716	1	31	No	No	No	No	No	No	No	No	No	No
15	4	716	1	31	No	No	No	No	No	No	No	No	No	No
16	4	696	1	30	No	No	No	No	No	No	No	No	No	No
17	4	397	1	17	No	No	No	No	No	No	No	No	No	No
18	4	218	1	9	No	No	No	No	No	No	No	No	No	No
19	4	199	1	9	No	No	No	No	No	No	No	No	No	No
20	4	80	1	3	No	No	No	No	No	No	No	No	No	No
21	4	60	1	3	No	No	No	No	No	No	No	No	No	No
22	4	60	1	3	No	No	No	No	No	No	No	No	No	No
23	4	39	1	2	No	No	No	No	No	No	No	No	No	No
24	4	39	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	1	3	5	7	8	2	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:21
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	85
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2074
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	259	178	191
2	249	171	183
3	243	167	180
4	207	142	153
5	197	135	145
6	176	121	130
7	163	112	120
8	155	107	115
9	124	85	92
10	117	80	86
11	117	80	86
12	111	77	82
13	101	69	74
14	93	64	69
15	93	64	69
16	91	62	67
17	52	36	38
18	28	20	21
19	26	18	19
20	10	7	8
21	8	5	6
22	8	5	6
23	5	4	4
24	5	4	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	437	1	191	No	No	Yes	Yes	No	No	No	No	No	No
2	4	420	1	183	No	No	Yes	Yes	No	No	No	No	No	No
3	4	410	1	180	No	No	No	Yes	No	No	No	No	No	No
4	4	349	1	153	No	No	No	Yes	No	No	No	No	No	No
5	4	332	1	145	No	No	No	No	No	No	No	No	No	No
6	4	297	1	130	No	No	No	No	No	No	No	No	No	No
7	4	275	1	120	No	No	No	No	No	No	No	No	No	No
8	4	262	1	115	No	No	No	No	No	No	No	No	No	No
9	4	209	1	92	No	No	No	No	No	No	No	No	No	No
10	4	197	1	86	No	No	No	No	No	No	No	No	No	No
11	4	197	1	86	No	No	No	No	No	No	No	No	No	No
12	4	188	1	82	No	No	No	No	No	No	No	No	No	No
13	4	170	1	74	No	No	No	No	No	No	No	No	No	No
14	4	157	1	69	No	No	No	No	No	No	No	No	No	No
15	4	157	1	69	No	No	No	No	No	No	No	No	No	No
16	4	153	1	67	No	No	No	No	No	No	No	No	No	No
17	4	88	1	38	No	No	No	No	No	No	No	No	No	No
18	4	48	1	21	No	No	No	No	No	No	No	No	No	No
19	4	44	1	19	No	No	No	No	No	No	No	No	No	No
20	4	17	1	8	No	No	No	No	No	No	No	No	No	No
21	4	13	1	6	No	No	No	No	No	No	No	No	No	No
22	4	13	1	6	No	No	No	No	No	No	No	No	No	No
23	4	9	1	4	No	No	No	No	No	No	No	No	No	No
24	4	9	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	2	4	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:42
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	191
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	628
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	89	333	162
2	85	320	156
3	84	313	152
4	71	266	130
5	68	253	123
6	61	226	110
7	56	210	102
8	53	200	97
9	43	160	78
10	40	150	73
11	40	150	73
12	38	143	70
13	35	130	63
14	32	120	58
15	32	120	58
16	31	117	57
17	18	67	32
18	10	37	18
19	9	33	16
20	4	13	6
21	3	10	5
22	3	10	5
23	2	7	3
24	2	7	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	422	1	162	No	No	Yes	Yes	No	No	No	No	No	No
2	2	405	1	156	No	No	No	Yes	No	No	No	No	No	No
3	2	397	1	152	No	No	No	Yes	No	No	No	No	No	No
4	2	337	1	130	No	No	No	Yes	No	No	No	No	No	No
5	2	321	1	123	No	No	No	No	No	No	No	No	No	No
6	2	287	1	110	No	No	No	No	No	No	No	No	No	No
7	2	266	1	102	No	No	No	No	No	No	No	No	No	No
8	2	253	1	97	No	No	No	No	No	No	No	No	No	No
9	2	203	1	78	No	No	No	No	No	No	No	No	No	No
10	2	190	1	73	No	No	No	No	No	No	No	No	No	No
11	2	190	1	73	No	No	No	No	No	No	No	No	No	No
12	2	181	1	70	No	No	No	No	No	No	No	No	No	No
13	2	165	1	63	No	No	No	No	No	No	No	No	No	No
14	2	152	1	58	No	No	No	No	No	No	No	No	No	No
15	2	152	1	58	No	No	No	No	No	No	No	No	No	No
16	2	148	1	57	No	No	No	No	No	No	No	No	No	No
17	2	85	1	32	No	No	No	No	No	No	No	No	No	No
18	2	47	1	18	No	No	No	No	No	No	No	No	No	No
19	2	42	1	16	No	No	No	No	No	No	No	No	No	No
20	2	17	1	6	No	No	No	No	No	No	No	No	No	No
21	2	13	1	5	No	No	No	No	No	No	No	No	No	No
22	2	13	1	5	No	No	No	No	No	No	No	No	No	No
23	2	9	1	3	No	No	No	No	No	No	No	No	No	No
24	2	9	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	1	4	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:32
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	162
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	584
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	484	394	136
2	465	378	131
3	455	370	128
4	387	315	109
5	368	299	103
6	329	268	92
7	305	248	86
8	290	236	82
9	232	189	65
10	218	177	61
11	218	177	61
12	208	169	58
13	189	154	53
14	174	142	49
15	174	142	49
16	169	138	48
17	97	79	27
18	53	43	15
19	48	39	14
20	19	16	5
21	15	12	4
22	15	12	4
23	10	8	3
24	10	8	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	878	1	136	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
2	2	843	1	131	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
3	2	825	1	128	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
4	2	702	1	109	No	No	Yes	Yes	No	No	Yes	Yes	No	No
5	2	667	1	103	No	No	No	Yes	No	No	Yes	Yes	No	No
6	2	597	1	92	No	No	No	Yes	No	No	No	Yes	No	No
7	2	553	1	86	No	No	No	Yes	No	No	No	Yes	No	No
8	2	526	1	82	No	No	No	No	No	No	No	Yes	No	No
9	2	421	1	65	No	No	No	No	No	No	No	No	No	No
10	2	395	1	61	No	No	No	No	No	No	No	No	No	No
11	2	395	1	61	No	No	No	No	No	No	No	No	No	No
12	2	377	1	58	No	No	No	No	No	No	No	No	No	No
13	2	343	1	53	No	No	No	No	No	No	No	No	No	No
14	2	316	1	49	No	No	No	No	No	No	No	No	No	No
15	2	316	1	49	No	No	No	No	No	No	No	No	No	No
16	2	307	1	48	No	No	No	No	No	No	No	No	No	No
17	2	176	1	27	No	No	No	No	No	No	No	No	No	No
18	2	96	1	15	No	No	No	No	No	No	No	No	No	No
19	2	87	1	14	No	No	No	No	No	No	No	No	No	No
20	2	35	1	5	No	No	No	No	No	No	No	No	No	No
21	2	27	1	4	No	No	No	No	No	No	No	No	No	No
22	2	27	1	4	No	No	No	No	No	No	No	No	No	No
23	2	18	1	3	No	No	No	No	No	No	No	No	No	No
24	2	18	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	3	4	7	0	3	5	8	0	0

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:31
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	136
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1014
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	793	980	80
2	761	941	77
3	745	921	75
4	634	784	64
5	603	745	61
6	539	666	54
7	500	617	50
8	476	588	48
9	381	470	38
10	357	441	36
11	357	441	36
12	341	421	34
13	309	382	31
14	285	353	29
15	285	353	29
16	278	343	28
17	159	196	16
18	87	108	9
19	79	98	8
20	32	39	3
21	24	29	2
22	24	29	2
23	16	20	2
24	16	20	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	1773	1	80	No	No	No	No	Yes	Yes	Yes	Yes	No	No
2	4	1702	1	77	No	No	No	No	Yes	Yes	Yes	Yes	No	No
3	4	1666	1	75	No	No	No	No	Yes	Yes	Yes	Yes	No	No
4	4	1418	1	64	No	No	No	No	No	Yes	Yes	Yes	No	No
5	4	1348	1	61	No	No	No	No	No	Yes	Yes	Yes	No	No
6	4	1205	1	54	No	No	No	No	No	No	Yes	Yes	No	No
7	4	1117	1	50	No	No	No	No	No	No	No	Yes	No	No
8	4	1064	1	48	No	No	No	No	No	No	No	Yes	No	No
9	4	851	1	38	No	No	No	No	No	No	No	No	No	No
10	4	798	1	36	No	No	No	No	No	No	No	No	No	No
11	4	798	1	36	No	No	No	No	No	No	No	No	No	No
12	4	762	1	34	No	No	No	No	No	No	No	No	No	No
13	4	691	1	31	No	No	No	No	No	No	No	No	No	No
14	4	638	1	29	No	No	No	No	No	No	No	No	No	No
15	4	638	1	29	No	No	No	No	No	No	No	No	No	No
16	4	621	1	28	No	No	No	No	No	No	No	No	No	No
17	4	355	1	16	No	No	No	No	No	No	No	No	No	No
18	4	195	1	9	No	No	No	No	No	No	No	No	No	No
19	4	177	1	8	No	No	No	No	No	No	No	No	No	No
20	4	71	1	3	No	No	No	No	No	No	No	No	No	No
21	4	53	1	2	No	No	No	No	No	No	No	No	No	No
22	4	53	1	2	No	No	No	No	No	No	No	No	No	No
23	4	36	1	2	No	No	No	No	No	No	No	No	No	No
24	4	36	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	3	5	6	8	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:16
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	80
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1853
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	283	88	200
2	272	84	192
3	266	83	188
4	226	70	160
5	215	67	152
6	192	60	136
7	178	55	126
8	170	53	120
9	136	42	96
10	127	40	90
11	127	40	90
12	122	38	86
13	110	34	78
14	102	32	72
15	102	32	72
16	99	31	70
17	57	18	40
18	31	10	22
19	28	9	20
20	11	4	8
21	8	3	6
22	8	3	6
23	6	2	4
24	6	2	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	371	1	200	No	No	No	Yes	No	No	No	No	No	No
2	4	356	1	192	No	No	No	Yes	No	No	No	No	No	No
3	4	349	1	188	No	No	No	Yes	No	No	No	No	No	No
4	4	296	1	160	No	No	No	No	No	No	No	No	No	No
5	4	282	1	152	No	No	No	No	No	No	No	No	No	No
6	4	252	1	136	No	No	No	No	No	No	No	No	No	No
7	4	233	1	126	No	No	No	No	No	No	No	No	No	No
8	4	223	1	120	No	No	No	No	No	No	No	No	No	No
9	4	178	1	96	No	No	No	No	No	No	No	No	No	No
10	4	167	1	90	No	No	No	No	No	No	No	No	No	No
11	4	167	1	90	No	No	No	No	No	No	No	No	No	No
12	4	160	1	86	No	No	No	No	No	No	No	No	No	No
13	4	144	1	78	No	No	No	No	No	No	No	No	No	No
14	4	134	1	72	No	No	No	No	No	No	No	No	No	No
15	4	134	1	72	No	No	No	No	No	No	No	No	No	No
16	4	130	1	70	No	No	No	No	No	No	No	No	No	No
17	4	75	1	40	No	No	No	No	No	No	No	No	No	No
18	4	41	1	22	No	No	No	No	No	No	No	No	No	No
19	4	37	1	20	No	No	No	No	No	No	No	No	No	No
20	4	15	1	8	No	No	No	No	No	No	No	No	No	No
21	4	11	1	6	No	No	No	No	No	No	No	No	No	No
22	4	11	1	6	No	No	No	No	No	No	No	No	No	No
23	4	8	1	4	No	No	No	No	No	No	No	No	No	No
24	4	8	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	3	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:36
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	200
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	571
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

**EXISTING PLUS AMBIENT
GROWTH PLUS PROJECT
CONDITION**

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	319	363	247
2	306	348	237
3	300	341	232
4	255	290	198
5	242	276	188
6	217	247	168
7	201	229	156
8	191	218	148
9	153	174	119
10	144	163	111
11	144	163	111
12	137	156	106
13	124	142	96
14	115	131	89
15	115	131	89
16	112	127	86
17	64	73	49
18	35	40	27
19	32	36	25
20	13	15	10
21	10	11	7
22	10	11	7
23	6	7	5
24	6	7	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	682	1	247	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
2	2	654	1	237	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
3	2	641	1	232	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
4	2	545	1	198	No	Yes	Yes	Yes	No	No	No	Yes	No	No
5	2	518	1	188	No	Yes	Yes	Yes	No	No	No	Yes	No	No
6	2	464	1	168	No	No	Yes	Yes	No	No	No	No	No	No
7	2	430	1	156	No	No	Yes	Yes	No	No	No	No	No	No
8	2	409	1	148	No	No	No	Yes	No	No	No	No	No	No
9	2	327	1	119	No	No	No	No	No	No	No	No	No	No
10	2	307	1	111	No	No	No	No	No	No	No	No	No	No
11	2	307	1	111	No	No	No	No	No	No	No	No	No	No
12	2	293	1	106	No	No	No	No	No	No	No	No	No	No
13	2	266	1	96	No	No	No	No	No	No	No	No	No	No
14	2	246	1	89	No	No	No	No	No	No	No	No	No	No
15	2	246	1	89	No	No	No	No	No	No	No	No	No	No
16	2	239	1	86	No	No	No	No	No	No	No	No	No	No
17	2	137	1	49	No	No	No	No	No	No	No	No	No	No
18	2	75	1	27	No	No	No	No	No	No	No	No	No	No
19	2	68	1	25	No	No	No	No	No	No	No	No	No	No
20	2	28	1	10	No	No	No	No	No	No	No	No	No	No
21	2	21	1	7	No	No	No	No	No	No	No	No	No	No
22	2	21	1	7	No	No	No	No	No	No	No	No	No	No
23	2	13	1	5	No	No	No	No	No	No	No	No	No	No
24	2	13	1	5	No	No	No	No	No	No	No	No	No	No
Hours Met					3	5	7	8	0	0	3	5	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	19.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	1:21
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	247
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	929
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	976	575	214
2	937	552	205
3	917	541	201
4	781	460	171
5	742	437	163
6	664	391	146
7	615	362	135
8	586	345	128
9	468	276	103
10	439	259	96
11	439	259	96
12	420	247	92
13	381	224	83
14	351	207	77
15	351	207	77
16	342	201	75
17	195	115	43
18	107	63	24
19	98	58	21
20	39	23	9
21	29	17	6
22	29	17	6
23	20	12	4
24	20	12	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1551	1	214	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1489	1	205	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1458	1	201	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1241	1	171	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	2	1179	1	163	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
6	2	1055	1	146	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
7	2	977	1	135	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
8	2	931	1	128	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
9	2	744	1	103	No	No	No	Yes	No	Yes	Yes	Yes	No	No
10	2	698	1	96	No	No	No	Yes	No	No	Yes	Yes	No	No
11	2	698	1	96	No	No	No	Yes	No	No	Yes	Yes	No	No
12	2	667	1	92	No	No	No	Yes	No	No	Yes	Yes	No	No
13	2	605	1	83	No	No	No	No	No	No	No	Yes	No	No
14	2	558	1	77	No	No	No	No	No	No	No	Yes	No	No
15	2	558	1	77	No	No	No	No	No	No	No	Yes	No	No
16	2	543	1	75	No	No	No	No	No	No	No	Yes	No	No
17	2	310	1	43	No	No	No	No	No	No	No	No	No	No
18	2	170	1	24	No	No	No	No	No	No	No	No	No	No
19	2	156	1	21	No	No	No	No	No	No	No	No	No	No
20	2	62	1	9	No	No	No	No	No	No	No	No	No	No
21	2	46	1	6	No	No	No	No	No	No	No	No	No	No
22	2	46	1	6	No	No	No	No	No	No	No	No	No	No
23	2	32	1	4	No	No	No	No	No	No	No	No	No	No
24	2	32	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					5	8	8	12	8	9	12	16	6	3

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	62.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	3:42
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	214
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1765
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	1214	886	85
2	1165	851	82
3	1141	833	80
4	971	709	68
5	923	673	65
6	826	602	58
7	765	558	54
8	728	532	51
9	583	425	41
10	546	399	38
11	546	399	38
12	522	381	37
13	473	346	33
14	437	319	31
15	437	319	31
16	425	310	30
17	243	177	17
18	134	97	9
19	121	89	9
20	49	35	3
21	36	27	3
22	36	27	3
23	24	18	2
24	24	18	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	2100	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
2	4	2016	1	82	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
3	4	1974	1	80	No	No	No	No	Yes	Yes	Yes	Yes	No	No
4	4	1680	1	68	No	No	No	No	No	Yes	Yes	Yes	No	No
5	4	1596	1	65	No	No	No	No	No	Yes	Yes	Yes	No	No
6	4	1428	1	58	No	No	No	No	No	No	Yes	Yes	No	No
7	4	1323	1	54	No	No	No	No	No	No	Yes	Yes	No	No
8	4	1260	1	51	No	No	No	No	No	No	No	Yes	No	No
9	4	1008	1	41	No	No	No	No	No	No	No	No	No	No
10	4	945	1	38	No	No	No	No	No	No	No	No	No	No
11	4	945	1	38	No	No	No	No	No	No	No	No	No	No
12	4	903	1	37	No	No	No	No	No	No	No	No	No	No
13	4	819	1	33	No	No	No	No	No	No	No	No	No	No
14	4	756	1	31	No	No	No	No	No	No	No	No	No	No
15	4	756	1	31	No	No	No	No	No	No	No	No	No	No
16	4	735	1	30	No	No	No	No	No	No	No	No	No	No
17	4	420	1	17	No	No	No	No	No	No	No	No	No	No
18	4	231	1	9	No	No	No	No	No	No	No	No	No	No
19	4	210	1	9	No	No	No	No	No	No	No	No	No	No
20	4	84	1	3	No	No	No	No	No	No	No	No	No	No
21	4	63	1	3	No	No	No	No	No	No	No	No	No	No
22	4	63	1	3	No	No	No	No	No	No	No	No	No	No
23	4	42	1	2	No	No	No	No	No	No	No	No	No	No
24	4	42	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	1	3	5	7	8	2	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:21
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	85
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2185
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	303	185	191
2	291	178	183
3	285	174	180
4	242	148	153
5	230	141	145
6	206	126	130
7	191	117	120
8	182	111	115
9	145	89	92
10	136	83	86
11	136	83	86
12	130	80	82
13	118	72	74
14	109	67	69
15	109	67	69
16	106	65	67
17	61	37	38
18	33	20	21
19	30	19	19
20	12	7	8
21	9	6	6
22	9	6	6
23	6	4	4
24	6	4	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	488	1	191	No	Yes	Yes	Yes	No	No	No	No	No	No
2	4	469	1	183	No	No	Yes	Yes	No	No	No	No	No	No
3	4	459	1	180	No	No	Yes	Yes	No	No	No	No	No	No
4	4	390	1	153	No	No	No	Yes	No	No	No	No	No	No
5	4	371	1	145	No	No	No	Yes	No	No	No	No	No	No
6	4	332	1	130	No	No	No	No	No	No	No	No	No	No
7	4	308	1	120	No	No	No	No	No	No	No	No	No	No
8	4	293	1	115	No	No	No	No	No	No	No	No	No	No
9	4	234	1	92	No	No	No	No	No	No	No	No	No	No
10	4	219	1	86	No	No	No	No	No	No	No	No	No	No
11	4	219	1	86	No	No	No	No	No	No	No	No	No	No
12	4	210	1	82	No	No	No	No	No	No	No	No	No	No
13	4	190	1	74	No	No	No	No	No	No	No	No	No	No
14	4	176	1	69	No	No	No	No	No	No	No	No	No	No
15	4	176	1	69	No	No	No	No	No	No	No	No	No	No
16	4	171	1	67	No	No	No	No	No	No	No	No	No	No
17	4	98	1	38	No	No	No	No	No	No	No	No	No	No
18	4	53	1	21	No	No	No	No	No	No	No	No	No	No
19	4	49	1	19	No	No	No	No	No	No	No	No	No	No
20	4	19	1	8	No	No	No	No	No	No	No	No	No	No
21	4	15	1	6	No	No	No	No	No	No	No	No	No	No
22	4	15	1	6	No	No	No	No	No	No	No	No	No	No
23	4	10	1	4	No	No	No	No	No	No	No	No	No	No
24	4	10	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	1	3	5	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:45
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	191
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	679
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	92	346	167
2	88	332	160
3	86	325	157
4	74	277	134
5	70	263	127
6	63	235	114
7	58	218	105
8	55	208	100
9	44	166	80
10	41	156	75
11	41	156	75
12	40	149	72
13	36	135	65
14	33	125	60
15	33	125	60
16	32	121	58
17	18	69	33
18	10	38	18
19	9	35	17
20	4	14	7
21	3	10	5
22	3	10	5
23	2	7	3
24	2	7	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	438	1	167	No	No	Yes	Yes	No	No	No	No	No	No
2	2	420	1	160	No	No	Yes	Yes	No	No	No	No	No	No
3	2	411	1	157	No	No	No	Yes	No	No	No	No	No	No
4	2	351	1	134	No	No	No	Yes	No	No	No	No	No	No
5	2	333	1	127	No	No	No	No	No	No	No	No	No	No
6	2	298	1	114	No	No	No	No	No	No	No	No	No	No
7	2	276	1	105	No	No	No	No	No	No	No	No	No	No
8	2	263	1	100	No	No	No	No	No	No	No	No	No	No
9	2	210	1	80	No	No	No	No	No	No	No	No	No	No
10	2	197	1	75	No	No	No	No	No	No	No	No	No	No
11	2	197	1	75	No	No	No	No	No	No	No	No	No	No
12	2	189	1	72	No	No	No	No	No	No	No	No	No	No
13	2	171	1	65	No	No	No	No	No	No	No	No	No	No
14	2	158	1	60	No	No	No	No	No	No	No	No	No	No
15	2	158	1	60	No	No	No	No	No	No	No	No	No	No
16	2	153	1	58	No	No	No	No	No	No	No	No	No	No
17	2	87	1	33	No	No	No	No	No	No	No	No	No	No
18	2	48	1	18	No	No	No	No	No	No	No	No	No	No
19	2	44	1	17	No	No	No	No	No	No	No	No	No	No
20	2	18	1	7	No	No	No	No	No	No	No	No	No	No
21	2	13	1	5	No	No	No	No	No	No	No	No	No	No
22	2	13	1	5	No	No	No	No	No	No	No	No	No	No
23	2	9	1	3	No	No	No	No	No	No	No	No	No	No
24	2	9	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	2	4	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:33
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	167
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	605
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	502	409	141
2	482	393	135
3	472	384	133
4	402	327	113
5	382	311	107
6	341	278	96
7	316	258	89
8	301	245	85
9	241	196	68
10	226	184	63
11	226	184	63
12	216	176	61
13	196	160	55
14	181	147	51
15	181	147	51
16	176	143	49
17	100	82	28
18	55	45	16
19	50	41	14
20	20	16	6
21	15	12	4
22	15	12	4
23	10	8	3
24	10	8	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	911	1	141	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
2	2	875	1	135	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
3	2	856	1	133	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
4	2	729	1	113	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
5	2	693	1	107	No	No	Yes	Yes	No	No	Yes	Yes	No	No
6	2	619	1	96	No	No	No	Yes	No	No	No	Yes	No	No
7	2	574	1	89	No	No	No	Yes	No	No	No	Yes	No	No
8	2	546	1	85	No	No	No	Yes	No	No	No	Yes	No	No
9	2	437	1	68	No	No	No	No	No	No	No	No	No	No
10	2	410	1	63	No	No	No	No	No	No	No	No	No	No
11	2	410	1	63	No	No	No	No	No	No	No	No	No	No
12	2	392	1	61	No	No	No	No	No	No	No	No	No	No
13	2	356	1	55	No	No	No	No	No	No	No	No	No	No
14	2	328	1	51	No	No	No	No	No	No	No	No	No	No
15	2	328	1	51	No	No	No	No	No	No	No	No	No	No
16	2	319	1	49	No	No	No	No	No	No	No	No	No	No
17	2	182	1	28	No	No	No	No	No	No	No	No	No	No
18	2	100	1	16	No	No	No	No	No	No	No	No	No	No
19	2	91	1	14	No	No	No	No	No	No	No	No	No	No
20	2	36	1	6	No	No	No	No	No	No	No	No	No	No
21	2	27	1	4	No	No	No	No	No	No	No	No	No	No
22	2	27	1	4	No	No	No	No	No	No	No	No	No	No
23	2	18	1	3	No	No	No	No	No	No	No	No	No	No
24	2	18	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	3	5	8	1	4	5	8	0	0

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:34
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	141
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1052
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	825	1060	80
2	792	1018	77
3	776	996	75
4	660	848	64
5	627	806	61
6	561	721	54
7	520	668	50
8	495	636	48
9	396	509	38
10	371	477	36
11	371	477	36
12	355	456	34
13	322	413	31
14	297	382	29
15	297	382	29
16	289	371	28
17	165	212	16
18	91	117	9
19	83	106	8
20	33	42	3
21	25	32	2
22	25	32	2
23	17	21	2
24	17	21	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	1885	1	80	No	No	No	No	Yes	Yes	Yes	Yes	No	No
2	4	1810	1	77	No	No	No	No	Yes	Yes	Yes	Yes	No	No
3	4	1772	1	75	No	No	No	No	Yes	Yes	Yes	Yes	No	No
4	4	1508	1	64	No	No	No	No	No	Yes	Yes	Yes	No	No
5	4	1433	1	61	No	No	No	No	No	Yes	Yes	Yes	No	No
6	4	1282	1	54	No	No	No	No	No	No	Yes	Yes	No	No
7	4	1188	1	50	No	No	No	No	No	No	No	Yes	No	No
8	4	1131	1	48	No	No	No	No	No	No	No	Yes	No	No
9	4	905	1	38	No	No	No	No	No	No	No	No	No	No
10	4	848	1	36	No	No	No	No	No	No	No	No	No	No
11	4	848	1	36	No	No	No	No	No	No	No	No	No	No
12	4	811	1	34	No	No	No	No	No	No	No	No	No	No
13	4	735	1	31	No	No	No	No	No	No	No	No	No	No
14	4	679	1	29	No	No	No	No	No	No	No	No	No	No
15	4	679	1	29	No	No	No	No	No	No	No	No	No	No
16	4	660	1	28	No	No	No	No	No	No	No	No	No	No
17	4	377	1	16	No	No	No	No	No	No	No	No	No	No
18	4	208	1	9	No	No	No	No	No	No	No	No	No	No
19	4	189	1	8	No	No	No	No	No	No	No	No	No	No
20	4	75	1	3	No	No	No	No	No	No	No	No	No	No
21	4	57	1	2	No	No	No	No	No	No	No	No	No	No
22	4	57	1	2	No	No	No	No	No	No	No	No	No	No
23	4	38	1	2	No	No	No	No	No	No	No	No	No	No
24	4	38	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	3	5	6	8	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:16
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	80
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1965
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	334	91	200
2	321	87	192
3	314	86	188
4	267	73	160
5	254	69	152
6	227	62	136
7	210	57	126
8	200	55	120
9	160	44	96
10	150	41	90
11	150	41	90
12	144	39	86
13	130	35	78
14	120	33	72
15	120	33	72
16	117	32	70
17	67	18	40
18	37	10	22
19	33	9	20
20	13	4	8
21	10	3	6
22	10	3	6
23	7	2	4
24	7	2	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	425	1	200	No	No	Yes	Yes	No	No	No	No	No	No
2	4	408	1	192	No	No	No	Yes	No	No	No	No	No	No
3	4	400	1	188	No	No	No	Yes	No	No	No	No	No	No
4	4	340	1	160	No	No	No	Yes	No	No	No	No	No	No
5	4	323	1	152	No	No	No	No	No	No	No	No	No	No
6	4	289	1	136	No	No	No	No	No	No	No	No	No	No
7	4	267	1	126	No	No	No	No	No	No	No	No	No	No
8	4	255	1	120	No	No	No	No	No	No	No	No	No	No
9	4	204	1	96	No	No	No	No	No	No	No	No	No	No
10	4	191	1	90	No	No	No	No	No	No	No	No	No	No
11	4	191	1	90	No	No	No	No	No	No	No	No	No	No
12	4	183	1	86	No	No	No	No	No	No	No	No	No	No
13	4	165	1	78	No	No	No	No	No	No	No	No	No	No
14	4	153	1	72	No	No	No	No	No	No	No	No	No	No
15	4	153	1	72	No	No	No	No	No	No	No	No	No	No
16	4	149	1	70	No	No	No	No	No	No	No	No	No	No
17	4	85	1	40	No	No	No	No	No	No	No	No	No	No
18	4	47	1	22	No	No	No	No	No	No	No	No	No	No
19	4	42	1	20	No	No	No	No	No	No	No	No	No	No
20	4	17	1	8	No	No	No	No	No	No	No	No	No	No
21	4	13	1	6	No	No	No	No	No	No	No	No	No	No
22	4	13	1	6	No	No	No	No	No	No	No	No	No	No
23	4	9	1	4	No	No	No	No	No	No	No	No	No	No
24	4	9	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	1	4	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:38
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	200
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	625
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

**EXISTING PLUS AMBIENT
GROWTH PLUS
CUMULATIVE PROJECTS
PLUS PROJECT CONDITION**

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	732	583	263
2	703	560	252
3	688	548	247
4	586	466	210
5	556	443	200
6	498	396	179
7	461	367	166
8	439	350	158
9	351	280	126
10	329	262	118
11	329	262	118
12	315	251	113
13	285	227	103
14	264	210	95
15	264	210	95
16	256	204	92
17	146	117	53
18	81	64	29
19	73	58	26
20	29	23	11
21	22	17	8
22	22	17	8
23	15	12	5
24	15	12	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1315	1	263	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1263	1	252	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1236	1	247	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1052	1	210	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	2	999	1	200	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
6	2	894	1	179	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
7	2	828	1	166	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
8	2	789	1	158	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
9	2	631	1	126	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No
10	2	591	1	118	No	No	Yes	Yes	No	No	No	Yes	No	No
11	2	591	1	118	No	No	Yes	Yes	No	No	No	Yes	No	No
12	2	566	1	113	No	No	Yes	Yes	No	No	No	Yes	No	No
13	2	512	1	103	No	No	No	Yes	No	No	No	Yes	No	No
14	2	474	1	95	No	No	No	Yes	No	No	No	No	No	No
15	2	474	1	95	No	No	No	Yes	No	No	No	No	No	No
16	2	460	1	92	No	No	No	Yes	No	No	No	No	No	No
17	2	263	1	53	No	No	No	No	No	No	No	No	No	No
18	2	145	1	29	No	No	No	No	No	No	No	No	No	No
19	2	131	1	26	No	No	No	No	No	No	No	No	No	No
20	2	52	1	11	No	No	No	No	No	No	No	No	No	No
21	2	39	1	8	No	No	No	No	No	No	No	No	No	No
22	2	39	1	8	No	No	No	No	No	No	No	No	No	No
23	2	27	1	5	No	No	No	No	No	No	No	No	No	No
24	2	27	1	5	No	No	No	No	No	No	No	No	No	No
Hours Met					8	9	12	16	5	8	9	13	6	3

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	388.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	28:21
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	263
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1578
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	Yes

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	1089	792	252
2	1045	760	242
3	1024	744	237
4	871	634	202
5	828	602	192
6	741	539	171
7	686	499	159
8	653	475	151
9	523	380	121
10	490	356	113
11	490	356	113
12	468	341	108
13	425	309	98
14	392	285	91
15	392	285	91
16	381	277	88
17	218	158	50
18	120	87	28
19	109	79	25
20	44	32	10
21	33	24	8
22	33	24	8
23	22	16	5
24	22	16	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1881	1	252	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1805	1	242	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1768	1	237	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1505	1	202	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	2	1430	1	192	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	2	1280	1	171	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
7	2	1185	1	159	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
8	2	1128	1	151	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
9	2	903	1	121	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
10	2	846	1	113	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
11	2	846	1	113	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
12	2	809	1	108	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
13	2	734	1	98	No	No	No	Yes	No	Yes	Yes	Yes	No	No
14	2	677	1	91	No	No	No	Yes	No	No	Yes	Yes	No	No
15	2	677	1	91	No	No	No	Yes	No	No	Yes	Yes	No	No
16	2	658	1	88	No	No	No	Yes	No	No	Yes	Yes	No	No
17	2	376	1	50	No	No	No	No	No	No	No	No	No	No
18	2	207	1	28	No	No	No	No	No	No	No	No	No	No
19	2	188	1	25	No	No	No	No	No	No	No	No	No	No
20	2	76	1	10	No	No	No	No	No	No	No	No	No	No
21	2	57	1	8	No	No	No	No	No	No	No	No	No	No
22	2	57	1	8	No	No	No	No	No	No	No	No	No	No
23	2	38	1	5	No	No	No	No	No	No	No	No	No	No
24	2	38	1	5	No	No	No	No	No	No	No	No	No	No
Hours Met					8	9	12	16	9	13	16	16	8	5

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	1656.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	115:56
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	252
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	2133
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	Yes

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	1567	1106	85
2	1504	1062	82
3	1473	1040	80
4	1254	885	68
5	1191	841	65
6	1066	752	58
7	987	697	54
8	940	664	51
9	752	531	41
10	705	498	38
11	705	498	38
12	674	476	37
13	611	431	33
14	564	398	31
15	564	398	31
16	548	387	30
17	313	221	17
18	172	122	9
19	157	111	9
20	63	44	3
21	47	33	3
22	47	33	3
23	31	22	2
24	31	22	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	2673	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
2	4	2566	1	82	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
3	4	2513	1	80	No	No	No	No	Yes	Yes	Yes	Yes	No	No
4	4	2139	1	68	No	No	No	No	No	Yes	Yes	Yes	No	No
5	4	2032	1	65	No	No	No	No	No	Yes	Yes	Yes	No	No
6	4	1818	1	58	No	No	No	No	No	No	Yes	Yes	No	No
7	4	1684	1	54	No	No	No	No	No	No	Yes	Yes	No	No
8	4	1604	1	51	No	No	No	No	No	No	No	Yes	No	No
9	4	1283	1	41	No	No	No	No	No	No	No	No	No	No
10	4	1203	1	38	No	No	No	No	No	No	No	No	No	No
11	4	1203	1	38	No	No	No	No	No	No	No	No	No	No
12	4	1150	1	37	No	No	No	No	No	No	No	No	No	No
13	4	1042	1	33	No	No	No	No	No	No	No	No	No	No
14	4	962	1	31	No	No	No	No	No	No	No	No	No	No
15	4	962	1	31	No	No	No	No	No	No	No	No	No	No
16	4	935	1	30	No	No	No	No	No	No	No	No	No	No
17	4	534	1	17	No	No	No	No	No	No	No	No	No	No
18	4	294	1	9	No	No	No	No	No	No	No	No	No	No
19	4	268	1	9	No	No	No	No	No	No	No	No	No	No
20	4	107	1	3	No	No	No	No	No	No	No	No	No	No
21	4	80	1	3	No	No	No	No	No	No	No	No	No	No
22	4	80	1	3	No	No	No	No	No	No	No	No	No	No
23	4	53	1	2	No	No	No	No	No	No	No	No	No	No
24	4	53	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	1	3	5	7	8	2	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	20
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:28
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	85
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2758
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	346	234	191
2	332	225	183
3	325	220	180
4	277	187	153
5	263	178	145
6	235	159	130
7	218	147	120
8	208	140	115
9	166	112	92
10	156	105	86
11	156	105	86
12	149	101	82
13	135	91	74
14	125	84	69
15	125	84	69
16	121	82	67
17	69	47	38
18	38	26	21
19	35	23	19
20	14	9	8
21	10	7	6
22	10	7	6
23	7	5	4
24	7	5	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	580	1	191	No	Yes	Yes	Yes	No	No	No	Yes	No	No
2	4	557	1	183	No	Yes	Yes	Yes	No	No	No	Yes	No	No
3	4	545	1	180	No	Yes	Yes	Yes	No	No	No	Yes	No	No
4	4	464	1	153	No	No	Yes	Yes	No	No	No	No	No	No
5	4	441	1	145	No	No	Yes	Yes	No	No	No	No	No	No
6	4	394	1	130	No	No	No	Yes	No	No	No	No	No	No
7	4	365	1	120	No	No	No	Yes	No	No	No	No	No	No
8	4	348	1	115	No	No	No	Yes	No	No	No	No	No	No
9	4	278	1	92	No	No	No	No	No	No	No	No	No	No
10	4	261	1	86	No	No	No	No	No	No	No	No	No	No
11	4	261	1	86	No	No	No	No	No	No	No	No	No	No
12	4	250	1	82	No	No	No	No	No	No	No	No	No	No
13	4	226	1	74	No	No	No	No	No	No	No	No	No	No
14	4	209	1	69	No	No	No	No	No	No	No	No	No	No
15	4	209	1	69	No	No	No	No	No	No	No	No	No	No
16	4	203	1	67	No	No	No	No	No	No	No	No	No	No
17	4	116	1	38	No	No	No	No	No	No	No	No	No	No
18	4	64	1	21	No	No	No	No	No	No	No	No	No	No
19	4	58	1	19	No	No	No	No	No	No	No	No	No	No
20	4	23	1	8	No	No	No	No	No	No	No	No	No	No
21	4	17	1	6	No	No	No	No	No	No	No	No	No	No
22	4	17	1	6	No	No	No	No	No	No	No	No	No	No
23	4	12	1	4	No	No	No	No	No	No	No	No	No	No
24	4	12	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	3	5	8	0	0	0	3	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	16.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:51
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	191
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	771
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	535	541	212
2	514	519	204
3	503	509	199
4	428	433	170
5	407	411	161
6	364	368	144
7	337	341	134
8	321	325	127
9	257	260	102
10	241	243	95
11	241	243	95
12	230	233	91
13	209	211	83
14	193	195	76
15	193	195	76
16	187	189	74
17	107	108	42
18	59	60	23
19	54	54	21
20	21	22	8
21	16	16	6
22	16	16	6
23	11	11	4
24	11	11	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1076	1	212	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
2	2	1033	1	204	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
3	2	1012	1	199	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
4	2	861	1	170	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
5	2	818	1	161	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
6	2	732	1	144	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
7	2	678	1	134	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No
8	2	646	1	127	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No
9	2	517	1	102	No	No	No	Yes	No	No	No	Yes	No	No
10	2	484	1	95	No	No	No	Yes	No	No	No	No	No	No
11	2	484	1	95	No	No	No	Yes	No	No	No	No	No	No
12	2	463	1	91	No	No	No	Yes	No	No	No	No	No	No
13	2	420	1	83	No	No	No	No	No	No	No	No	No	No
14	2	388	1	76	No	No	No	No	No	No	No	No	No	No
15	2	388	1	76	No	No	No	No	No	No	No	No	No	No
16	2	376	1	74	No	No	No	No	No	No	No	No	No	No
17	2	215	1	42	No	No	No	No	No	No	No	No	No	No
18	2	119	1	23	No	No	No	No	No	No	No	No	No	No
19	2	108	1	21	No	No	No	No	No	No	No	No	No	No
20	2	43	1	8	No	No	No	No	No	No	No	No	No	No
21	2	32	1	6	No	No	No	No	No	No	No	No	No	No
22	2	32	1	6	No	No	No	No	No	No	No	No	No	No
23	2	22	1	4	No	No	No	No	No	No	No	No	No	No
24	2	22	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					5	8	8	12	3	6	8	9	3	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	49.4
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	2:54
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	212
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1288
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	NW
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	NW
1	902	698	167
2	866	670	160
3	848	656	157
4	722	558	134
5	686	530	127
6	613	475	114
7	568	440	105
8	541	419	100
9	433	335	80
10	406	314	75
11	406	314	75
12	388	300	72
13	352	272	65
14	325	251	60
15	325	251	60
16	316	244	58
17	180	140	33
18	99	77	18
19	90	70	17
20	36	28	7
21	27	21	5
22	27	21	5
23	18	14	3
24	18	14	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1600	1	167	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1536	1	160	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1504	1	157	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1280	1	134	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	2	1216	1	127	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
6	2	1088	1	114	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
7	2	1008	1	105	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
8	2	960	1	100	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
9	2	768	1	80	No	No	No	No	No	Yes	Yes	Yes	Yes	No
10	2	720	1	75	No	No	No	No	No	Yes	Yes	Yes	Yes	No
11	2	720	1	75	No	No	No	No	No	Yes	Yes	Yes	Yes	No
12	2	688	1	72	No	No	No	No	No	No	Yes	Yes	Yes	No
13	2	624	1	65	No	No	No	No	No	No	No	Yes	Yes	No
14	2	576	1	60	No	No	No	No	No	No	No	Yes	Yes	No
15	2	576	1	60	No	No	No	No	No	No	No	Yes	Yes	No
16	2	560	1	58	No	No	No	No	No	No	No	Yes	Yes	No
17	2	320	1	33	No	No	No	No	No	No	No	No	No	No
18	2	176	1	18	No	No	No	No	No	No	No	No	No	No
19	2	160	1	17	No	No	No	No	No	No	No	No	No	No
20	2	64	1	7	No	No	No	No	No	No	No	No	No	No
21	2	48	1	5	No	No	No	No	No	No	No	No	No	No
22	2	48	1	5	No	No	No	No	No	No	No	No	No	No
23	2	32	1	3	No	No	No	No	No	No	No	No	No	No
24	2	32	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					3	5	7	8	8	11	12	16	5	3

Warrant 3 Condition A

Orientation	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	40.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	1:53
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	167
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1767
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Project Driveway (NS) / SR -74 (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	1197	1552	80
2	1149	1490	77
3	1125	1459	75
4	958	1242	64
5	910	1180	61
6	814	1055	54
7	754	978	50
8	718	931	48
9	575	745	38
10	539	698	36
11	539	698	36
12	515	667	34
13	467	605	31
14	431	559	29
15	431	559	29
16	419	543	28
17	239	310	16
18	132	171	9
19	120	155	8
20	48	62	3
21	36	47	2
22	36	47	2
23	24	31	2
24	24	31	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	2749	1	80	No	No	No	No	Yes	Yes	Yes	Yes	No	No
2	4	2639	1	77	No	No	No	No	Yes	Yes	Yes	Yes	No	No
3	4	2584	1	75	No	No	No	No	Yes	Yes	Yes	Yes	No	No
4	4	2200	1	64	No	No	No	No	No	Yes	Yes	Yes	No	No
5	4	2090	1	61	No	No	No	No	No	Yes	Yes	Yes	No	No
6	4	1869	1	54	No	No	No	No	No	No	Yes	Yes	No	No
7	4	1732	1	50	No	No	No	No	No	No	No	Yes	No	No
8	4	1649	1	48	No	No	No	No	No	No	No	Yes	No	No
9	4	1320	1	38	No	No	No	No	No	No	No	No	No	No
10	4	1237	1	36	No	No	No	No	No	No	No	No	No	No
11	4	1237	1	36	No	No	No	No	No	No	No	No	No	No
12	4	1182	1	34	No	No	No	No	No	No	No	No	No	No
13	4	1072	1	31	No	No	No	No	No	No	No	No	No	No
14	4	990	1	29	No	No	No	No	No	No	No	No	No	No
15	4	990	1	29	No	No	No	No	No	No	No	No	No	No
16	4	962	1	28	No	No	No	No	No	No	No	No	No	No
17	4	549	1	16	No	No	No	No	No	No	No	No	No	No
18	4	303	1	9	No	No	No	No	No	No	No	No	No	No
19	4	275	1	8	No	No	No	No	No	No	No	No	No	No
20	4	110	1	3	No	No	No	No	No	No	No	No	No	No
21	4	83	1	2	No	No	No	No	No	No	No	No	No	No
22	4	83	1	2	No	No	No	No	No	No	No	No	No	No
23	4	55	1	2	No	No	No	No	No	No	No	No	No	No
24	4	55	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	3	5	6	8	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:21
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	80
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2829
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	390	153	200
2	374	147	192
3	367	144	188
4	312	122	160
5	296	116	152
6	265	104	136
7	246	96	126
8	234	92	120
9	187	73	96
10	176	69	90
11	176	69	90
12	168	66	86
13	152	60	78
14	140	55	72
15	140	55	72
16	137	54	70
17	78	31	40
18	43	17	22
19	39	15	20
20	16	6	8
21	12	5	6
22	12	5	6
23	8	3	4
24	8	3	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	543	1	200	No	Yes	Yes	Yes	No	No	No	Yes	No	No
2	4	521	1	192	No	Yes	Yes	Yes	No	No	No	Yes	No	No
3	4	511	1	188	No	Yes	Yes	Yes	No	No	No	Yes	No	No
4	4	434	1	160	No	No	Yes	Yes	No	No	No	No	No	No
5	4	412	1	152	No	No	No	Yes	No	No	No	No	No	No
6	4	369	1	136	No	No	No	Yes	No	No	No	No	No	No
7	4	342	1	126	No	No	No	Yes	No	No	No	No	No	No
8	4	326	1	120	No	No	No	No	No	No	No	No	No	No
9	4	260	1	96	No	No	No	No	No	No	No	No	No	No
10	4	245	1	90	No	No	No	No	No	No	No	No	No	No
11	4	245	1	90	No	No	No	No	No	No	No	No	No	No
12	4	234	1	86	No	No	No	No	No	No	No	No	No	No
13	4	212	1	78	No	No	No	No	No	No	No	No	No	No
14	4	195	1	72	No	No	No	No	No	No	No	No	No	No
15	4	195	1	72	No	No	No	No	No	No	No	No	No	No
16	4	191	1	70	No	No	No	No	No	No	No	No	No	No
17	4	109	1	40	No	No	No	No	No	No	No	No	No	No
18	4	60	1	22	No	No	No	No	No	No	No	No	No	No
19	4	54	1	20	No	No	No	No	No	No	No	No	No	No
20	4	22	1	8	No	No	No	No	No	No	No	No	No	No
21	4	17	1	6	No	No	No	No	No	No	No	No	No	No
22	4	17	1	6	No	No	No	No	No	No	No	No	No	No
23	4	11	1	4	No	No	No	No	No	No	No	No	No	No
24	4	11	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	3	4	7	0	0	0	3	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:42
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	200
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	743
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

APPENDIX E
LEVEL OF SERVICE WORKSHEETS

EXISTING CONDITION

Vistro File: \...\2018-0099 E EP EAP AM.vistro

Scenario 1 E-AM

Report File: \...\E AM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.645	8.9	A
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SB Left	0.739	8.1	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.654	11.8	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Right	1.052	79.5	E
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Left	1.046	63.3	E
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.223	23.8	C
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.243	150.4	F
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	NB Left	0.386	5.1	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.681	9.2	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Left	0.817	41.6	D
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.016	13.2	B
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.012	10.7	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.645

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach	↕↔			↕			↔↕			↔↕		
Lane Configuration	↕↔			↕			↔↕			↔↕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	33	3	119	3	3	3	112	971	10	3	717	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	3	119	3	3	3	112	971	10	3	717	21
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	31	1	1	1	30	257	3	1	189	6
Total Analysis Volume [veh/h]	35	3	126	3	3	3	118	1026	11	3	758	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	68	0	0	68	0	22	39	0	13	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	28	28	28	28	28	28	28	28	28
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	4	4	3	12	12	0	9	9
g / C, Green / Cycle	0.13	0.13	0.13	0.11	0.43	0.43	0.00	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.01	0.07	0.28	0.28	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1776	1589	1202	1745	1832	1826	1745	1832	1814
c, Capacity [veh/h]	483	209	331	192	790	787	8	597	591
d1, Uniform Delay [s]	10.68	11.36	10.53	11.79	6.26	6.26	13.77	8.02	8.02
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	2.78	0.03	3.19	0.94	0.94	27.65	1.23	1.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.60	0.03	0.62	0.66	0.66	0.38	0.66	0.66
d, Delay for Lane Group [s/veh]	10.75	14.14	10.57	14.97	7.20	7.20	41.42	9.25	9.26
Lane Group LOS	B	B	B	B	A	A	D	A	A
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.16	0.68	0.04	0.67	1.28	1.28	0.07	1.35	1.34
50th-Percentile Queue Length [ft/ln]	3.90	16.97	0.93	16.73	32.10	32.01	1.87	33.67	33.41
95th-Percentile Queue Length [veh/ln]	0.28	1.22	0.07	1.20	2.31	2.30	0.13	2.42	2.41
95th-Percentile Queue Length [ft/ln]	7.02	30.54	1.67	30.12	57.78	57.61	3.36	60.61	60.14

Movement, Approach, & Intersection Results

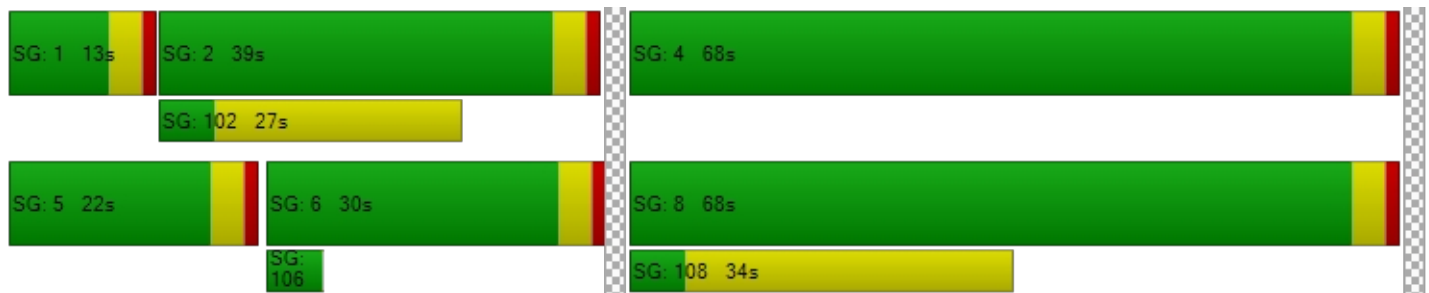
d_M, Delay for Movement [s/veh]	10.75	10.75	14.14	10.57	10.57	10.57	14.97	7.20	7.20	41.42	9.25	9.26
Movement LOS	B	B	B	B	B	B	B	A	A	D	A	A
d_A, Approach Delay [s/veh]	13.35			10.57			7.99			9.38		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	8.93											
Intersection LOS	A											
Intersection V/C	0.645											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.055			1.743			2.718			0.000		
Crosswalk LOS	B			A			B			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1067			1067			583			433		
d_b, Bicycle Delay [s]	13.07			13.07			30.10			36.82		
I_b,int, Bicycle LOS Score for Intersection	1.830			1.574			2.512			2.206		
Bicycle LOS	A			A			B			B		

Sequence




Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	8.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.739

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	89	49	994	122	80	710
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	49	994	122	80	710
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	13	265	33	21	189
Total Analysis Volume [veh/h]	95	52	1060	130	85	757
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	19	0	64	0	37	101
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	33	33	33	33	33
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	15	15	3	21
g / C, Green / Cycle	0.12	0.44	0.44	0.08	0.64
(v / s)_i Volume / Saturation Flow Rate	0.09	0.32	0.34	0.05	0.22
s, saturation flow rate [veh/h]	1708	1832	1764	1745	3489
c, Capacity [veh/h]	198	810	780	144	2249
d1, Uniform Delay [s]	14.27	7.69	7.84	14.75	2.69
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.47	1.32	1.58	3.78	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.73	0.76	0.59	0.34
d, Delay for Lane Group [s/veh]	19.74	9.01	9.42	18.54	2.78
Lane Group LOS	B	A	A	B	A
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.15	2.30	2.38	0.65	0.22
50th-Percentile Queue Length [ft/ln]	28.77	57.47	59.59	16.28	5.53
95th-Percentile Queue Length [veh/ln]	2.07	4.14	4.29	1.17	0.40
95th-Percentile Queue Length [ft/ln]	51.78	103.45	107.26	29.30	9.95

Movement, Approach, & Intersection Results

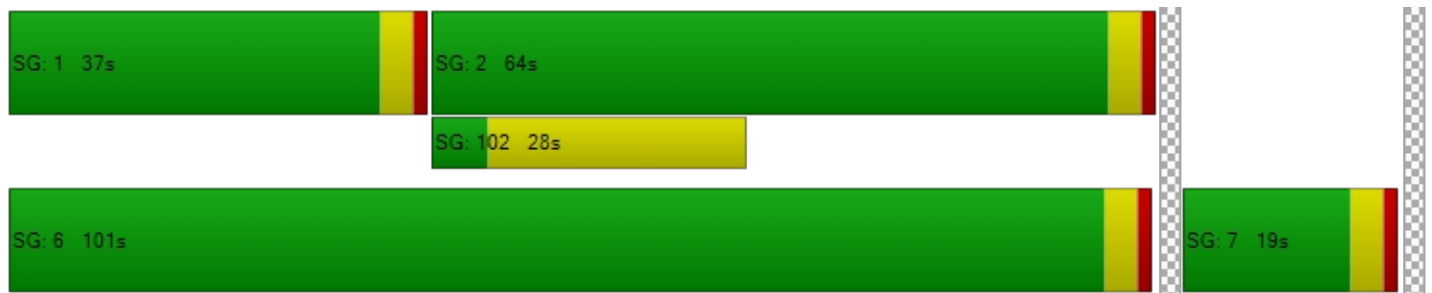
d_M, Delay for Movement [s/veh]	19.74	19.74	9.19	9.42	18.54	2.78
Movement LOS	B	B	A	A	B	A
d_A, Approach Delay [s/veh]	19.74		9.21		4.37	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.05					
Intersection LOS	A					
Intersection V/C	0.739					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.907	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.375	5.114	4.827
Bicycle LOS	E	F	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.654

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	88	48	171	54	82	32	12	764	33	121	1006	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	48	171	54	82	32	12	764	33	121	1006	29
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	13	46	15	22	9	3	206	9	33	271	8
Total Analysis Volume [veh/h]	95	52	184	58	88	34	13	823	36	130	1084	31
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	28	0	9	33	0	59	83	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	35	35	35	35	35	35	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	8	8	8	8	1	11	11	4	14	14
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.23	0.02	0.33	0.33	0.10	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.07	0.03	0.12	0.04	0.03	0.04	0.01	0.24	0.24	0.07	0.31	0.31
s, saturation flow rate [veh/h]	1269	1870	1589	1352	1870	1700	1745	1832	1806	1745	1832	1815
c, Capacity [veh/h]	381	423	359	401	423	384	30	597	588	181	755	748
d1, Uniform Delay [s]	14.00	10.73	11.80	13.33	10.79	10.82	16.94	10.37	10.37	15.12	8.67	8.67
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.34	0.13	1.13	0.16	0.16	0.19	9.29	1.69	1.72	5.26	1.46	1.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.12	0.51	0.14	0.15	0.16	0.43	0.72	0.72	0.72	0.74	0.74
d, Delay for Lane Group [s/veh]	14.34	10.86	12.93	13.50	10.95	11.00	26.23	12.06	12.08	20.38	10.13	10.15
Lane Group LOS	B	B	B	B	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.60	0.26	1.07	0.34	0.31	0.31	0.17	2.35	2.32	1.08	2.58	2.56
50th-Percentile Queue Length [ft/ln]	14.89	6.52	26.73	8.62	7.83	7.65	4.13	58.73	57.98	26.98	64.50	64.03
95th-Percentile Queue Length [veh/ln]	1.07	0.47	1.92	0.62	0.56	0.55	0.30	4.23	4.17	1.94	4.64	4.61
95th-Percentile Queue Length [ft/ln]	26.80	11.74	48.12	15.52	14.10	13.76	7.43	105.71	104.37	48.57	116.10	115.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.34	10.86	12.93	13.50	10.97	11.00	26.23	12.07	12.08	20.38	10.14	10.15
Movement LOS	B	B	B	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	13.01			11.79			12.28			11.21		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	11.83											
Intersection LOS	B											
Intersection V/C	0.654											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.429			2.214			2.857			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	400			400			483			1317		
d_b, Bicycle Delay [s]	38.40			38.40			34.50			7.00		
I_b,int, Bicycle LOS Score for Intersection	2.106			1.708			2.279			2.587		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	79.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.052

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	56	95	36	51	7	12	232	37	71	303	33
Total Analysis Volume [veh/h]	93	225	382	146	204	26	47	928	147	285	1211	134
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	27	0	9	41	0	22	54	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	23	4	33	33	22	51	51
g / C, Green / Cycle	0.22	0.22	0.19	0.03	0.28	0.28	0.18	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.17	0.24	0.21	0.03	0.30	0.30	0.16	0.37	0.38
s, saturation flow rate [veh/h]	1843	1589	1813	1745	1832	1746	1745	1832	1770
c, Capacity [veh/h]	399	344	345	62	508	484	319	778	751
d1, Uniform Delay [s]	44.54	47.05	48.64	57.43	43.41	43.41	47.95	31.59	31.89
k, delay calibration	0.22	0.42	0.33	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.30	77.54	66.28	17.17	64.18	65.50	8.68	12.94	14.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	1.11	1.09	0.76	1.08	1.08	0.89	0.87	0.89
d, Delay for Lane Group [s/veh]	51.84	124.59	114.93	74.60	107.58	108.91	56.62	44.53	46.46
Lane Group LOS	D	F	F	E	F	F	E	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.74	17.64	16.60	1.71	23.98	23.03	9.07	20.39	20.46
50th-Percentile Queue Length [ft/ln]	243.53	440.96	415.02	42.76	599.58	575.80	226.85	509.73	511.56
95th-Percentile Queue Length [veh/ln]	14.86	25.94	24.36	3.08	33.63	32.48	14.01	27.79	27.88
95th-Percentile Queue Length [ft/ln]	371.50	648.40	609.11	76.97	840.86	811.97	350.36	694.86	697.03

Movement, Approach, & Intersection Results

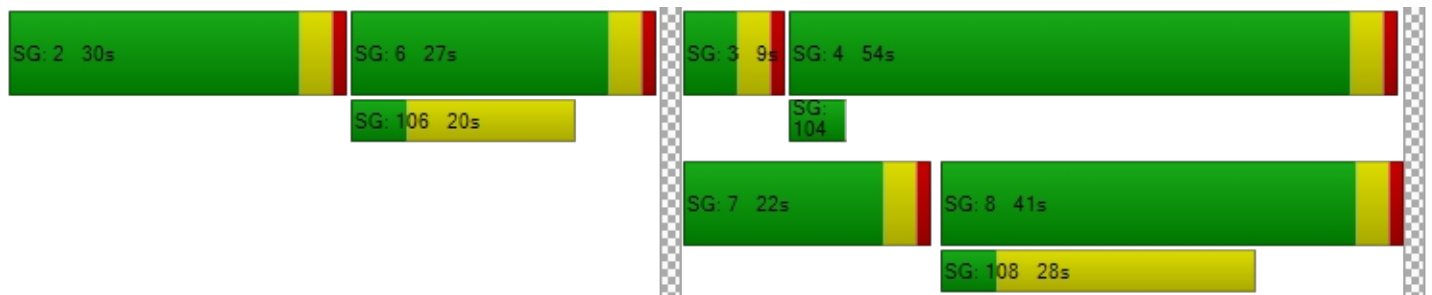
d_M, Delay for Movement [s/veh]	51.84	51.84	124.59	114.93	114.93	114.93	74.60	108.13	108.91	56.62	45.38	46.46
Movement LOS	D	D	F	F	F	F	E	F	F	E	D	D
d_A, Approach Delay [s/veh]	91.54			114.93			106.82			47.43		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	79.54											
Intersection LOS	E											
Intersection V/C	1.052											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.390			2.111			2.793			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	433			383			617			833		
d_b, Bicycle Delay [s]	36.82			39.20			28.70			20.42		
I_b,int, Bicycle LOS Score for Intersection	2.715			2.180			2.485			2.904		
Bicycle LOS	B			B			B			C		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	63.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.046

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	103	41	41	42	48	25	20	183	143	62	273	28
Total Analysis Volume [veh/h]	411	166	164	169	191	100	78	733	573	249	1092	111
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	23	0	12	49	0	19	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	19	19	7	41	41	19	53	53
g / C, Green / Cycle	0.21	0.21	0.16	0.16	0.06	0.34	0.34	0.16	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.23	0.19	0.09	0.17	0.04	0.21	0.37	0.14	0.33	0.33
s, saturation flow rate [veh/h]	1781	1719	1781	1763	1745	3489	1558	1745	1832	1774
c, Capacity [veh/h]	371	358	279	276	99	1186	529	283	815	789
d1, Uniform Delay [s]	47.54	46.57	47.20	50.66	55.92	33.14	39.65	49.21	27.72	27.83
k, delay calibration	0.40	0.28	0.11	0.20	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	74.02	20.75	2.12	49.48	12.67	2.42	63.27	8.78	6.18	6.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.11	0.92	0.61	1.05	0.79	0.62	1.08	0.88	0.75	0.75
d, Delay for Lane Group [s/veh]	121.56	67.32	49.32	100.14	68.59	35.56	102.92	57.99	33.91	34.39
Lane Group LOS	F	E	D	F	E	D	F	E	C	C
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	18.66	11.67	4.87	12.05	2.68	9.28	24.66	7.97	15.67	15.41
50th-Percentile Queue Length [ft/ln]	466.53	291.74	121.83	301.30	67.07	232.04	616.38	199.32	391.71	385.32
95th-Percentile Queue Length [veh/ln]	27.20	17.27	8.49	18.20	4.83	14.28	34.57	12.60	22.16	21.85
95th-Percentile Queue Length [ft/ln]	679.88	431.80	212.34	454.94	120.73	356.95	864.27	315.09	554.00	546.28

Movement, Approach, & Intersection Results

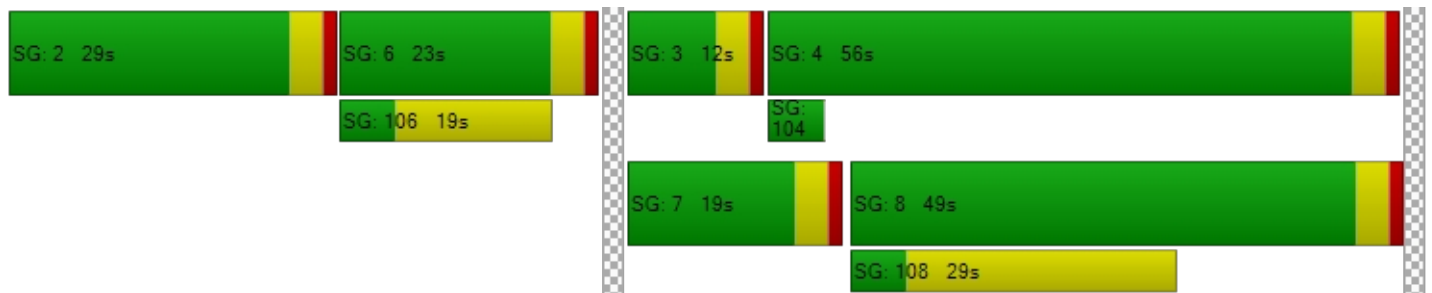
d_M, Delay for Movement [s/veh]	121.56	67.32	67.32	49.32	100.14	100.14	68.59	35.56	102.92	57.99	34.12	34.39
Movement LOS	F	E	E	D	F	F	E	D	F	E	C	C
d_A, Approach Delay [s/veh]	97.41			81.47			65.31			38.23		
Approach LOS	F			F			E			D		
d_I, Intersection Delay [s/veh]	63.30											
Intersection LOS	E											
Intersection V/C	1.046											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.525	2.220	2.953	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	317	750	867
d_b, Bicycle Delay [s]	37.60	42.50	23.44	19.27
I_b,int, Bicycle LOS Score for Intersection	2.782	2.319	2.701	2.758
Bicycle LOS	C	B	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	23.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.223

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration	↙		↑		↗	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	55	158	191	115	193	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	158	191	115	193	146
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	43	52	31	52	40
Total Analysis Volume [veh/h]	60	172	207	125	210	159
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.22	0.00	0.00	0.17	0.00
d_M, Delay for Movement [s/veh]	23.83	15.15	0.00	0.00	8.54	0.00
Movement LOS	C	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.28	2.28	0.00	0.00	0.62	0.62
95th-Percentile Queue Length [ft/ln]	56.88	56.88	0.00	0.00	15.41	15.41
d_A, Approach Delay [s/veh]	17.39		0.00		4.86	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	6.25					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	150.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.243

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	286	628	530	13	6	185
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	82	180	152	4	2	53
Total Analysis Volume [veh/h]	328	719	607	15	7	212
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	10
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.34	0.01	0.01	0.00	0.24	0.43
d_M, Delay for Movement [s/veh]	10.69	0.00	0.00	0.00	150.37	32.54
Movement LOS	B	A	A	A	F	D
95th-Percentile Queue Length [veh/ln]	1.53	1.53	0.00	0.00	4.61	4.61
95th-Percentile Queue Length [ft/ln]	38.25	38.25	0.00	0.00	115.28	115.28
d_A, Approach Delay [s/veh]	3.35		0.00		36.30	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	6.07					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	5.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.386

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵↵↵			↵↵↵			+			+		
Lane Configuration	↵↵↵			↵↵↵			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	2	873	10	12	682	8	2	0	0	23	0	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	873	10	12	682	8	2	0	0	23	0	40
Peak Hour Factor	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	259	3	4	202	2	1	0	0	7	0	12
Total Analysis Volume [veh/h]	2	1036	12	14	809	9	2	0	0	27	0	47
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	32	0	9	32	0	0	49	0	0	49	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	71	71	2	73	73	5	5
g / C, Green / Cycle	0.00	0.79	0.79	0.02	0.81	0.81	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.00	0.28	0.28	0.01	0.22	0.22	0.00	0.05
s, saturation flow rate [veh/h]	1781	1870	1862	1781	1870	1863	1423	1616
c, Capacity [veh/h]	6	1479	1473	30	1505	1499	163	149
d1, Uniform Delay [s]	44.76	2.73	2.73	43.83	2.20	2.20	39.94	41.70
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	29.69	0.67	0.67	10.50	0.45	0.45	0.03	2.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	0.35	0.35	0.46	0.27	0.27	0.01	0.50
d, Delay for Lane Group [s/veh]	74.45	3.40	3.40	54.34	2.65	2.65	39.97	44.23
Lane Group LOS	E	A	A	D	A	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.09	1.97	1.96	0.39	1.22	1.22	0.04	1.71
50th-Percentile Queue Length [ft/ln]	2.34	49.19	49.02	9.87	30.61	30.51	1.07	42.63
95th-Percentile Queue Length [veh/ln]	0.17	3.54	3.53	0.71	2.20	2.20	0.08	3.07
95th-Percentile Queue Length [ft/ln]	4.21	88.55	88.24	17.77	55.09	54.92	1.92	76.74

Movement, Approach, & Intersection Results

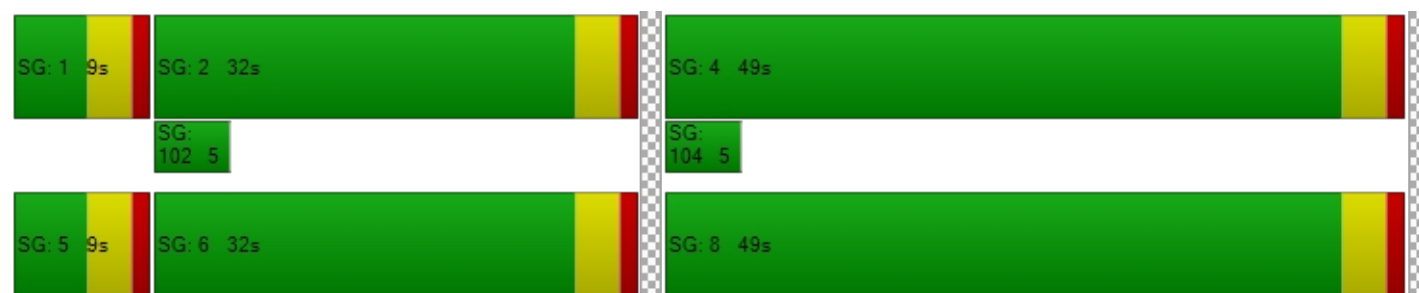
d_M, Delay for Movement [s/veh]	74.45	3.40	3.40	54.34	2.65	2.65	39.97	39.97	39.97	44.23	44.23	44.23
Movement LOS	E	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	3.54			3.52			39.97			44.23		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	5.10											
Intersection LOS	A											
Intersection V/C	0.386											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			36.45		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.678			0.000			1.765		
Crosswalk LOS	F			B			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	622			622			1000			1000		
d_b, Bicycle Delay [s]	21.36			21.36			11.25			11.25		
I_b,int, Bicycle LOS Score for Intersection	2.426			2.246			1.563			1.682		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	718	45	109	598	91	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	718	45	109	598	91	171
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	203	13	31	169	26	48
Total Analysis Volume [veh/h]	811	51	123	676	103	193
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	52	0	19	71	29	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	0	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	32	32	32	32	32	32
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	3	18	6	6
g / C, Green / Cycle	0.33	0.33	0.10	0.56	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.23	0.24	0.07	0.19	0.06	0.12
s, saturation flow rate [veh/h]	1870	1832	1781	3560	1781	1589
c, Capacity [veh/h]	626	614	187	2010	332	296
d1, Uniform Delay [s]	9.23	9.28	13.81	3.76	11.29	12.10
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.36	1.48	3.89	0.10	0.53	2.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.70	0.66	0.34	0.31	0.65
d, Delay for Lane Group [s/veh]	10.58	10.76	17.70	3.85	11.81	14.53
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.93	1.96	0.87	0.44	0.52	1.16
50th-Percentile Queue Length [ft/ln]	48.31	48.98	21.80	10.97	13.11	28.89
95th-Percentile Queue Length [veh/ln]	3.48	3.53	1.57	0.79	0.94	2.08
95th-Percentile Queue Length [ft/ln]	86.95	88.16	39.23	19.75	23.60	51.99

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.67	10.76	17.70	3.85	11.81	14.53
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	10.67		5.98		13.58	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	9.20					
Intersection LOS	A					
Intersection V/C	0.681					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.658	2.100
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	50.00	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	4.844	4.792	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	41.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.817

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T T T			T T T			T T T			T T T		
Lane Configuration	T T T			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	279	317	39	124	272	292	264	327	283	47	561	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	279	317	39	124	272	292	264	327	283	47	561	189
Peak Hour Factor	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	96	12	38	83	89	80	99	86	14	170	57
Total Analysis Volume [veh/h]	339	385	47	151	330	355	321	397	344	57	682	230
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	38	33	0	14	9	0	20	54	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	23	47	47	10	34	34	12	33	33	4	25	25
g / C, Green / Cycle	0.21	0.43	0.43	0.09	0.31	0.31	0.11	0.30	0.30	0.04	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.19	0.12	0.12	0.08	0.18	0.22	0.09	0.21	0.22	0.02	0.19	0.14
s, saturation flow rate [veh/h]	1781	1870	1800	1781	1870	1589	3459	1870	1589	3459	3560	1589
c, Capacity [veh/h]	375	797	767	163	575	488	391	558	474	133	797	356
d1, Uniform Delay [s]	42.38	20.54	20.54	49.64	32.08	34.01	47.74	34.40	34.58	51.75	41.02	38.77
k, delay calibration	0.17	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.20	0.86	0.89	19.04	4.14	9.13	4.34	1.70	2.13	2.17	2.77	1.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.28	0.28	0.93	0.57	0.73	0.82	0.71	0.73	0.43	0.86	0.65
d, Delay for Lane Group [s/veh]	54.59	21.40	21.44	68.69	36.21	43.14	52.08	36.09	36.70	53.92	43.79	40.74
Lane Group LOS	D	C	C	E	D	D	D	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	10.17	3.84	3.71	4.97	7.98	9.59	4.52	9.62	8.43	0.81	9.10	5.80
50th-Percentile Queue Length [ft/ln]	254.31	95.93	92.67	124.25	199.50	239.70	113.11	240.49	210.76	20.22	227.51	145.03
95th-Percentile Queue Length [veh/ln]	15.40	6.91	6.67	8.63	12.61	14.67	8.01	14.71	13.19	1.46	14.05	9.75
95th-Percentile Queue Length [ft/ln]	385.07	172.68	166.81	215.66	315.32	366.65	200.31	367.65	329.81	36.39	351.20	243.79

Movement, Approach, & Intersection Results

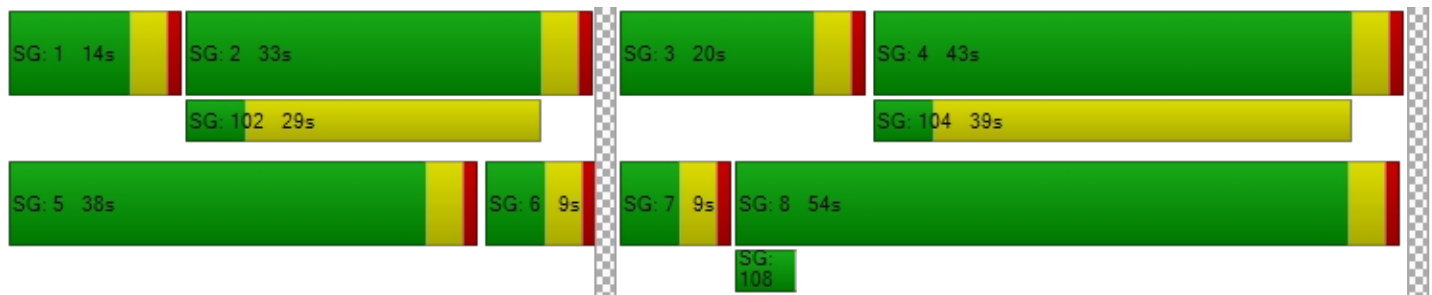
d_M, Delay for Movement [s/veh]	54.59	21.41	21.44	68.69	36.21	43.14	52.08	36.09	36.70	53.92	43.79	40.74
Movement LOS	D	C	C	E	D	D	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	36.00			45.02			41.12			43.66		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	41.61											
Intersection LOS	D											
Intersection V/C	0.817											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	46.37			46.37			0.00			46.37		
I_p,int, Pedestrian LOS Score for Intersection	2.604			2.657			0.000			2.823		
Crosswalk LOS	B			B			F			C		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	527			91			909			709		
d_b, Bicycle Delay [s]	29.82			50.11			16.36			22.91		
I_b,int, Bicycle LOS Score for Intersection	2.196			2.249			2.436			2.359		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	T		T		T	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	7	10	822	1164	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	10	822	1164	3
Peak Hour Factor	1.0000	0.9740	0.9740	0.9740	0.9740	0.9740
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	3	211	299	1
Total Analysis Volume [veh/h]	0	7	10	844	1195	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.02	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	19.61	13.22	11.49	0.00	0.00	0.00
Movement LOS	C	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.20	1.20	1.35	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.22		0.13		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.10					
Intersection LOS	B					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration	←		↑		→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	85	167	6	6	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	85	167	6	6	3
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	28	55	2	2	1
Total Analysis Volume [veh/h]	5	113	222	8	8	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	7.70	0.00	0.00	0.00	10.67	9.52
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.28	0.28	0.00	0.00	1.32	1.32
d_A, Approach Delay [s/veh]	0.33		0.00		10.28	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.45					
Intersection LOS	B					

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Scenario 5 E-PM

Report File: \...\E PM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.707	9.1	A
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.673	5.0	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.672	10.0	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Right	1.058	78.0	E
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.587	18.0	B
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.061	16.0	C
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.055	21.1	C
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	SB Left	0.188	4.4	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.221	6.6	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Left	0.473	31.9	C
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Left	0.007	32.1	D
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.017	9.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.707

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach	↔			+			↔			↔		
Lane Configuration	↔			+			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	43	9	135	15	5	9	57	817	14	14	1056	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	43	9	135	15	5	9	57	817	14	14	1056	28
Peak Hour Factor	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	2	36	4	1	2	15	219	4	4	284	8
Total Analysis Volume [veh/h]	46	10	145	16	5	10	61	878	15	15	1134	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	12	73	0	9	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	32	32	32	32	32	32	32	32	32
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	4	4	2	15	15	1	14	14
g / C, Green / Cycle	0.14	0.14	0.14	0.07	0.47	0.47	0.02	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.03	0.09	0.03	0.03	0.24	0.24	0.01	0.32	0.32
s, saturation flow rate [veh/h]	1776	1589	1165	1745	1832	1822	1745	1832	1816
c, Capacity [veh/h]	446	219	328	116	868	863	35	783	776
d1, Uniform Delay [s]	12.48	13.32	12.35	14.71	5.97	5.97	15.78	7.85	7.85
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.12	3.38	0.12	3.67	0.48	0.48	8.09	1.45	1.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.66	0.09	0.53	0.52	0.52	0.43	0.75	0.75
d, Delay for Lane Group [s/veh]	12.61	16.70	12.47	18.38	6.45	6.45	23.87	9.29	9.31
Lane Group LOS	B	B	B	B	A	A	C	A	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.30	0.99	0.17	0.47	1.22	1.21	0.17	2.27	2.26
50th-Percentile Queue Length [ft/ln]	7.44	24.64	4.14	11.69	30.51	30.34	4.21	56.81	56.41
95th-Percentile Queue Length [veh/ln]	0.54	1.77	0.30	0.84	2.20	2.18	0.30	4.09	4.06
95th-Percentile Queue Length [ft/ln]	13.40	44.36	7.45	21.04	54.91	54.62	7.59	102.26	101.53

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.61	12.61	16.70	12.47	12.47	12.47	18.38	6.45	6.45	23.87	9.30	9.31
Movement LOS	B	B	B	B	B	B	B	A	A	C	A	A
d_A, Approach Delay [s/veh]	15.56			12.47			7.22			9.49		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.13											
Intersection LOS	A											
Intersection V/C	0.707											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.052			1.765			2.776			0.000		
Crosswalk LOS	B			A			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			1150			1100		
d_b, Bicycle Delay [s]	30.82			30.82			10.84			12.15		
I_b,int, Bicycle LOS Score for Intersection	1.891			1.611			2.347			2.532		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	5.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	25	17	784	33	30	962
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	17	784	33	30	962
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	5	208	9	8	256
Total Analysis Volume [veh/h]	27	18	833	35	32	1022
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	9	0	50	0	61	111
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	23	23	23	23	23
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	9	9	1	14
g / C, Green / Cycle	0.06	0.38	0.38	0.04	0.59
(v / s)_i Volume / Saturation Flow Rate	0.03	0.24	0.24	0.02	0.29
s, saturation flow rate [veh/h]	1699	1832	1807	1745	3489
c, Capacity [veh/h]	95	695	685	73	2076
d1, Uniform Delay [s]	10.49	5.79	5.82	10.73	2.66
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.60	0.93	0.98	4.14	0.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.62	0.63	0.44	0.49
d, Delay for Lane Group [s/veh]	14.09	6.72	6.80	14.87	2.84
Lane Group LOS	B	A	A	B	A
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.24	0.78	0.79	0.19	0.05
50th-Percentile Queue Length [ft/ln]	5.97	19.57	19.81	4.70	1.31
95th-Percentile Queue Length [veh/ln]	0.43	1.41	1.43	0.34	0.09
95th-Percentile Queue Length [ft/ln]	10.75	35.22	35.65	8.46	2.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.09	14.09	6.76	6.80	14.87	2.84
Movement LOS	B	B	A	A	B	A
d_A, Approach Delay [s/veh]	14.09		6.76		3.21	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.02					
Intersection LOS	A					
Intersection V/C	0.673					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.785	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.207	4.849	5.002
Bicycle LOS	D	E	F

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.672

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	33	61	151	16	27	30	33	908	19	77	703	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	61	151	16	27	30	33	908	19	77	703	24
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	16	40	4	7	8	9	241	5	20	187	6
Total Analysis Volume [veh/h]	35	65	160	17	29	32	35	965	20	82	747	26
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	28	0	39	66	0	26	53	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	32	32	32	32	32	32	32	32	32	32	32	32
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	5	5	5	5	5	1	12	12	3	13	13
g / C, Green / Cycle	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.37	0.37	0.08	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.10	0.01	0.02	0.02	0.02	0.27	0.27	0.05	0.21	0.21
s, saturation flow rate [veh/h]	1341	1870	1589	1336	1870	1589	1745	1832	1819	1745	1832	1811
c, Capacity [veh/h]	344	306	260	326	306	260	75	689	684	145	761	752
d1, Uniform Delay [s]	13.58	11.51	12.36	13.79	11.29	11.34	14.85	8.48	8.48	14.02	6.89	6.89
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.34	2.35	0.07	0.13	0.21	4.40	1.42	1.43	3.45	0.53	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.21	0.61	0.05	0.09	0.12	0.46	0.72	0.72	0.57	0.51	0.51
d, Delay for Lane Group [s/veh]	13.71	11.86	14.71	13.86	11.42	11.55	19.24	9.90	9.91	17.47	7.42	7.43
Lane Group LOS	B	B	B	B	B	B	B	A	A	B	A	A
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.20	0.33	0.96	0.10	0.14	0.16	0.29	2.05	2.03	0.59	1.23	1.22
50th-Percentile Queue Length [ft/ln]	4.92	8.24	24.11	2.41	3.57	4.02	7.25	51.16	50.84	14.63	30.85	30.53
95th-Percentile Queue Length [veh/ln]	0.35	0.59	1.74	0.17	0.26	0.29	0.52	3.68	3.66	1.05	2.22	2.20
95th-Percentile Queue Length [ft/ln]	8.86	14.84	43.40	4.34	6.43	7.24	13.04	92.09	91.52	26.33	55.54	54.95

Movement, Approach, & Intersection Results

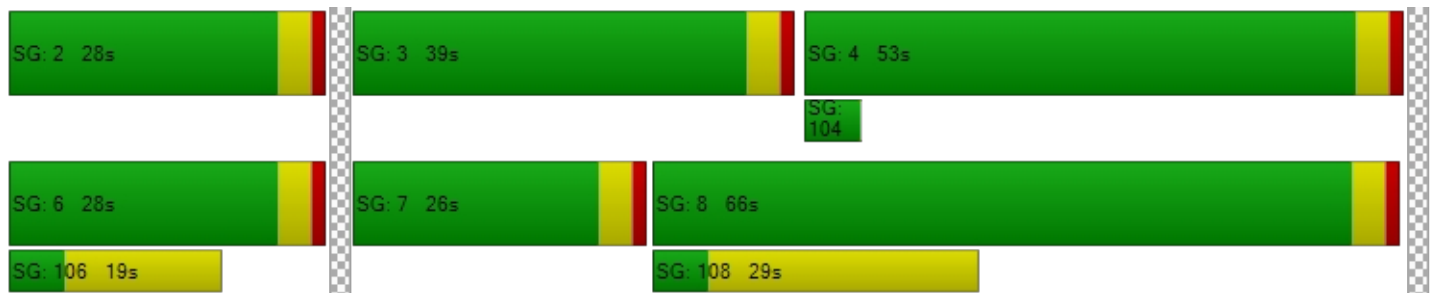
d_M, Delay for Movement [s/veh]	13.71	11.86	14.71	13.86	11.42	11.55	19.24	9.91	9.91	17.47	7.42	7.43
Movement LOS	B	B	B	B	B	B	B	A	A	B	A	A
d_A, Approach Delay [s/veh]	13.86			12.00			10.23			8.39		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	10.01											
Intersection LOS	B											
Intersection V/C	0.672											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.391			2.196			2.723			0.000		
Crosswalk LOS	B			B			B			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	400			400			1033			817		
d_b, Bicycle Delay [s]	38.40			38.40			14.02			21.00		
I_b,int, Bicycle LOS Score for Intersection	1.989			1.624			2.401			2.265		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	78.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.058

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	←→			↑			←→			←→		
Lane Configuration	←→			↑			←→			←→		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	51	77	28	41	8	14	352	23	59	257	30
Total Analysis Volume [veh/h]	111	204	309	112	165	33	55	1407	91	237	1026	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	25	0	0	24	0	9	53	0	18	62	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	21	21	20	5	45	45	19	58	58
g / C, Green / Cycle	0.18	0.18	0.17	0.04	0.37	0.37	0.15	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.17	0.19	0.17	0.03	0.41	0.41	0.14	0.32	0.32
s, saturation flow rate [veh/h]	1838	1589	1804	1745	1832	1794	1745	1832	1766
c, Capacity [veh/h]	322	278	298	71	681	667	269	890	858
d1, Uniform Delay [s]	49.29	49.51	50.08	57.06	37.71	37.71	49.66	23.26	23.33
k, delay calibration	0.22	0.29	0.22	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	28.55	74.55	45.13	16.67	67.67	71.05	9.04	3.73	3.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.98	1.11	1.04	0.78	1.11	1.12	0.88	0.65	0.66
d, Delay for Lane Group [s/veh]	77.83	124.05	95.22	73.73	105.37	108.76	58.69	26.98	27.26
Lane Group LOS	E	F	F	E	F	F	E	C	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.91	14.07	12.65	1.98	32.40	32.34	7.62	13.09	12.77
50th-Percentile Queue Length [ft/ln]	297.76	351.73	316.31	49.50	810.01	808.57	190.43	327.18	319.36
95th-Percentile Queue Length [veh/ln]	17.57	21.28	18.84	3.56	44.78	44.92	12.14	19.02	18.64
95th-Percentile Queue Length [ft/ln]	439.25	531.97	470.96	89.10	1119.5	1123.0	303.59	475.50	465.90

Movement, Approach, & Intersection Results

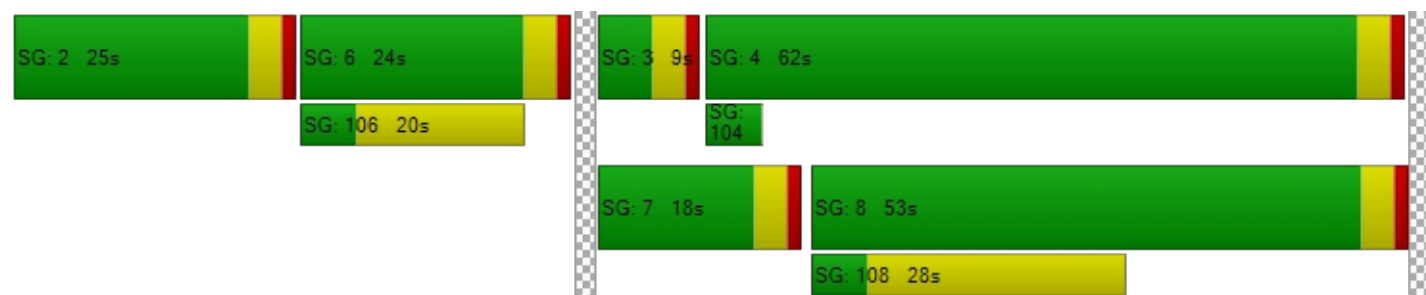
d_M, Delay for Movement [s/veh]	77.83	77.83	124.05	95.22	95.22	95.22	73.73	106.94	108.76	58.69	27.10	27.26
Movement LOS	E	E	F	F	F	F	E	F	F	E	C	C
d_A, Approach Delay [s/veh]	100.72			95.22			105.87			32.53		
Approach LOS	F			F			F			C		
d_I, Intersection Delay [s/veh]	77.98											
Intersection LOS	E											
Intersection V/C	1.058											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.318			2.066			2.846			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	350			333			817			967		
d_b, Bicycle Delay [s]	40.84			41.67			21.00			16.02		
I_b,int, Bicycle LOS Score for Intersection	2.589			2.071			2.841			2.701		
Bicycle LOS	B			B			C			B		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.587

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔↔↔			↔↔		
Lane Configuration	↔			↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	12	17	21	10	14	17	285	36	13	227	16
Total Analysis Volume [veh/h]	104	48	70	86	40	56	67	1141	145	52	907	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	18	0	0	23	0	40	40	0	9	9	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	7	7	5	55	55	4	54	54
g / C, Green / Cycle	0.09	0.09	0.08	0.08	0.05	0.61	0.61	0.04	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.06	0.07	0.05	0.06	0.04	0.33	0.09	0.03	0.27	0.27
s, saturation flow rate [veh/h]	1781	1693	1781	1695	1745	3489	1558	1745	1832	1790
c, Capacity [veh/h]	167	159	145	138	90	2112	943	73	1091	1066
d1, Uniform Delay [s]	39.32	39.80	39.96	40.32	42.18	10.43	7.74	42.68	10.08	10.08
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.75	6.68	3.81	6.12	11.46	1.00	0.35	12.17	1.34	1.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.74	0.59	0.69	0.74	0.54	0.15	0.71	0.45	0.45
d, Delay for Lane Group [s/veh]	43.07	46.48	43.77	46.43	53.64	11.43	8.09	54.84	11.42	11.46
Lane Group LOS	D	D	D	D	D	B	A	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.36	2.81	1.97	2.28	1.74	6.19	1.20	1.38	5.24	5.13
50th-Percentile Queue Length [ft/ln]	59.04	70.18	49.28	57.04	43.51	154.64	30.06	34.44	131.11	128.30
95th-Percentile Queue Length [veh/ln]	4.25	5.05	3.55	4.11	3.13	10.26	2.16	2.48	9.00	8.85
95th-Percentile Queue Length [ft/ln]	106.27	126.32	88.70	102.67	78.32	256.61	54.10	62.00	225.00	221.18

Movement, Approach, & Intersection Results

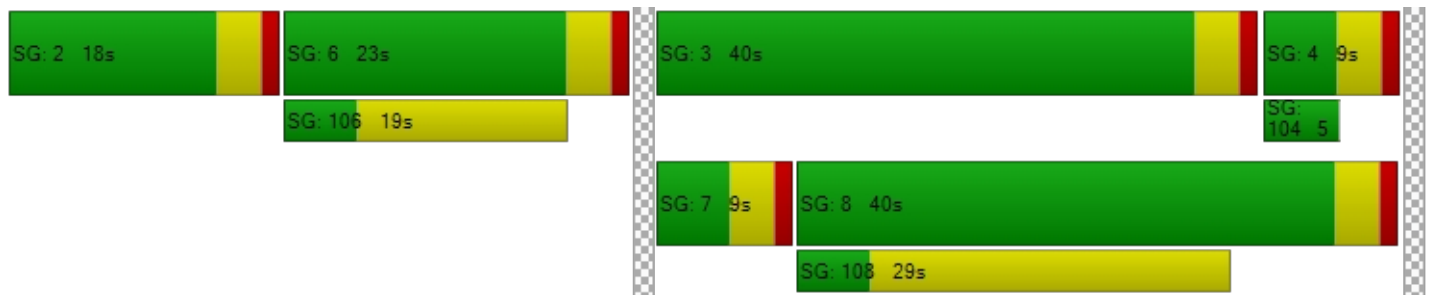
d_M, Delay for Movement [s/veh]	43.07	46.48	46.48	43.77	46.43	46.43	53.64	11.43	8.09	54.84	11.44	11.46
Movement LOS	D	D	D	D	D	D	D	B	A	D	B	B
d_A, Approach Delay [s/veh]	44.88			45.18			13.16			13.64		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	17.97											
Intersection LOS	B											
Intersection V/C	0.587											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.091	2.059	2.848	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	311	422	800	111
d_b, Bicycle Delay [s]	32.09	28.01	16.20	40.14
I_b,int, Bicycle LOS Score for Intersection	1.926	1.860	2.676	2.404
Bicycle LOS	A	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.061

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	21	108	61	28	227	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	108	61	28	227	92
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	28	16	7	60	24
Total Analysis Volume [veh/h]	22	113	64	29	238	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.12	0.00	0.00	0.16	0.00
d_M, Delay for Movement [s/veh]	15.99	9.67	0.00	0.00	7.85	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.64	0.64	0.00	0.00	0.56	0.56
95th-Percentile Queue Length [ft/ln]	15.90	15.90	0.00	0.00	14.08	14.08
d_A, Approach Delay [s/veh]	10.70		0.00		5.58	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.88					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	21.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.055

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	377	378	3	13	103
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	102	102	1	4	28
Total Analysis Volume [veh/h]	79	407	408	3	14	111
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.06	0.17
d_M, Delay for Movement [s/veh]	8.37	0.00	0.00	0.00	21.09	12.54
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.00	0.00	0.87	0.87
95th-Percentile Queue Length [ft/ln]	5.53	5.53	0.00	0.00	21.79	21.79
d_A, Approach Delay [s/veh]	1.36		0.00		13.49	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.30					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	4.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.188

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	432	27	24	464	0	0	0	0	14	0	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	432	27	24	464	0	0	0	0	14	0	16
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	113	7	6	122	0	0	0	0	4	0	4
Total Analysis Volume [veh/h]	0	453	28	25	486	0	0	0	0	15	0	17
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	19	0	9	19	0	0	62	0	0	62	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	73	73	2	75	75	3	3
g / C, Green / Cycle	0.00	0.81	0.81	0.03	0.83	0.83	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.13	0.13	0.01	0.13	0.13	0.00	0.02
s, saturation flow rate [veh/h]	1781	1870	1832	1781	1870	1870	708	1692
c, Capacity [veh/h]	2	1511	1480	48	1559	1559	63	113
d1, Uniform Delay [s]	0.00	1.91	1.91	43.23	1.43	1.43	0.00	42.96
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.23	0.23	8.36	0.21	0.21	0.00	1.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.16	0.16	0.52	0.16	0.16	0.00	0.28
d, Delay for Lane Group [s/veh]	0.00	2.14	2.15	51.59	1.65	1.65	0.00	44.32
Lane Group LOS	A	A	A	D	A	A	A	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	0.62	0.62	0.66	0.44	0.44	0.00	0.74
50th-Percentile Queue Length [ft/ln]	0.00	15.55	15.38	16.40	11.01	11.01	0.00	18.45
95th-Percentile Queue Length [veh/ln]	0.00	1.12	1.11	1.18	0.79	0.79	0.00	1.33
95th-Percentile Queue Length [ft/ln]	0.00	27.99	27.68	29.53	19.81	19.81	0.00	33.20

Movement, Approach, & Intersection Results

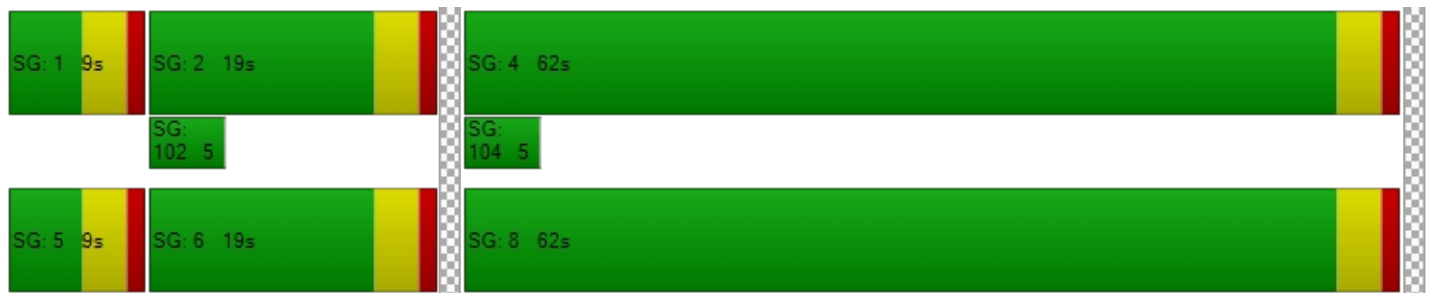
d_M, Delay for Movement [s/veh]	0.00	2.14	2.15	51.59	1.65	1.65	0.00	0.00	0.00	44.32	44.32	44.32
Movement LOS	A	A	A	D	A	A	A	A	A	D	D	D
d_A, Approach Delay [s/veh]	2.14			4.09			0.00			44.32		
Approach LOS	A			A			A			D		
d_I, Intersection Delay [s/veh]	4.43											
Intersection LOS	A											
Intersection V/C	0.188											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			36.45		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.493			0.000			1.758		
Crosswalk LOS	F			B			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			1289			1289		
d_b, Bicycle Delay [s]	31.25			31.25			5.69			5.69		
I_b,int, Bicycle LOS Score for Intersection	1.956			1.981			1.560			1.612		
Bicycle LOS	A			A			A			A		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	6.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.221

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	423	52	38	436	28	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	423	52	38	436	28	37
Peak Hour Factor	0.9222	0.9222	0.9222	0.9222	0.9222	0.9222
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	115	14	10	118	8	10
Total Analysis Volume [veh/h]	459	56	41	473	30	40
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	19	0	21	40	50	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	71	71	3	78	4	4
g / C, Green / Cycle	0.78	0.78	0.04	0.86	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.14	0.14	0.02	0.13	0.02	0.03
s, saturation flow rate [veh/h]	1870	1801	1781	3560	1781	1589
c, Capacity [veh/h]	1464	1410	66	3077	84	75
d1, Uniform Delay [s]	2.46	2.48	42.75	0.96	41.59	41.94
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.26	0.29	9.36	0.11	2.56	5.81
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.18	0.62	0.15	0.36	0.53
d, Delay for Lane Group [s/veh]	2.72	2.76	52.11	1.07	44.15	47.76
Lane Group LOS	A	A	D	A	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.86	0.87	1.06	0.18	0.70	0.98
50th-Percentile Queue Length [ft/ln]	21.46	21.70	26.52	4.55	17.48	24.52
95th-Percentile Queue Length [veh/ln]	1.55	1.56	1.91	0.33	1.26	1.77
95th-Percentile Queue Length [ft/ln]	38.63	39.07	47.74	8.19	31.47	44.14

Movement, Approach, & Intersection Results

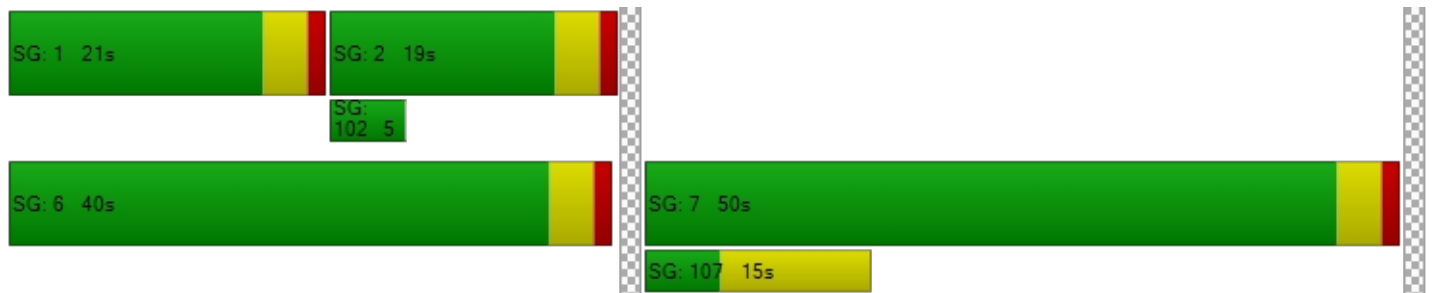
d_M, Delay for Movement [s/veh]	2.74	2.76	52.11	1.07	44.15	47.76
Movement LOS	A	A	D	A	D	D
d_A, Approach Delay [s/veh]	2.74		5.14		46.21	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	6.63					
Intersection LOS	A					
Intersection V/C	0.221					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.499	1.996
Crosswalk LOS	F	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.557	4.556	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.473

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T T T			T T T			T T T			T T T		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	152	186	29	47	219	193	233	298	248	17	212	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	152	186	29	47	219	193	233	298	248	17	212	41
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	50	8	13	59	52	63	80	67	5	57	11
Total Analysis Volume [veh/h]	163	200	31	51	235	208	251	320	267	18	228	44
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	17	33	0	15	31	0	9	43	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	23	23	4	16	16	10	55	55	2	48	48
g / C, Green / Cycle	0.11	0.23	0.23	0.04	0.16	0.16	0.10	0.55	0.55	0.02	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.06	0.03	0.13	0.13	0.07	0.17	0.17	0.01	0.06	0.03
s, saturation flow rate [veh/h]	1781	1870	1784	1781	1870	1589	3459	1870	1592	3459	3560	1589
c, Capacity [veh/h]	196	427	408	69	294	250	331	1032	879	72	1699	758
d1, Uniform Delay [s]	43.64	31.79	31.83	47.60	40.66	40.90	44.16	12.10	12.11	48.26	14.63	14.08
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.73	0.34	0.37	13.85	4.97	7.03	3.59	0.77	0.91	1.79	0.16	0.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.27	0.28	0.73	0.80	0.83	0.76	0.31	0.31	0.25	0.13	0.06
d, Delay for Lane Group [s/veh]	52.37	32.14	32.20	61.46	45.63	47.93	47.76	12.87	13.02	50.05	14.79	14.23
Lane Group LOS	D	C	C	E	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.40	2.36	2.30	1.52	5.93	5.41	3.18	3.86	3.33	0.24	1.46	0.56
50th-Percentile Queue Length [ft/ln]	109.96	59.10	57.43	37.98	148.23	135.14	79.43	96.40	83.20	5.96	36.38	13.93
95th-Percentile Queue Length [veh/ln]	7.84	4.25	4.14	2.73	9.92	9.22	5.72	6.94	5.99	0.43	2.62	1.00
95th-Percentile Queue Length [ft/ln]	195.95	106.37	103.38	68.37	248.06	230.47	142.97	173.51	149.76	10.72	65.48	25.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.37	32.16	32.20	61.46	45.63	47.93	47.76	12.88	13.02	50.05	14.79	14.23
Movement LOS	D	C	C	E	D	D	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	40.52			48.23			23.37			16.89		
Approach LOS	D			D			C			B		
d_I, Intersection Delay [s/veh]	31.88											
Intersection LOS	C											
Intersection V/C	0.473											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	41.41			41.41			0.00			41.41		
I_p,int, Pedestrian LOS Score for Intersection	2.485			2.499			0.000			2.697		
Crosswalk LOS	B			B			F			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	580			540			780			780		
d_b, Bicycle Delay [s]	25.21			26.65			18.61			18.61		
I_b,int, Bicycle LOS Score for Intersection	1.885			1.967			2.251			1.799		
Bicycle LOS	A			A			B			A		

Sequence




Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	32.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	1	5	6	980	793	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	5	6	980	793	0
Peak Hour Factor	1.0000	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	262	212	0
Total Analysis Volume [veh/h]	1	5	6	1047	847	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	32.06	11.38	9.71	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.23	1.23	0.59	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.82		0.06		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.08					
Intersection LOS	D					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration	←		↑		→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	114	74	7	12	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	114	74	7	12	12
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	32	21	2	3	3
Total Analysis Volume [veh/h]	4	127	82	8	13	13
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	7.40	0.00	0.00	0.00	9.84	8.83
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.20	0.20	0.00	0.00	2.35	2.35
d_A, Approach Delay [s/veh]	0.23		0.00		9.34	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.10					
Intersection LOS	A					

**EXISTING PLUS PROJECT
CONDITION**

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Scenario 2 EP-AM

Report File: \...\EP AM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.650	9.0	A
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SB Left	0.746	8.2	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.649	13.3	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Right	1.069	86.0	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Right	1.056	65.2	E
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.277	25.2	D
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.273	172.5	F
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	NB Left	0.399	5.3	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.690	9.4	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Right	0.812	46.6	D
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.196	15.1	C
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.088	20.7	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.650

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach	↕↔			↕			↔↕			↔↕		
Lane Configuration	↕↔			↕			↔↕			↔↕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	33	3	119	3	3	3	112	971	10	3	717	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	0	0	5	16	0	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	3	124	3	3	3	117	987	10	3	733	21
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	33	1	1	1	31	261	3	1	194	6
Total Analysis Volume [veh/h]	35	3	131	3	3	3	124	1043	11	3	775	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	67	0	0	67	0	22	40	0	13	31	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	28	28	28	28	28	28	28	28	28
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	4	4	3	12	12	0	9	9
g / C, Green / Cycle	0.13	0.13	0.13	0.11	0.44	0.44	0.00	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.01	0.07	0.29	0.29	0.00	0.22	0.22
s, saturation flow rate [veh/h]	1775	1589	1247	1745	1832	1826	1745	1832	1815
c, Capacity [veh/h]	480	210	335	196	802	799	8	604	598
d1, Uniform Delay [s]	10.84	11.57	10.69	11.96	6.26	6.26	14.00	8.11	8.11
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	2.99	0.03	3.33	0.93	0.93	27.66	1.25	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.62	0.03	0.63	0.66	0.66	0.38	0.66	0.66
d, Delay for Lane Group [s/veh]	10.91	14.56	10.72	15.29	7.19	7.20	41.66	9.36	9.38
Lane Group LOS	B	B	B	B	A	A	D	A	A
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.16	0.73	0.04	0.72	1.33	1.32	0.08	1.41	1.40
50th-Percentile Queue Length [ft/ln]	4.00	18.25	0.95	18.03	33.19	33.10	1.88	35.36	35.08
95th-Percentile Queue Length [veh/ln]	0.29	1.31	0.07	1.30	2.39	2.38	0.14	2.55	2.53
95th-Percentile Queue Length [ft/ln]	7.20	32.84	1.72	32.46	59.75	59.58	3.38	63.65	63.15

Movement, Approach, & Intersection Results

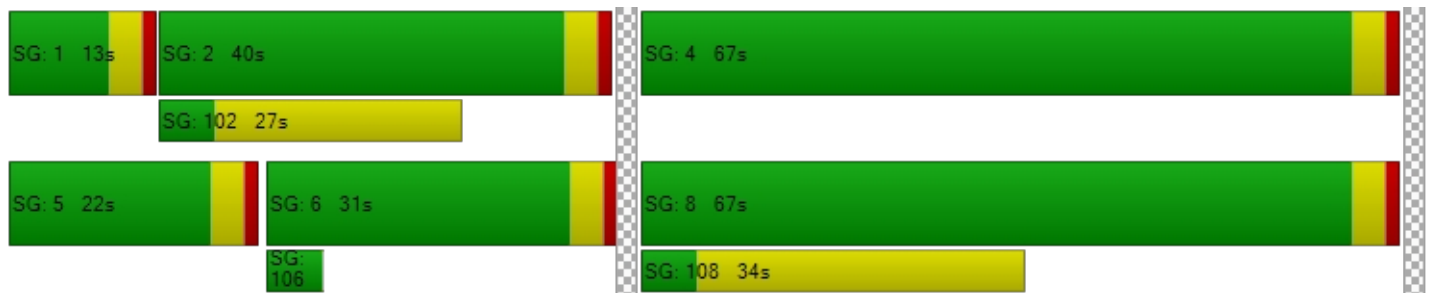
d_M, Delay for Movement [s/veh]	10.91	10.91	14.56	10.72	10.72	10.72	15.29	7.19	7.20	41.66	9.37	9.38
Movement LOS	B	B	B	B	B	B	B	A	A	D	A	A
d_A, Approach Delay [s/veh]	13.74			10.72			8.05			9.49		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.04											
Intersection LOS	A											
Intersection V/C	0.650											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.059			1.743			2.726			0.000		
Crosswalk LOS	B			A			B			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1050			1050			600			450		
d_b, Bicycle Delay [s]	13.54			13.54			29.40			36.04		
I_b,int, Bicycle LOS Score for Intersection	1.838			1.574			2.531			2.220		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	8.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.746

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	89	49	994	122	80	710
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	26	5	0	26
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	49	1020	127	80	736
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	13	272	34	21	196
Total Analysis Volume [veh/h]	100	52	1087	135	85	785
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	24	0	81	0	15	96
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	34	34	34	34	34
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	15	15	3	22
g / C, Green / Cycle	0.12	0.45	0.45	0.08	0.65
(v / s)_i Volume / Saturation Flow Rate	0.09	0.33	0.35	0.05	0.22
s, saturation flow rate [veh/h]	1710	1832	1764	1745	3489
c, Capacity [veh/h]	205	822	792	143	2258
d1, Uniform Delay [s]	14.59	7.82	7.98	15.20	2.76
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.25	1.35	1.64	3.91	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.74	0.77	0.59	0.35
d, Delay for Lane Group [s/veh]	19.84	9.17	9.61	19.12	2.85
Lane Group LOS	B	A	A	B	A
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.21	2.47	2.56	0.68	0.27
50th-Percentile Queue Length [ft/ln]	30.33	61.71	64.07	16.93	6.66
95th-Percentile Queue Length [veh/ln]	2.18	4.44	4.61	1.22	0.48
95th-Percentile Queue Length [ft/ln]	54.59	111.08	115.32	30.47	11.99

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.84	19.84	9.37	9.61	19.12	2.85
Movement LOS	B	B	A	A	B	A
d_A, Approach Delay [s/veh]	19.84		9.39		4.44	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.18					
Intersection LOS	A					
Intersection V/C	0.746					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.911	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.383	5.141	4.850
Bicycle LOS	E	F	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.649

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	88	48	171	54	82	32	12	764	33	121	1006	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	0	42	26	0	0	0	0	0	0	57
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	101	0	0	0	0	-102	102
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	58	171	96	108	133	12	764	33	121	904	188
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	16	46	26	29	36	3	206	9	33	244	51
Total Analysis Volume [veh/h]	95	63	184	103	116	143	13	823	36	130	974	203
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	28	0	16	33	0	29	46	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	40	40	40	40	40	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	11	11	11	1	13	13	4	17	17
g / C, Green / Cycle	0.27	0.27	0.27	0.27	0.27	0.27	0.02	0.33	0.33	0.10	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.08	0.03	0.12	0.08	0.06	0.09	0.01	0.24	0.24	0.07	0.33	0.33
s, saturation flow rate [veh/h]	1120	1870	1589	1339	1870	1589	1745	1832	1806	1745	1832	1725
c, Capacity [veh/h]	340	497	423	437	497	423	31	615	606	177	768	723
d1, Uniform Delay [s]	16.15	11.25	12.30	14.25	11.59	11.95	19.62	11.67	11.67	17.61	10.16	10.20
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.44	0.11	0.71	0.27	0.24	0.47	8.96	1.49	1.51	5.83	1.83	2.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.13	0.44	0.24	0.23	0.34	0.42	0.70	0.70	0.74	0.79	0.79
d, Delay for Lane Group [s/veh]	16.59	11.37	13.00	14.52	11.83	12.42	28.59	13.16	13.18	23.45	12.00	12.21
Lane Group LOS	B	B	B	B	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.74	0.36	1.19	0.72	0.69	0.89	0.18	2.83	2.80	1.29	3.66	3.51
50th-Percentile Queue Length [ft/ln]	18.38	9.05	29.72	17.95	17.25	22.25	4.57	70.85	69.91	32.37	91.57	87.86
95th-Percentile Queue Length [veh/ln]	1.32	0.65	2.14	1.29	1.24	1.60	0.33	5.10	5.03	2.33	6.59	6.33
95th-Percentile Queue Length [ft/ln]	33.08	16.29	53.49	32.30	31.05	40.05	8.22	127.52	125.85	58.27	164.82	158.15

Movement, Approach, & Intersection Results

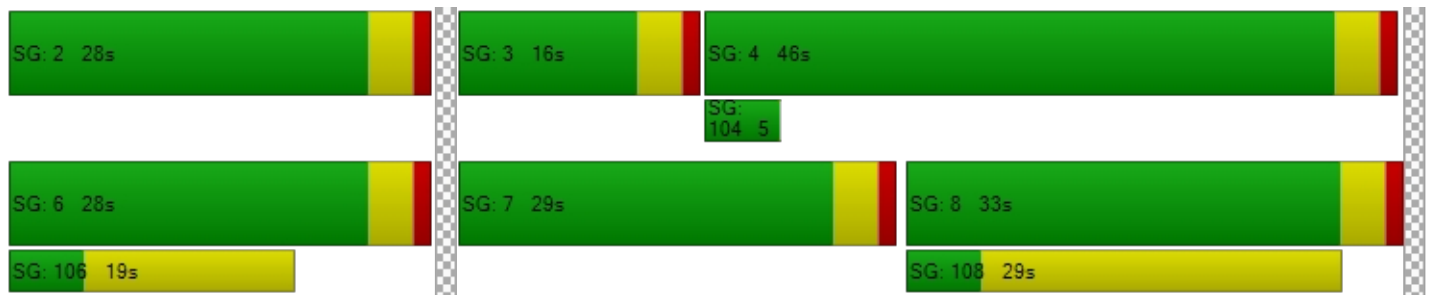
d_M, Delay for Movement [s/veh]	16.59	11.37	13.00	14.52	11.83	12.42	28.59	13.17	13.18	23.45	12.08	12.21
Movement LOS	B	B	B	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	13.70			12.83			13.40			13.23		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	13.28											
Intersection LOS	B											
Intersection V/C	0.649											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.423			2.289			2.843			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	533			533			644			933		
d_b, Bicycle Delay [s]	24.20			24.20			20.67			12.80		
I_b,int, Bicycle LOS Score for Intersection	2.124			1.858			2.279			2.638		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	86.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.069

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	0	0	0	0	5	5	26	10	0	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	205	348	133	186	29	48	872	144	260	1130	122
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	56	95	36	51	8	13	239	39	71	310	33
Total Analysis Volume [veh/h]	122	225	382	146	204	32	53	956	158	285	1239	134
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	27	0	9	42	0	21	54	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	23	5	33	33	22	50	50
g / C, Green / Cycle	0.22	0.22	0.19	0.04	0.28	0.28	0.18	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.19	0.24	0.21	0.03	0.31	0.31	0.16	0.38	0.38
s, saturation flow rate [veh/h]	1838	1589	1809	1745	1832	1743	1745	1832	1771
c, Capacity [veh/h]	398	344	344	69	508	483	319	770	744
d1, Uniform Delay [s]	45.43	47.05	48.64	57.13	43.41	43.41	47.95	32.44	32.78
k, delay calibration	0.27	0.42	0.34	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.49	77.54	73.87	15.98	78.07	79.76	8.68	15.51	17.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	1.11	1.11	0.77	1.12	1.12	0.89	0.90	0.91
d, Delay for Lane Group [s/veh]	58.92	124.59	122.52	73.11	121.48	123.17	56.63	47.94	50.45
Lane Group LOS	E	F	F	E	F	F	E	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.43	17.64	17.29	1.90	25.95	24.91	9.07	21.64	21.84
50th-Percentile Queue Length [ft/ln]	285.86	440.96	432.23	47.52	648.66	622.70	226.87	540.88	546.09
95th-Percentile Queue Length [veh/ln]	16.98	25.94	25.45	3.42	36.79	35.52	14.02	29.26	29.51
95th-Percentile Queue Length [ft/ln]	424.49	648.40	636.36	85.54	919.87	888.12	350.38	731.59	737.71

Movement, Approach, & Intersection Results

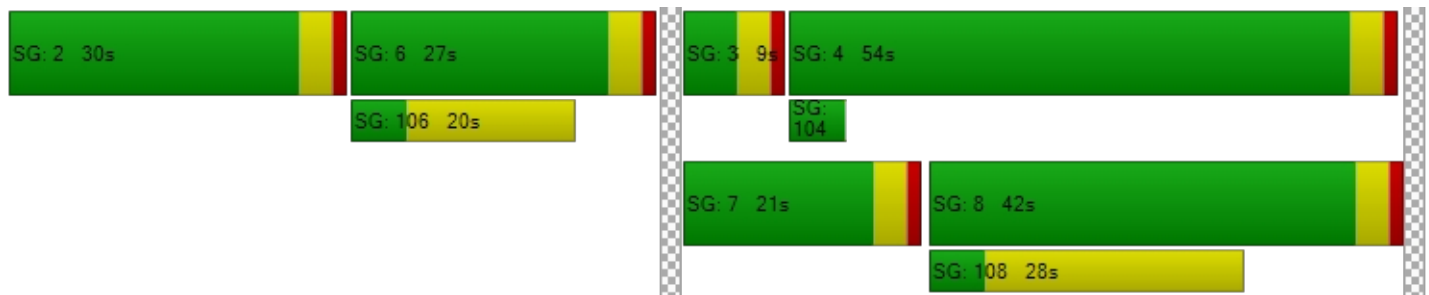
d_M, Delay for Movement [s/veh]	58.92	58.92	124.59	122.52	122.52	122.52	73.11	122.16	123.17	56.63	49.05	50.45
Movement LOS	E	E	F	F	F	F	E	F	F	E	D	D
d_A, Approach Delay [s/veh]	93.33			122.52			120.07			50.46		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	86.04											
Intersection LOS	F											
Intersection V/C	1.069											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.403			2.117			2.814			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	433			383			633			833		
d_b, Bicycle Delay [s]	36.82			39.20			28.02			20.42		
I_b,int, Bicycle LOS Score for Intersection	2.762			2.190			2.522			2.927		
Bicycle LOS	C			B			B			C		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	65.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.056

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔↔↔			↔↔		
Lane Configuration	↔			↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	5	5	16	5	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	384	153	151	156	176	97	77	692	533	230	1023	102
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	104	41	41	42	48	26	21	188	145	62	277	28
Total Analysis Volume [veh/h]	416	166	164	169	191	105	84	751	578	249	1110	111
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	23	0	12	58	0	9	55	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	19	19	7	40	40	19	52	52
g / C, Green / Cycle	0.22	0.22	0.16	0.16	0.06	0.33	0.33	0.16	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.23	0.19	0.09	0.17	0.05	0.22	0.37	0.14	0.34	0.34
s, saturation flow rate [veh/h]	1781	1719	1781	1760	1745	3489	1558	1745	1832	1775
c, Capacity [veh/h]	386	373	280	276	106	1156	516	282	792	768
d1, Uniform Delay [s]	47.05	45.61	47.15	50.63	55.68	34.21	40.16	49.24	29.19	29.31
k, delay calibration	0.40	0.28	0.11	0.21	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	63.71	16.04	2.10	55.69	12.51	2.83	76.78	8.88	7.47	7.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.08	0.89	0.60	1.07	0.79	0.65	1.12	0.88	0.78	0.79
d, Delay for Lane Group [s/veh]	110.76	61.65	49.25	106.32	68.20	37.05	116.94	58.12	36.66	37.26
Lane Group LOS	F	E	D	F	E	D	F	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	18.28	11.15	4.87	12.54	2.88	9.75	26.01	7.98	16.61	16.37
50th-Percentile Queue Length [ft/ln]	457.01	278.78	121.76	313.57	71.95	243.75	650.15	199.52	415.23	409.30
95th-Percentile Queue Length [veh/ln]	26.37	16.63	8.49	18.96	5.18	14.87	36.97	12.61	23.29	23.01
95th-Percentile Queue Length [ft/ln]	659.21	415.70	212.24	474.00	129.52	371.78	924.20	315.34	582.32	575.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	110.76	61.65	61.65	49.25	106.32	106.32	68.20	37.05	116.94	58.12	36.93	37.26
Movement LOS	F	E	E	D	F	F	E	D	F	E	D	D
d_A, Approach Delay [s/veh]	89.04			85.58			71.58			40.54		
Approach LOS	F			F			E			D		
d_I, Intersection Delay [s/veh]	65.21											
Intersection LOS	E											
Intersection V/C	1.056											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.529	2.224	2.963	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	317	900	850
d_b, Bicycle Delay [s]	36.82	42.50	18.15	19.84
I_b,int, Bicycle LOS Score for Intersection	2.791	2.327	2.725	2.772
Bicycle LOS	C	B	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.277

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	55	158	191	115	193	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	168	191	115	203	146
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	46	52	31	55	40
Total Analysis Volume [veh/h]	77	182	207	125	220	159
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.28	0.24	0.00	0.00	0.13	0.00
d_M, Delay for Movement [s/veh]	25.22	16.96	0.00	0.00	7.34	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.89	2.89	0.00	0.00	0.43	0.43
95th-Percentile Queue Length [ft/ln]	72.28	72.28	0.00	0.00	10.71	10.71
d_A, Approach Delay [s/veh]	19.42		0.00		4.26	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	6.85					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	172.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.273

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	26	10	0	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	286	654	540	13	6	201
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	82	187	155	4	2	58
Total Analysis Volume [veh/h]	328	749	619	15	7	230
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.35	0.01	0.01	0.00	0.27	0.48
d_M, Delay for Movement [s/veh]	10.78	0.00	0.00	0.00	172.48	39.66
Movement LOS	B	A	A	A	F	E
95th-Percentile Queue Length [veh/ln]	1.55	1.55	0.00	0.00	5.68	5.68
95th-Percentile Queue Length [ft/ln]	38.83	38.83	0.00	0.00	141.95	141.95
d_A, Approach Delay [s/veh]	3.28		0.00		43.58	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	7.12					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	5.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.399

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	2	873	10	12	682	8	2	0	0	23	0	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	0	2	24	0	0	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	897	10	14	706	8	2	0	0	23	0	42
Peak Hour Factor	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	266	3	4	209	2	1	0	0	7	0	12
Total Analysis Volume [veh/h]	2	1064	12	17	837	9	2	0	0	27	0	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	19	0	9	19	0	0	62	0	0	62	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	71	71	2	72	72	5	5
g / C, Green / Cycle	0.00	0.79	0.79	0.02	0.80	0.80	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.00	0.29	0.29	0.01	0.23	0.23	0.00	0.05
s, saturation flow rate [veh/h]	1781	1870	1863	1781	1870	1863	1375	1611
c, Capacity [veh/h]	6	1469	1463	35	1500	1494	164	153
d1, Uniform Delay [s]	44.76	2.91	2.91	43.66	2.28	2.28	39.73	41.56
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	29.69	0.71	0.71	9.75	0.47	0.47	0.03	2.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	0.37	0.37	0.48	0.28	0.28	0.01	0.50
d, Delay for Lane Group [s/veh]	74.45	3.62	3.62	53.40	2.75	2.75	39.75	44.12
Lane Group LOS	E	A	A	D	A	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.09	2.15	2.14	0.47	1.32	1.31	0.04	1.77
50th-Percentile Queue Length [ft/ln]	2.34	53.72	53.54	11.68	32.90	32.79	1.06	44.31
95th-Percentile Queue Length [veh/ln]	0.17	3.87	3.86	0.84	2.37	2.36	0.08	3.19
95th-Percentile Queue Length [ft/ln]	4.21	96.70	96.38	21.02	59.21	59.03	1.92	79.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.45	3.62	3.62	53.40	2.75	2.75	39.75	39.75	39.75	44.12	44.12	44.12
Movement LOS	E	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	3.75			3.75			39.75			44.12		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	5.32											
Intersection LOS	A											
Intersection V/C	0.399											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			36.45		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.690			0.000			1.768		
Crosswalk LOS	F			B			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			1289			1289		
d_b, Bicycle Delay [s]	31.25			31.25			5.69			5.69		
I_b,int, Bicycle LOS Score for Intersection	2.449			2.272			1.563			1.687		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	718	45	109	598	91	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	0	3	21	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	739	45	112	619	91	174
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	209	13	32	175	26	49
Total Analysis Volume [veh/h]	835	51	127	699	103	197
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	52	0	19	71	29	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	3	19	6	6
g / C, Green / Cycle	0.34	0.34	0.11	0.57	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.24	0.07	0.20	0.06	0.12
s, saturation flow rate [veh/h]	1870	1833	1781	3560	1781	1589
c, Capacity [veh/h]	636	624	188	2022	335	299
d1, Uniform Delay [s]	9.36	9.42	14.13	3.81	11.48	12.34
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.39	1.51	4.14	0.10	0.51	2.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.71	0.67	0.35	0.31	0.66
d, Delay for Lane Group [s/veh]	10.75	10.93	18.27	3.91	11.99	14.80
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.05	2.08	0.93	0.48	0.54	1.21
50th-Percentile Queue Length [ft/ln]	51.30	52.01	23.33	12.04	13.47	30.37
95th-Percentile Queue Length [veh/ln]	3.69	3.74	1.68	0.87	0.97	2.19
95th-Percentile Queue Length [ft/ln]	92.34	93.61	41.99	21.68	24.25	54.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.84	10.93	18.27	3.91	11.99	14.80
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	10.84		6.12		13.84	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	9.35					
Intersection LOS	A					
Intersection V/C	0.690					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.669	2.102
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	50.00	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	4.863	4.814	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	46.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.812

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T			T			T			T		
Lane Configuration	T			T			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	279	317	39	124	272	292	264	327	283	47	561	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	0	5	10	5	5	0	0	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	279	327	39	129	282	297	269	327	283	47	561	194
Peak Hour Factor	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	99	12	39	86	90	82	99	86	14	170	59
Total Analysis Volume [veh/h]	339	397	47	157	343	361	327	397	344	57	682	236
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	28	35	0	26	33	0	16	49	0	10	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	40	40	13	29	29	12	47	47	4	39	39
g / C, Green / Cycle	0.20	0.34	0.34	0.10	0.24	0.24	0.10	0.39	0.39	0.04	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.19	0.12	0.12	0.09	0.18	0.23	0.09	0.21	0.22	0.02	0.19	0.15
s, saturation flow rate [veh/h]	1781	1870	1801	1781	1870	1589	3459	1870	1589	3459	3560	1589
c, Capacity [veh/h]	356	627	604	186	449	382	356	731	621	124	1152	514
d1, Uniform Delay [s]	47.43	30.14	30.15	52.76	42.43	44.83	53.35	28.29	28.44	56.73	33.96	32.24
k, delay calibration	0.28	0.11	0.11	0.11	0.26	0.38	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	25.32	0.35	0.36	9.76	6.25	28.89	9.79	2.89	3.54	2.65	2.24	2.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.95	0.36	0.36	0.84	0.76	0.95	0.92	0.54	0.55	0.46	0.59	0.46
d, Delay for Lane Group [s/veh]	72.75	30.49	30.51	62.52	48.68	73.72	63.14	31.18	31.97	59.38	36.20	35.17
Lane Group LOS	E	C	C	E	D	E	E	C	C	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	12.46	5.01	4.84	5.15	10.21	13.55	5.37	9.37	8.26	0.89	8.64	5.86
50th-Percentile Queue Length [ft/ln]	311.61	125.29	120.95	128.72	255.16	338.64	134.20	234.26	206.53	22.34	216.10	146.58
95th-Percentile Queue Length [veh/ln]	18.25	8.68	8.45	8.87	15.45	19.58	9.17	14.39	12.97	1.61	13.47	9.83
95th-Percentile Queue Length [ft/ln]	456.36	217.08	211.13	221.75	386.15	489.54	229.20	359.76	324.37	40.21	336.64	245.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.75	30.50	30.51	62.52	48.68	73.72	63.14	31.18	31.97	59.38	36.20	35.17
Movement LOS	E	C	C	E	D	E	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	48.79			61.70			41.22			37.31		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	46.58											
Intersection LOS	D											
Intersection V/C	0.812											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.613	2.670	0.000	2.829
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	483	750	650
d_b, Bicycle Delay [s]	33.00	34.50	23.44	27.34
I_b,int, Bicycle LOS Score for Intersection	2.206	2.270	2.441	2.364
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.196

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↶		⇕		⇕	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	7	10	822	1164	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	31	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	47	0	0	-47	47
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	85	41	822	1117	50
Peak Hour Factor	1.0000	0.9740	0.9740	0.9740	0.9740	0.9740
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	22	11	211	287	13
Total Analysis Volume [veh/h]	0	87	42	844	1147	51
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.20	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	15.05	0.00	0.00	0.00	0.00
Movement LOS		C		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.72	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	17.95	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.05		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.62					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	85	167	6	6	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	68	0	0	5	5	68
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	110	-8	0	0	8	101
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	182	77	167	11	19	172
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	60	26	55	4	6	57
Total Analysis Volume [veh/h]	242	102	222	15	25	228
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.18	0.00	0.00	0.00	0.09	0.28
d_M, Delay for Movement [s/veh]	8.31	0.00	0.00	0.00	20.74	12.50
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.66	0.00	0.00	0.00	1.71	1.71
95th-Percentile Queue Length [ft/ln]	16.60	0.00	0.00	0.00	42.64	42.64
d_A, Approach Delay [s/veh]	5.84		0.00		13.31	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	6.45					
Intersection LOS	C					

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Scenario 2 EP-PM

Report File: \...\EP PM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.717	9.4	A
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.678	5.2	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.640	11.1	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Thru	1.091	90.5	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.601	18.5	B
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.118	16.6	C
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.059	22.7	C
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	SB Left	0.202	4.6	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.236	6.9	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Left	0.480	32.2	C
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.147	12.3	B
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.069	15.5	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.717

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach												
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	43	9	135	15	5	9	57	817	14	14	1056	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	7	0	0	0	7	20	0	0	20	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	43	9	142	15	5	9	64	837	14	14	1076	28
Peak Hour Factor	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	2	38	4	1	2	17	225	4	4	289	8
Total Analysis Volume [veh/h]	46	10	153	16	5	10	69	899	15	15	1156	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	12	73	0	9	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	34	34	34	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	5	5	2	16	16	1	14	14
g / C, Green / Cycle	0.14	0.14	0.14	0.07	0.48	0.48	0.02	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.03	0.10	0.03	0.04	0.25	0.25	0.01	0.32	0.33
s, saturation flow rate [veh/h]	1715	1589	1191	1745	1832	1822	1745	1832	1816
c, Capacity [veh/h]	440	228	333	125	881	876	35	786	779
d1, Uniform Delay [s]	12.76	13.68	12.61	15.12	6.05	6.05	16.32	8.13	8.13
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	3.43	0.12	3.78	0.48	0.48	8.36	1.52	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.67	0.09	0.55	0.52	0.52	0.43	0.76	0.76
d, Delay for Lane Group [s/veh]	12.89	17.11	12.73	18.90	6.53	6.53	24.68	9.65	9.67
Lane Group LOS	B	B	B	B	A	A	C	A	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.31	1.08	0.17	0.55	1.32	1.31	0.17	2.49	2.47
50th-Percentile Queue Length [ft/ln]	7.78	27.05	4.31	13.66	32.92	32.75	4.37	62.23	61.80
95th-Percentile Queue Length [veh/ln]	0.56	1.95	0.31	0.98	2.37	2.36	0.31	4.48	4.45
95th-Percentile Queue Length [ft/ln]	14.00	48.70	7.76	24.58	59.26	58.95	7.87	112.01	111.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.89	12.89	17.11	12.73	12.73	12.73	18.90	6.53	6.53	24.68	9.66	9.67
Movement LOS	B	B	B	B	B	B	B	A	A	C	A	A
d_A, Approach Delay [s/veh]	15.98			12.73			7.40			9.85		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.42											
Intersection LOS	A											
Intersection V/C	0.717											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.057			1.765			2.788			0.000		
Crosswalk LOS	B			A			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			1150			1100		
d_b, Bicycle Delay [s]	30.82			30.82			10.84			12.15		
I_b,int, Bicycle LOS Score for Intersection	1.904			1.611			2.371			2.550		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	5.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	25	17	784	33	30	962
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	33	7	0	34
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	17	817	40	30	996
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	5	217	11	8	265
Total Analysis Volume [veh/h]	34	18	868	43	32	1058
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	9	0	46	0	65	111
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	9	9	1	14
g / C, Green / Cycle	0.06	0.39	0.39	0.04	0.60
(v / s)_i Volume / Saturation Flow Rate	0.03	0.25	0.25	0.02	0.30
s, saturation flow rate [veh/h]	1710	1832	1802	1745	3489
c, Capacity [veh/h]	108	714	702	72	2092
d1, Uniform Delay [s]	10.74	5.88	5.91	11.10	2.73
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.32	0.96	1.02	4.18	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.64	0.65	0.44	0.51
d, Delay for Lane Group [s/veh]	14.06	6.84	6.93	15.28	2.92
Lane Group LOS	B	A	A	B	A
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.27	0.87	0.89	0.20	0.06
50th-Percentile Queue Length [ft/ln]	6.86	21.81	22.13	4.88	1.38
95th-Percentile Queue Length [veh/ln]	0.49	1.57	1.59	0.35	0.10
95th-Percentile Queue Length [ft/ln]	12.36	39.27	39.84	8.78	2.48

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.06	14.06	6.88	6.93	15.28	2.92
Movement LOS	B	B	A	A	B	A
d_A, Approach Delay [s/veh]	14.06		6.88		3.28	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.15					
Intersection LOS	A					
Intersection V/C	0.678					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.792	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.218	4.884	5.032
Bicycle LOS	D	E	F

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	33	61	151	16	27	30	33	908	19	77	703	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	53	33	0	0	0	0	0	0	74
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	77	0	0	0	0	-77	77
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	75	151	69	60	107	33	908	19	77	626	175
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	20	40	18	16	28	9	241	5	20	166	46
Total Analysis Volume [veh/h]	35	80	160	73	64	114	35	965	20	82	665	186
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	28	0	28	76	0	16	64	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	35	35	35	35	35	35	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	7	7	7	7	7	1	13	13	3	14	14
g / C, Green / Cycle	0.21	0.21	0.21	0.21	0.21	0.21	0.04	0.36	0.36	0.08	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.03	0.04	0.10	0.06	0.03	0.07	0.02	0.27	0.27	0.05	0.24	0.24
s, saturation flow rate [veh/h]	1206	1870	1589	1318	1870	1589	1745	1832	1819	1745	1832	1696
c, Capacity [veh/h]	311	386	329	356	386	329	74	669	665	140	739	684
d1, Uniform Delay [s]	14.88	11.35	12.08	14.41	11.25	11.70	16.15	9.52	9.52	15.32	8.10	8.10
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.16	0.26	1.12	0.28	0.20	0.63	4.59	1.62	1.63	3.81	0.78	0.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.21	0.49	0.21	0.17	0.35	0.47	0.74	0.74	0.58	0.60	0.60
d, Delay for Lane Group [s/veh]	15.04	11.61	13.20	14.70	11.45	12.33	20.73	11.14	11.15	19.13	8.88	8.94
Lane Group LOS	B	B	B	B	B	B	C	B	B	B	A	A
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.23	0.42	0.94	0.46	0.33	0.63	0.32	2.47	2.46	0.66	1.82	1.70
50th-Percentile Queue Length [ft/ln]	5.63	10.53	23.47	11.54	8.33	15.87	7.99	61.84	61.45	16.48	45.47	42.39
95th-Percentile Queue Length [veh/ln]	0.41	0.76	1.69	0.83	0.60	1.14	0.58	4.45	4.42	1.19	3.27	3.05
95th-Percentile Queue Length [ft/ln]	10.13	18.95	42.24	20.77	14.99	28.57	14.38	111.31	110.61	29.67	81.84	76.31

Movement, Approach, & Intersection Results

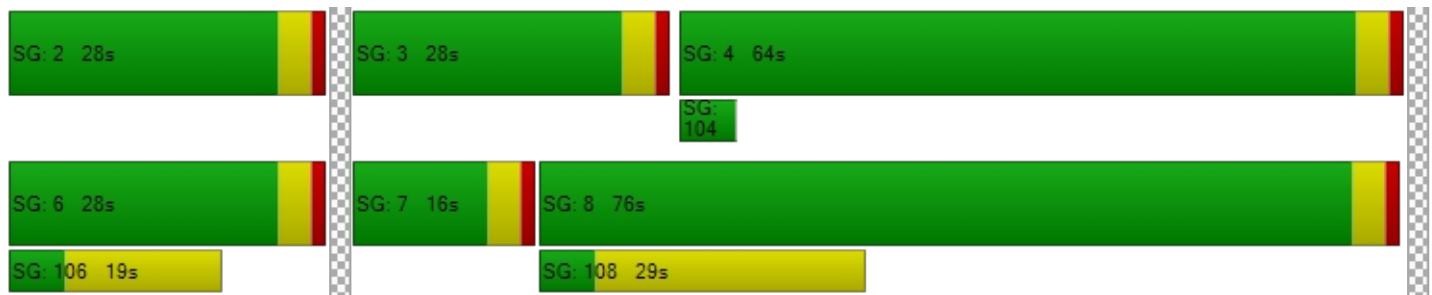
d_M, Delay for Movement [s/veh]	15.04	11.61	13.20	14.70	11.45	12.33	20.73	11.15	11.15	19.13	8.90	8.94
Movement LOS	B	B	B	B	B	B	C	B	B	B	A	A
d_A, Approach Delay [s/veh]	12.97			12.79			11.48			9.81		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	11.15											
Intersection LOS	B											
Intersection V/C	0.640											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.401			2.281			2.723			0.000		
Crosswalk LOS	B			B			B			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	400			400			1200			1000		
d_b, Bicycle Delay [s]	38.40			38.40			9.60			15.00		
I_b,int, Bicycle LOS Score for Intersection	2.013			1.767			2.401			2.329		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	90.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.091

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	0	0	0	0	7	7	33	13	0	34	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	114	147	223	81	119	31	47	1049	79	171	775	87
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	51	77	28	41	11	16	363	27	59	268	30
Total Analysis Volume [veh/h]	158	204	309	112	165	43	65	1453	109	237	1073	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	24	0	0	24	0	10	54	0	18	62	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20	20	6	46	46	19	58	58
g / C, Green / Cycle	0.17	0.17	0.17	0.05	0.38	0.38	0.15	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.20	0.19	0.18	0.04	0.43	0.43	0.14	0.33	0.33
s, saturation flow rate [veh/h]	1830	1589	1796	1745	1832	1788	1745	1832	1769
c, Capacity [veh/h]	305	265	297	83	697	680	269	892	861
d1, Uniform Delay [s]	50.01	50.01	50.09	56.55	37.20	37.20	49.66	23.57	23.66
k, delay calibration	0.30	0.29	0.24	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	102.07	95.88	58.94	14.68	75.28	80.38	9.04	4.12	4.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.19	1.17	1.08	0.78	1.13	1.14	0.88	0.68	0.68
d, Delay for Lane Group [s/veh]	152.07	145.89	109.03	71.23	112.48	117.57	58.70	27.70	28.03
Lane Group LOS	F	F	F	E	F	F	E	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	17.77	14.98	13.73	2.29	34.57	34.70	7.62	13.87	13.59
50th-Percentile Queue Length [ft/ln]	444.33	374.55	343.16	57.19	864.26	867.41	190.43	346.73	339.72
95th-Percentile Queue Length [veh/ln]	26.75	22.91	20.54	4.12	48.06	48.54	12.14	19.98	19.63
95th-Percentile Queue Length [ft/ln]	668.82	572.74	513.52	102.95	1201.5	1213.5	303.59	499.42	490.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	152.07	152.07	145.89	109.03	109.03	109.03	71.23	114.82	117.57	58.70	27.84	28.03
Movement LOS	F	F	F	F	F	F	E	F	F	E	C	C
d_A, Approach Delay [s/veh]	149.23			109.03			113.26			32.97		
Approach LOS	F			F			F			C		
d_I, Intersection Delay [s/veh]	90.52											
Intersection LOS	F											
Intersection V/C	1.091											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.340			2.076			2.881			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			833			967		
d_b, Bicycle Delay [s]	41.67			41.67			20.42			16.02		
I_b,int, Bicycle LOS Score for Intersection	2.667			2.088			2.902			2.739		
Bicycle LOS	B			B			C			B		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	18.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.601

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵			↵			↵↵↵			↵↵		
Lane Configuration	↵			↵			↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	0	7	7	20	7	0	20	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	107	46	67	82	38	61	71	1113	146	50	889	62
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	12	17	21	10	16	19	290	38	13	232	16
Total Analysis Volume [veh/h]	112	48	70	86	40	64	74	1162	152	52	928	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	17	0	0	23	0	41	41	0	9	9	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	8	8	5	54	54	4	53	53
g / C, Green / Cycle	0.09	0.09	0.09	0.09	0.06	0.60	0.60	0.04	0.59	0.59
(v / s)_i Volume / Saturation Flow Rate	0.06	0.07	0.05	0.06	0.04	0.33	0.10	0.03	0.27	0.27
s, saturation flow rate [veh/h]	1781	1693	1781	1687	1745	3489	1558	1745	1832	1791
c, Capacity [veh/h]	167	159	154	146	99	2095	935	73	1073	1048
d1, Uniform Delay [s]	39.52	39.81	39.53	40.09	41.89	10.79	7.97	42.68	10.68	10.68
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.61	6.73	3.13	6.27	10.55	1.06	0.37	12.17	1.47	1.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.74	0.56	0.71	0.75	0.55	0.16	0.71	0.47	0.47
d, Delay for Lane Group [s/veh]	44.14	46.54	42.65	46.36	52.43	11.85	8.35	54.84	12.14	12.18
Lane Group LOS	D	D	D	D	D	B	A	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.58	2.81	1.94	2.47	1.89	6.47	1.29	1.38	5.59	5.48
50th-Percentile Queue Length [ft/ln]	64.54	70.23	48.50	61.74	47.32	161.82	32.22	34.44	139.82	136.90
95th-Percentile Queue Length [veh/ln]	4.65	5.06	3.49	4.45	3.41	10.65	2.32	2.48	9.47	9.31
95th-Percentile Queue Length [ft/ln]	116.17	126.42	87.30	111.13	85.18	266.14	57.99	62.00	236.79	232.85

Movement, Approach, & Intersection Results

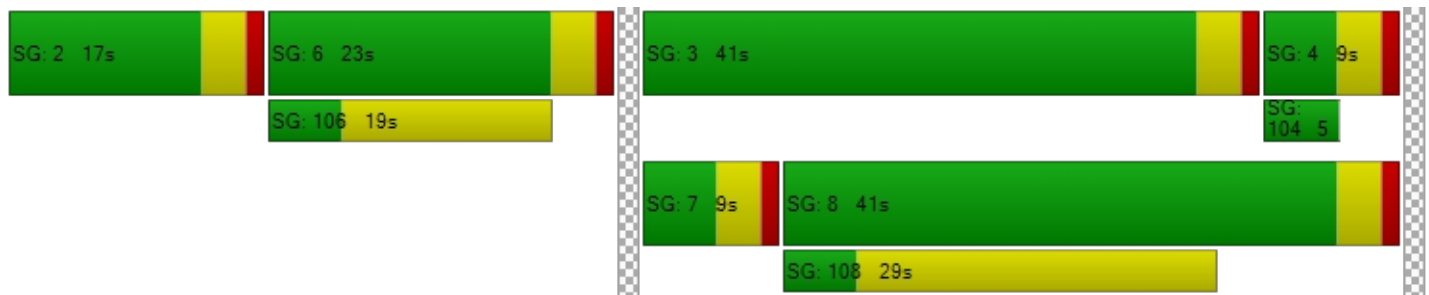
d_M, Delay for Movement [s/veh]	44.14	46.54	46.54	42.65	46.36	46.36	52.43	11.85	8.35	54.84	12.16	12.18
Movement LOS	D	D	D	D	D	D	D	B	A	D	B	B
d_A, Approach Delay [s/veh]	45.37			44.68			13.63			14.28		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	18.50											
Intersection LOS	B											
Intersection V/C	0.601											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.096	2.064	2.859	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	289	422	822	111
d_b, Bicycle Delay [s]	32.94	28.01	15.61	40.14
I_b,int, Bicycle LOS Score for Intersection	1.939	1.873	2.705	2.422
Bicycle LOS	A	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.118

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	21	108	61	28	227	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	20	13	0	0	14	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	121	61	28	241	92
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	32	16	7	63	24
Total Analysis Volume [veh/h]	43	127	64	29	253	97
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.13	0.00	0.00	0.12	0.00
d_M, Delay for Movement [s/veh]	16.57	10.37	0.00	0.00	6.85	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.97	0.97	0.00	0.00	0.39	0.39
95th-Percentile Queue Length [ft/ln]	24.25	24.25	0.00	0.00	9.73	9.73
d_A, Approach Delay [s/veh]	11.94		0.00		4.95	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.14					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	22.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.059

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	13	0	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	411	391	3	13	123
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	111	106	1	4	33
Total Analysis Volume [veh/h]	79	444	422	3	14	133
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.06	0.21
d_M, Delay for Movement [s/veh]	8.41	0.00	0.00	0.00	22.68	13.14
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.00	0.00	1.09	1.09
95th-Percentile Queue Length [ft/ln]	5.61	5.61	0.00	0.00	27.18	27.18
d_A, Approach Delay [s/veh]	1.27		0.00		14.05	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.49					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	4.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.202

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵↵↵			↵↵↵			+			+		
Lane Configuration	↵↵↵			↵↵↵			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	432	27	24	464	0	0	0	0	14	0	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	0	3	31	0	0	0	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	463	27	27	495	0	0	0	0	14	0	19
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	121	7	7	130	0	0	0	0	4	0	5
Total Analysis Volume [veh/h]	0	485	28	28	519	0	0	0	0	15	0	20
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	19	0	9	19	0	0	62	0	0	62	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	19	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	72	72	3	75	75	3	3
g / C, Green / Cycle	0.00	0.81	0.81	0.03	0.83	0.83	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.14	0.02	0.14	0.14	0.00	0.02
s, saturation flow rate [veh/h]	1781	1870	1834	1781	1870	1870	771	1687
c, Capacity [veh/h]	2	1503	1475	52	1555	1555	66	114
d1, Uniform Delay [s]	0.00	2.01	2.01	43.11	1.48	1.48	0.00	42.87
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.25	0.25	8.37	0.23	0.23	0.00	1.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.17	0.17	0.54	0.17	0.17	0.00	0.31
d, Delay for Lane Group [s/veh]	0.00	2.26	2.27	51.48	1.71	1.71	0.00	44.38
Lane Group LOS	A	A	A	D	A	A	A	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	0.70	0.69	0.73	0.49	0.49	0.00	0.81
50th-Percentile Queue Length [ft/ln]	0.00	17.51	17.31	18.25	12.23	12.23	0.00	20.19
95th-Percentile Queue Length [veh/ln]	0.00	1.26	1.25	1.31	0.88	0.88	0.00	1.45
95th-Percentile Queue Length [ft/ln]	0.00	31.52	31.16	32.85	22.01	22.01	0.00	36.34

Movement, Approach, & Intersection Results

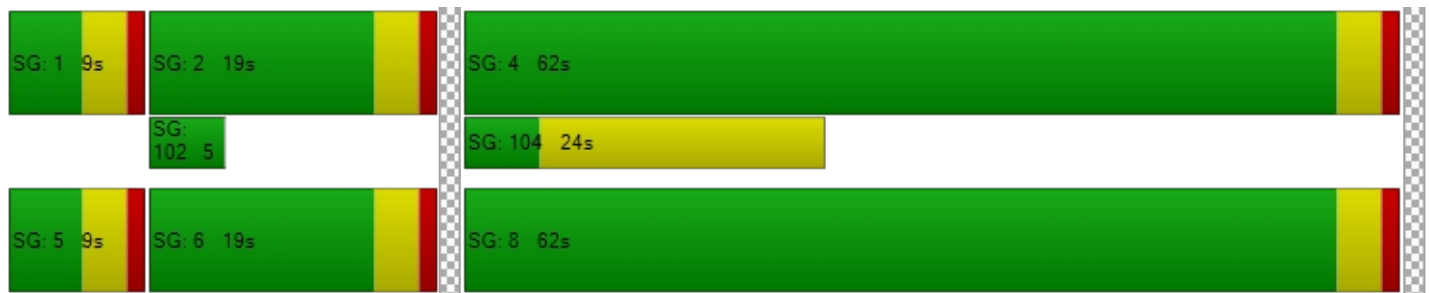
d_M, Delay for Movement [s/veh]	0.00	2.26	2.27	51.48	1.71	1.71	0.00	0.00	0.00	44.38	44.38	44.38
Movement LOS	A	A	A	D	A	A	A	A	A	D	D	D
d_A, Approach Delay [s/veh]	2.26			4.26			0.00			44.38		
Approach LOS	A			A			A			D		
d_I, Intersection Delay [s/veh]	4.60											
Intersection LOS	A											
Intersection V/C	0.202											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			36.45		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.507			0.000			1.761		
Crosswalk LOS	F			B			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			1289			1289		
d_b, Bicycle Delay [s]	31.25			31.25			5.69			5.69		
I_b,int, Bicycle LOS Score for Intersection	1.983			2.011			1.560			1.617		
Bicycle LOS	A			B			A			A		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	6.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.236

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	423	52	38	436	28	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	4	27	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	450	52	42	463	28	41
Peak Hour Factor	0.9222	0.9222	0.9222	0.9222	0.9222	0.9222
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	122	14	11	126	8	11
Total Analysis Volume [veh/h]	488	56	46	502	30	44
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	19	0	21	40	50	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	70	70	3	78	4	4
g / C, Green / Cycle	0.78	0.78	0.04	0.86	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.15	0.15	0.03	0.14	0.02	0.03
s, saturation flow rate [veh/h]	1870	1804	1781	3560	1781	1589
c, Capacity [veh/h]	1458	1407	70	3073	85	76
d1, Uniform Delay [s]	2.56	2.58	42.67	0.98	41.51	41.97
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	0.31	10.12	0.11	2.44	6.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.19	0.66	0.16	0.35	0.58
d, Delay for Lane Group [s/veh]	2.84	2.88	52.79	1.10	43.95	48.69
Lane Group LOS	A	A	D	A	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.94	0.95	1.20	0.20	0.70	1.09
50th-Percentile Queue Length [ft/ln]	23.55	23.80	29.88	5.04	17.42	27.25
95th-Percentile Queue Length [veh/ln]	1.70	1.71	2.15	0.36	1.25	1.96
95th-Percentile Queue Length [ft/ln]	42.38	42.85	53.79	9.08	31.36	49.04

Movement, Approach, & Intersection Results

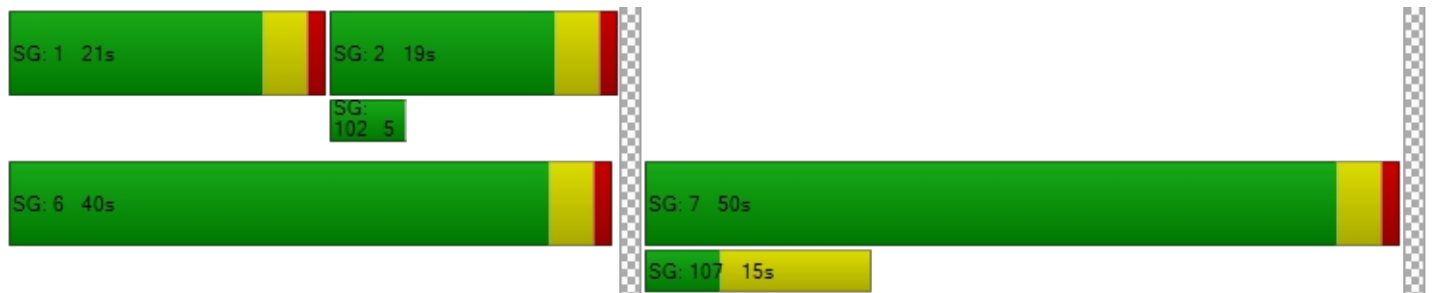
d_M, Delay for Movement [s/veh]	2.86	2.88	52.79	1.10	43.95	48.69
Movement LOS	A	A	D	A	D	D
d_A, Approach Delay [s/veh]	2.86		5.43		46.77	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	6.86					
Intersection LOS	A					
Intersection V/C	0.236					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.512	1.999
Crosswalk LOS	F	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.581	4.585	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.480

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T T T			T T T			T T T			T T T		
Lane Configuration	T T T			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	152	186	29	47	219	193	233	298	248	17	212	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	7	13	7	7	0	0	0	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	152	200	29	54	232	200	240	298	248	17	212	48
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	54	8	15	62	54	65	80	67	5	57	13
Total Analysis Volume [veh/h]	163	215	31	58	249	215	258	320	267	18	228	52
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	19	33	0	15	29	0	9	43	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	23	23	4	16	16	10	55	55	2	47	47
g / C, Green / Cycle	0.11	0.23	0.23	0.04	0.16	0.16	0.10	0.55	0.55	0.02	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.09	0.07	0.07	0.03	0.13	0.14	0.07	0.17	0.17	0.01	0.06	0.03
s, saturation flow rate [veh/h]	1781	1870	1789	1781	1870	1592	3459	1870	1592	3459	3560	1589
c, Capacity [veh/h]	197	431	412	77	305	260	337	1020	869	72	1670	746
d1, Uniform Delay [s]	43.59	31.77	31.80	47.38	40.41	40.61	44.08	12.44	12.45	48.26	15.08	14.59
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.51	0.37	0.39	13.72	5.12	7.00	3.64	0.79	0.93	1.79	0.17	0.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.29	0.29	0.75	0.81	0.84	0.77	0.31	0.31	0.25	0.14	0.07
d, Delay for Lane Group [s/veh]	52.10	32.14	32.20	61.10	45.53	47.61	47.72	13.23	13.38	50.05	15.25	14.77
Lane Group LOS	D	C	C	E	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.39	2.52	2.45	1.72	6.23	5.63	3.27	3.93	3.39	0.24	1.48	0.67
50th-Percentile Queue Length [ft/ln]	109.66	63.00	61.28	42.90	155.84	140.76	81.65	98.14	84.67	5.96	37.08	16.87
95th-Percentile Queue Length [veh/ln]	7.82	4.54	4.41	3.09	10.33	9.52	5.88	7.07	6.10	0.43	2.67	1.21
95th-Percentile Queue Length [ft/ln]	195.53	113.40	110.31	77.22	258.21	238.04	146.97	176.66	152.41	10.72	66.75	30.36

Movement, Approach, & Intersection Results

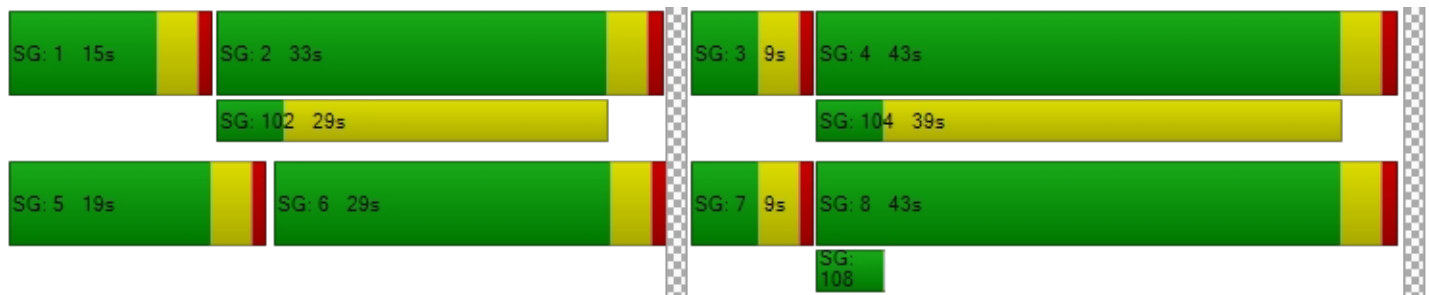
d_M, Delay for Movement [s/veh]	52.10	32.16	32.20	61.10	45.55	47.61	47.72	13.23	13.38	50.05	15.25	14.77
Movement LOS	D	C	C	E	D	D	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	40.11			48.12			23.81			17.27		
Approach LOS	D			D			C			B		
d_I, Intersection Delay [s/veh]	32.20											
Intersection LOS	C											
Intersection V/C	0.480											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	41.41			41.41			0.00			41.41		
I_p,int, Pedestrian LOS Score for Intersection	2.490			2.511			0.000			2.699		
Crosswalk LOS	B			B			F			B		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	580			500			780			780		
d_b, Bicycle Delay [s]	25.21			28.13			18.61			18.61		
I_b,int, Bicycle LOS Score for Intersection	1.897			1.990			2.257			1.805		
Bicycle LOS	A			A			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↶		⇕		⇕↶	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	1	5	6	980	793	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	40	41	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	35	0	0	-35	35
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	80	47	980	758	35
Peak Hour Factor	1.0000	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	21	13	262	202	9
Total Analysis Volume [veh/h]	1	85	50	1047	810	37
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.15	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	12.28	0.00	0.00	0.00	0.00
Movement LOS		B		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.51	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	12.80	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.28		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.53					
Intersection LOS	B					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.069

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	114	74	7	12	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	88	0	0	7	7	86
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	83	-6	0	0	6	77
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	175	108	74	14	25	175
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	30	21	4	7	49
Total Analysis Volume [veh/h]	195	120	82	16	28	195
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.00	0.00	0.00	0.07	0.20
d_M, Delay for Movement [s/veh]	7.77	0.00	0.00	0.00	15.54	10.34
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.45	0.00	0.00	0.00	1.10	1.10
95th-Percentile Queue Length [ft/ln]	11.22	0.00	0.00	0.00	27.46	27.46
d_A, Approach Delay [s/veh]	4.81		0.00		10.99	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	6.24					
Intersection LOS	C					

**EXISTING AMBIENT
GROWTH PLUS PROJECT
CONDITION**

Vistro File: \...\2018-0099 E EP EAP AM.vistro

Scenario 3 EAP- AM

Report File: \...\EAP AM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.686	9.6	A
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SB Left	0.756	8.3	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.675	14.7	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Right	1.110	99.4	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Right	1.134	82.3	F
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.279	25.4	D
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.350	230.1	F
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	NB Left	0.414	5.4	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.704	9.6	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	NB Left	0.843	49.2	D
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.203	15.5	C
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.110	24.4	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach	↗			↖			↙			↘		
Lane Configuration	↗			+			↙			↘		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	33	3	119	3	3	3	112	971	10	3	717	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	31	0	0	0	5	16	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	3	155	3	3	3	121	1026	10	3	746	22
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	41	1	1	1	32	271	3	1	197	6
Total Analysis Volume [veh/h]	36	3	164	3	3	3	128	1085	11	3	789	23
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	41	0	0	41	0	21	70	0	9	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	29	29	29	29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	4	4	3	13	13	0	10	10
g / C, Green / Cycle	0.15	0.15	0.15	0.11	0.44	0.44	0.00	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.02	0.10	0.01	0.07	0.30	0.30	0.00	0.22	0.22
s, saturation flow rate [veh/h]	1733	1589	1544	1745	1832	1826	1745	1832	1814
c, Capacity [veh/h]	496	239	395	195	801	798	8	604	598
d1, Uniform Delay [s]	10.84	11.83	10.67	12.51	6.65	6.65	14.60	8.50	8.50
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	3.47	0.02	3.69	1.05	1.05	30.21	1.33	1.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.69	0.02	0.66	0.69	0.69	0.40	0.68	0.68
d, Delay for Lane Group [s/veh]	10.91	15.30	10.69	16.21	7.70	7.70	44.81	9.83	9.85
Lane Group LOS	B	B	B	B	A	A	D	A	A
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.17	0.97	0.04	0.80	1.56	1.56	0.08	1.57	1.56
50th-Percentile Queue Length [ft/ln]	4.25	24.19	0.97	19.99	39.11	39.01	1.98	39.31	38.99
95th-Percentile Queue Length [veh/ln]	0.31	1.74	0.07	1.44	2.82	2.81	0.14	2.83	2.81
95th-Percentile Queue Length [ft/ln]	7.64	43.55	1.75	35.99	70.40	70.22	3.57	70.76	70.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.91	10.91	15.30	10.69	10.69	10.69	16.21	7.70	7.70	44.81	9.84	9.85
Movement LOS	B	B	B	B	B	B	B	A	A	D	A	A
d_A, Approach Delay [s/veh]	14.46			10.69			8.59			9.97		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.63											
Intersection LOS	A											
Intersection V/C	0.686											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.071			1.743			2.744			0.000		
Crosswalk LOS	B			A			B			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	617			617			1100			900		
d_b, Bicycle Delay [s]	28.70			28.70			12.15			18.15		
I_b,int, Bicycle LOS Score for Intersection	1.895			1.574			2.569			2.232		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.756

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	89	49	994	122	80	710
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	26	5	0	31
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	93	51	1060	132	83	769
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	14	283	35	22	205
Total Analysis Volume [veh/h]	99	54	1130	141	88	820
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	24	0	81	0	15	96
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	16	16	3	23
g / C, Green / Cycle	0.12	0.46	0.46	0.08	0.65
(v / s)_i Volume / Saturation Flow Rate	0.09	0.35	0.36	0.05	0.24
s, saturation flow rate [veh/h]	1708	1832	1763	1745	3489
c, Capacity [veh/h]	206	842	811	144	2284
d1, Uniform Delay [s]	15.12	7.95	8.12	15.77	2.77
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.23	1.40	1.71	4.14	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.75	0.78	0.61	0.36
d, Delay for Lane Group [s/veh]	20.35	9.35	9.83	19.91	2.87
Lane Group LOS	C	A	A	B	A
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.27	2.70	2.81	0.74	0.31
50th-Percentile Queue Length [ft/ln]	31.78	67.61	70.30	18.40	7.73
95th-Percentile Queue Length [veh/ln]	2.29	4.87	5.06	1.33	0.56
95th-Percentile Queue Length [ft/ln]	57.21	121.69	126.55	33.13	13.91

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.35	20.35	9.56	9.83	19.91	2.87
Movement LOS	C	C	A	A	B	A
d_A, Approach Delay [s/veh]	20.35		9.59		4.52	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	8.32					
Intersection LOS	A					
Intersection V/C	0.756					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.916	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.385	5.181	4.882
Bicycle LOS	E	F	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.675

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	88	48	171	54	82	32	12	764	33	121	1006	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	0	42	26	0	31	0	0	0	0	57
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	101	0	0	0	0	-102	102
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	10	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	60	178	98	111	134	53	795	34	126	944	189
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	16	48	26	30	36	14	214	9	34	254	51
Total Analysis Volume [veh/h]	99	65	192	106	120	144	57	857	37	136	1017	204
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	23	0	0	23	0	9	38	0	59	88	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	46	46	46	46	46	46	46	46	46	46	46	46
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	12	12	12	3	17	17	5	19	19
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.26	0.26	0.06	0.37	0.37	0.10	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.12	0.08	0.06	0.09	0.03	0.25	0.25	0.08	0.34	0.34
s, saturation flow rate [veh/h]	1115	1870	1589	1336	1870	1589	1781	1832	1806	1745	1832	1728
c, Capacity [veh/h]	316	486	414	412	486	414	102	681	671	184	769	725
d1, Uniform Delay [s]	18.45	12.94	14.21	16.26	13.35	13.74	20.95	11.94	11.94	19.82	11.67	11.73
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.56	0.12	0.81	0.33	0.26	0.50	4.70	1.10	1.12	5.78	2.15	2.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.13	0.46	0.26	0.25	0.35	0.56	0.66	0.66	0.74	0.81	0.82
d, Delay for Lane Group [s/veh]	19.01	13.07	15.02	16.58	13.61	14.24	25.65	13.05	13.06	25.60	13.83	14.12
Lane Group LOS	B	B	B	B	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.92	0.45	1.51	0.88	0.87	1.08	0.67	3.25	3.20	1.54	4.72	4.56
50th-Percentile Queue Length [ft/ln]	22.88	11.31	37.66	22.11	21.63	27.05	16.68	81.13	80.03	38.58	118.08	113.91
95th-Percentile Queue Length [veh/ln]	1.65	0.81	2.71	1.59	1.56	1.95	1.20	5.84	5.76	2.78	8.29	8.06
95th-Percentile Queue Length [ft/ln]	41.19	20.36	67.78	39.80	38.93	48.70	30.02	146.03	144.05	69.45	207.18	201.42

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.01	13.07	15.02	16.58	13.61	14.24	25.65	13.05	13.06	25.60	13.94	14.12
Movement LOS	B	B	B	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	15.77			14.71			13.81			15.14		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	14.74											
Intersection LOS	B											
Intersection V/C	0.675											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.442	2.316	2.887	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	317	567	1400
d_b, Bicycle Delay [s]	42.50	42.50	30.82	5.40
I_b,int, Bicycle LOS Score for Intersection	2.147	1.865	2.344	2.679
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	99.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.110

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	0	0	0	0	5	5	26	10	0	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	114	213	362	138	193	30	50	906	149	270	1174	127
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	58	99	38	53	8	14	248	41	74	322	35
Total Analysis Volume [veh/h]	125	234	397	151	212	33	55	993	163	296	1287	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	27	0	9	41	0	22	54	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	23	5	32	32	23	50	50
g / C, Green / Cycle	0.22	0.22	0.19	0.04	0.27	0.27	0.19	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.20	0.25	0.22	0.03	0.32	0.32	0.17	0.39	0.40
s, saturation flow rate [veh/h]	1838	1589	1809	1745	1832	1744	1745	1832	1771
c, Capacity [veh/h]	398	344	344	72	496	472	330	768	742
d1, Uniform Delay [s]	45.80	47.05	48.64	57.03	43.79	43.79	47.56	33.34	33.78
k, delay calibration	0.29	0.45	0.36	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	17.29	94.53	89.95	15.65	104.74	106.91	8.65	20.05	23.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	1.15	1.15	0.77	1.19	1.19	0.90	0.94	0.95
d, Delay for Lane Group [s/veh]	63.08	141.58	138.59	72.69	148.53	150.70	56.21	53.39	57.34
Lane Group LOS	E	F	F	E	F	F	E	D	E
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.28	19.26	18.83	1.96	29.05	27.92	9.41	23.76	24.32
50th-Percentile Queue Length [ft/ln]	307.02	481.60	470.66	49.11	726.14	698.04	235.22	593.99	608.08
95th-Percentile Queue Length [veh/ln]	18.03	28.53	27.87	3.54	41.94	40.54	14.44	31.75	32.41
95th-Percentile Queue Length [ft/ln]	450.71	713.21	696.69	88.40	1048.5	1013.6	360.98	793.84	810.29

Movement, Approach, & Intersection Results

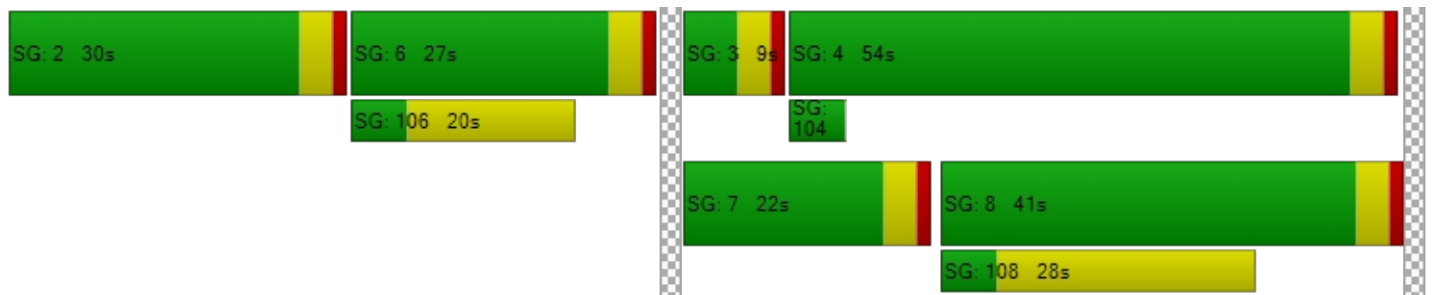
d_M, Delay for Movement [s/veh]	63.08	63.08	141.58	138.59	138.59	138.59	72.69	149.40	150.70	56.21	55.13	57.34
Movement LOS	E	E	F	F	F	F	E	F	F	E	E	E
d_A, Approach Delay [s/veh]	104.30			138.59			146.09			55.50		
Approach LOS	F			F			F			E		
d_I, Intersection Delay [s/veh]	99.44											
Intersection LOS	F											
Intersection V/C	1.110											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.419	2.132	2.833	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	383	617	833
d_b, Bicycle Delay [s]	36.82	39.20	28.70	20.42
I_b,int, Bicycle LOS Score for Intersection	2.807	2.213	2.559	2.980
Bicycle LOS	C	B	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	82.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.134

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	5	5	16	5	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	399	159	157	162	183	101	80	719	554	239	1063	106
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	43	43	44	50	27	22	195	150	65	288	29
Total Analysis Volume [veh/h]	433	172	170	176	198	110	87	780	601	259	1153	115
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	23	0	0	23	0	10	39	0	15	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	19	6	29	29	17	40	40
g / C, Green / Cycle	0.19	0.19	0.19	0.19	0.06	0.29	0.29	0.17	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.24	0.20	0.10	0.18	0.05	0.22	0.39	0.15	0.35	0.35
s, saturation flow rate [veh/h]	1781	1719	1781	1759	1745	3489	1558	1745	1832	1775
c, Capacity [veh/h]	339	327	335	331	110	1015	453	299	731	708
d1, Uniform Delay [s]	40.52	40.52	36.59	39.98	46.23	32.41	35.48	40.37	27.80	27.96
k, delay calibration	0.31	0.20	0.11	0.15	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	139.30	44.64	1.28	14.48	11.89	5.59	161.70	7.57	13.99	15.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.28	1.05	0.53	0.93	0.79	0.77	1.33	0.87	0.88	0.89
d, Delay for Lane Group [s/veh]	179.83	85.16	37.87	54.45	58.12	38.00	197.19	47.95	41.80	43.17
Lane Group LOS	F	F	D	D	E	D	F	D	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	21.30	11.97	3.96	8.67	2.49	9.25	31.10	6.76	16.46	16.40
50th-Percentile Queue Length [ft/ln]	532.52	299.23	98.92	216.72	62.13	231.16	777.58	168.96	411.57	409.91
95th-Percentile Queue Length [veh/ln]	32.43	18.06	7.12	13.50	4.47	14.23	46.95	11.02	23.12	23.04
95th-Percentile Queue Length [ft/ln]	810.73	451.47	178.06	337.43	111.83	355.84	1173.8	275.55	577.93	575.93

Movement, Approach, & Intersection Results

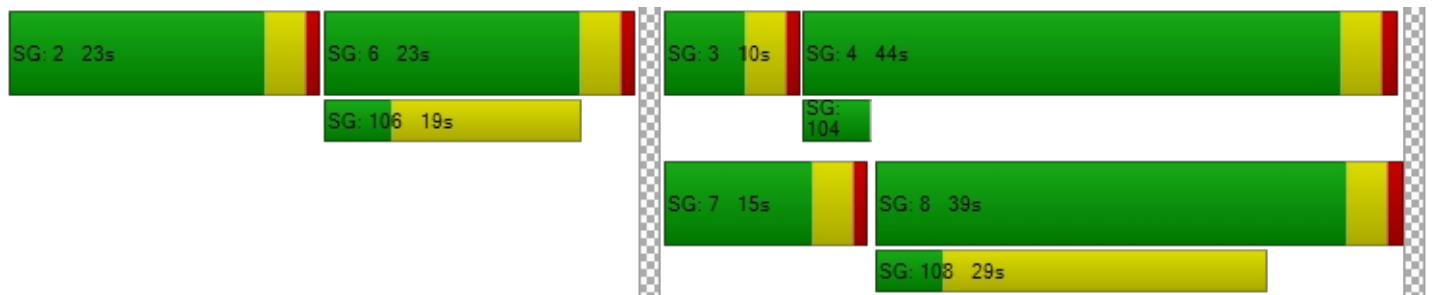
d_M, Delay for Movement [s/veh]	179.83	85.16	85.16	37.87	54.45	54.45	58.12	38.00	197.19	47.95	42.41	43.17
Movement LOS	F	F	F	D	D	D	E	D	F	D	D	D
d_A, Approach Delay [s/veh]	138.05			48.42			104.37			43.41		
Approach LOS	F			D			F			D		
d_I, Intersection Delay [s/veh]	82.26											
Intersection LOS	F											
Intersection V/C	1.134											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.543	2.226	2.974	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	380	380	700	800
d_b, Bicycle Delay [s]	32.81	32.81	21.13	18.00
I_b,int, Bicycle LOS Score for Intersection	2.838	2.358	2.771	2.819
Bicycle LOS	C	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	25.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.279

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	55	158	191	115	193	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	174	199	120	211	152
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	47	54	33	57	41
Total Analysis Volume [veh/h]	79	189	216	130	229	165
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.28	0.25	0.00	0.00	0.07	0.00
d_M, Delay for Movement [s/veh]	25.42	17.44	0.00	0.00	6.23	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	3.05	3.05	0.00	0.00	0.24	0.24
95th-Percentile Queue Length [ft/ln]	76.35	76.35	0.00	0.00	5.88	5.88
d_A, Approach Delay [s/veh]	19.79		0.00		3.62	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	6.68					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	230.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.350

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	26	10	0	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	297	679	561	14	6	208
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	194	161	4	2	60
Total Analysis Volume [veh/h]	340	778	643	16	7	238
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.37	0.01	0.01	0.00	0.35	0.51
d_M, Delay for Movement [s/veh]	11.10	0.00	0.00	0.00	230.09	57.55
Movement LOS	B	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	1.69	1.69	0.00	0.00	7.39	7.39
95th-Percentile Queue Length [ft/ln]	42.32	42.32	0.00	0.00	184.66	184.66
d_A, Approach Delay [s/veh]	3.37		0.00		62.48	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	9.44					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	5.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.414

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵↵↵			↵↵↵			+			+		
Lane Configuration	↵↵↵			↵↵↵			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	2	873	10	12	682	8	2	0	0	23	0	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	0	2	24	0	0	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	932	10	14	733	8	2	0	0	24	0	44
Peak Hour Factor	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	276	3	4	217	2	1	0	0	7	0	13
Total Analysis Volume [veh/h]	2	1106	12	17	870	9	2	0	0	28	0	52
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	19	0	9	19	0	0	62	0	0	62	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	71	71	2	72	72	6	6
g / C, Green / Cycle	0.00	0.78	0.78	0.02	0.80	0.80	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.00	0.30	0.30	0.01	0.24	0.24	0.00	0.05
s, saturation flow rate [veh/h]	1781	1870	1863	1781	1870	1863	1336	1606
c, Capacity [veh/h]	6	1464	1459	35	1495	1490	165	156
d1, Uniform Delay [s]	44.76	3.02	3.02	43.66	2.36	2.36	39.52	41.42
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	29.69	0.76	0.76	9.75	0.50	0.50	0.03	2.58
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	0.38	0.38	0.48	0.29	0.29	0.01	0.51
d, Delay for Lane Group [s/veh]	74.45	3.78	3.79	53.40	2.87	2.87	39.54	44.00
Lane Group LOS	E	A	A	D	A	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.09	2.32	2.31	0.47	1.42	1.42	0.04	1.84
50th-Percentile Queue Length [ft/ln]	2.34	58.05	57.87	11.68	35.52	35.41	1.06	45.97
95th-Percentile Queue Length [veh/ln]	0.17	4.18	4.17	0.84	2.56	2.55	0.08	3.31
95th-Percentile Queue Length [ft/ln]	4.21	104.50	104.17	21.02	63.93	63.74	1.91	82.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.45	3.78	3.79	53.40	2.87	2.87	39.54	39.54	39.54	44.00	44.00	44.00
Movement LOS	E	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	3.91		3.83		39.54		44.00					
Approach LOS	A		A		D		D					
d_I, Intersection Delay [s/veh]	5.44											
Intersection LOS	A											
Intersection V/C	0.414											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0		9.0		0.0		9.0				
M_corner, Corner Circulation Area [ft ² /ped]	0.00		0.00		0.00		0.00				
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00		0.00		0.00		0.00				
d_p, Pedestrian Delay [s]	0.00		36.45		0.00		36.45				
I_p,int, Pedestrian LOS Score for Intersection	0.000		2.705		0.000		1.770				
Crosswalk LOS	F		B		F		A				
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000		2000		2000		2000				
c_b, Capacity of the bicycle lane [bicycles/h]	333		333		1289		1289				
d_b, Bicycle Delay [s]	31.25		31.25		5.69		5.69				
I_b,int, Bicycle LOS Score for Intersection	2.484		2.299		1.563		1.692				
Bicycle LOS	B		B		A		A				

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.704

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	718	45	109	598	91	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	0	3	21	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	768	47	116	643	95	181
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	217	13	33	182	27	51
Total Analysis Volume [veh/h]	868	53	131	727	107	205
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	52	0	26	45	45	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	4	19	6	6
g / C, Green / Cycle	0.35	0.35	0.11	0.57	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.25	0.25	0.07	0.20	0.06	0.13
s, saturation flow rate [veh/h]	1870	1833	1781	3560	1781	1589
c, Capacity [veh/h]	649	636	188	2033	344	307
d1, Uniform Delay [s]	9.57	9.64	14.62	3.92	11.74	12.67
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.45	1.58	4.59	0.11	0.51	2.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.72	0.70	0.36	0.31	0.67
d, Delay for Lane Group [s/veh]	11.02	11.22	19.22	4.02	12.25	15.18
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.24	2.27	1.02	0.55	0.58	1.32
50th-Percentile Queue Length [ft/ln]	56.04	56.84	25.47	13.80	14.57	32.95
95th-Percentile Queue Length [veh/ln]	4.04	4.09	1.83	0.99	1.05	2.37
95th-Percentile Queue Length [ft/ln]	100.88	102.31	45.84	24.84	26.22	59.32

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.11	11.22	19.22	4.02	12.25	15.18
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	11.12		6.34		14.18	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	9.62					
Intersection LOS	A					
Intersection V/C	0.704					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.683	2.108
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	50.00	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	4.892	4.840	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	49.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	TTL			TTL			TTL			TTL		
Lane Configuration	TTL			TTL			TTL			TTL		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	279	317	39	124	272	292	264	327	283	47	561	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	0	5	10	5	5	0	0	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	290	340	41	134	293	309	280	340	294	49	583	202
Peak Hour Factor	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	103	12	41	89	94	85	103	89	15	177	61
Total Analysis Volume [veh/h]	352	413	50	163	356	375	340	413	357	60	708	245
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	28	35	0	26	33	0	16	49	0	10	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	40	40	13	29	29	12	47	47	4	39	39
g / C, Green / Cycle	0.20	0.33	0.33	0.11	0.24	0.24	0.10	0.39	0.39	0.04	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.20	0.13	0.13	0.09	0.19	0.24	0.10	0.22	0.22	0.02	0.20	0.15
s, saturation flow rate [veh/h]	1781	1870	1800	1781	1870	1589	3459	1870	1589	3459	3560	1589
c, Capacity [veh/h]	356	623	600	192	451	383	352	728	619	125	1153	515
d1, Uniform Delay [s]	47.86	30.53	30.54	52.55	42.68	45.22	53.69	28.72	28.86	56.72	34.25	32.44
k, delay calibration	0.30	0.11	0.11	0.11	0.28	0.41	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	33.97	0.38	0.39	9.81	7.64	36.57	15.57	3.19	3.89	2.82	2.45	3.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.99	0.38	0.38	0.85	0.79	0.98	0.97	0.57	0.58	0.48	0.61	0.48
d, Delay for Lane Group [s/veh]	81.83	30.91	30.93	62.37	50.32	81.79	69.27	31.91	32.75	59.55	36.71	35.58
Lane Group LOS	F	C	C	E	D	F	E	C	C	E	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	13.80	5.28	5.09	5.34	10.81	14.89	5.87	9.91	8.72	0.94	9.07	6.14
50th-Percentile Queue Length [ft/ln]	344.89	132.07	127.34	133.56	270.21	372.24	146.67	247.75	217.89	23.55	226.82	153.46
95th-Percentile Queue Length [veh/ln]	19.89	9.05	8.79	9.13	16.20	21.22	9.84	15.07	13.56	1.70	14.01	10.20
95th-Percentile Queue Length [ft/ln]	497.18	226.31	219.87	228.32	405.00	530.45	245.98	376.82	338.93	42.39	350.32	255.04

Movement, Approach, & Intersection Results

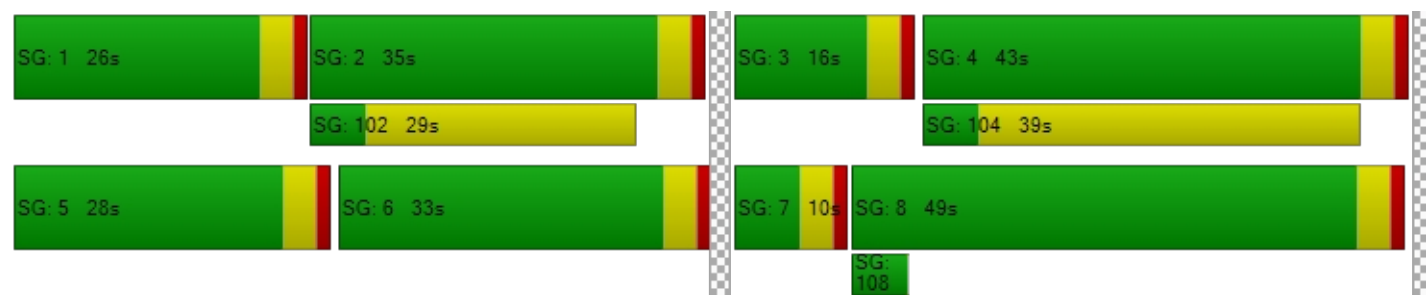
d_M, Delay for Movement [s/veh]	81.83	30.92	30.93	62.37	50.32	81.79	69.27	31.91	32.75	59.55	36.71	35.58
Movement LOS	F	C	C	E	D	F	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	52.91			65.72			43.62			37.79		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	49.21											
Intersection LOS	D											
Intersection V/C	0.843											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			0.00			51.34		
I_p,int, Pedestrian LOS Score for Intersection	2.625			2.684			0.000			2.837		
Crosswalk LOS	B			B			F			C		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	517			483			750			650		
d_b, Bicycle Delay [s]	33.00			34.50			23.44			27.34		
I_b,int, Bicycle LOS Score for Intersection	2.232			2.297			2.475			2.395		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.203

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↗		↑↑		↑↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	7	0	822	1164	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	0	31	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	47	0	0	-47	47
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	85	0	886	1164	50
Peak Hour Factor	1.0000	0.9740	0.9740	0.9740	0.9740	0.9740
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	22	0	227	299	13
Total Analysis Volume [veh/h]	0	87	0	910	1195	51
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.20	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	15.52	0.00	0.00	0.00	0.00
Movement LOS		C		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.75	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	18.75	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.52		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.60					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	24.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.110

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	85	167	6	6	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	99	0	0	5	5	68
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	110	-8	0	0	8	101
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	10	0	0	0	0	0
Total Hourly Volume [veh/h]	223	80	174	11	19	172
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	27	58	4	6	57
Total Analysis Volume [veh/h]	296	106	231	15	25	228
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.00	0.00	0.00	0.11	0.28
d_M, Delay for Movement [s/veh]	8.51	0.00	0.00	0.00	24.39	13.11
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.86	0.00	0.00	0.00	1.88	1.88
95th-Percentile Queue Length [ft/ln]	21.54	0.00	0.00	0.00	47.03	47.03
d_A, Approach Delay [s/veh]	6.27		0.00		14.22	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	6.79					
Intersection LOS	C					

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Scenario 4 EAP PM

Report File: \...\EAP PM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.737	10.4	B
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.693	5.1	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.655	12.0	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Thru	1.133	104.9	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.625	19.0	B
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.118	16.4	C
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.067	23.9	C
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	SB Left	0.210	4.7	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.245	6.9	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Left	0.499	32.4	C
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.151	12.5	B
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.084	17.7	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	10.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.737

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach												
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	43	9	135	15	5	9	57	817	14	14	1056	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	41	0	0	0	7	20	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	9	181	16	5	9	66	870	15	15	1098	29
Peak Hour Factor	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	2	49	4	1	2	18	234	4	4	295	8
Total Analysis Volume [veh/h]	48	10	194	17	5	10	71	934	16	16	1179	31
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	12	56	0	26	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	36	36	36	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	6	6	3	17	17	1	16	16
g / C, Green / Cycle	0.17	0.17	0.17	0.07	0.48	0.48	0.02	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.12	0.03	0.04	0.26	0.26	0.01	0.33	0.33
s, saturation flow rate [veh/h]	1647	1589	1268	1745	1832	1822	1745	1832	1816
c, Capacity [veh/h]	466	276	371	124	876	870	36	784	777
d1, Uniform Delay [s]	12.92	14.24	12.76	16.47	6.74	6.74	17.71	8.97	8.97
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.12	3.26	0.10	4.11	0.53	0.53	8.09	1.68	1.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.70	0.09	0.57	0.54	0.54	0.44	0.78	0.78
d, Delay for Lane Group [s/veh]	13.04	17.51	12.86	20.57	7.27	7.28	25.80	10.66	10.68
Lane Group LOS	B	B	B	C	A	A	C	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.34	1.46	0.19	0.63	1.68	1.67	0.20	3.02	3.00
50th-Percentile Queue Length [ft/ln]	8.62	36.62	4.73	15.63	42.06	41.83	4.89	75.55	75.03
95th-Percentile Queue Length [veh/ln]	0.62	2.64	0.34	1.13	3.03	3.01	0.35	5.44	5.40
95th-Percentile Queue Length [ft/ln]	15.52	65.92	8.52	28.13	75.70	75.29	8.80	135.99	135.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.04	13.04	17.51	12.86	12.86	12.86	20.57	7.27	7.28	25.80	10.67	10.68
Movement LOS	B	B	B	B	B	B	C	A	A	C	B	B
d_A, Approach Delay [s/veh]	16.48			12.86			8.20			10.86		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	10.37											
Intersection LOS	B											
Intersection V/C	0.737											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.072			1.766			2.809			0.000		
Crosswalk LOS	B			A			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			867			1100		
d_b, Bicycle Delay [s]	30.82			30.82			19.27			12.15		
I_b,int, Bicycle LOS Score for Intersection	1.975			1.612			2.402			2.571		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	5.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.693

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	25	17	784	33	30	962
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	33	7	0	41
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	18	848	41	31	1041
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	5	225	11	8	277
Total Analysis Volume [veh/h]	28	19	901	44	33	1106
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	9	0	52	0	59	111
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	10	10	1	15
g / C, Green / Cycle	0.06	0.40	0.40	0.04	0.61
(v / s)_i Volume / Saturation Flow Rate	0.03	0.26	0.26	0.02	0.32
s, saturation flow rate [veh/h]	1698	1832	1803	1745	3489
c, Capacity [veh/h]	98	731	720	74	2123
d1, Uniform Delay [s]	10.95	5.83	5.87	11.20	2.69
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.58	0.96	1.03	4.11	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.65	0.66	0.44	0.52
d, Delay for Lane Group [s/veh]	14.53	6.80	6.89	15.31	2.89
Lane Group LOS	B	A	A	B	A
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.26	0.90	0.91	0.20	0.06
50th-Percentile Queue Length [ft/ln]	6.51	22.52	22.86	5.04	1.47
95th-Percentile Queue Length [veh/ln]	0.47	1.62	1.65	0.36	0.11
95th-Percentile Queue Length [ft/ln]	11.73	40.54	41.14	9.07	2.64

Movement, Approach, & Intersection Results

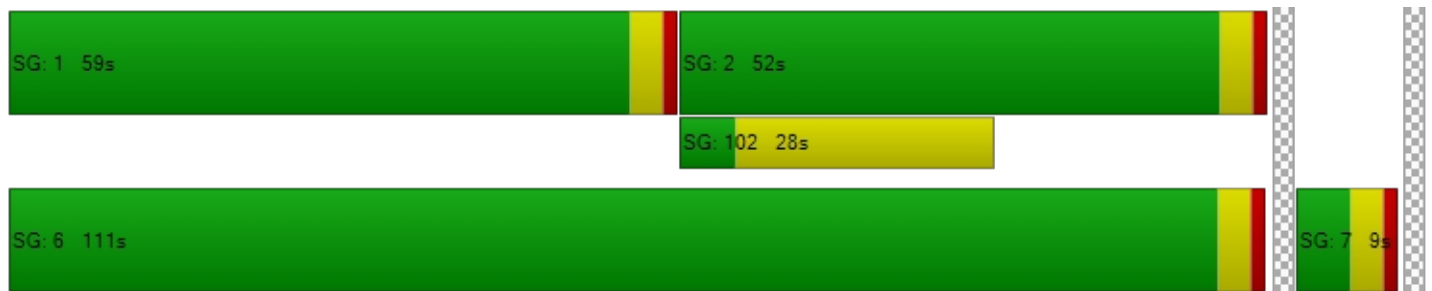
d_M, Delay for Movement [s/veh]	14.53	14.53	6.84	6.89	15.31	2.89
Movement LOS	B	B	A	A	B	A
d_A, Approach Delay [s/veh]	14.53		6.84		3.25	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.09					
Intersection LOS	A					
Intersection V/C	0.693					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.791	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.210	4.912	5.072
Bicycle LOS	D	E	F

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	33	61	151	16	27	30	33	908	19	77	703	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	53	33	0	41	0	0	0	0	74
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	77	0	0	0	0	-77	77
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	6	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	77	157	70	61	108	81	944	20	80	654	176
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	20	42	19	16	29	22	251	5	21	174	47
Total Analysis Volume [veh/h]	36	82	167	74	65	115	86	1003	21	85	695	187
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	28	0	55	82	0	10	37	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	36	36	36	36	36	36	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	7	7	7	7	7	3	13	13	3	13	13
g / C, Green / Cycle	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.37	0.37	0.08	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.03	0.04	0.11	0.06	0.03	0.07	0.05	0.28	0.28	0.05	0.25	0.25
s, saturation flow rate [veh/h]	1204	1870	1589	1316	1870	1589	1745	1832	1819	1745	1832	1700
c, Capacity [veh/h]	307	388	330	352	388	330	143	686	681	142	685	636
d1, Uniform Delay [s]	15.29	11.71	12.51	14.82	11.60	12.07	15.79	9.69	9.69	15.80	9.31	9.31
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.17	0.27	1.20	0.29	0.20	0.63	3.99	1.67	1.68	3.97	1.13	1.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.21	0.51	0.21	0.17	0.35	0.60	0.75	0.75	0.60	0.67	0.67
d, Delay for Lane Group [s/veh]	15.46	11.98	13.71	15.12	11.80	12.70	19.79	11.36	11.37	19.78	10.45	10.53
Lane Group LOS	B	B	B	B	B	B	B	B	B	B	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.24	0.45	1.03	0.49	0.35	0.67	0.72	2.68	2.67	0.71	2.24	2.09
50th-Percentile Queue Length [ft/ln]	6.04	11.31	25.79	12.21	8.86	16.75	17.99	67.11	66.70	17.79	56.01	52.35
95th-Percentile Queue Length [veh/ln]	0.43	0.81	1.86	0.88	0.64	1.21	1.30	4.83	4.80	1.28	4.03	3.77
95th-Percentile Queue Length [ft/ln]	10.87	20.36	46.43	21.98	15.94	30.14	32.39	120.80	120.06	32.02	100.81	94.23

Movement, Approach, & Intersection Results

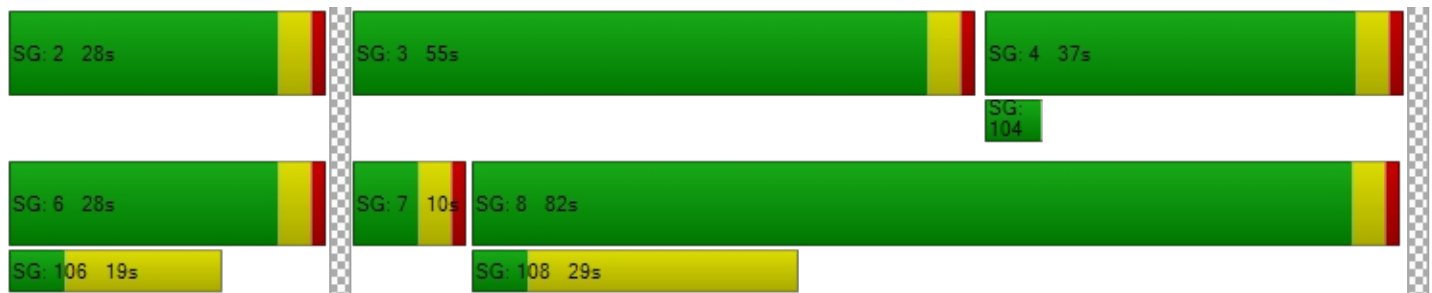
d_M, Delay for Movement [s/veh]	15.46	11.98	13.71	15.12	11.80	12.70	19.79	11.37	11.37	19.78	10.48	10.53
Movement LOS	B	B	B	B	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	13.43			13.17			12.02			11.30		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	12.02											
Intersection LOS	B											
Intersection V/C	0.655											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.404			2.295			2.748			0.000		
Crosswalk LOS	B			B			B			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	400			400			1300			550		
d_b, Bicycle Delay [s]	38.40			38.40			7.35			31.54		
I_b,int, Bicycle LOS Score for Intersection	2.030			1.769			2.475			2.357		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	104.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.133

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	←→			↑			←→			←→		
Lane Configuration	←→			↑			←→			←→		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	0	0	0	0	7	7	33	13	0	34	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	117	153	232	84	124	32	49	1090	82	178	805	90
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	53	80	29	43	11	17	377	28	62	279	31
Total Analysis Volume [veh/h]	162	212	321	116	172	44	68	1510	114	247	1115	125
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	24	0	0	24	0	10	54	0	18	62	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20	20	6	45	45	19	58	58
g / C, Green / Cycle	0.17	0.17	0.17	0.05	0.37	0.37	0.16	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.20	0.20	0.18	0.04	0.45	0.45	0.14	0.34	0.35
s, saturation flow rate [veh/h]	1830	1589	1797	1745	1832	1788	1745	1832	1769
c, Capacity [veh/h]	305	265	297	87	686	669	280	889	858
d1, Uniform Delay [s]	50.01	50.01	50.09	56.40	37.55	37.55	49.31	24.22	24.35
k, delay calibration	0.32	0.31	0.26	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	118.67	114.85	74.30	14.26	99.68	106.50	9.01	4.71	5.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.23	1.21	1.12	0.78	1.19	1.21	0.88	0.71	0.71
d, Delay for Lane Group [s/veh]	168.67	164.85	124.39	70.66	137.23	144.04	58.31	28.93	29.38
Lane Group LOS	F	F	F	E	F	F	E	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	19.18	16.38	15.00	2.38	38.72	39.05	7.93	14.83	14.58
50th-Percentile Queue Length [ft/ln]	479.60	409.46	374.96	59.53	968.08	976.22	198.15	370.66	364.61
95th-Percentile Queue Length [veh/ln]	28.97	25.12	22.53	4.29	54.91	55.74	12.54	21.14	20.85
95th-Percentile Queue Length [ft/ln]	724.22	628.09	563.14	107.15	1372.7	1393.5	313.57	528.52	521.19

Movement, Approach, & Intersection Results

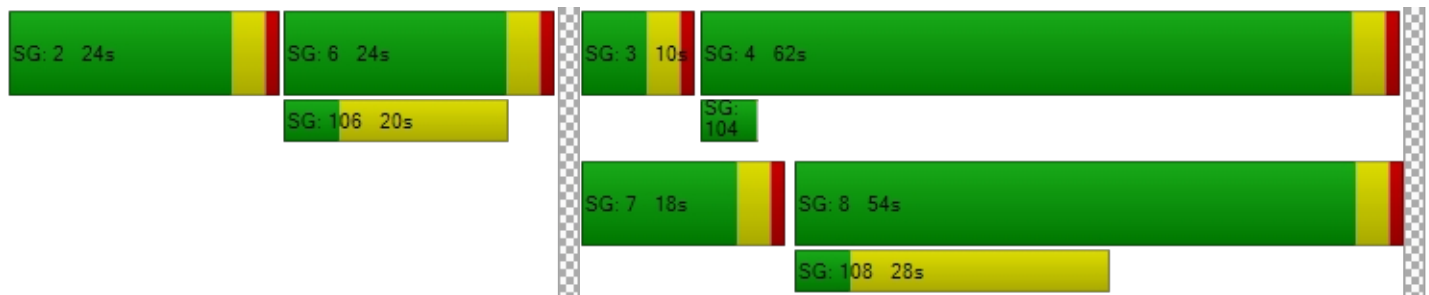
d_M, Delay for Movement [s/veh]	168.67	168.67	164.85	124.39	124.39	124.39	70.66	140.36	144.04	58.31	29.13	29.38
Movement LOS	F	F	F	F	F	F	E	F	F	E	C	C
d_A, Approach Delay [s/veh]	166.91			124.39			137.80			34.00		
Approach LOS	F			F			F			C		
d_I, Intersection Delay [s/veh]	104.85											
Intersection LOS	F											
Intersection V/C	1.133											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.355			2.089			2.903			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			833			967		
d_b, Bicycle Delay [s]	41.67			41.67			20.42			16.02		
I_b,int, Bicycle LOS Score for Intersection	2.706			2.107			2.956			2.786		
Bicycle LOS	B			B			C			C		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔↔↔			↔↔		
Lane Configuration	↔			↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	0	7	7	20	7	0	20	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	48	70	85	40	63	74	1157	152	52	924	64
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	13	18	22	10	16	19	302	40	14	241	17
Total Analysis Volume [veh/h]	116	50	73	89	42	66	77	1208	159	54	965	67
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	19	0	0	23	0	39	39	0	9	9	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	8	8	5	54	54	4	52	52
g / C, Green / Cycle	0.10	0.10	0.09	0.09	0.06	0.59	0.59	0.04	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.07	0.07	0.05	0.06	0.04	0.35	0.10	0.03	0.28	0.28
s, saturation flow rate [veh/h]	1781	1693	1781	1688	1745	3489	1558	1745	1832	1791
c, Capacity [veh/h]	173	165	159	151	103	2070	924	74	1057	1033
d1, Uniform Delay [s]	39.30	39.62	39.36	39.95	41.76	11.40	8.30	42.66	11.29	11.29
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.40	6.56	3.06	6.21	10.22	1.21	0.40	12.74	1.65	1.69
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.75	0.56	0.72	0.75	0.58	0.17	0.73	0.49	0.49
d, Delay for Lane Group [s/veh]	43.70	46.18	42.42	46.16	51.99	12.61	8.71	55.40	12.94	12.98
Lane Group LOS	D	D	D	D	D	B	A	E	B	B
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.66	2.92	2.00	2.56	1.96	7.05	1.39	1.44	6.08	5.95
50th-Percentile Queue Length [ft/ln]	66.47	72.90	50.02	63.95	48.96	176.22	34.70	35.94	151.96	148.85
95th-Percentile Queue Length [veh/ln]	4.79	5.25	3.60	4.60	3.53	11.40	2.50	2.59	10.12	9.96
95th-Percentile Queue Length [ft/ln]	119.64	131.22	90.04	115.12	88.13	285.07	62.46	64.70	253.04	248.90

Movement, Approach, & Intersection Results

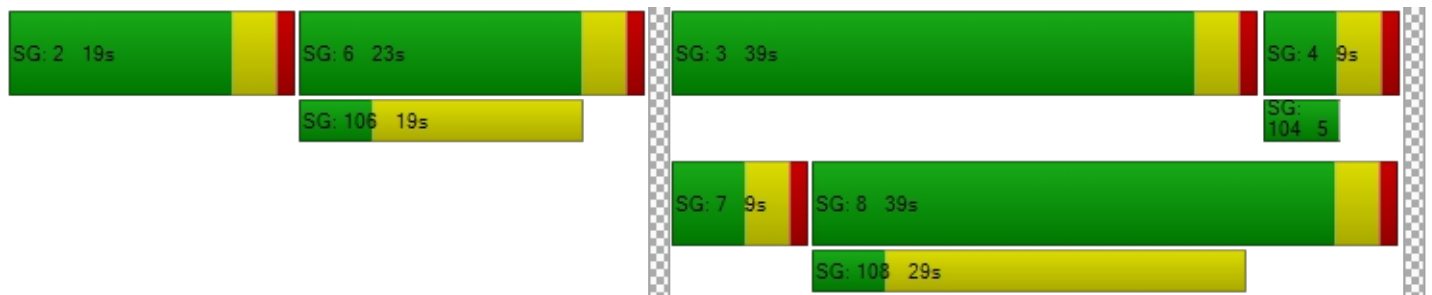
d_M, Delay for Movement [s/veh]	43.70	46.18	46.18	42.42	46.16	46.16	51.99	12.61	8.71	55.40	12.96	12.98
Movement LOS	D	D	D	D	D	D	D	B	A	E	B	B
d_A, Approach Delay [s/veh]	44.98			44.47			14.28			15.07		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	19.05											
Intersection LOS	B											
Intersection V/C	0.625											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.102	2.069	2.875	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	333	422	778	111
d_b, Bicycle Delay [s]	31.25	28.01	16.81	40.14
I_b,int, Bicycle LOS Score for Intersection	1.954	1.885	2.751	2.456
Bicycle LOS	A	A	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.118

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	21	108	61	28	227	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	20	13	0	0	14	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	125	63	29	250	96
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	33	17	8	66	25
Total Analysis Volume [veh/h]	44	131	66	30	263	101
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.13	0.00	0.00	0.06	0.00
d_M, Delay for Movement [s/veh]	16.36	10.41	0.00	0.00	5.94	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.99	0.99	0.00	0.00	0.21	0.21
95th-Percentile Queue Length [ft/ln]	24.83	24.83	0.00	0.00	5.17	5.17
d_A, Approach Delay [s/veh]	11.91		0.00		4.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.74					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	23.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	13	0	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	426	406	3	14	127
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	115	110	1	4	34
Total Analysis Volume [veh/h]	82	460	438	3	15	137
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.07	0.22
d_M, Delay for Movement [s/veh]	8.47	0.00	0.00	0.00	23.93	13.59
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.24	0.24	0.00	0.00	1.19	1.19
95th-Percentile Queue Length [ft/ln]	5.92	5.92	0.00	0.00	29.76	29.76
d_A, Approach Delay [s/veh]	1.28		0.00		14.61	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	2.57					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	4.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.210

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵↵↵			↵↵↵			+			+		
Lane Configuration	↵↵↵			↵↵↵			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	432	27	24	464	0	0	0	0	14	0	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	0	3	31	0	0	0	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	480	28	28	514	0	0	0	0	15	0	20
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	126	7	7	135	0	0	0	0	4	0	5
Total Analysis Volume [veh/h]	0	503	29	29	539	0	0	0	0	16	0	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	19	0	9	19	0	0	62	0	0	62	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	72	72	3	75	75	3	3
g / C, Green / Cycle	0.00	0.80	0.80	0.03	0.83	0.83	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.14	0.02	0.14	0.14	0.00	0.02
s, saturation flow rate [veh/h]	1781	1870	1834	1781	1870	1870	807	1681
c, Capacity [veh/h]	2	1500	1471	53	1553	1553	68	116
d1, Uniform Delay [s]	0.00	2.06	2.06	43.07	1.51	1.51	0.00	42.81
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.26	0.27	8.40	0.24	0.24	0.00	1.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.18	0.18	0.54	0.17	0.17	0.00	0.32
d, Delay for Lane Group [s/veh]	0.00	2.32	2.33	51.47	1.75	1.75	0.00	44.39
Lane Group LOS	A	A	A	D	A	A	A	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	0.75	0.74	0.75	0.52	0.52	0.00	0.85
50th-Percentile Queue Length [ft/ln]	0.00	18.64	18.42	18.87	13.01	13.01	0.00	21.34
95th-Percentile Queue Length [veh/ln]	0.00	1.34	1.33	1.36	0.94	0.94	0.00	1.54
95th-Percentile Queue Length [ft/ln]	0.00	33.55	33.15	33.96	23.41	23.41	0.00	38.42

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	2.32	2.33	51.47	1.75	1.75	0.00	0.00	0.00	44.39	44.39	44.39
Movement LOS	A	A	A	D	A	A	A	A	A	D	D	D
d_A, Approach Delay [s/veh]	2.32			4.29			0.00			44.39		
Approach LOS	A			A			A			D		
d_I, Intersection Delay [s/veh]	4.67											
Intersection LOS	A											
Intersection V/C	0.210											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			36.45		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.514			0.000			1.763		
Crosswalk LOS	F			B			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			1289			1289		
d_b, Bicycle Delay [s]	31.25			31.25			5.69			5.69		
I_b,int, Bicycle LOS Score for Intersection	1.999			2.028			1.560			1.621		
Bicycle LOS	A			B			A			A		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	6.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.245

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	423	52	38	436	28	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	4	27	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	467	54	44	480	29	42
Peak Hour Factor	0.9222	0.9222	0.9222	0.9222	0.9222	0.9222
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	127	15	12	130	8	11
Total Analysis Volume [veh/h]	506	59	48	520	31	46
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	19	0	21	40	50	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	70	70	4	78	4	4
g / C, Green / Cycle	0.78	0.78	0.04	0.86	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.15	0.16	0.03	0.15	0.02	0.03
s, saturation flow rate [veh/h]	1870	1804	1781	3560	1781	1589
c, Capacity [veh/h]	1455	1403	71	3071	87	77
d1, Uniform Delay [s]	2.61	2.63	42.64	1.00	41.48	41.97
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.30	0.32	10.50	0.12	2.49	7.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.20	0.67	0.17	0.36	0.60
d, Delay for Lane Group [s/veh]	2.91	2.95	53.14	1.12	43.96	49.10
Lane Group LOS	A	A	D	A	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.00	1.01	1.25	0.22	0.72	1.14
50th-Percentile Queue Length [ft/ln]	24.94	25.22	31.26	5.38	18.00	28.60
95th-Percentile Queue Length [veh/ln]	1.80	1.82	2.25	0.39	1.30	2.06
95th-Percentile Queue Length [ft/ln]	44.89	45.40	56.27	9.68	32.39	51.48

Movement, Approach, & Intersection Results

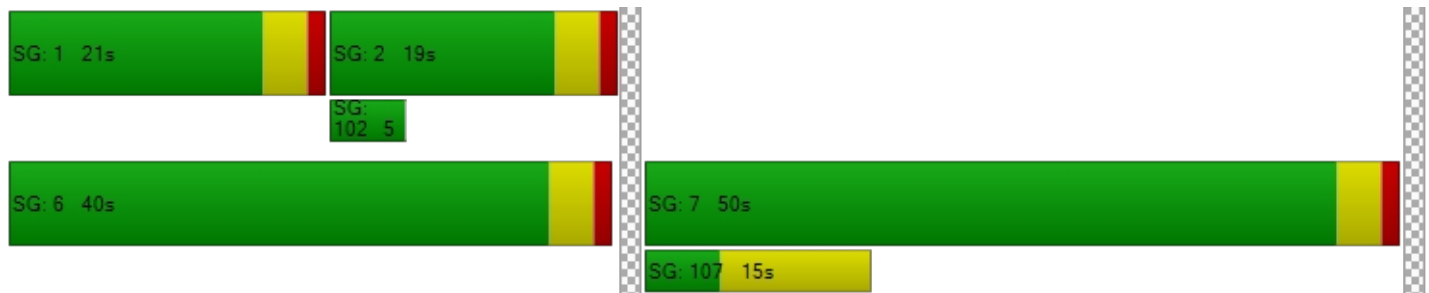
d_M, Delay for Movement [s/veh]	2.93	2.95	53.14	1.12	43.96	49.10
Movement LOS	A	A	D	A	D	D
d_A, Approach Delay [s/veh]	2.93		5.51		47.03	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	6.95					
Intersection LOS	A					
Intersection V/C	0.245					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.520	2.002
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.599	4.601	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	32.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.499

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T T T			T T T			T T T			T T T		
Lane Configuration	T T T			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	152	186	29	47	219	193	233	298	248	17	212	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	7	13	7	7	0	0	0	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	158	207	30	56	241	208	249	310	258	18	220	50
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	56	8	15	65	56	67	83	69	5	59	13
Total Analysis Volume [veh/h]	170	223	32	60	259	224	268	333	277	19	237	54
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	33	0	15	28	0	9	43	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	24	24	4	17	17	10	54	54	2	46	46
g / C, Green / Cycle	0.11	0.24	0.24	0.04	0.17	0.17	0.10	0.54	0.54	0.02	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.07	0.03	0.14	0.14	0.08	0.18	0.18	0.01	0.07	0.03
s, saturation flow rate [veh/h]	1781	1870	1790	1781	1870	1591	3459	1870	1593	3459	3560	1589
c, Capacity [veh/h]	205	446	427	80	315	268	346	1001	852	75	1627	726
d1, Uniform Delay [s]	43.37	31.18	31.21	47.29	40.15	40.34	43.97	13.13	13.13	48.19	15.82	15.28
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.42	0.36	0.38	13.34	5.18	7.01	3.75	0.88	1.03	1.76	0.19	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.29	0.29	0.75	0.82	0.84	0.78	0.33	0.33	0.25	0.15	0.07
d, Delay for Lane Group [s/veh]	51.78	31.54	31.59	60.63	45.33	47.35	47.72	14.01	14.16	49.95	16.01	15.48
Lane Group LOS	D	C	C	E	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.56	2.59	2.51	1.77	6.49	5.84	3.40	4.24	3.65	0.25	1.59	0.72
50th-Percentile Queue Length [ft/ln]	114.07	64.67	62.86	44.14	162.37	146.06	84.88	106.01	91.35	6.27	39.76	18.04
95th-Percentile Queue Length [veh/ln]	8.07	4.66	4.53	3.18	10.67	9.81	6.11	7.62	6.58	0.45	2.86	1.30
95th-Percentile Queue Length [ft/ln]	201.65	116.40	113.15	79.46	266.86	245.16	152.78	190.43	164.43	11.28	71.58	32.48

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	51.78	31.56	31.59	60.63	45.34	47.35	47.72	14.01	14.16	49.95	16.01	15.48
Movement LOS	D	C	C	E	D	D	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	39.65			47.86			24.35			18.00		
Approach LOS	D			D			C			B		
d_I, Intersection Delay [s/veh]	32.37											
Intersection LOS	C											
Intersection V/C	0.499											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersection	2.498	2.519	0.000	2.703
Crosswalk LOS	B	B	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	580	480	780	780
d_b, Bicycle Delay [s]	25.21	28.88	18.61	18.61
I_b,int, Bicycle LOS Score for Intersection	1.910	2.008	2.284	1.815
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.151

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↗				↗	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	5	0	980	793	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	40	0	41	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	35	0	0	-35	35
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	80	0	1060	790	35
Peak Hour Factor	1.0000	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	21	0	283	211	9
Total Analysis Volume [veh/h]	0	85	0	1132	844	37
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.15	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	12.51	0.00	0.00	0.00	0.00
Movement LOS		B		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.53	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	13.18	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.51		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.51					
Intersection LOS	B					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	17.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.084

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	114	74	7	12	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	128	0	0	7	7	86
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	83	-6	0	0	6	77
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	6	0	0	0	0	0
Total Hourly Volume [veh/h]	221	113	77	14	25	175
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	31	21	4	7	49
Total Analysis Volume [veh/h]	246	126	86	16	28	195
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.00	0.00	0.00	0.08	0.20
d_M, Delay for Movement [s/veh]	7.89	0.00	0.00	0.00	17.66	10.59
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.59	0.00	0.00	0.00	1.18	1.18
95th-Percentile Queue Length [ft/ln]	14.77	0.00	0.00	0.00	29.62	29.62
d_A, Approach Delay [s/veh]	5.22		0.00		11.47	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	6.46					
Intersection LOS	C					

**EXISTING PLUS AMBIENT
GROWTH PLUS
CUMULATIVE PROJECTS
CONDITION**

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Scenario 5 EAC AM

Report File: \...\EAC AM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.741	10.0	A
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.841	12.6	B
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.758	16.7	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Right	1.319	191.1	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Right	1.249	115.3	F
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.899	272.5	F
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	2.071	1,954.1	F
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	SB Left	0.443	7.3	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.714	9.4	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	NB Left	1.254	114.0	F
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.021	16.3	C
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.016	12.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.741

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach												
Lane Configuration	↕↔			⊕			↔↕			↔↕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	33	3	119	3	3	3	112	971	10	3	717	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	0	1	1	0	0	1	326	1	0	205	20
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	3	125	4	3	3	117	1336	11	3	951	42
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	1	33	1	1	1	31	353	3	1	251	11
Total Analysis Volume [veh/h]	97	3	132	4	3	3	124	1412	12	3	1005	44
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	39	0	0	39	0	17	72	0	9	64	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	33	33	33	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	5	5	3	17	17	0	13	13
g / C, Green / Cycle	0.14	0.14	0.14	0.10	0.50	0.50	0.00	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.06	0.08	0.01	0.07	0.39	0.39	0.00	0.29	0.29
s, saturation flow rate [veh/h]	1591	1589	1057	1745	1832	1827	1745	1832	1806
c, Capacity [veh/h]	431	218	296	181	916	913	8	734	723
d1, Uniform Delay [s]	13.28	13.58	12.57	14.47	6.85	6.86	16.61	8.45	8.45
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	2.68	0.05	4.56	1.47	1.48	30.87	1.35	1.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.60	0.03	0.69	0.78	0.78	0.40	0.72	0.72
d, Delay for Lane Group [s/veh]	13.55	16.26	12.61	19.03	8.32	8.34	47.48	9.80	9.82
Lane Group LOS	B	B	B	B	A	A	D	A	A
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.58	0.90	0.06	0.95	2.42	2.42	0.08	2.26	2.23
50th-Percentile Queue Length [ft/ln]	14.44	22.46	1.38	23.81	60.51	60.49	2.09	56.46	55.74
95th-Percentile Queue Length [veh/ln]	1.04	1.62	0.10	1.71	4.36	4.36	0.15	4.07	4.01
95th-Percentile Queue Length [ft/ln]	26.00	40.43	2.48	42.86	108.92	108.88	3.76	101.63	100.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.55	13.55	16.26	12.61	12.61	12.61	19.03	8.33	8.34	47.48	9.81	9.82
Movement LOS	B	B	B	B	B	B	B	A	A	D	A	A
d_A, Approach Delay [s/veh]	15.09			12.61			9.19			9.92		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.95											
Intersection LOS	A											
Intersection V/C	0.741											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.086			1.744			2.845			0.000		
Crosswalk LOS	B			A			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	583			583			1133			1000		
d_b, Bicycle Delay [s]	30.10			30.10			11.27			15.00		
I_b,int, Bicycle LOS Score for Intersection	1.942			1.576			2.837			2.428		
Bicycle LOS	A			A			C			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.841

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	89	49	994	122	80	710
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	15	303	50	5	186
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	127	66	1337	177	88	924
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	18	356	47	23	246
Total Analysis Volume [veh/h]	135	70	1425	189	94	985
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	19	0	90	0	11	101
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	25	25	4	33
g / C, Green / Cycle	0.16	0.52	0.52	0.07	0.68
(v / s)_i Volume / Saturation Flow Rate	0.12	0.44	0.46	0.05	0.28
s, saturation flow rate [veh/h]	1711	1832	1760	1745	3489
c, Capacity [veh/h]	268	956	918	130	2367
d1, Uniform Delay [s]	19.60	9.92	10.25	21.95	3.49
k, delay calibration	0.11	0.24	0.26	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.55	4.59	6.64	7.37	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.84	0.88	0.72	0.42
d, Delay for Lane Group [s/veh]	24.15	14.51	16.90	29.32	3.61
Lane Group LOS	C	B	B	C	A
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.31	6.33	6.98	1.22	1.02
50th-Percentile Queue Length [ft/ln]	57.69	158.37	174.55	30.38	25.61
95th-Percentile Queue Length [veh/ln]	4.15	10.46	11.32	2.19	1.84
95th-Percentile Queue Length [ft/ln]	103.84	261.57	282.89	54.68	46.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.15	24.15	15.54	16.90	29.32	3.61
Movement LOS	C	C	B	B	C	A
d_A, Approach Delay [s/veh]	24.15		15.70		5.85	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	12.63					
Intersection LOS	B					
Intersection V/C	0.841					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.968	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.471	5.464	5.023
Bicycle LOS	E	F	F

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	16.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.758

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	88	48	171	54	82	32	12	764	33	121	1006	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	0	19	24	0	24	23	188	9	7	307	20
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	10	0	0	12	0	10	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	113	60	197	80	97	57	45	983	43	133	1353	50
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	16	53	22	26	15	12	265	12	36	364	13
Total Analysis Volume [veh/h]	122	65	212	86	105	61	48	1059	46	143	1458	54
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	27	0	0	27	0	9	60	0	33	84	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	50	50	50	50	50	50	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	12	12	12	2	21	21	5	24	24
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.23	0.05	0.42	0.42	0.11	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.10	0.03	0.13	0.06	0.05	0.05	0.03	0.30	0.30	0.08	0.41	0.42
s, saturation flow rate [veh/h]	1219	1870	1589	1336	1870	1650	1781	1832	1806	1745	1832	1810
c, Capacity [veh/h]	326	433	368	360	433	382	88	769	757	191	879	868
d1, Uniform Delay [s]	20.10	15.31	17.06	18.79	15.49	15.54	23.24	12.11	12.12	21.62	11.57	11.62
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.22	0.23
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.71	0.16	1.43	0.34	0.22	0.27	5.18	1.31	1.33	5.79	5.32	5.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.15	0.58	0.24	0.20	0.21	0.55	0.72	0.72	0.75	0.86	0.87
d, Delay for Lane Group [s/veh]	20.81	15.47	18.48	19.13	15.71	15.81	28.43	13.43	13.45	27.41	16.90	17.30
Lane Group LOS	C	B	B	B	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.27	0.54	2.05	0.84	0.72	0.69	0.64	4.44	4.38	1.79	6.96	7.02
50th-Percentile Queue Length [ft/ln]	31.87	13.60	51.30	20.98	18.10	17.22	15.94	111.01	109.58	44.77	174.04	175.46
95th-Percentile Queue Length [veh/ln]	2.29	0.98	3.69	1.51	1.30	1.24	1.15	7.90	7.82	3.22	11.29	11.36
95th-Percentile Queue Length [ft/ln]	57.36	24.47	92.35	37.76	32.59	31.00	28.69	197.41	195.42	80.59	282.22	284.08

Movement, Approach, & Intersection Results

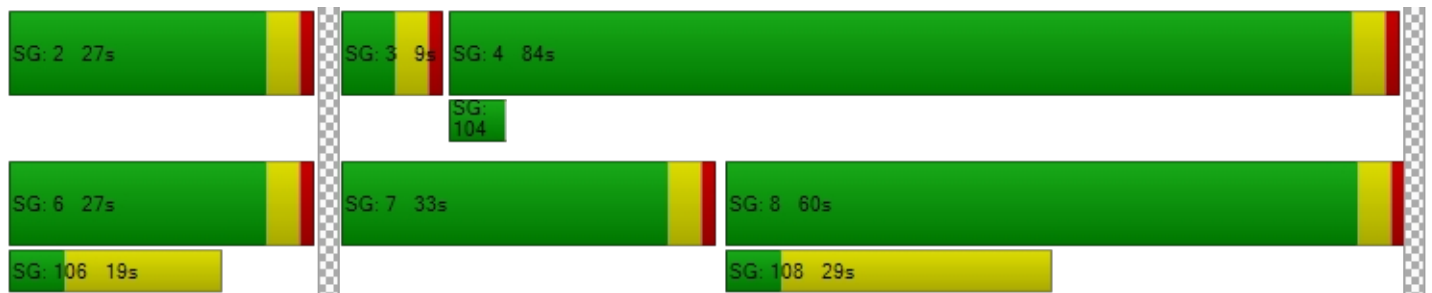
d_M, Delay for Movement [s/veh]	20.81	15.47	18.48	19.13	15.73	15.81	28.43	13.44	13.45	27.41	17.09	17.30
Movement LOS	C	B	B	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	18.71			16.91			14.06			17.99		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	16.68											
Intersection LOS	B											
Intersection V/C	0.758											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.450			2.248			3.033			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	383			383			933			1333		
d_b, Bicycle Delay [s]	39.20			39.20			17.07			6.67		
I_b,int, Bicycle LOS Score for Intersection	2.218			1.768			2.511			2.925		
Bicycle LOS	B			A			B			C		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	191.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.319

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	←→			↑			←→			←→		
Lane Configuration	←→			↑			←→			←→		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	100	35	19	39	48	45	19	111	103	44	189	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	100	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	188	248	381	177	241	70	64	991	242	314	1437	140
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	68	104	49	66	19	18	272	66	86	394	38
Total Analysis Volume [veh/h]	206	272	418	194	264	77	70	1087	265	344	1576	154
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	29	0	10	45	0	20	55	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	25	6	31	31	26	51	51
g / C, Green / Cycle	0.18	0.18	0.21	0.05	0.26	0.26	0.22	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.26	0.26	0.30	0.04	0.38	0.38	0.20	0.47	0.49
s, saturation flow rate [veh/h]	1831	1589	1792	1745	1832	1711	1745	1832	1777
c, Capacity [veh/h]	336	292	370	90	477	446	378	780	756
d1, Uniform Delay [s]	49.02	49.02	47.65	56.29	44.40	44.40	45.90	34.48	34.48
k, delay calibration	0.48	0.49	0.50	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	206.46	213.19	215.90	13.66	216.15	225.99	8.63	66.42	80.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.42	1.43	1.45	0.78	1.45	1.48	0.91	1.11	1.14
d, Delay for Lane Group [s/veh]	255.48	262.21	263.55	69.94	260.55	270.39	54.53	100.90	114.55
Lane Group LOS	F	F	F	E	F	F	D	F	F
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	29.28	25.97	33.14	2.44	42.72	41.10	10.86	36.51	38.26
50th-Percentile Queue Length [ft/ln]	731.96	649.20	828.51	60.91	1068.0	1027.6	271.62	912.66	956.50
95th-Percentile Queue Length [veh/ln]	44.61	40.13	50.45	4.39	64.50	62.55	16.27	50.06	53.28
95th-Percentile Queue Length [ft/ln]	1115.13	1003.37	1261.36	109.65	1612.3	1563.6	406.76	1251.5	1331.9

Movement, Approach, & Intersection Results

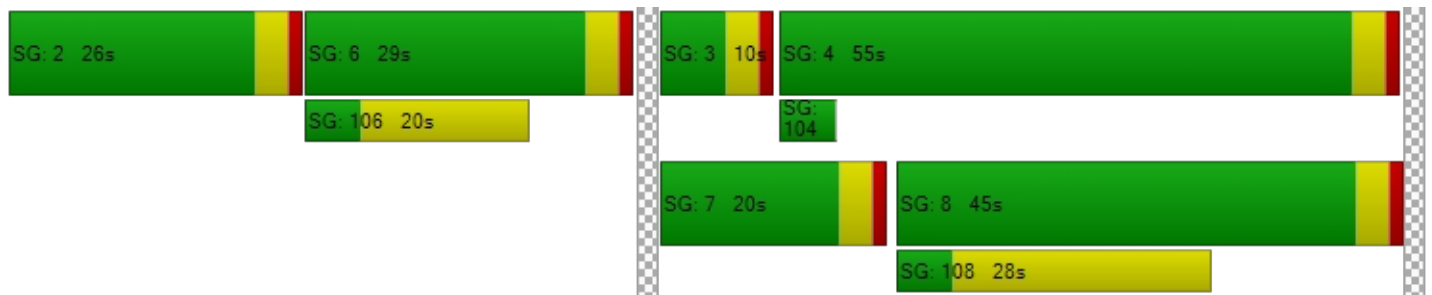
d_M, Delay for Movement [s/veh]	255.48	255.48	262.21	263.55	263.55	263.55	69.94	264.10	270.39	54.53	107.06	114.55
Movement LOS	F	F	F	F	F	F	E	F	F	D	F	F
d_A, Approach Delay [s/veh]	258.62			263.55			255.71			98.90		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	191.08											
Intersection LOS	F											
Intersection V/C	1.319											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.530	2.233	2.955	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	367	417	683	850
d_b, Bicycle Delay [s]	40.02	37.60	26.00	19.84
I_b,int, Bicycle LOS Score for Intersection	3.038	2.442	2.733	3.271
Bicycle LOS	C	B	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	115.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.249

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	64	12	63	15	18	69	31	112	26	40	113	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	458	171	220	177	201	165	106	815	575	279	1160	111
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	124	46	60	48	55	45	29	221	156	76	315	30
Total Analysis Volume [veh/h]	497	185	239	192	218	179	115	884	624	303	1258	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	25	0	22	46	0	20	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	21	21	10	35	35	23	48	48
g / C, Green / Cycle	0.21	0.21	0.17	0.17	0.08	0.29	0.29	0.19	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.28	0.25	0.11	0.23	0.07	0.25	0.40	0.17	0.38	0.38
s, saturation flow rate [veh/h]	1781	1701	1781	1732	1745	3489	1558	1745	1832	1777
c, Capacity [veh/h]	371	355	308	300	143	1019	455	337	739	717
d1, Uniform Delay [s]	47.54	47.54	46.03	49.66	54.22	40.31	42.52	47.32	34.40	34.74
k, delay calibration	0.50	0.45	0.11	0.39	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	169.69	110.45	2.06	162.88	10.17	9.90	180.59	8.65	21.09	24.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.34	1.20	0.62	1.32	0.81	0.87	1.37	0.90	0.94	0.95
d, Delay for Lane Group [s/veh]	217.23	157.99	48.09	212.54	64.39	50.20	223.10	55.97	55.48	58.75
Lane Group LOS	F	F	D	F	E	D	F	E	E	E
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	28.53	21.41	5.48	22.51	3.82	13.68	36.16	9.62	23.34	23.71
50th-Percentile Queue Length [ft/ln]	713.16	535.23	137.11	562.85	95.50	341.97	904.00	240.57	583.56	592.72
95th-Percentile Queue Length [veh/ln]	42.94	31.79	9.33	34.37	6.88	19.74	54.55	14.71	31.27	31.69
95th-Percentile Queue Length [ft/ln]	1073.48	794.82	233.13	859.18	171.91	493.61	1363.7	367.75	781.65	792.35

Movement, Approach, & Intersection Results

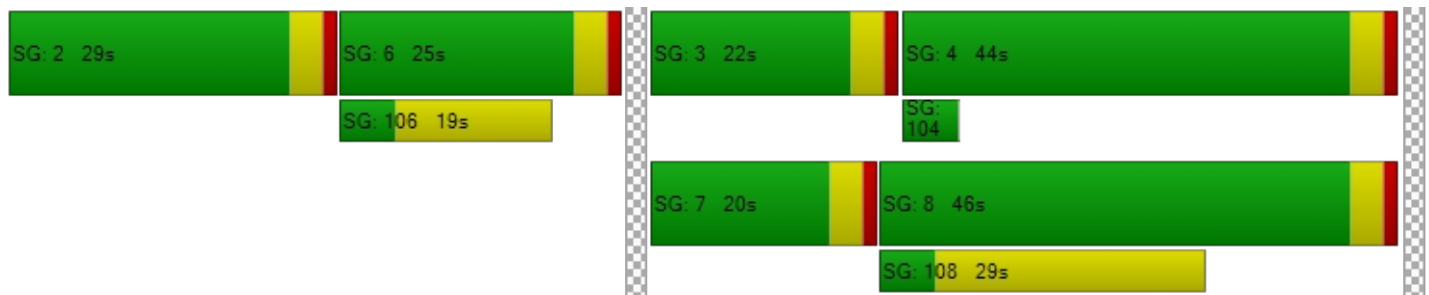
d_M, Delay for Movement [s/veh]	217.23	157.99	157.99	48.09	212.54	212.54	64.39	50.20	223.10	55.97	56.95	58.75
Movement LOS	F	F	F	D	F	F	E	D	F	E	E	E
d_A, Approach Delay [s/veh]	189.96			158.93			117.68			56.90		
Approach LOS	F			F			F			E		
d_I, Intersection Delay [s/veh]	115.33											
Intersection LOS	F											
Intersection V/C	1.249											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.627	2.283	3.046	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	350	700	667
d_b, Bicycle Delay [s]	37.60	40.84	25.35	26.67
I_b,int, Bicycle LOS Score for Intersection	3.079	2.531	2.899	2.946
Bicycle LOS	C	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	272.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.899

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration	↙		↑		↘	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	55	158	191	115	193	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	13	0	41	39
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	400	0	0	140
Total Hourly Volume [veh/h]	57	179	612	120	242	331
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	49	166	33	66	90
Total Analysis Volume [veh/h]	62	194	664	130	263	359
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.90	0.46	0.01	0.00	0.32	0.00
d_M, Delay for Movement [s/veh]	272.49	228.80	0.00	0.00	11.37	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	14.88	14.88	0.00	0.00	1.37	1.37
95th-Percentile Queue Length [ft/ln]	372.12	372.12	0.00	0.00	34.29	34.29
d_A, Approach Delay [s/veh]	239.38		0.00		4.81	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	38.44					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	1,954.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.071

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	100	216	0	0	39
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	310	753	767	14	6	231
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	89	216	220	4	2	66
Total Analysis Volume [veh/h]	355	863	879	16	7	265
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.47	0.01	0.01	0.00	2.07	0.77
d_M, Delay for Movement [s/veh]	13.86	0.00	0.00	0.00	1954.11	899.53
Movement LOS	B	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	2.52	2.52	0.00	0.00	25.97	25.97
95th-Percentile Queue Length [ft/ln]	62.90	62.90	0.00	0.00	649.26	649.26
d_A, Approach Delay [s/veh]	4.04		0.00		926.67	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	107.75					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.443

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵↵↵			↵↵↵			+			+		
Lane Configuration	↵↵↵			↵↵↵			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	2	873	10	12	682	8	2	0	0	23	0	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	61	0	0	184	71	52	0	11	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	969	10	12	893	79	54	0	11	24	0	42
Peak Hour Factor	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	287	3	4	265	23	16	0	3	7	0	12
Total Analysis Volume [veh/h]	27	1149	12	14	1059	94	64	0	13	28	0	50
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	19	0	9	19	0	0	62	0	0	62	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	71	71	1	70	70	6	6
g / C, Green / Cycle	0.03	0.78	0.78	0.02	0.77	0.77	0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.02	0.31	0.31	0.01	0.31	0.31	0.06	0.04
s, saturation flow rate [veh/h]	1781	1870	1863	1781	1870	1817	1378	1784
c, Capacity [veh/h]	49	1466	1461	30	1446	1405	164	172
d1, Uniform Delay [s]	43.21	3.04	3.04	43.86	3.36	3.37	41.60	41.11
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.24	0.80	0.81	11.06	0.84	0.87	2.08	1.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.40	0.40	0.47	0.40	0.40	0.47	0.45
d, Delay for Lane Group [s/veh]	52.45	3.85	3.85	54.92	4.21	4.23	43.69	42.98
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.71	2.47	2.46	0.40	2.72	2.66	1.76	1.76
50th-Percentile Queue Length [ft/ln]	17.84	61.65	61.47	9.94	68.08	66.50	44.06	43.94
95th-Percentile Queue Length [veh/ln]	1.28	4.44	4.43	0.72	4.90	4.79	3.17	3.16
95th-Percentile Queue Length [ft/ln]	32.11	110.98	110.65	17.90	122.55	119.70	79.31	79.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.45	3.85	3.85	54.92	4.22	4.23	43.69	43.69	43.69	42.98	42.98	42.98
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	4.95			4.83			43.69			42.98		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	7.26											
Intersection LOS	A											
Intersection V/C	0.443											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			36.45		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.866			0.000			1.767		
Crosswalk LOS	F			C			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			1289			1289		
d_b, Bicycle Delay [s]	31.25			31.25			5.69			5.69		
I_b,int, Bicycle LOS Score for Intersection	2.540			2.522			1.687			1.688		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.714

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	718	45	109	598	91	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	82	0	0	195	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	829	47	113	817	95	178
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	234	13	32	231	27	50
Total Analysis Volume [veh/h]	937	53	128	923	107	201
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	52	0	26	45	45	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13	13	4	20	7	7
g / C, Green / Cycle	0.36	0.36	0.10	0.58	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.26	0.27	0.07	0.26	0.06	0.13
s, saturation flow rate [veh/h]	1870	1835	1781	3560	1781	1589
c, Capacity [veh/h]	682	670	183	2073	336	300
d1, Uniform Delay [s]	9.58	9.65	15.15	4.12	12.23	13.16
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.49	1.62	4.77	0.15	0.54	2.58
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.74	0.70	0.45	0.32	0.67
d, Delay for Lane Group [s/veh]	11.07	11.27	19.92	4.27	12.77	15.74
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.48	2.51	1.04	0.77	0.62	1.36
50th-Percentile Queue Length [ft/ln]	61.97	62.84	26.05	19.14	15.39	33.95
95th-Percentile Queue Length [veh/ln]	4.46	4.52	1.88	1.38	1.11	2.44
95th-Percentile Queue Length [ft/ln]	111.54	113.12	46.88	34.45	27.71	61.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.16	11.27	19.92	4.27	12.77	15.74
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	11.17		6.17		14.71	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	9.40					
Intersection LOS	A					
Intersection V/C	0.714					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.733	2.106
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	50.00	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	4.949	4.999	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	114.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.254

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T			T			T			T		
Lane Configuration	T			T			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	279	317	39	124	272	292	264	327	283	47	561	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	75	0	0	174	21	7	39	0	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	120	200	31	10	0	200	100	100	108	28	200	38
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	410	605	72	139	457	525	382	479	402	77	796	235
Peak Hour Factor	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	184	22	42	139	159	116	146	122	23	242	71
Total Analysis Volume [veh/h]	498	735	87	169	555	638	464	582	488	94	967	286
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	26	41	0	21	36	0	15	49	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	41	41	13	32	32	11	45	45	5	39	39
g / C, Green / Cycle	0.18	0.34	0.34	0.11	0.27	0.27	0.09	0.38	0.38	0.04	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.28	0.22	0.22	0.09	0.30	0.40	0.13	0.30	0.32	0.03	0.27	0.18
s, saturation flow rate [veh/h]	1781	1870	1802	1781	1870	1589	3459	1870	1598	3459	3560	1589
c, Capacity [veh/h]	327	635	612	196	498	423	323	702	600	144	1153	515
d1, Uniform Delay [s]	45.33	27.40	27.44	50.31	38.70	38.70	52.54	26.25	26.91	55.84	31.32	27.65
k, delay calibration	0.50	0.21	0.21	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	251.34	2.23	2.37	10.61	75.57	240.35	200.72	9.43	13.56	4.98	7.39	4.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.53	0.66	0.66	0.86	1.11	1.51	1.44	0.80	0.84	0.65	0.84	0.56
d, Delay for Lane Group [s/veh]	296.67	29.63	29.81	60.92	114.27	279.05	253.26	35.68	40.47	60.82	38.70	31.94
Lane Group LOS	F	C	C	E	F	F	F	D	D	E	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	32.02	8.95	8.70	5.35	24.08	39.84	13.69	13.91	13.48	1.48	12.61	6.29
50th-Percentile Queue Length [ft/ln]	800.52	223.78	217.56	133.79	601.90	995.90	342.19	347.71	337.04	37.07	315.31	157.16
95th-Percentile Queue Length [veh/ln]	49.34	13.86	13.54	9.15	34.28	61.28	22.21	20.02	19.50	2.67	18.44	10.40
95th-Percentile Queue Length [ft/ln]	1233.4	346.44	338.51	228.64	856.92	1531.9	555.36	500.62	487.58	66.73	460.91	259.96

Movement, Approach, & Intersection Results

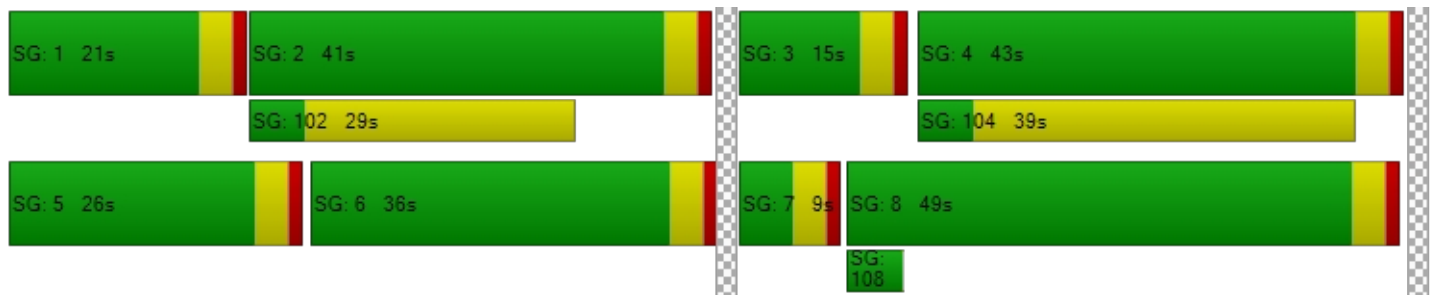
d_M, Delay for Movement [s/veh]	296.67	29.70	29.81	60.92	114.27	279.05	253.26	35.83	40.47	60.82	38.70	31.94
Movement LOS	F	C	C	E	F	F	F	D	D	E	D	C
d_A, Approach Delay [s/veh]	130.43			184.84			103.07			38.81		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	114.02											
Intersection LOS	F											
Intersection V/C	1.254											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.794	2.870	0.000	2.913
Crosswalk LOS	C	C	F	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	617	533	750	650
d_b, Bicycle Delay [s]	28.70	32.27	23.44	27.34
I_b,int, Bicycle LOS Score for Intersection	2.649	2.683	2.825	2.671
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↗		↖		↗	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	7	10	822	1164	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	220	353	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	10	1075	1564	3
Peak Hour Factor	1.0000	0.9740	0.9740	0.9740	0.9740	0.9740
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	3	276	401	1
Total Analysis Volume [veh/h]	0	7	10	1104	1606	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.03	0.01	0.02	0.00
d_M, Delay for Movement [s/veh]	0.00	16.30	14.46	0.00	0.00	0.00
Movement LOS		C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.07	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	1.64	1.97	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.30		0.13		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.09					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration	←		↑		→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	85	167	6	6	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	43	49	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	10	0	0	0	0	0
Total Hourly Volume [veh/h]	14	131	223	6	6	3
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	43	74	2	2	1
Total Analysis Volume [veh/h]	19	174	296	8	8	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	7.91	0.00	0.00	0.00	12.15	10.00
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft/ln]	1.15	1.15	0.00	0.00	1.61	1.61
d_A, Approach Delay [s/veh]	0.78		0.00		11.43	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.56					
Intersection LOS	B					

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Scenario 5 EAC PM

Report File: \...\EAC PM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.833	13.9	B
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.795	7.4	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.797	14.2	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Right	1.684	325.8	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.811	31.6	C
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.214	48.8	E
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.235	78.1	F
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	EB Right	0.619	11.8	B
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.556	5.6	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Right	0.823	47.4	D
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.012	13.7	B
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.021	11.0	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.833

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach	↔			↕			↔			↕		
Lane Configuration	↔			↕			↔			↕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	43	9	135	15	5	9	57	817	14	14	1056	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	39	0	1	1	0	0	1	353	1	0	468	65
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	9	141	17	5	9	60	1203	16	15	1566	94
Peak Hour Factor	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	2	38	5	1	2	16	323	4	4	421	25
Total Analysis Volume [veh/h]	90	10	151	18	5	10	64	1292	17	16	1682	101
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	9	54	0	28	73	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	48	48	48	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	7	7	3	29	29	1	27	27
g / C, Green / Cycle	0.14	0.14	0.14	0.06	0.59	0.59	0.02	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.07	0.09	0.04	0.04	0.36	0.36	0.01	0.49	0.49
s, saturation flow rate [veh/h]	1413	1589	817	1745	1832	1824	1745	1832	1796
c, Capacity [veh/h]	339	223	229	105	1086	1081	36	1013	993
d1, Uniform Delay [s]	19.30	19.86	18.44	22.28	6.28	6.28	23.54	9.49	9.62
k, delay calibration	0.11	0.11	0.11	0.11	0.14	0.14	0.11	0.30	0.31
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.48	3.60	0.29	5.59	0.72	0.72	8.61	6.99	8.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.68	0.14	0.61	0.60	0.60	0.45	0.88	0.90
d, Delay for Lane Group [s/veh]	19.78	23.46	18.72	27.87	6.99	7.00	32.15	16.48	17.68
Lane Group LOS	B	C	B	C	A	A	C	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.98	1.67	0.31	0.81	2.87	2.87	0.25	7.45	7.75
50th-Percentile Queue Length [ft/ln]	24.50	41.85	7.77	20.31	71.86	71.66	6.29	186.18	193.72
95th-Percentile Queue Length [veh/ln]	1.76	3.01	0.56	1.46	5.17	5.16	0.45	11.92	12.31
95th-Percentile Queue Length [ft/ln]	44.10	75.32	13.98	36.55	129.35	128.99	11.32	298.07	307.85

Movement, Approach, & Intersection Results

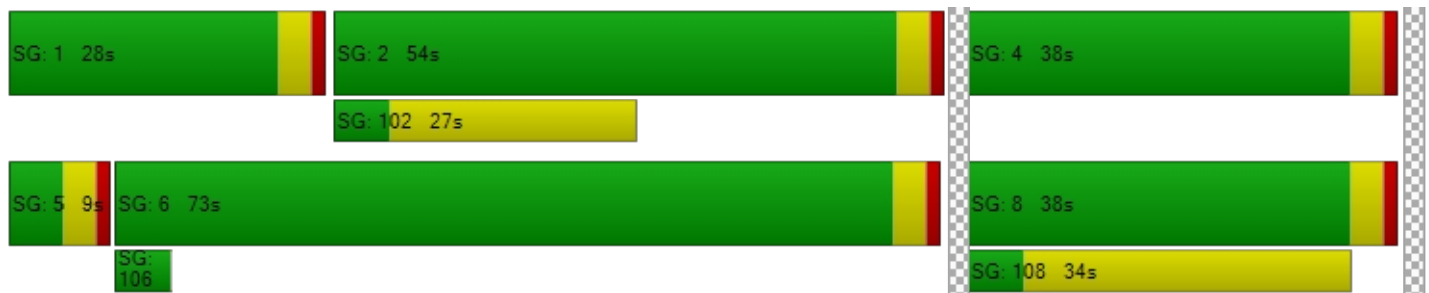
d_M, Delay for Movement [s/veh]	19.78	19.78	23.46	18.72	18.72	18.72	27.87	7.00	7.00	32.15	17.04	17.68
Movement LOS	B	B	C	B	B	B	C	A	A	C	B	B
d_A, Approach Delay [s/veh]	21.99			18.72			7.97			17.21		
Approach LOS	C			B			A			B		
d_I, Intersection Delay [s/veh]	13.90											
Intersection LOS	B											
Intersection V/C	0.833											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.092			1.767			2.969			0.000		
Crosswalk LOS	B			A			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			833			1150		
d_b, Bicycle Delay [s]	30.82			30.82			20.42			10.84		
I_b,int, Bicycle LOS Score for Intersection	1.974			1.614			2.692			3.044		
Bicycle LOS	A			A			B			C		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	7.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.795

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	25	17	784	33	30	962
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	96	10	284	88	17	396
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	122	28	1099	122	48	1396
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	7	292	32	13	371
Total Analysis Volume [veh/h]	130	30	1168	130	51	1484
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	24	0	84	0	12	96
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	34	34	34	34	34
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	16	16	2	22
g / C, Green / Cycle	0.12	0.47	0.47	0.06	0.64
(v / s)_i Volume / Saturation Flow Rate	0.09	0.35	0.37	0.03	0.43
s, saturation flow rate [veh/h]	1742	1832	1770	1745	3489
c, Capacity [veh/h]	217	862	832	99	2244
d1, Uniform Delay [s]	14.54	7.49	7.64	15.79	3.82
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.81	1.36	1.63	4.07	0.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.75	0.78	0.51	0.66
d, Delay for Lane Group [s/veh]	19.35	8.85	9.27	19.86	4.16
Lane Group LOS	B	A	A	B	A
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.25	2.51	2.60	0.43	0.78
50th-Percentile Queue Length [ft/ln]	31.35	62.76	65.11	10.83	19.50
95th-Percentile Queue Length [veh/ln]	2.26	4.52	4.69	0.78	1.40
95th-Percentile Queue Length [ft/ln]	56.44	112.97	117.20	19.50	35.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.35	19.35	9.03	9.27	19.86	4.16
Movement LOS	B	B	A	A	B	A
d_A, Approach Delay [s/veh]	19.35		9.06		4.68	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	7.36					
Intersection LOS	A					
Intersection V/C	0.795					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.896	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.396	5.203	5.399
Bicycle LOS	E	F	F

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.797

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	33	61	151	16	27	30	33	908	19	77	703	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	0	13	28	0	34	27	442	23	22	322	29
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	10	0	0	12	0	6	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	73	170	45	40	65	67	1386	43	102	1053	54
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	19	45	12	11	17	18	368	11	27	280	14
Total Analysis Volume [veh/h]	53	78	181	48	43	69	71	1473	46	108	1119	57
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	23	0	0	23	0	50	85	0	12	47	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	47	47	47	47	47	47	47	47	47	47	47	47
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	8	8	8	8	3	23	23	4	24	24
g / C, Green / Cycle	0.17	0.17	0.17	0.17	0.17	0.17	0.06	0.49	0.49	0.08	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.04	0.04	0.11	0.04	0.02	0.04	0.04	0.42	0.42	0.06	0.32	0.32
s, saturation flow rate [veh/h]	1281	1870	1589	1321	1870	1589	1781	1832	1813	1745	1832	1801
c, Capacity [veh/h]	273	325	276	278	325	276	115	895	886	144	927	912
d1, Uniform Delay [s]	20.15	16.74	18.10	19.98	16.42	16.77	21.40	10.52	10.55	21.09	8.47	8.48
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.19	0.20	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.34	0.38	2.63	0.29	0.18	0.47	5.22	4.21	4.41	7.67	0.74	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.24	0.66	0.17	0.13	0.25	0.61	0.85	0.85	0.75	0.64	0.64
d, Delay for Lane Group [s/veh]	20.50	17.12	20.73	20.27	16.60	17.24	26.62	14.73	14.96	28.76	9.21	9.24
Lane Group LOS	C	B	C	C	B	B	C	B	B	C	A	A
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.52	0.68	1.81	0.47	0.36	0.60	0.86	6.00	6.02	1.35	3.32	3.27
50th-Percentile Queue Length [ft/ln]	13.00	16.89	45.29	11.66	9.08	15.11	21.41	149.94	150.46	33.81	82.92	81.81
95th-Percentile Queue Length [veh/ln]	0.94	1.22	3.26	0.84	0.65	1.09	1.54	10.01	10.04	2.43	5.97	5.89
95th-Percentile Queue Length [ft/ln]	23.39	30.40	81.53	20.99	16.35	27.20	38.53	250.34	251.05	60.87	149.25	147.26

Movement, Approach, & Intersection Results

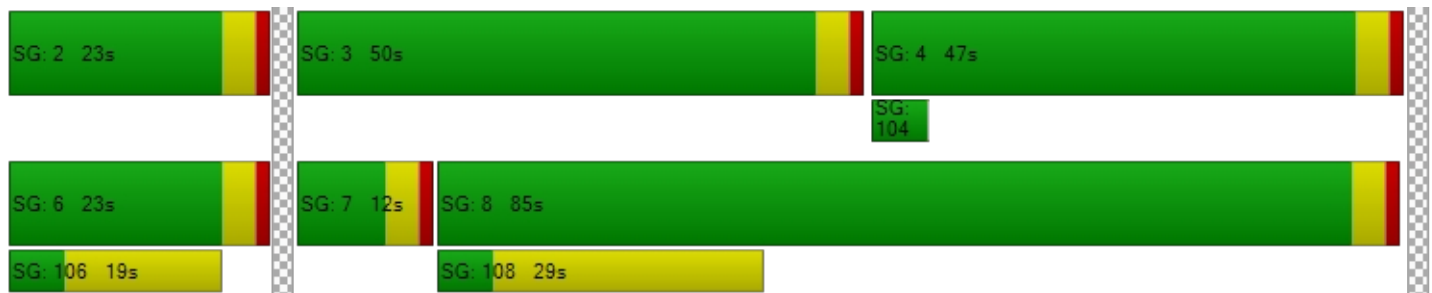
d_M, Delay for Movement [s/veh]	20.50	17.12	20.73	20.27	16.60	17.24	26.62	14.84	14.96	28.76	9.22	9.24
Movement LOS	C	B	C	C	B	B	C	B	B	C	A	A
d_A, Approach Delay [s/veh]	19.79			17.98			15.37			10.87		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	14.18											
Intersection LOS	B											
Intersection V/C	0.797											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.414	2.236	2.943	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	317	1350	717
d_b, Bicycle Delay [s]	42.50	42.50	6.34	24.70
I_b,int, Bicycle LOS Score for Intersection	2.074	1.692	2.871	2.619
Bicycle LOS	B	A	C	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	325.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.684

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	←→			+			←→			←→		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	197	53	91	23	46	33	43	223	218	73	143	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	100	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	280	206	323	107	170	58	85	1280	287	251	1014	128
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	97	71	112	37	59	20	29	443	99	87	351	44
Total Analysis Volume [veh/h]	388	285	447	148	235	80	118	1773	398	348	1404	177
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	24	0	14	54	0	16	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	20	10	36	36	26	52	52
g / C, Green / Cycle	0.18	0.18	0.17	0.08	0.30	0.30	0.22	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.37	0.28	0.26	0.07	0.59	0.63	0.20	0.43	0.45
s, saturation flow rate [veh/h]	1818	1589	1787	1745	1832	1721	1745	1832	1763
c, Capacity [veh/h]	334	292	295	143	549	516	382	800	770
d1, Uniform Delay [s]	49.02	49.02	50.14	54.28	42.04	42.04	45.77	33.53	33.82
k, delay calibration	0.50	0.50	0.48	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	468.49	256.26	272.57	11.32	445.87	503.44	8.66	29.21	39.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	2.02	1.53	1.57	0.83	1.98	2.10	0.91	0.99	1.03
d, Delay for Lane Group [s/veh]	517.51	305.28	322.71	65.60	487.91	545.48	54.43	62.74	73.18
Lane Group LOS	F	F	F	E	F	F	D	E	F
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	53.35	29.46	31.09	3.96	84.10	87.23	10.99	28.66	30.16
50th-Percentile Queue Length [ft/ln]	1333.67	736.44	777.34	98.97	2102.4	2180.8	274.72	716.39	754.11
95th-Percentile Queue Length [veh/ln]	83.23	45.81	48.15	7.13	131.87	137.78	16.43	37.43	39.97
95th-Percentile Queue Length [ft/ln]	2080.77	1145.28	1203.70	178.14	3296.8	3444.4	410.63	935.87	999.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	517.51	517.51	305.28	322.71	322.71	322.71	65.60	510.24	545.48	54.43	67.30	73.18
Movement LOS	F	F	F	F	F	F	E	F	F	D	E	E
d_A, Approach Delay [s/veh]	432.81			322.71			493.44			65.52		
Approach LOS	F			F			F			E		
d_I, Intersection Delay [s/veh]	325.81											
Intersection LOS	F											
Intersection V/C	1.684											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.638	2.239	3.126	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	367	333	833	867
d_b, Bicycle Delay [s]	40.02	41.67	20.42	19.27
I_b,int, Bicycle LOS Score for Intersection	3.408	2.324	3.448	3.151
Bicycle LOS	C	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	31.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.811

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵			↵			↵↵↵			↵↵		
Lane Configuration	↵			↵			↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	86	22	60	10	18	41	78	145	113	76	128	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	190	70	130	95	58	97	145	1282	258	128	1032	81
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	18	34	25	15	25	38	335	67	33	269	21
Total Analysis Volume [veh/h]	198	73	136	99	61	101	151	1338	269	134	1077	85
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	35	0	0	23	0	15	33	0	9	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	12	12	11	47	47	10	46	46
g / C, Green / Cycle	0.15	0.15	0.12	0.12	0.11	0.47	0.47	0.10	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.11	0.12	0.06	0.10	0.09	0.38	0.17	0.08	0.32	0.32
s, saturation flow rate [veh/h]	1781	1677	1781	1685	1745	3489	1558	1745	1832	1786
c, Capacity [veh/h]	269	253	214	203	187	1647	735	169	846	825
d1, Uniform Delay [s]	40.61	41.23	41.02	42.86	43.72	22.64	16.87	44.24	21.34	21.37
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.91	6.68	1.54	7.05	8.10	4.50	1.41	8.11	4.67	4.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.83	0.46	0.80	0.81	0.81	0.37	0.79	0.69	0.70
d, Delay for Lane Group [s/veh]	44.52	47.91	42.56	49.91	51.82	27.14	18.28	52.35	26.01	26.20
Lane Group LOS	D	D	D	D	D	C	B	D	C	C
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.91	5.42	2.35	4.26	4.05	13.79	4.11	3.61	11.52	11.30
50th-Percentile Queue Length [ft/ln]	122.74	135.47	58.85	106.62	101.21	344.76	102.78	90.20	287.92	282.56
95th-Percentile Queue Length [veh/ln]	8.54	9.24	4.24	7.65	7.29	19.88	7.40	6.49	17.08	16.82
95th-Percentile Queue Length [ft/ln]	213.58	230.91	105.93	191.29	182.17	497.01	185.00	162.35	427.05	420.39

Movement, Approach, & Intersection Results

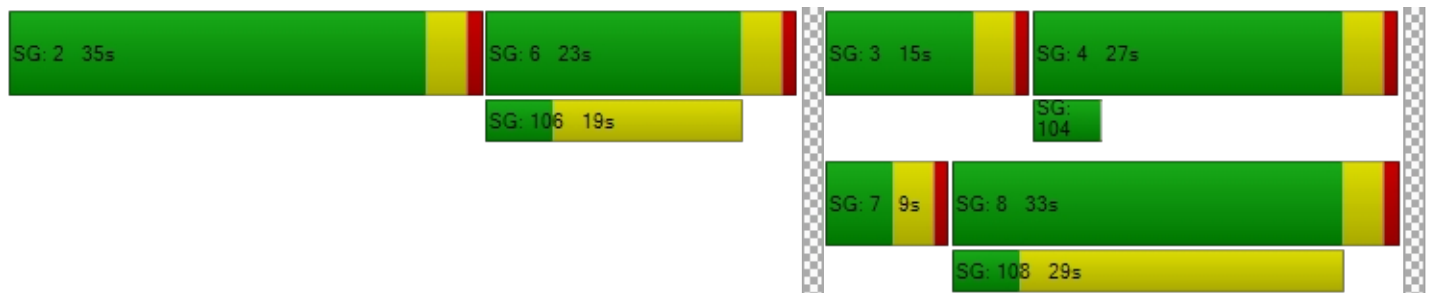
d_M, Delay for Movement [s/veh]	44.52	47.91	47.91	42.56	49.91	49.91	51.82	27.14	18.28	52.35	26.10	26.20
Movement LOS	D	D	D	D	D	D	D	C	B	D	C	C
d_A, Approach Delay [s/veh]	46.26			47.12			27.90			28.82		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	31.58											
Intersection LOS	C											
Intersection V/C	0.811											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.230	2.132	2.969	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	620	380	580	460
d_b, Bicycle Delay [s]	23.81	32.81	25.21	29.65
I_b,int, Bicycle LOS Score for Intersection	2.231	1.990	3.010	2.629
Bicycle LOS	B	A	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	48.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.214

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	21	108	61	28	227	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	43	0	29	26
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	400	0	0	140
Total Hourly Volume [veh/h]	22	157	506	29	265	262
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	41	133	8	70	69
Total Analysis Volume [veh/h]	23	165	532	30	278	275
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.31	0.01	0.00	0.28	0.00
d_M, Delay for Movement [s/veh]	48.79	22.06	0.00	0.00	9.92	0.00
Movement LOS	E	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.88	2.88	0.00	0.00	1.13	1.13
95th-Percentile Queue Length [ft/ln]	71.98	71.98	0.00	0.00	28.16	28.16
d_A, Approach Delay [s/veh]	25.33		0.00		4.99	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	5.77					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	78.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.235

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	43	357	288	0	0	26
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	749	681	3	14	133
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	202	184	1	4	36
Total Analysis Volume [veh/h]	129	809	735	3	15	144
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.01	0.01	0.00	0.24	0.34
d_M, Delay for Movement [s/veh]	9.87	0.00	0.00	0.00	78.07	30.20
Movement LOS	A	A	A	A	F	D
95th-Percentile Queue Length [veh/ln]	0.52	0.52	0.00	0.00	3.35	3.35
95th-Percentile Queue Length [ft/ln]	13.02	13.02	0.00	0.00	83.80	83.80
d_A, Approach Delay [s/veh]	1.36		0.00		34.72	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	3.70					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.619

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	432	27	24	464	0	0	0	0	14	0	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	190	0	0	119	196	210	0	66	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	58	639	28	25	602	196	210	0	66	15	0	17
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	167	7	7	158	51	55	0	17	4	0	4
Total Analysis Volume [veh/h]	61	670	29	26	631	205	220	0	69	16	0	18
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	0	0	18	9	0	0	72	0	0	72	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No			No	No			No			No	
Maximum Recall	No			No	No			No			No	
Pedestrian Recall	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	5	77	68	68	5	5
g / C, Green / Cycle	0.05	0.05	0.86	0.76	0.76	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.01	0.23	0.23	0.04	0.27
s, saturation flow rate [veh/h]	1781	1589	1769	1870	1715	1589	59
c, Capacity [veh/h]	91	81	1526	1420	1303	89	83
d1, Uniform Delay [s]	41.98	41.30	1.23	3.39	3.39	41.93	45.00
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.11	0.31
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.26	2.64	0.00	0.56	0.61	13.22	3.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.36	0.02	0.31	0.31	0.77	0.19
d, Delay for Lane Group [s/veh]	50.24	43.94	1.24	3.95	4.01	55.15	48.15
Lane Group LOS	D	D	A	A	A	E	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.53	0.68	0.02	1.98	1.84	1.82	0.43
50th-Percentile Queue Length [ft/ln]	38.15	16.89	0.53	49.61	46.02	45.57	10.76
95th-Percentile Queue Length [veh/ln]	2.75	1.22	0.04	3.57	3.31	3.28	0.77
95th-Percentile Queue Length [ft/ln]	68.67	30.40	0.95	89.31	82.84	82.02	19.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.24	0.00	43.94	1.24	3.97	4.01	0.00	55.15	55.15	48.15	48.15	0.00
Movement LOS	D		D	A	A	A		E	E	D	D	
d_A, Approach Delay [s/veh]	48.21			3.90			55.15			48.15		
Approach LOS	D			A			E			D		
d_I, Intersection Delay [s/veh]	11.83											
Intersection LOS	B											
Intersection V/C	0.619											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			5.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			40.14		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.343			0.000			1.761		
Crosswalk LOS	F			B			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	0			111			1511			1511		
d_b, Bicycle Delay [s]	45.00			40.14			2.69			2.69		
I_b,int, Bicycle LOS Score for Intersection	4.132			2.271			1.673			1.586		
Bicycle LOS	D			B			A			A		

Sequence

Ring 1	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	5.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.556

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	423	52	38	436	28	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	248	0	0	184	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	688	54	40	637	29	38
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	187	15	11	173	8	10
Total Analysis Volume [veh/h]	746	59	43	691	31	41
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	33	0	50	83	37	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	23	23	23	23	23	23
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	1	13	2	2
g / C, Green / Cycle	0.35	0.35	0.05	0.58	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.22	0.22	0.02	0.19	0.02	0.03
s, saturation flow rate [veh/h]	1870	1823	1781	3560	1781	1589
c, Capacity [veh/h]	661	644	96	2056	146	130
d1, Uniform Delay [s]	6.26	6.30	10.78	2.60	10.08	10.16
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.91	1.00	3.26	0.10	0.72	1.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.62	0.45	0.34	0.21	0.31
d, Delay for Lane Group [s/veh]	7.17	7.30	14.04	2.70	10.79	11.53
Lane Group LOS	A	A	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.85	0.86	0.23	0.03	0.13	0.18
50th-Percentile Queue Length [ft/ln]	21.14	21.55	5.77	0.68	3.16	4.48
95th-Percentile Queue Length [veh/ln]	1.52	1.55	0.42	0.05	0.23	0.32
95th-Percentile Queue Length [ft/ln]	38.05	38.78	10.39	1.23	5.69	8.07

Movement, Approach, & Intersection Results

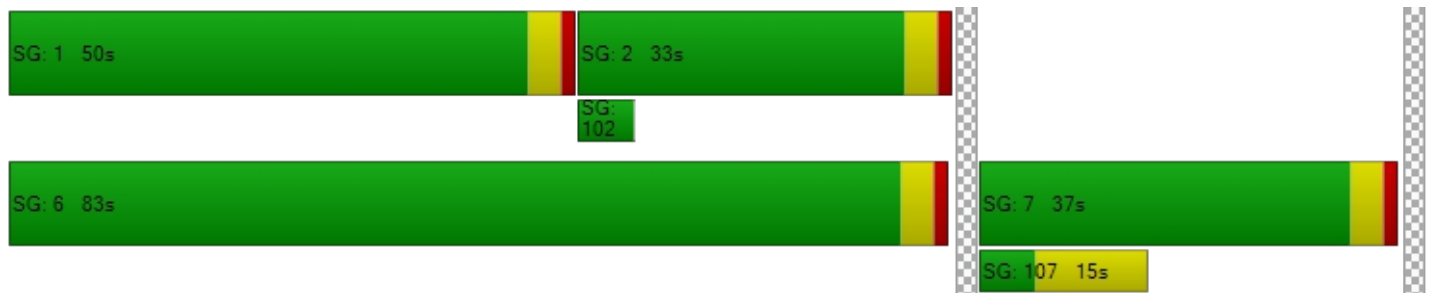
d_M, Delay for Movement [s/veh]	7.23	7.30	14.04	2.70	10.79	11.53
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	7.23		3.36		11.21	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	5.65					
Intersection LOS	A					
Intersection V/C	0.556					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.612	2.012
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.797	4.738	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	47.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.823

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T			T			T			T		
Lane Configuration	T			T			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	152	186	29	47	219	193	233	298	248	17	212	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	225	0	0	171	14	23	26	0	0	43	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	120	200	31	10	0	200	100	100	108	28	200	38
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	618	61	59	399	415	365	436	366	46	463	81
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	166	16	16	107	112	98	117	98	12	124	22
Total Analysis Volume [veh/h]	299	665	66	63	429	446	392	469	394	49	498	87
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	33	0	27	36	0	17	51	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	46	46	6	32	32	13	48	48	4	39	39
g / C, Green / Cycle	0.17	0.39	0.39	0.05	0.27	0.27	0.11	0.40	0.40	0.03	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.17	0.20	0.20	0.04	0.23	0.28	0.11	0.25	0.25	0.01	0.14	0.05
s, saturation flow rate [veh/h]	1781	1870	1811	1781	1870	1589	3459	1870	1593	3459	3560	1589
c, Capacity [veh/h]	297	724	701	82	498	423	379	748	637	116	1153	515
d1, Uniform Delay [s]	46.67	21.58	21.58	55.71	36.63	38.69	51.22	21.63	21.72	56.18	26.38	24.19
k, delay calibration	0.21	0.11	0.11	0.11	0.35	0.49	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	35.62	0.56	0.58	14.12	13.02	58.15	30.51	3.83	4.63	2.42	1.18	0.71
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.01	0.51	0.51	0.77	0.86	1.05	1.03	0.62	0.63	0.42	0.43	0.17
d, Delay for Lane Group [s/veh]	82.28	22.14	22.16	69.83	49.65	96.84	81.73	25.46	26.35	58.60	27.56	24.90
Lane Group LOS	F	C	C	E	D	F	F	C	C	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.36	6.31	6.12	2.18	12.71	18.42	7.08	8.90	7.85	0.76	4.84	1.61
50th-Percentile Queue Length [ft/ln]	284.11	157.78	152.94	54.45	317.66	460.60	177.07	222.53	196.34	18.99	121.09	40.15
95th-Percentile Queue Length [veh/ln]	16.95	10.43	10.17	3.92	18.55	26.28	11.60	13.79	12.45	1.37	8.45	2.89
95th-Percentile Queue Length [ft/ln]	423.85	260.78	254.35	98.00	463.81	656.94	289.88	344.85	311.24	34.18	211.32	72.26

Movement, Approach, & Intersection Results

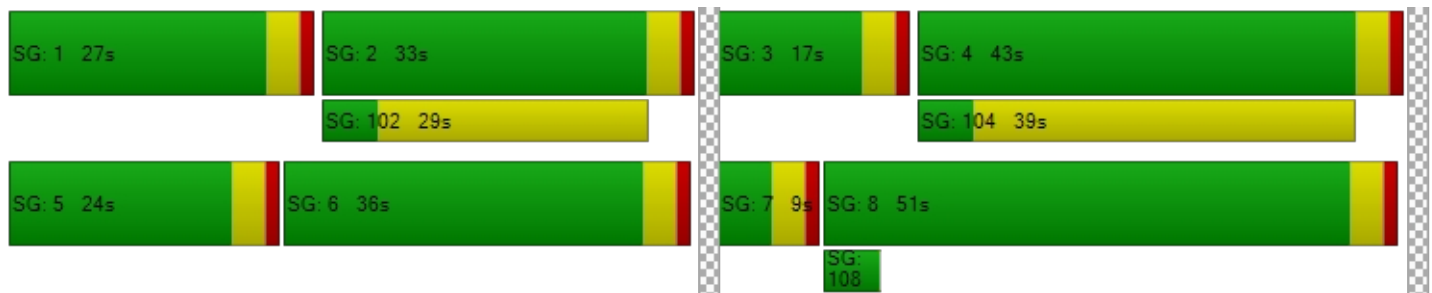
d_M, Delay for Movement [s/veh]	82.28	22.15	22.16	69.83	49.65	96.84	81.73	25.47	26.35	58.60	27.56	24.90
Movement LOS	F	C	C	E	D	F	F	C	C	E	C	C
d_A, Approach Delay [s/veh]	39.61			73.44			43.32			29.59		
Approach LOS	D			E			D			C		
d_I, Intersection Delay [s/veh]	47.40											
Intersection LOS	D											
Intersection V/C	0.823											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			0.00			51.34		
I_p,int, Pedestrian LOS Score for Intersection	2.686			2.721			0.000			2.781		
Crosswalk LOS	B			B			F			C		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	483			533			783			650		
d_b, Bicycle Delay [s]	34.50			32.27			22.20			27.34		
I_b,int, Bicycle LOS Score for Intersection	2.409			2.333			2.595			2.083		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↗		↖		↗	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	5	6	980	793	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	492	372	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	6	1511	1197	0
Peak Hour Factor	1.0000	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	404	320	0
Total Analysis Volume [veh/h]	0	5	6	1614	1279	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	13.71	11.93	0.00	0.00	0.00
Movement LOS		B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.04	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.91	0.87	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.71		0.04		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	B					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration	←		↑		→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	114	74	7	12	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	56	62	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	6	0	0	0	0	0
Total Hourly Volume [veh/h]	10	175	139	7	12	12
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	49	39	2	3	3
Total Analysis Volume [veh/h]	11	195	155	8	13	13
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	7.56	0.00	0.00	0.00	10.99	9.24
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.59	0.59	0.00	0.00	2.77	2.77
d_A, Approach Delay [s/veh]	0.40		0.00		10.12	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.88					
Intersection LOS	B					

**EXISTING PLUS AMBIENT
GROWTH PLUS
CUMULATIVE PROJECTS
PLUS PROJECT CONDITION**

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Scenario 4 EACP- AM

Report File: \...\EACP AM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.755	10.7	B
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.848	13.1	B
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.776	24.7	C
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Thru	1.353	205.3	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Right	1.260	118.4	F
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	1.216	422.2	F
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	3.561	3,433.0	F
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	SB Left	0.453	7.4	A
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.722	9.6	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	NB Left	1.260	116.6	F
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.267	20.0	C
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.132	28.8	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	10.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach	↗↘			↑			↖↗			↖↗		
Lane Configuration	↗↘			↑			↖↗			↖↗		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	33	3	119	3	3	3	112	971	10	3	717	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	0	32	1	0	0	6	342	1	0	205	20
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	3	156	4	3	3	122	1352	11	3	951	42
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	1	41	1	1	1	32	357	3	1	251	11
Total Analysis Volume [veh/h]	97	3	165	4	3	3	129	1429	12	3	1005	44
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	40	0	0	40	0	17	71	0	9	63	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	35	35	35	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	6	6	4	18	18	0	14	14
g / C, Green / Cycle	0.16	0.16	0.16	0.10	0.50	0.50	0.00	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.07	0.10	0.01	0.07	0.39	0.39	0.00	0.29	0.29
s, saturation flow rate [veh/h]	1392	1589	1156	1745	1832	1827	1745	1832	1806
c, Capacity [veh/h]	424	256	328	179	911	909	7	731	721
d1, Uniform Delay [s]	13.47	13.97	12.64	15.47	7.41	7.41	17.66	9.02	9.02
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	2.71	0.04	5.37	1.59	1.60	31.05	1.37	1.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.64	0.03	0.72	0.79	0.79	0.40	0.72	0.72
d, Delay for Lane Group [s/veh]	13.76	16.68	12.67	20.84	9.00	9.02	48.71	10.39	10.41
Lane Group LOS	B	B	B	C	A	A	D	B	B
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.61	1.18	0.06	1.10	2.87	2.86	0.09	2.53	2.50
50th-Percentile Queue Length [ft/ln]	15.32	29.59	1.44	27.42	71.64	71.62	2.14	63.31	62.49
95th-Percentile Queue Length [veh/ln]	1.10	2.13	0.10	1.97	5.16	5.16	0.15	4.56	4.50
95th-Percentile Queue Length [ft/ln]	27.57	53.26	2.59	49.35	128.94	128.91	3.85	113.96	112.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.76	13.76	16.68	12.67	12.67	12.67	20.84	9.01	9.02	48.71	10.40	10.41
Movement LOS	B	B	B	B	B	B	C	A	A	D	B	B
d_A, Approach Delay [s/veh]	15.58			12.67			9.98			10.51		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	10.70											
Intersection LOS	B											
Intersection V/C	0.755											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.099			1.744			2.856			0.000		
Crosswalk LOS	B			A			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	600			600			1117			983		
d_b, Bicycle Delay [s]	29.40			29.40			11.70			15.50		
I_b,int, Bicycle LOS Score for Intersection	1.997			1.576			2.855			2.428		
Bicycle LOS	A			A			C			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.848

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	89	49	994	122	80	710
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	15	329	55	5	217
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	127	66	1363	182	88	955
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	18	363	49	23	255
Total Analysis Volume [veh/h]	135	70	1453	194	94	1018
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	19	0	90	0	11	101
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	26	26	4	34
g / C, Green / Cycle	0.16	0.53	0.53	0.07	0.68
(v / s)_i Volume / Saturation Flow Rate	0.12	0.45	0.47	0.05	0.29
s, saturation flow rate [veh/h]	1711	1832	1759	1745	3489
c, Capacity [veh/h]	267	966	927	129	2379
d1, Uniform Delay [s]	19.97	10.03	10.38	22.38	3.53
k, delay calibration	0.11	0.26	0.28	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.61	5.19	7.56	7.68	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.85	0.89	0.73	0.43
d, Delay for Lane Group [s/veh]	24.59	15.22	17.94	30.06	3.65
Lane Group LOS	C	B	B	C	A
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.36	6.76	7.50	1.25	1.10
50th-Percentile Queue Length [ft/ln]	59.03	169.05	187.62	31.19	27.42
95th-Percentile Queue Length [veh/ln]	4.25	11.03	12.00	2.25	1.97
95th-Percentile Queue Length [ft/ln]	106.25	275.67	299.93	56.14	49.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.59	24.59	16.40	17.94	30.06	3.65
Movement LOS	C	C	B	B	C	A
d_A, Approach Delay [s/veh]	24.59		16.58		5.88	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	13.12					
Intersection LOS	B					
Intersection V/C	0.848					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.970	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.471	5.491	5.050
Bicycle LOS	E	F	F

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	24.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.776

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	88	48	171	54	82	32	12	764	33	121	1006	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	10	19	66	26	24	55	188	9	7	307	77
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	101	0	0	0	0	-102	102
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	10	0	0	12	0	10	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	113	70	197	122	123	158	77	983	43	133	1251	209
Peak Hour Factor	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280	0.9280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	19	53	33	33	43	21	265	12	36	337	56
Total Analysis Volume [veh/h]	122	75	212	131	133	170	83	1059	46	143	1348	225
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	23	0	0	23	0	10	83	0	14	87	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	62	62	62	62	62	62	62	62	62	62	62	62
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	17	17	17	17	4	27	27	7	29	29
g / C, Green / Cycle	0.28	0.28	0.28	0.28	0.28	0.28	0.06	0.43	0.43	0.11	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.11	0.04	0.13	0.10	0.07	0.11	0.05	0.30	0.30	0.08	0.43	0.45
s, saturation flow rate [veh/h]	1076	1870	1589	1324	1870	1589	1781	1832	1806	1745	1832	1743
c, Capacity [veh/h]	281	514	437	394	514	437	109	781	769	186	863	822
d1, Uniform Delay [s]	25.15	17.05	18.89	21.54	17.62	18.33	28.76	14.72	14.72	27.06	15.36	15.71
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.18	0.18	0.11	0.38	0.40
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.06	0.13	0.84	0.49	0.26	0.57	10.33	2.01	2.05	6.59	13.28	17.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.43	0.15	0.49	0.33	0.26	0.39	0.76	0.71	0.71	0.77	0.92	0.95
d, Delay for Lane Group [s/veh]	26.21	17.18	19.72	22.03	17.89	18.89	39.09	16.73	16.77	33.65	28.64	33.54
Lane Group LOS	C	B	B	C	B	B	D	B	B	C	C	C
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.70	0.77	2.47	1.62	1.42	1.91	1.48	6.08	6.01	2.30	12.00	12.90
50th-Percentile Queue Length [ft/ln]	42.52	19.34	61.65	40.52	35.54	47.71	36.95	152.01	150.14	57.55	300.03	322.45
95th-Percentile Queue Length [veh/ln]	3.06	1.39	4.44	2.92	2.56	3.44	2.66	10.12	10.02	4.14	17.68	18.79
95th-Percentile Queue Length [ft/ln]	76.54	34.81	110.96	72.94	63.97	85.88	66.51	253.12	250.62	103.59	442.06	469.70

Movement, Approach, & Intersection Results

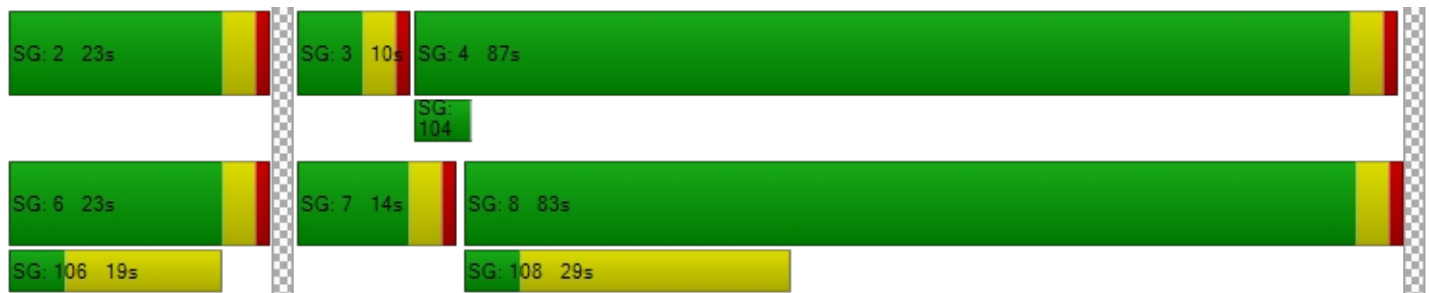
d_M, Delay for Movement [s/veh]	26.21	17.18	19.72	22.03	17.89	18.89	39.09	16.75	16.77	33.65	30.65	33.54
Movement LOS	C	B	B	C	B	B	D	B	B	C	C	C
d_A, Approach Delay [s/veh]	21.19			19.53			18.31			31.28		
Approach LOS	C			B			B			C		
d_I, Intersection Delay [s/veh]	24.71											
Intersection LOS	C											
Intersection V/C	0.776											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.458			2.345			3.040			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	317			317			1317			1383		
d_b, Bicycle Delay [s]	42.50			42.50			7.00			5.70		
I_b,int, Bicycle LOS Score for Intersection	2.234			1.918			2.540			2.975		
Bicycle LOS	B			A			B			C		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	205.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.353

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	126	35	19	39	48	50	24	137	113	44	215	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	100	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	214	248	381	177	241	75	69	1017	252	314	1463	140
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	68	104	49	66	21	19	279	69	86	401	38
Total Analysis Volume [veh/h]	235	272	418	194	264	82	76	1115	276	344	1604	154
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	29	0	11	45	0	20	54	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	25	7	31	31	26	51	51
g / C, Green / Cycle	0.18	0.18	0.21	0.06	0.26	0.26	0.22	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.28	0.26	0.30	0.04	0.39	0.40	0.20	0.48	0.49
s, saturation flow rate [veh/h]	1828	1589	1790	1745	1832	1710	1745	1832	1777
c, Capacity [veh/h]	335	292	369	97	477	445	378	772	749
d1, Uniform Delay [s]	49.02	49.02	47.65	56.00	44.40	44.40	45.90	34.73	34.73
k, delay calibration	0.50	0.49	0.50	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	245.19	213.19	222.49	12.99	233.66	245.90	8.63	77.51	91.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.51	1.43	1.46	0.79	1.50	1.52	0.91	1.14	1.17
d, Delay for Lane Group [s/veh]	294.21	262.21	270.14	68.99	278.06	290.30	54.53	112.23	126.49
Lane Group LOS	F	F	F	E	F	F	D	F	F
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	32.84	25.97	33.78	2.62	45.04	43.54	10.86	38.56	40.37
50th-Percentile Queue Length [ft/ln]	821.00	649.20	844.45	65.58	1126.1	1088.4	271.62	963.96	1009.2
95th-Percentile Queue Length [veh/ln]	50.36	40.13	51.50	4.72	68.31	66.57	16.27	53.47	56.79
95th-Percentile Queue Length [ft/ln]	1259.02	1003.37	1287.51	118.04	1707.7	1664.1	406.76	1336.6	1419.7

Movement, Approach, & Intersection Results

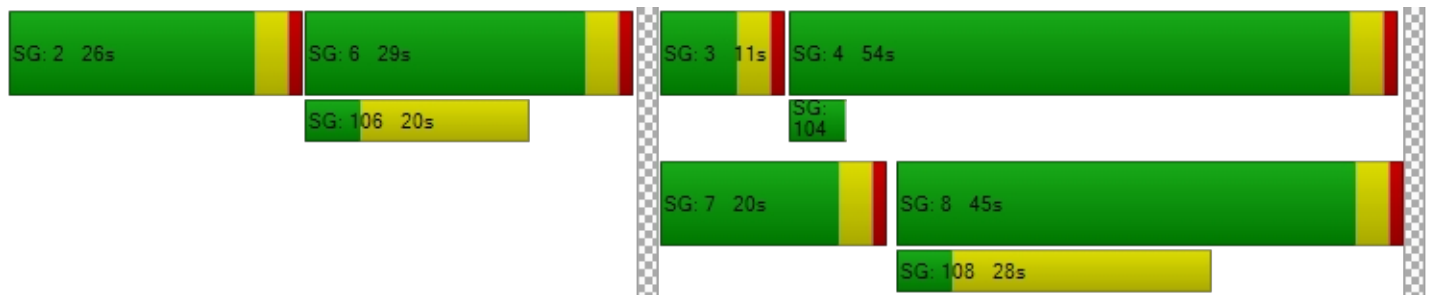
d_M, Delay for Movement [s/veh]	294.21	294.21	262.21	270.14	270.14	270.14	68.99	282.46	290.30	54.53	118.68	126.49
Movement LOS	F	F	F	F	F	F	E	F	F	D	F	F
d_A, Approach Delay [s/veh]	279.75			270.14			272.88			108.75		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	205.31											
Intersection LOS	F											
Intersection V/C	1.353											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.543	2.238	2.976	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	367	417	683	833
d_b, Bicycle Delay [s]	40.02	37.60	26.00	20.42
I_b,int, Bicycle LOS Score for Intersection	3.086	2.451	2.770	3.294
Bicycle LOS	C	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	118.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.260

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	69	12	63	15	18	75	36	127	31	40	129	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	463	171	220	177	201	171	111	830	580	279	1176	111
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	126	46	60	48	55	46	30	225	157	76	319	30
Total Analysis Volume [veh/h]	502	185	239	192	218	185	120	900	629	303	1275	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	25	0	15	47	0	19	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	21	21	10	35	35	23	48	48
g / C, Green / Cycle	0.21	0.21	0.17	0.17	0.08	0.29	0.29	0.19	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.28	0.25	0.11	0.23	0.07	0.26	0.40	0.17	0.38	0.39
s, saturation flow rate [veh/h]	1781	1701	1781	1730	1745	3489	1558	1745	1832	1778
c, Capacity [veh/h]	371	355	308	299	146	1019	455	337	736	715
d1, Uniform Delay [s]	47.54	47.54	46.03	49.66	54.19	40.55	42.51	47.33	34.84	35.21
k, delay calibration	0.50	0.45	0.11	0.40	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	175.36	110.45	2.06	172.49	11.02	11.01	185.26	8.65	23.59	27.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.35	1.20	0.62	1.35	0.82	0.88	1.38	0.90	0.95	0.97
d, Delay for Lane Group [s/veh]	222.90	157.99	48.09	222.16	65.21	51.57	227.77	55.98	58.43	62.21
Lane Group LOS	F	F	D	F	E	D	F	E	E	E
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	29.11	21.41	5.48	23.28	4.01	14.14	36.75	9.62	24.28	24.75
50th-Percentile Queue Length [ft/ln]	727.78	535.23	137.11	582.09	100.35	353.40	918.81	240.58	606.92	618.82
95th-Percentile Queue Length [veh/ln]	43.89	31.79	9.33	35.61	7.22	20.30	55.53	14.71	32.36	32.91
95th-Percentile Queue Length [ft/ln]	1097.19	794.82	233.13	890.13	180.62	507.55	1388.2	367.77	808.93	822.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	222.90	157.99	157.99	48.09	222.16	222.16	65.21	51.57	227.77	55.98	60.13	62.21
Movement LOS	F	F	F	D	F	F	E	D	F	E	E	E
d_A, Approach Delay [s/veh]	193.18			165.99			119.77			59.54		
Approach LOS	F			F			F			E		
d_I, Intersection Delay [s/veh]	118.37											
Intersection LOS	F											
Intersection V/C	1.260											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.630	2.287	3.055	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	350	717	783
d_b, Bicycle Delay [s]	37.60	40.84	24.70	22.20
I_b,int, Bicycle LOS Score for Intersection	3.088	2.541	2.920	2.960
Bicycle LOS	C	B	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	422.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.216

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	55	158	191	115	193	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	26	13	0	51	39
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	400	0	0	140
Total Hourly Volume [veh/h]	73	190	612	120	252	331
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	52	166	33	68	90
Total Analysis Volume [veh/h]	79	206	664	130	274	359
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.22	0.49	0.01	0.00	0.33	0.00
d_M, Delay for Movement [s/veh]	422.16	375.28	0.00	0.00	11.49	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	20.04	20.04	0.00	0.00	1.46	1.46
95th-Percentile Queue Length [ft/ln]	500.91	500.91	0.00	0.00	36.38	36.38
d_A, Approach Delay [s/veh]	388.28		0.00		4.97	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	66.48					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	3,433.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.561

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach						
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	126	227	0	0	54
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	310	779	778	14	6	246
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	89	223	223	4	2	70
Total Analysis Volume [veh/h]	355	892	891	16	7	282
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.47	0.01	0.01	0.00	3.56	0.84
d_M, Delay for Movement [s/veh]	14.03	0.00	0.00	0.00	3433.04	1612.09
Movement LOS	B	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	2.56	2.56	0.00	0.00	31.36	31.36
95th-Percentile Queue Length [ft/ln]	64.03	64.03	0.00	0.00	784.10	784.10
d_A, Approach Delay [s/veh]	3.99		0.00		1656.19	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	197.96					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	7.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.453

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵↵↵			↵↵↵			+			+		
Lane Configuration	↵↵↵			↵↵↵			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	2	873	10	12	682	8	2	0	0	23	0	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	85	0	2	208	71	52	0	11	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	993	10	14	917	79	54	0	11	24	0	44
Peak Hour Factor	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430	0.8430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	294	3	4	272	23	16	0	3	7	0	13
Total Analysis Volume [veh/h]	27	1178	12	17	1088	94	64	0	13	28	0	52
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	19	0	9	19	0	0	62	0	0	62	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	70	70	2	69	69	6	6
g / C, Green / Cycle	0.03	0.78	0.78	0.02	0.77	0.77	0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.02	0.32	0.32	0.01	0.32	0.32	0.06	0.04
s, saturation flow rate [veh/h]	1781	1870	1863	1781	1870	1818	1363	1784
c, Capacity [veh/h]	49	1460	1455	35	1445	1405	164	172
d1, Uniform Delay [s]	43.21	3.17	3.17	43.68	3.42	3.42	41.59	41.11
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.24	0.85	0.85	10.19	0.88	0.91	2.09	1.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.41	0.41	0.49	0.41	0.42	0.47	0.46
d, Delay for Lane Group [s/veh]	52.45	4.02	4.02	53.87	4.30	4.33	43.68	43.06
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.71	2.63	2.63	0.47	2.84	2.77	1.76	1.80
50th-Percentile Queue Length [ft/ln]	17.84	65.85	65.67	11.75	70.90	69.34	44.07	45.12
95th-Percentile Queue Length [veh/ln]	1.28	4.74	4.73	0.85	5.10	4.99	3.17	3.25
95th-Percentile Queue Length [ft/ln]	32.11	118.53	118.20	21.15	127.62	124.80	79.33	81.22

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.45	4.02	4.02	53.87	4.31	4.33	43.68	43.68	43.68	43.06	43.06	43.06
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	5.10			5.01			43.68			43.06		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	7.39											
Intersection LOS	A											
Intersection V/C	0.453											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			36.45		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.879			0.000			1.770		
Crosswalk LOS	F			C			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	333			333			1289			1289		
d_b, Bicycle Delay [s]	31.25			31.25			5.69			5.69		
I_b,int, Bicycle LOS Score for Intersection	2.564			2.549			1.687			1.692		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	718	45	109	598	91	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	103	0	3	216	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	850	47	116	838	95	181
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	240	13	33	237	27	51
Total Analysis Volume [veh/h]	960	53	131	947	107	205
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	52	0	26	45	45	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13	13	4	21	7	7
g / C, Green / Cycle	0.37	0.37	0.10	0.58	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.27	0.28	0.07	0.27	0.06	0.13
s, saturation flow rate [veh/h]	1870	1836	1781	3560	1781	1589
c, Capacity [veh/h]	692	679	183	2082	340	303
d1, Uniform Delay [s]	9.72	9.78	15.50	4.19	12.43	13.41
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.52	1.66	5.11	0.16	0.52	2.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.75	0.71	0.45	0.31	0.68
d, Delay for Lane Group [s/veh]	11.24	11.44	20.60	4.34	12.95	16.03
Lane Group LOS	B	B	C	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.62	2.65	1.11	0.83	0.63	1.42
50th-Percentile Queue Length [ft/ln]	65.38	66.30	27.63	20.77	15.79	35.60
95th-Percentile Queue Length [veh/ln]	4.71	4.77	1.99	1.50	1.14	2.56
95th-Percentile Queue Length [ft/ln]	117.68	119.34	49.74	37.39	28.42	64.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	11.33	11.44	20.60	4.34	12.95	16.03
Movement LOS	B	B	C	A	B	B
d_A, Approach Delay [s/veh]	11.34		6.32		14.97	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	9.56					
Intersection LOS	A					
Intersection V/C	0.722					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.744	2.108
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	50.00	50.00	50.00
I_b,int, Bicycle LOS Score for Intersection	4.968	5.022	4.132
Bicycle LOS	E	F	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	116.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.260

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	TTL			TTL			TTL			TTL		
Lane Configuration	TTL			TTL			TTL			TTL		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	279	317	39	124	272	292	264	327	283	47	561	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	86	0	5	185	26	12	39	0	0	13	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	120	200	31	10	0	200	100	100	108	28	200	38
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	410	616	72	144	468	530	387	479	402	77	796	240
Peak Hour Factor	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	187	22	44	142	161	118	146	122	23	242	73
Total Analysis Volume [veh/h]	498	748	87	175	569	644	470	582	488	94	967	292
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	26	43	0	19	36	0	15	49	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	40	40	14	32	32	11	45	45	5	39	39
g / C, Green / Cycle	0.18	0.34	0.34	0.11	0.27	0.27	0.09	0.38	0.38	0.04	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.28	0.23	0.23	0.10	0.30	0.41	0.14	0.30	0.32	0.03	0.27	0.18
s, saturation flow rate [veh/h]	1781	1870	1803	1781	1870	1589	3459	1870	1598	3459	3560	1589
c, Capacity [veh/h]	327	630	607	201	498	423	323	702	600	144	1153	515
d1, Uniform Delay [s]	45.33	27.85	27.90	50.11	38.70	38.70	52.54	26.24	26.92	55.84	31.32	27.78
k, delay calibration	0.50	0.22	0.22	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	251.34	2.54	2.70	10.93	85.88	246.53	208.99	9.41	13.59	4.98	7.39	4.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.53	0.67	0.68	0.87	1.14	1.52	1.46	0.80	0.84	0.65	0.84	0.57
d, Delay for Lane Group [s/veh]	296.67	30.39	30.60	61.05	124.58	285.24	261.53	35.65	40.51	60.82	38.70	32.27
Lane Group LOS	F	C	C	E	F	F	F	D	D	E	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	32.02	9.27	9.02	5.55	25.50	40.56	14.06	13.89	13.50	1.48	12.61	6.47
50th-Percentile Queue Length [ft/ln]	800.52	231.71	225.56	138.69	637.53	1014.0	351.45	347.33	337.46	37.07	315.30	161.82
95th-Percentile Queue Length [veh/ln]	49.34	14.26	13.95	9.41	36.55	62.48	22.80	20.01	19.52	2.67	18.44	10.65
95th-Percentile Queue Length [ft/ln]	1233.4	356.52	348.71	235.25	913.72	1562.0	569.98	500.15	488.09	66.73	460.91	266.13

Movement, Approach, & Intersection Results

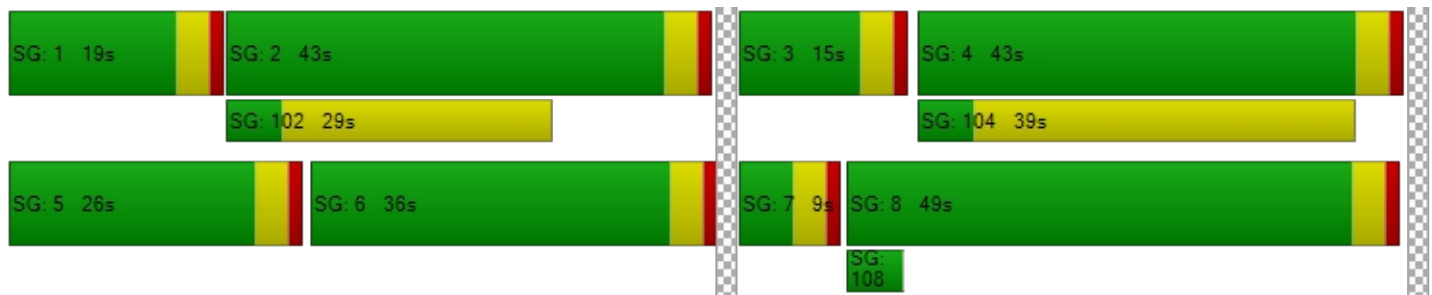
d_M, Delay for Movement [s/veh]	296.67	30.48	30.60	61.05	124.58	285.24	261.53	35.80	40.51	60.82	38.70	32.27
Movement LOS	F	C	C	E	F	F	F	D	D	E	D	C
d_A, Approach Delay [s/veh]	129.93			191.11			106.18			38.85		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	116.59											
Intersection LOS	F											
Intersection V/C	1.260											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			0.00			51.34		
I_p,int, Pedestrian LOS Score for Intersection	2.799			2.880			0.000			2.915		
Crosswalk LOS	C			C			F			C		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	650			533			750			650		
d_b, Bicycle Delay [s]	27.34			32.27			23.44			27.34		
I_b,int, Bicycle LOS Score for Intersection	2.659			2.705			2.830			2.676		
Bicycle LOS	B			B			C			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	20.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.267

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↶		⇕		⇕↶	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	7	10	822	1164	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	0	251	353	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	47	0	0	-47	47
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	85	10	1106	1517	50
Peak Hour Factor	1.0000	0.9740	0.9740	0.9740	0.9740	0.9740
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	22	3	284	389	13
Total Analysis Volume [veh/h]	0	87	10	1136	1557	51
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.27	0.00	0.01	0.02	0.00
d_M, Delay for Movement [s/veh]	0.00	20.02	0.00	0.00	0.00	0.00
Movement LOS		C		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	1.06	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	26.38	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	20.02		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.62					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	28.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.132

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	85	167	6	6	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	99	43	49	5	5	68
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	110	-8	0	0	8	101
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	10	0	0	0	0	0
Total Hourly Volume [veh/h]	223	123	223	11	19	172
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	41	74	4	6	57
Total Analysis Volume [veh/h]	296	163	296	15	25	228
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.00	0.00	0.00	0.13	0.31
d_M, Delay for Movement [s/veh]	8.77	0.00	0.00	0.00	28.84	14.76
Movement LOS	A	A	A	A	D	B
95th-Percentile Queue Length [veh/ln]	0.92	0.00	0.00	0.00	2.24	2.24
95th-Percentile Queue Length [ft/ln]	23.11	0.00	0.00	0.00	56.12	56.12
d_A, Approach Delay [s/veh]	5.66		0.00		16.15	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	6.53					
Intersection LOS	D					

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Scenario 4 4 EACP- PM

Report File: \...\EACP PM.pdf

12/1/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Sherman Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.855	16.5	B
2	Antelope Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	SEB Left	0.802	7.5	A
3	Palomar Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.768	18.0	B
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	NB Left	1.743	349.4	F
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.824	32.5	C
6	Palomar Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SB Left	0.438	72.8	F
7	Menifee Road (NS) / Matthews Road (EW)	Two-way stop	HCM 6th Edition	SEB Left	0.259	89.7	F
8	Menifee Road (NS) / Rouse Road (EW)	Signalized	HCM 6th Edition	EB Right	0.629	11.6	B
9	Menifee Road (NS) / Heritage Lake Drive (EW)	Signalized	HCM 6th Edition	SB Left	0.567	5.8	A
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	NB Left	0.829	48.6	D
11	Project Driveway (NS) / SR - 74 (EW)	Two-way stop	HCM 6th Edition	SB Right	0.203	15.8	C
12	Palomar Road (NS) / East Project Driveway (EW)	Two-way stop	HCM 6th Edition	EB Left	0.102	20.5	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Sherman Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	16.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

Intersection Setup

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Approach	↗↘			↑			↖↗			↖↗		
Lane Configuration	↗↘			↑			↖↗			↖↗		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	180.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Base Volume Input [veh/h]	43	9	135	15	5	9	57	817	14	14	1056	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	39	0	41	1	0	0	7	373	1	0	468	65
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	9	181	17	5	9	66	1223	16	15	1566	94
Peak Hour Factor	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	2	49	5	1	2	18	328	4	4	421	25
Total Analysis Volume [veh/h]	90	10	194	18	5	10	71	1314	17	16	1682	101
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	9	49	0	33	73	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	10	0	0	22	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	52	52	52	52	52	52	52	52	52
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	9	3	30	30	1	28	28
g / C, Green / Cycle	0.17	0.17	0.17	0.06	0.58	0.58	0.02	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.07	0.12	0.03	0.04	0.36	0.36	0.01	0.49	0.49
s, saturation flow rate [veh/h]	1406	1589	958	1745	1832	1824	1745	1832	1796
c, Capacity [veh/h]	366	265	266	109	1068	1063	35	991	971
d1, Uniform Delay [s]	19.42	20.59	18.54	23.86	7.13	7.13	25.22	10.72	10.87
k, delay calibration	0.11	0.11	0.11	0.11	0.18	0.18	0.11	0.34	0.35
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	3.89	0.21	6.51	1.00	1.01	8.87	9.36	10.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.73	0.12	0.65	0.62	0.62	0.45	0.90	0.92
d, Delay for Lane Group [s/veh]	19.82	24.49	18.74	30.37	8.13	8.14	34.09	20.08	21.70
Lane Group LOS	B	C	B	C	A	A	C	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.02	2.31	0.32	0.98	3.59	3.58	0.27	9.11	9.51
50th-Percentile Queue Length [ft/ln]	25.60	57.67	8.07	24.61	89.70	89.48	6.71	227.87	237.85
95th-Percentile Queue Length [veh/ln]	1.84	4.15	0.58	1.77	6.46	6.44	0.48	14.07	14.57
95th-Percentile Queue Length [ft/ln]	46.08	103.81	14.52	44.30	161.47	161.07	12.08	351.65	364.32

Movement, Approach, & Intersection Results

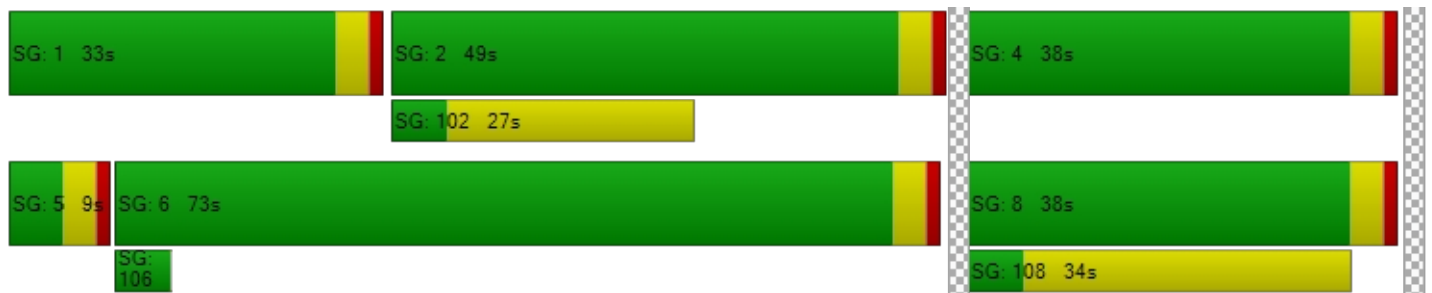
d_M, Delay for Movement [s/veh]	19.82	19.82	24.49	18.74	18.74	18.74	30.37	8.14	8.14	34.09	20.84	21.70
Movement LOS	B	B	C	B	B	B	C	A	A	C	C	C
d_A, Approach Delay [s/veh]	22.90			18.74			9.26			21.01		
Approach LOS	C			B			A			C		
d_I, Intersection Delay [s/veh]	16.48											
Intersection LOS	B											
Intersection V/C	0.855											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.109			1.767			2.983			0.000		
Crosswalk LOS	B			A			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			750			1150		
d_b, Bicycle Delay [s]	30.82			30.82			23.44			10.84		
I_b,int, Bicycle LOS Score for Intersection	2.045			1.614			2.716			3.044		
Bicycle LOS	B			A			B			C		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Antelope Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.802

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration	↙		↑↑		↗↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	25	17	784	33	30	962
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	96	10	317	95	17	437
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	122	28	1132	129	48	1437
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	7	301	34	13	382
Total Analysis Volume [veh/h]	130	30	1203	137	51	1527
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	24	0	84	0	12	96
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	0	0	23	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	C	L	C
C, Cycle Length [s]	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	17	17	2	23
g / C, Green / Cycle	0.12	0.48	0.48	0.06	0.65
(v / s)_i Volume / Saturation Flow Rate	0.09	0.37	0.38	0.03	0.44
s, saturation flow rate [veh/h]	1742	1832	1769	1745	3489
c, Capacity [veh/h]	217	880	849	99	2266
d1, Uniform Delay [s]	14.94	7.55	7.71	16.24	3.87
k, delay calibration	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.82	1.40	1.69	4.15	0.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.76	0.79	0.52	0.67
d, Delay for Lane Group [s/veh]	19.76	8.94	9.39	20.38	4.22
Lane Group LOS	B	A	A	C	A
Critical Lane Group	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.30	2.68	2.79	0.45	0.86
50th-Percentile Queue Length [ft/ln]	32.39	67.07	69.73	11.20	21.61
95th-Percentile Queue Length [veh/ln]	2.33	4.83	5.02	0.81	1.56
95th-Percentile Queue Length [ft/ln]	58.30	120.73	125.51	20.16	38.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.76	19.76	9.14	9.39	20.38	4.22
Movement LOS	B	B	A	A	C	A
d_A, Approach Delay [s/veh]	19.76		9.17		4.75	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	7.45					
Intersection LOS	A					
Intersection V/C	0.802					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.900	0.000	0.000
Crosswalk LOS	A	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.396	5.238	5.434
Bicycle LOS	E	F	F

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Palomar Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.768

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	100.00	250.00	100.00	100.00	230.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	33	61	151	16	27	30	33	908	19	77	703	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	14	13	81	33	34	68	442	23	22	322	103
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	77	0	0	0	0	-77	77
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	10	0	0	12	0	6	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	87	170	98	73	142	108	1386	43	102	976	205
Peak Hour Factor	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410	0.9410
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	23	45	26	19	38	29	368	11	27	259	54
Total Analysis Volume [veh/h]	53	92	181	104	78	151	115	1473	46	108	1037	218
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	23	0	0	23	0	45	85	0	12	52	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	53	53	53	53	53	53	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	11	11	11	5	25	25	4	25	25
g / C, Green / Cycle	0.22	0.22	0.22	0.22	0.22	0.22	0.09	0.48	0.48	0.08	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.11	0.08	0.04	0.09	0.06	0.42	0.42	0.06	0.35	0.35
s, saturation flow rate [veh/h]	1151	1870	1589	1304	1870	1589	1781	1832	1813	1745	1832	1724
c, Capacity [veh/h]	242	400	340	312	400	340	156	873	863	145	865	813
d1, Uniform Delay [s]	22.88	17.20	18.45	21.53	17.06	18.07	23.55	12.42	12.47	23.71	11.38	11.44
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.25	0.26	0.11	0.17	0.18
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.45	0.29	1.29	0.62	0.24	0.91	6.66	6.48	6.83	7.34	2.04	2.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.22	0.23	0.53	0.33	0.20	0.44	0.74	0.87	0.88	0.74	0.74	0.75
d, Delay for Lane Group [s/veh]	23.34	17.49	19.75	22.15	17.30	18.98	30.22	18.91	19.29	31.05	13.42	13.74
Lane Group LOS	C	B	B	C	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.61	0.87	1.89	1.16	0.73	1.53	1.58	7.86	7.91	1.52	5.34	5.15
50th-Percentile Queue Length [ft/ln]	15.24	21.69	47.14	29.03	18.22	38.16	39.56	196.51	197.78	37.88	133.50	128.78
95th-Percentile Queue Length [veh/ln]	1.10	1.56	3.39	2.09	1.31	2.75	2.85	12.46	12.52	2.73	9.13	8.87
95th-Percentile Queue Length [ft/ln]	27.44	39.04	84.85	52.25	32.80	68.69	71.21	311.46	313.10	68.18	228.24	221.84

Movement, Approach, & Intersection Results

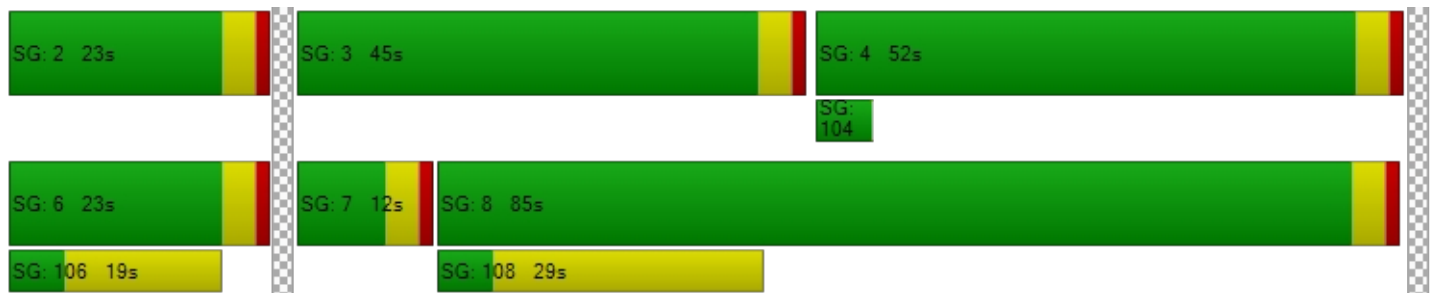
d_M, Delay for Movement [s/veh]	23.34	17.49	19.75	22.15	17.30	18.98	30.22	19.09	19.29	31.05	13.54	13.74
Movement LOS	C	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	19.69			19.57			19.88			14.96		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	18.00											
Intersection LOS	B											
Intersection V/C	0.768											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.424			2.331			2.951			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	317			317			1350			800		
d_b, Bicycle Delay [s]	42.50			42.50			6.34			21.60		
I_b,int, Bicycle LOS Score for Intersection	2.098			1.834			2.908			2.684		
Bicycle LOS	B			A			C			B		

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	349.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.743

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	←→			↑			←→			←→		
Lane Configuration	←→			↑			←→			←→		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	231	53	91	23	46	39	50	256	231	73	177	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	100	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	314	206	323	107	170	64	92	1313	300	251	1048	128
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	109	71	112	37	59	22	32	455	104	87	363	44
Total Analysis Volume [veh/h]	435	285	447	148	235	89	127	1819	416	348	1452	177
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	24	0	14	54	0	16	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	22	20	10	36	36	26	52	52
g / C, Green / Cycle	0.18	0.18	0.17	0.09	0.30	0.30	0.22	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.40	0.28	0.26	0.07	0.61	0.65	0.20	0.44	0.46
s, saturation flow rate [veh/h]	1815	1589	1783	1745	1832	1719	1745	1832	1765
c, Capacity [veh/h]	333	292	294	151	549	515	382	792	762
d1, Uniform Delay [s]	49.02	49.02	50.14	54.04	42.04	42.04	45.77	34.10	34.10
k, delay calibration	0.50	0.50	0.49	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	532.62	256.26	288.08	11.81	471.91	532.10	8.66	39.59	52.41
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	2.16	1.53	1.61	0.84	2.03	2.17	0.91	1.03	1.07
d, Delay for Lane Group [s/veh]	581.64	305.28	338.21	65.84	513.95	574.14	54.43	73.68	86.50
Lane Group LOS	F	F	F	E	F	F	D	F	F
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	59.21	29.46	32.29	4.28	88.07	91.26	10.99	31.08	32.65
50th-Percentile Queue Length [ft/ln]	1480.22	736.44	807.14	106.88	2201.7	2281.4	274.72	776.95	816.13
95th-Percentile Queue Length [veh/ln]	92.45	45.81	50.07	7.67	138.37	144.32	16.43	41.11	44.15
95th-Percentile Queue Length [ft/ln]	2311.17	1145.28	1251.78	191.65	3459.1	3608.0	410.63	1027.8	1103.7

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	581.64	581.64	305.28	338.21	338.21	338.21	65.84	537.16	574.14	54.43	79.31	86.50
Movement LOS	F	F	F	F	F	F	E	F	F	D	E	F
d_A, Approach Delay [s/veh]	475.78			338.21			518.33			75.58		
Approach LOS	F			F			F			E		
d_I, Intersection Delay [s/veh]	349.38											
Intersection LOS	F											
Intersection V/C	1.743											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.659	2.247	3.161	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	367	333	833	867
d_b, Bicycle Delay [s]	40.02	41.67	20.42	19.27
I_b,int, Bicycle LOS Score for Intersection	3.485	2.338	3.508	3.191
Bicycle LOS	C	B	D	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	32.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.824

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔↔↔			↔↔		
Lane Configuration	↔			↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	93	22	60	10	18	48	85	165	120	76	148	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	197	70	130	95	58	104	152	1302	265	128	1052	81
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	18	34	25	15	27	40	340	69	33	275	21
Total Analysis Volume [veh/h]	206	73	136	99	61	109	159	1359	277	134	1098	85
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	23	0	9	40	0	9	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	12	12	11	47	47	10	46	46
g / C, Green / Cycle	0.15	0.15	0.12	0.12	0.11	0.47	0.47	0.10	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.06	0.10	0.09	0.39	0.18	0.08	0.33	0.33
s, saturation flow rate [veh/h]	1781	1677	1781	1680	1745	3489	1558	1745	1832	1787
c, Capacity [veh/h]	267	251	223	210	193	1635	730	169	834	813
d1, Uniform Delay [s]	40.93	41.35	40.59	42.65	43.60	23.16	17.20	44.24	22.08	22.11
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.73	7.01	1.39	7.25	8.59	5.08	1.50	8.12	5.26	5.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.83	0.44	0.81	0.83	0.83	0.38	0.79	0.72	0.72
d, Delay for Lane Group [s/veh]	45.65	48.36	41.98	49.90	52.18	28.24	18.70	52.36	27.34	27.56
Lane Group LOS	D	D	D	D	D	C	B	D	C	C
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.19	5.45	2.33	4.48	4.28	14.35	4.30	3.61	12.09	11.88
50th-Percentile Queue Length [ft/ln]	129.66	136.15	58.36	112.00	107.04	358.71	107.45	90.21	302.17	296.90
95th-Percentile Queue Length [veh/ln]	8.92	9.27	4.20	7.95	7.68	20.56	7.70	6.50	17.79	17.53
95th-Percentile Queue Length [ft/ln]	223.03	231.83	105.05	198.78	191.88	514.01	192.45	162.38	444.71	438.19

Movement, Approach, & Intersection Results

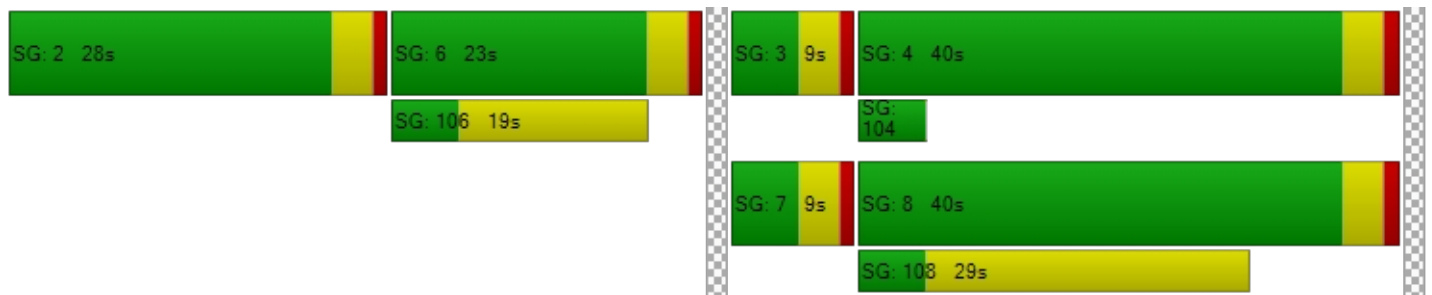
d_M, Delay for Movement [s/veh]	45.65	48.36	48.36	41.98	49.90	49.90	52.18	28.24	18.70	52.36	27.44	27.56
Movement LOS	D	D	D	D	D	D	D	C	B	D	C	C
d_A, Approach Delay [s/veh]	47.01			46.99			28.89			29.98		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	32.53											
Intersection LOS	C											
Intersection V/C	0.824											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.235	2.137	2.981	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	480	380	720	720
d_b, Bicycle Delay [s]	28.88	32.81	20.48	20.48
I_b,int, Bicycle LOS Score for Intersection	2.244	2.003	3.040	2.646
Bicycle LOS	B	B	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	72.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.438

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration	↙		↑		↘	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	21	108	61	28	227	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	20	58	43	0	43	26
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	400	0	0	140
Total Hourly Volume [veh/h]	42	170	506	29	279	262
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	45	133	8	73	69
Total Analysis Volume [veh/h]	44	179	532	30	293	275
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.44	0.33	0.01	0.00	0.29	0.00
d_M, Delay for Movement [s/veh]	72.79	43.69	0.00	0.00	10.02	0.00
Movement LOS	F	E	A	A	B	A
95th-Percentile Queue Length [veh/ln]	5.90	5.90	0.00	0.00	1.21	1.21
95th-Percentile Queue Length [ft/ln]	147.47	147.47	0.00	0.00	30.27	30.27
d_A, Approach Delay [s/veh]	49.43		0.00		5.17	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	10.32					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Two-way stop	Delay (sec / veh):	89.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.259

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration	↑		↑		↑	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	43	391	302	0	0	46
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	783	695	3	14	153
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	211	188	1	4	41
Total Analysis Volume [veh/h]	129	846	751	3	15	165
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.01	0.01	0.00	0.26	0.40
d_M, Delay for Movement [s/veh]	9.95	0.00	0.00	0.00	89.67	36.30
Movement LOS	A	A	A	A	F	E
95th-Percentile Queue Length [veh/ln]	0.53	0.53	0.00	0.00	4.27	4.27
95th-Percentile Queue Length [ft/ln]	13.23	13.23	0.00	0.00	106.87	106.87
d_A, Approach Delay [s/veh]	1.32		0.00		40.75	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	4.51					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 8: Menifee Road (NS) / Rouse Road (EW)

Control Type:	Signalized	Delay (sec / veh):	11.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.629

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	432	27	24	464	0	0	0	0	14	0	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	221	0	3	149	196	210	0	66	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	58	670	28	28	632	196	210	0	66	15	0	20
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	176	7	7	166	51	55	0	17	4	0	5
Total Analysis Volume [veh/h]	61	702	29	29	662	205	220	0	69	16	0	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Protect	Permis	Permis	Permis	Permis	Permis	Permis	Permis	Permis
Signal Group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	0	0	18	9	0	0	72	0	0	72	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	0	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No			No	No			No			No	
Maximum Recall	No			No	No			No			No	
Pedestrian Recall	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	5	77	68	68	5	5
g / C, Green / Cycle	0.05	0.05	0.86	0.76	0.76	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.02	0.24	0.24	0.04	0.27
s, saturation flow rate [veh/h]	1781	1589	1769	1870	1720	1589	59
c, Capacity [veh/h]	91	81	1526	1420	1307	89	83
d1, Uniform Delay [s]	41.98	41.30	1.23	3.43	3.43	41.93	45.00
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.11	0.31
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.26	2.64	0.00	0.59	0.64	13.22	3.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.36	0.02	0.32	0.32	0.77	0.19
d, Delay for Lane Group [s/veh]	50.24	43.94	1.24	4.02	4.07	55.15	48.15
Lane Group LOS	D	D	A	A	A	E	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.53	0.68	0.02	2.08	1.93	1.82	0.43
50th-Percentile Queue Length [ft/ln]	38.15	16.89	0.59	51.99	48.32	45.57	10.76
95th-Percentile Queue Length [veh/ln]	2.75	1.22	0.04	3.74	3.48	3.28	0.77
95th-Percentile Queue Length [ft/ln]	68.67	30.40	1.06	93.58	86.98	82.02	19.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.24	0.00	43.94	1.24	4.04	4.07	0.00	55.15	55.15	48.15	48.15	0.00
Movement LOS	D		D	A	A	A		E	E	D	D	
d_A, Approach Delay [s/veh]	48.21			3.95			55.15			48.15		
Approach LOS	D			A			E			D		
d_I, Intersection Delay [s/veh]	11.63											
Intersection LOS	B											
Intersection V/C	0.629											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			5.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			40.14		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.351			0.000			1.763		
Crosswalk LOS	F			B			F			A		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	0			111			1511			1511		
d_b, Bicycle Delay [s]	45.00			40.14			2.69			2.69		
I_b,int, Bicycle LOS Score for Intersection	4.132			2.299			1.673			1.586		
Bicycle LOS	D			B			A			A		

Sequence

Ring 1	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 9: Menifee Road (NS) / Heritage Lake Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	5.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.567

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	150.00	100.00	150.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	423	52	38	436	28	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	275	0	4	211	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	715	54	44	664	29	42
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	194	15	12	180	8	11
Total Analysis Volume [veh/h]	775	59	48	720	31	46
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal Group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	33	0	50	83	37	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	0	0	0	17	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	R
C, Cycle Length [s]	24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	1	14	2	2
g / C, Green / Cycle	0.36	0.36	0.06	0.58	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.22	0.23	0.03	0.20	0.02	0.03
s, saturation flow rate [veh/h]	1870	1824	1781	3560	1781	1589
c, Capacity [veh/h]	672	656	105	2078	153	136
d1, Uniform Delay [s]	6.39	6.43	11.01	2.63	10.29	10.41
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.94	1.03	3.11	0.10	0.65	1.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.64	0.46	0.35	0.20	0.34
d, Delay for Lane Group [s/veh]	7.33	7.46	14.12	2.73	10.94	11.86
Lane Group LOS	A	A	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.93	0.95	0.26	0.03	0.13	0.21
50th-Percentile Queue Length [ft/ln]	23.26	23.70	6.47	0.72	3.24	5.20
95th-Percentile Queue Length [veh/ln]	1.67	1.71	0.47	0.05	0.23	0.37
95th-Percentile Queue Length [ft/ln]	41.87	42.65	11.65	1.29	5.83	9.36

Movement, Approach, & Intersection Results

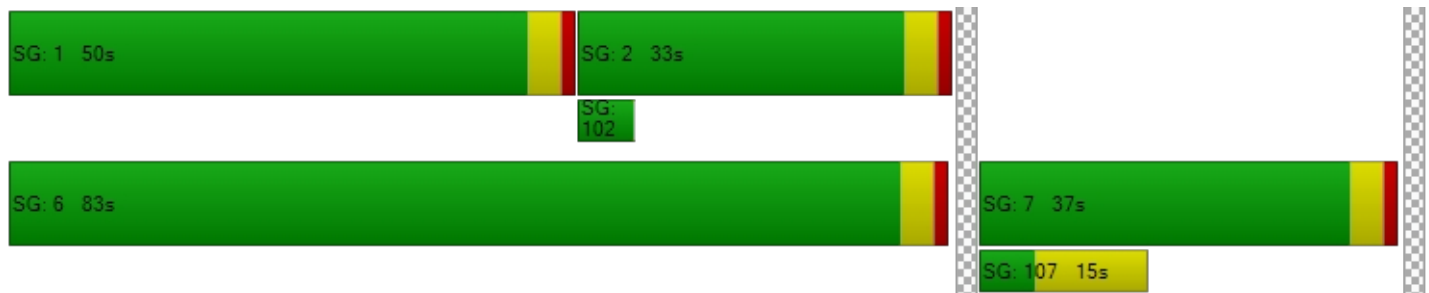
d_M, Delay for Movement [s/veh]	7.39	7.46	14.12	2.73	10.94	11.86
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	7.40		3.44		11.49	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	5.77					
Intersection LOS	A					
Intersection V/C	0.567					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.625	2.015
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.820	4.766	4.132
Bicycle LOS	E	E	D

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	48.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.829

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T			T			T			T		
Lane Configuration	T			T			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	152	186	29	47	219	193	233	298	248	17	212	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	239	0	7	184	20	30	26	0	0	43	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	120	200	31	10	0	200	100	100	108	28	200	38
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	632	61	66	412	421	372	436	366	46	463	88
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	170	16	18	111	113	100	117	98	12	124	24
Total Analysis Volume [veh/h]	299	680	66	71	443	453	400	469	394	49	498	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	23	40	0	20	37	0	17	51	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	0	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	46	46	6	33	33	13	48	48	4	39	39
g / C, Green / Cycle	0.16	0.38	0.38	0.05	0.27	0.27	0.11	0.40	0.40	0.03	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.17	0.20	0.20	0.04	0.24	0.28	0.12	0.25	0.25	0.01	0.14	0.06
s, saturation flow rate [veh/h]	1781	1870	1812	1781	1870	1589	3459	1870	1593	3459	3560	1589
c, Capacity [veh/h]	282	714	692	91	514	437	381	748	637	116	1152	514
d1, Uniform Delay [s]	47.33	22.22	22.22	55.24	35.93	38.03	51.20	21.62	21.72	56.18	26.41	24.33
k, delay calibration	0.21	0.11	0.11	0.11	0.35	0.48	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	51.77	0.65	0.67	13.25	12.85	52.38	36.33	3.83	4.63	2.42	1.18	0.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.06	0.53	0.53	0.78	0.86	1.04	1.05	0.62	0.63	0.42	0.43	0.18
d, Delay for Lane Group [s/veh]	99.10	22.87	22.89	68.49	48.78	90.41	87.53	25.45	26.35	58.60	27.59	25.12
Lane Group LOS	F	C	C	E	D	F	F	C	C	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.08	6.62	6.42	2.42	13.02	18.25	7.41	8.89	7.86	0.76	4.85	1.76
50th-Percentile Queue Length [ft/ln]	302.04	165.53	160.58	60.53	325.47	456.28	185.30	222.37	196.44	18.99	121.14	44.09
95th-Percentile Queue Length [veh/ln]	18.29	10.84	10.58	4.36	18.94	25.84	12.11	13.79	12.45	1.37	8.46	3.17
95th-Percentile Queue Length [ft/ln]	457.15	271.03	264.49	108.96	473.40	646.03	302.79	344.65	311.36	34.18	211.40	79.36

Movement, Approach, & Intersection Results

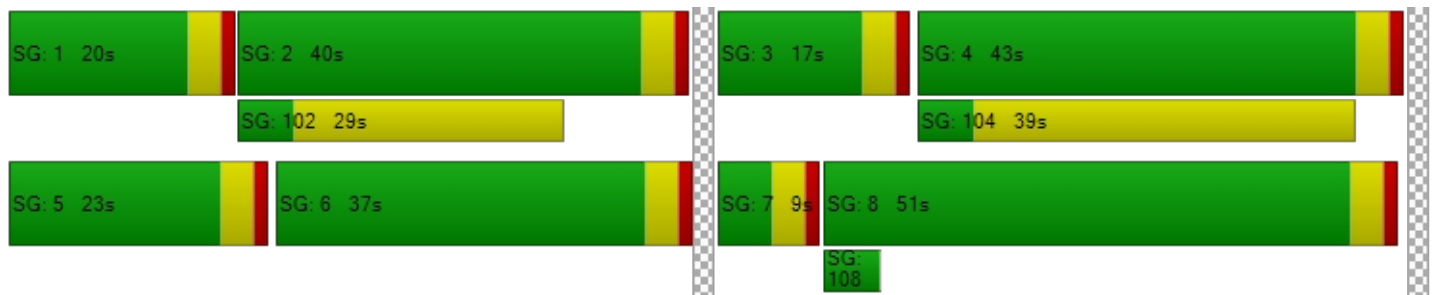
d_M, Delay for Movement [s/veh]	99.10	22.88	22.89	68.49	48.78	90.41	87.53	25.46	26.35	58.60	27.59	25.12
Movement LOS	F	C	C	E	D	F	F	C	C	E	C	C
d_A, Approach Delay [s/veh]	44.69			69.73			45.40			29.59		
Approach LOS	D			E			D			C		
d_I, Intersection Delay [s/veh]	48.62											
Intersection LOS	D											
Intersection V/C	0.829											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			0.00			51.34		
I_p,int, Pedestrian LOS Score for Intersection	2.692			2.733			0.000			2.783		
Crosswalk LOS	B			B			F			C		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	600			550			783			650		
d_b, Bicycle Delay [s]	29.40			31.54			22.20			27.34		
I_b,int, Bicycle LOS Score for Intersection	2.422			2.357			2.602			2.089		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project Driveway (NS) / SR -74 (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.203

Intersection Setup

Name	Southbound		Eastbound		Westbound	
Approach						
Lane Configuration	↗		↑↑		↑↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Southbound		Eastbound		Westbound	
Base Volume Input [veh/h]	0	5	6	980	793	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	40	0	533	372	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	35	0	0	-35	35
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	80	6	1552	1162	35
Peak Hour Factor	1.0000	0.9360	0.9360	0.9360	0.9360	0.9360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	21	2	415	310	9
Total Analysis Volume [veh/h]	0	85	6	1658	1241	37
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	15	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.20	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	15.78	0.00	0.00	0.00	0.00
Movement LOS		C		A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.75	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	18.77	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.78		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.44					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 12: Palomar Road (NS) / East Project Driveway (EW)

Control Type:	Two-way stop	Delay (sec / veh):	20.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.102

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	4	114	74	7	12	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	128	56	62	7	7	86
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	83	-6	0	0	6	77
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	6	0	0	0	0	0
Total Hourly Volume [veh/h]	221	169	139	14	25	175
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	47	39	4	7	49
Total Analysis Volume [veh/h]	246	188	155	16	28	195
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.00	0.00	0.00	0.10	0.22
d_M, Delay for Movement [s/veh]	8.10	0.00	0.00	0.00	20.53	11.55
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.63	0.00	0.00	0.00	1.40	1.40
95th-Percentile Queue Length [ft/ln]	15.83	0.00	0.00	0.00	34.91	34.91
d_A, Approach Delay [s/veh]	4.59		0.00		12.67	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	5.82					
Intersection LOS	C					

**EXISTING PLUS PROJECT
CONDITION WITH
IMPROVEMENTS**

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Scenario 2 2 EP-AM MIT

Report File: \\...\EP AM MIT.pdf

8/4/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.870	28.5	C
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.939	50.8	D
7	Menifee Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	SEB Right	0.855	17.6	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	28.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.870

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	0	0	0	0	5	5	26	10	0	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	205	348	133	186	29	48	872	144	260	1130	122
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	56	95	36	51	8	13	239	39	71	310	33
Total Analysis Volume [veh/h]	122	225	382	146	204	32	53	956	158	285	1239	134
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	49	0	0	49	0	25	32	0	9	16	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	25	4	37	37	17	50	50
g / C, Green / Cycle	0.27	0.27	0.27	0.27	0.27	0.04	0.41	0.41	0.19	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.11	0.12	0.24	0.13	0.13	0.03	0.31	0.31	0.16	0.38	0.38
s, saturation flow rate [veh/h]	1144	1870	1589	1156	1826	1745	1832	1743	1745	1832	1771
c, Capacity [veh/h]	247	513	436	258	501	73	744	707	325	1008	975
d1, Uniform Delay [s]	36.75	26.94	31.20	36.84	27.22	42.62	23.07	23.09	35.62	14.63	14.79
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.52	0.59	5.70	1.93	0.69	12.61	7.43	7.85	7.45	3.81	4.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.44	0.88	0.56	0.47	0.72	0.77	0.77	0.88	0.69	0.70
d, Delay for Lane Group [s/veh]	38.27	27.53	36.90	38.78	27.91	55.22	30.51	30.94	43.07	18.44	18.94
Lane Group LOS	D	C	D	D	C	E	C	C	D	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.63	3.98	8.36	3.19	4.23	1.41	11.46	11.01	6.62	10.37	10.36
50th-Percentile Queue Length [ft/ln]	65.64	99.62	208.99	79.72	105.73	35.23	286.41	275.14	165.56	259.20	258.97
95th-Percentile Queue Length [veh/ln]	4.73	7.17	13.10	5.74	7.60	2.54	17.01	16.45	10.84	15.65	15.64
95th-Percentile Queue Length [ft/ln]	118.16	179.32	327.53	143.50	190.04	63.41	425.18	411.15	271.07	391.21	390.92

Movement, Approach, & Intersection Results

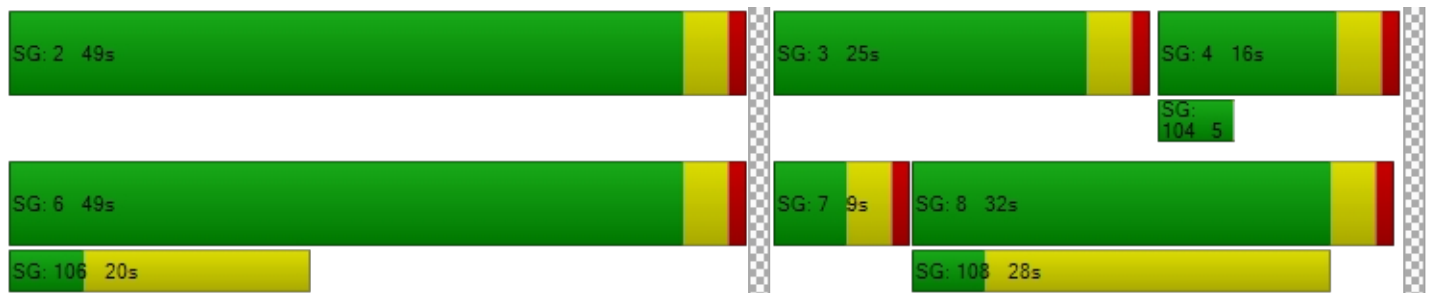
d_M, Delay for Movement [s/veh]	38.27	27.53	36.90	38.78	27.91	27.91	55.22	30.68	30.94	43.07	18.66	18.94
Movement LOS	D	C	D	D	C	C	E	C	C	D	B	B
d_A, Approach Delay [s/veh]	34.24			32.06			31.83			22.88		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.53											
Intersection LOS	C											
Intersection V/C	0.870											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.468	2.200	2.974	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	1000	622	267
d_b, Bicycle Delay [s]	11.25	11.25	21.36	33.80
I_b,int, Bicycle LOS Score for Intersection	2.762	2.190	2.522	2.927
Bicycle LOS	C	B	B	C

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	50.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.939

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	5	5	16	5	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	384	153	151	156	176	97	77	692	533	230	1023	102
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	104	41	41	42	48	26	21	188	145	62	277	28
Total Analysis Volume [veh/h]	416	166	164	169	191	105	84	751	578	249	1110	111
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	5	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	35	0	0	26	0	11	33	33	26	48	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	24	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No	No	No	No	
Maximum Recall		No			No		No	No	No	No	No	
Pedestrian Recall		No			No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	22	22	7	32	67	19	44	44
g / C, Green / Cycle	0.26	0.26	0.18	0.18	0.06	0.26	0.56	0.16	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.23	0.19	0.09	0.17	0.05	0.22	0.37	0.14	0.34	0.34
s, saturation flow rate [veh/h]	1781	1719	1781	1760	1745	3489	1558	1745	1832	1775
c, Capacity [veh/h]	460	444	325	321	100	922	866	282	675	654
d1, Uniform Delay [s]	43.10	40.88	44.31	48.22	56.02	41.40	18.83	49.22	36.12	36.27
k, delay calibration	0.38	0.26	0.11	0.21	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	19.54	5.90	1.29	18.21	16.27	7.82	4.06	8.91	19.13	20.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.74	0.52	0.92	0.84	0.81	0.67	0.88	0.91	0.92
d, Delay for Lane Group [s/veh]	62.64	46.78	45.60	66.43	72.29	49.21	22.89	58.13	55.25	56.88
Lane Group LOS	E	D	D	E	E	D	C	E	E	E
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	14.35	9.65	4.67	10.30	2.97	11.35	11.93	7.98	20.54	20.37
50th-Percentile Queue Length [ft/ln]	358.84	241.23	116.69	257.49	74.25	283.84	298.15	199.53	513.59	509.29
95th-Percentile Queue Length [veh/ln]	20.57	14.74	8.21	15.56	5.35	16.88	17.59	12.61	27.98	27.77
95th-Percentile Queue Length [ft/ln]	514.17	368.58	205.26	389.07	133.66	421.99	439.74	315.36	699.42	694.35

Movement, Approach, & Intersection Results

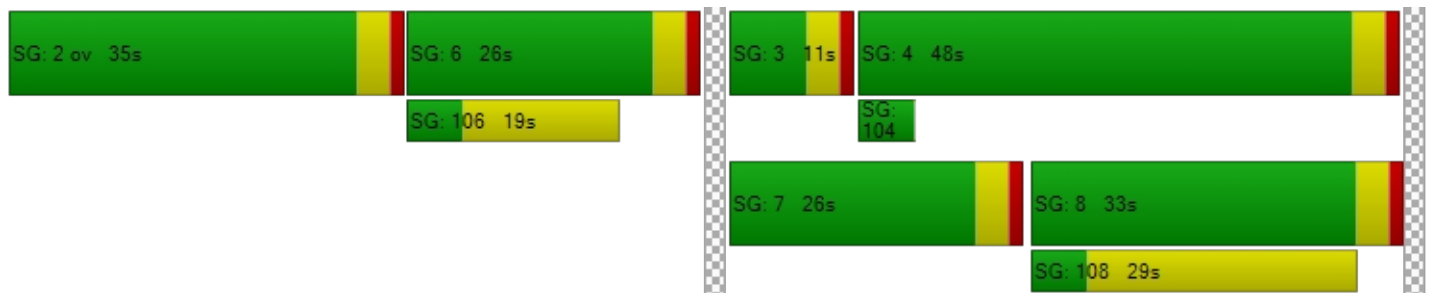
d_M, Delay for Movement [s/veh]	62.64	46.78	46.78	45.60	66.43	66.43	72.29	49.21	22.89	58.13	55.97	56.88
Movement LOS	E	D	D	D	E	E	E	D	C	E	E	E
d_A, Approach Delay [s/veh]	55.62			58.86			39.82			56.41		
Approach LOS	E			E			D			E		
d_I, Intersection Delay [s/veh]	50.82											
Intersection LOS	D											
Intersection V/C	0.939											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.529			2.224			2.963			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	517			367			483			733		
d_b, Bicycle Delay [s]	33.00			40.02			34.50			24.07		
I_b,int, Bicycle LOS Score for Intersection	2.791			2.327			2.725			2.772		
Bicycle LOS	C			B			B			C		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach						
Lane Configuration					/	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	26	10	0	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	286	654	540	13	6	201
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	82	187	155	4	2	58
Total Analysis Volume [veh/h]	328	749	619	15	7	230
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal Group	5	2	6	0	7	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	17	45	28	0	15	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C
C, Cycle Length [s]	56	56	56	56
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13	38	21	10
g / C, Green / Cycle	0.22	0.67	0.38	0.18
(v / s)_i Volume / Saturation Flow Rate	0.18	0.40	0.34	0.15
s, saturation flow rate [veh/h]	1781	1870	1862	1595
c, Capacity [veh/h]	398	1261	708	294
d1, Uniform Delay [s]	20.92	5.01	16.48	22.10
k, delay calibration	0.11	0.27	0.19	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.36	1.13	7.13	5.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.59	0.90	0.81
d, Delay for Lane Group [s/veh]	25.28	6.14	23.61	27.27
Lane Group LOS	C	A	C	C
Critical Lane Group	Yes	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	4.22	3.18	7.98	3.18
50th-Percentile Queue Length [ft/ln]	105.54	79.54	199.50	79.54
95th-Percentile Queue Length [veh/ln]	7.59	5.73	12.61	5.73
95th-Percentile Queue Length [ft/ln]	189.77	143.18	315.32	143.16

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.28	6.14	23.61	23.61	27.27	27.27
Movement LOS	C	A	C	C	C	C
d_A, Approach Delay [s/veh]	11.97		23.61		27.27	
Approach LOS	B		C		C	
d_I, Intersection Delay [s/veh]	17.62					
Intersection LOS	B					
Intersection V/C	0.855					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.909	5.179	4.523
Bicycle LOS	F	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Scenario 8 EP-PM MIT

Report File: \\...\EP PM MIT.pdf

8/4/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.894	32.7	C
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.588	19.1	B
7	Menifee Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	SEB Right	0.747	9.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	32.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.894

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔↔			↔↔			↔↔↔			↔↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	0	0	0	0	7	7	33	13	0	34	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	114	147	223	81	119	31	47	1049	79	171	775	87
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	51	77	28	41	11	16	363	27	59	268	30
Total Analysis Volume [veh/h]	158	204	309	112	165	43	65	1453	109	237	1073	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	29	0	19	32	0	49	62	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	25	5	56	56	17	68	68
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.05	0.51	0.51	0.16	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.13	0.11	0.19	0.10	0.12	0.04	0.43	0.43	0.14	0.33	0.33
s, saturation flow rate [veh/h]	1174	1870	1589	1178	1804	1745	1832	1788	1745	1832	1769
c, Capacity [veh/h]	194	425	362	202	410	85	930	908	272	1127	1088
d1, Uniform Delay [s]	50.08	36.83	40.73	47.52	37.09	51.70	23.34	23.53	45.36	12.17	12.22
k, delay calibration	0.11	0.11	0.24	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.00	0.84	11.86	2.38	0.97	13.45	9.31	10.08	8.54	1.83	1.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.48	0.85	0.56	0.51	0.77	0.85	0.85	0.87	0.54	0.54
d, Delay for Lane Group [s/veh]	58.08	37.67	52.59	49.91	38.06	65.16	32.65	33.62	53.90	14.01	14.15
Lane Group LOS	E	D	D	D	D	E	C	C	D	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.80	4.84	9.14	3.12	4.98	2.08	19.14	19.19	6.93	8.58	8.40
50th-Percentile Queue Length [ft/ln]	120.07	121.09	228.48	78.02	124.55	52.12	478.52	479.79	173.19	214.49	210.00
95th-Percentile Queue Length [veh/ln]	8.40	8.45	14.10	5.62	8.64	3.75	26.32	26.38	11.24	13.38	13.15
95th-Percentile Queue Length [ft/ln]	209.92	211.32	352.43	140.44	216.06	93.82	657.89	659.40	281.11	334.58	328.84

Movement, Approach, & Intersection Results

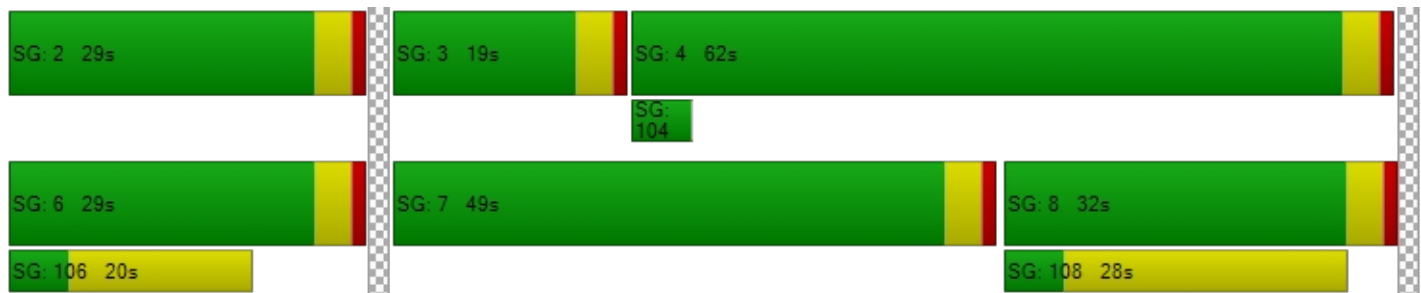
d_M, Delay for Movement [s/veh]	58.08	37.67	52.59	49.91	38.06	38.06	65.16	33.09	33.62	53.90	14.07	14.15
Movement LOS	E	D	D	D	D	D	E	C	C	D	B	B
d_A, Approach Delay [s/veh]	49.35			42.20			34.41			20.68		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	32.65											
Intersection LOS	C											
Intersection V/C	0.894											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	46.37			46.37			46.37			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.430			2.182			3.101			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	455			455			509			1055		
d_b, Bicycle Delay [s]	32.84			32.84			30.56			12.29		
I_b,int, Bicycle LOS Score for Intersection	2.667			2.088			2.902			2.739		
Bicycle LOS	B			B			C			B		

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	19.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.588

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔↔↔			↔↔		
Lane Configuration	↔			↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	0	7	7	20	7	0	20	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	107	46	67	82	38	61	71	1113	146	50	889	62
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	12	17	21	10	16	19	290	38	13	232	16
Total Analysis Volume [veh/h]	112	48	70	86	40	64	74	1162	152	52	928	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	5	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	17	0	0	23	0	51	49	49	11	9	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	24	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No	No	No	No	
Maximum Recall		No			No		No	No	No	No	No	
Pedestrian Recall		No			No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	8	8	6	62	76	4	61	61
g / C, Green / Cycle	0.09	0.09	0.08	0.08	0.06	0.62	0.76	0.04	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.06	0.07	0.05	0.06	0.04	0.33	0.10	0.03	0.27	0.27
s, saturation flow rate [veh/h]	1781	1693	1781	1687	1745	3489	1558	1745	1832	1791
c, Capacity [veh/h]	166	158	150	142	98	2174	1178	69	1112	1086
d1, Uniform Delay [s]	43.94	44.26	44.14	44.77	46.55	10.66	3.29	47.58	10.67	10.67
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.72	6.92	3.44	7.12	10.89	0.95	0.05	14.77	1.33	1.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.75	0.57	0.73	0.75	0.53	0.13	0.75	0.45	0.45
d, Delay for Lane Group [s/veh]	48.66	51.18	47.58	51.89	57.45	11.60	3.34	62.35	12.00	12.03
Lane Group LOS	D	D	D	D	E	B	A	E	B	B
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.89	3.14	2.18	2.78	2.10	6.87	0.67	1.56	5.96	5.83
50th-Percentile Queue Length [ft/ln]	72.18	78.40	54.61	69.60	52.58	171.65	16.68	39.04	148.90	145.76
95th-Percentile Queue Length [veh/ln]	5.20	5.65	3.93	5.01	3.79	11.16	1.20	2.81	9.96	9.79
95th-Percentile Queue Length [ft/ln]	129.92	141.13	98.29	125.27	94.64	279.08	30.02	70.28	248.97	244.76

Movement, Approach, & Intersection Results

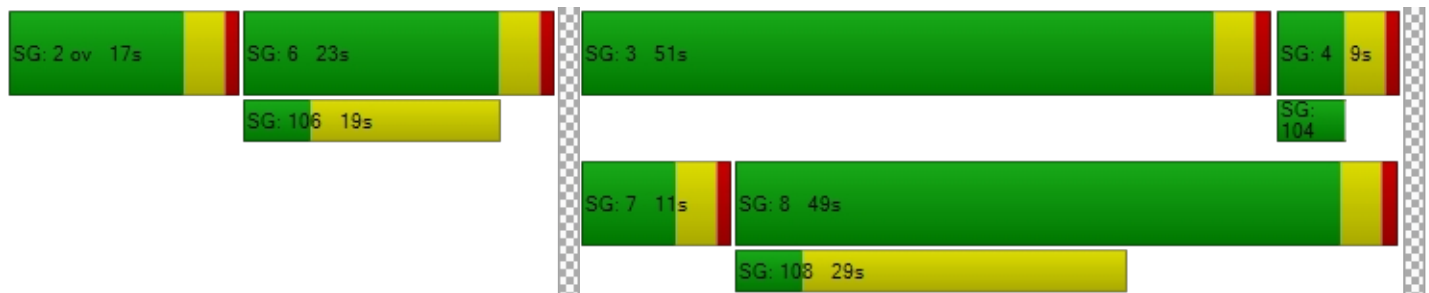
d_M, Delay for Movement [s/veh]	48.66	51.18	51.18	47.58	51.89	51.89	57.45	11.60	3.34	62.35	12.02	12.03
Movement LOS	D	D	D	D	D	D	E	B	A	E	B	B
d_A, Approach Delay [s/veh]	49.96			49.94			13.14			14.52		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	19.07											
Intersection LOS	B											
Intersection V/C	0.588											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.101	2.069	2.864	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	260	380	900	100
d_b, Bicycle Delay [s]	37.85	32.81	15.13	45.13
I_b,int, Bicycle LOS Score for Intersection	1.939	1.873	2.705	2.422
Bicycle LOS	A	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.747

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration					/	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	13	0	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	411	391	3	13	123
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	111	106	1	4	33
Total Analysis Volume [veh/h]	79	444	422	3	14	133
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal Group	5	2	6	0	7	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	17	40	23	0	20	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C
C, Cycle Length [s]	26	26	26	26
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	15	9	3
g / C, Green / Cycle	0.08	0.57	0.33	0.13
(v / s)_i Volume / Saturation Flow Rate	0.05	0.26	0.25	0.10
s, saturation flow rate [veh/h]	1603	1683	1681	1445
c, Capacity [veh/h]	137	955	555	185
d1, Uniform Delay [s]	11.57	3.34	7.89	11.12
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.82	0.35	2.24	7.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.46	0.77	0.79
d, Delay for Lane Group [s/veh]	15.39	3.69	10.14	18.64
Lane Group LOS	B	A	B	B
Critical Lane Group	Yes	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.46	0.25	1.48	0.95
50th-Percentile Queue Length [ft/ln]	11.44	6.30	36.93	23.79
95th-Percentile Queue Length [veh/ln]	0.82	0.45	2.66	1.71
95th-Percentile Queue Length [ft/ln]	20.60	11.33	66.48	42.81

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.39	3.69	10.14	10.14	18.64	18.64
Movement LOS	B	A	B	B	B	B
d_A, Approach Delay [s/veh]	5.46		10.14		18.64	
Approach LOS	A		B		B	
d_I, Intersection Delay [s/veh]	9.04					
Intersection LOS	A					
Intersection V/C	0.747					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.995	4.834	4.375
Bicycle LOS	E	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**EXISTING AMBIENT
GROWTH PLUS PROJECT
CONDITION WITH
IMPROVEMENTS**

Vistro File: \\...\\2018-0099 AM MIT.vistro

Scenario 3 3 EAP- AM MIT

Report File: \\...\\EAP AM MIT.pdf

8/4/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.904	30.4	C
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.960	53.6	D
7	Menifee Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	SB Thru	0.925	29.9	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	30.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.904

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔↔			↔↔			↔↔↔			↔↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	0	0	0	0	5	5	26	10	0	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	114	213	362	138	193	30	50	906	149	270	1174	127
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	58	99	38	53	8	14	248	41	74	322	35
Total Analysis Volume [veh/h]	125	234	397	151	212	33	55	993	163	296	1287	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	47	0	0	47	0	22	32	0	11	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26	26	26	4	35	35	17	49	49
g / C, Green / Cycle	0.28	0.28	0.28	0.28	0.28	0.04	0.39	0.39	0.19	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.11	0.13	0.25	0.13	0.13	0.03	0.32	0.32	0.17	0.39	0.40
s, saturation flow rate [veh/h]	1135	1870	1589	1146	1827	1745	1832	1744	1745	1832	1771
c, Capacity [veh/h]	253	531	451	264	519	75	715	681	336	990	957
d1, Uniform Delay [s]	36.36	26.39	30.77	36.52	26.66	42.60	24.70	24.74	35.37	15.66	15.86
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.49	0.58	5.70	1.94	0.67	13.23	10.57	11.20	7.56	4.63	5.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.44	0.88	0.57	0.47	0.74	0.83	0.83	0.88	0.73	0.74
d, Delay for Lane Group [s/veh]	37.85	26.97	36.48	38.46	27.33	55.83	35.27	35.94	42.92	20.29	21.00
Lane Group LOS	D	C	D	D	C	E	D	D	D	C	C
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.68	4.10	8.67	3.29	4.35	1.47	12.89	12.43	6.88	11.42	11.51
50th-Percentile Queue Length [ft/ln]	66.95	102.60	216.66	82.29	108.71	36.76	322.25	310.70	171.93	285.59	287.64
95th-Percentile Queue Length [veh/ln]	4.82	7.39	13.49	5.92	7.77	2.65	18.78	18.21	11.18	16.97	17.07
95th-Percentile Queue Length [ft/ln]	120.52	184.68	337.36	148.12	194.20	66.16	469.45	455.24	279.45	424.17	426.71

Movement, Approach, & Intersection Results

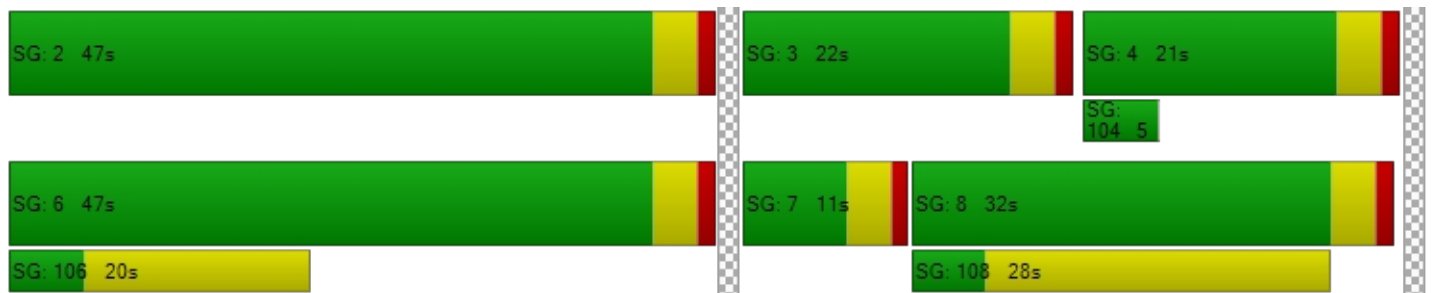
d_M, Delay for Movement [s/veh]	37.85	26.97	36.48	38.46	27.33	27.33	55.83	35.54	35.94	42.92	20.60	21.00
Movement LOS	D	C	D	D	C	C	E	D	D	D	C	C
d_A, Approach Delay [s/veh]	33.76			31.58			36.52			24.47		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	30.45											
Intersection LOS	C											
Intersection V/C	0.904											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.480			2.210			2.997			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	956			956			622			378		
d_b, Bicycle Delay [s]	12.27			12.27			21.36			29.61		
I_b,int, Bicycle LOS Score for Intersection	2.807			2.213			2.559			2.980		
Bicycle LOS	C			B			B			C		

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	53.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.960

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔↔			↔↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	5	5	16	5	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	399	159	157	162	183	101	80	719	554	239	1063	106
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	43	43	44	50	27	22	195	150	65	288	29
Total Analysis Volume [veh/h]	433	172	170	176	198	110	87	780	601	259	1153	115
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	5	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	33	0	0	27	0	11	33	33	27	49	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	24	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No	No	No	No	
Maximum Recall		No			No		No	No	No	No	No	
Pedestrian Recall		No			No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	23	23	7	32	65	20	45	45
g / C, Green / Cycle	0.24	0.24	0.19	0.19	0.06	0.27	0.54	0.17	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.22	0.22	0.10	0.18	0.05	0.22	0.39	0.15	0.35	0.35
s, saturation flow rate [veh/h]	1781	1726	1781	1759	1745	3489	1558	1745	1832	1775
c, Capacity [veh/h]	430	417	338	333	103	936	846	292	690	668
d1, Uniform Delay [s]	44.26	44.40	43.76	47.80	55.93	41.40	20.40	48.87	35.89	36.09
k, delay calibration	0.36	0.37	0.11	0.23	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.42	22.54	1.25	19.34	16.40	8.62	5.03	8.88	20.70	22.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.92	0.52	0.92	0.84	0.83	0.71	0.89	0.93	0.94
d, Delay for Lane Group [s/veh]	64.68	66.94	45.00	67.14	72.32	50.02	25.43	57.75	56.59	58.70
Lane Group LOS	E	E	D	E	E	D	C	E	E	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	13.68	13.65	4.83	10.81	3.08	11.92	13.26	8.29	21.63	21.58
50th-Percentile Queue Length [ft/ln]	342.09	341.35	120.80	270.13	76.92	298.08	331.38	207.21	540.78	539.49
95th-Percentile Queue Length [veh/ln]	19.75	19.71	8.44	16.20	5.54	17.59	19.23	13.01	29.26	29.20
95th-Percentile Queue Length [ft/ln]	493.76	492.86	210.93	404.90	138.45	439.65	480.65	325.25	731.47	729.95

Movement, Approach, & Intersection Results

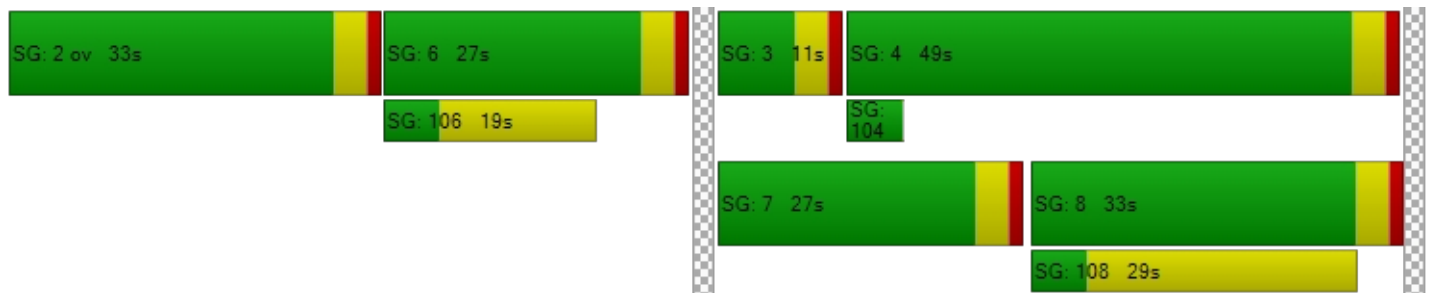
d_M, Delay for Movement [s/veh]	64.91	66.94	66.94	45.00	67.14	67.14	72.32	50.02	25.43	57.75	57.53	58.70
Movement LOS	E	E	E	D	E	E	E	D	C	E	E	E
d_A, Approach Delay [s/veh]	65.80			59.09			41.27			57.66		
Approach LOS	E			E			D			E		
d_I, Intersection Delay [s/veh]	53.65											
Intersection LOS	D											
Intersection V/C	0.960											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.551			2.234			2.982			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	483			383			483			750		
d_b, Bicycle Delay [s]	34.50			39.20			34.50			23.44		
I_b,int, Bicycle LOS Score for Intersection	2.838			2.358			2.771			2.819		
Bicycle LOS	C			B			C			C		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	29.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.925

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach						
Lane Configuration					/	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	26	10	0	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	297	679	561	14	6	208
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	194	161	4	2	60
Total Analysis Volume [veh/h]	340	778	643	16	7	238
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal Group	5	2	6	0	7	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	9	51	42	0	9	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C
C, Cycle Length [s]	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	52	30	15
g / C, Green / Cycle	0.24	0.70	0.40	0.20
(v / s)_i Volume / Saturation Flow Rate	0.21	0.46	0.39	0.17
s, saturation flow rate [veh/h]	1603	1683	1676	1435
c, Capacity [veh/h]	384	1170	674	283
d1, Uniform Delay [s]	27.36	6.44	21.95	28.94
k, delay calibration	0.11	0.50	0.43	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.95	2.99	27.35	7.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.66	0.98	0.86
d, Delay for Lane Group [s/veh]	34.30	9.43	49.29	36.72
Lane Group LOS	C	A	D	D
Critical Lane Group	Yes	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	6.30	5.94	15.45	4.67
50th-Percentile Queue Length [ft/ln]	157.40	148.56	386.27	116.83
95th-Percentile Queue Length [veh/ln]	10.41	9.94	21.90	8.22
95th-Percentile Queue Length [ft/ln]	260.28	248.51	547.43	205.46

Movement, Approach, & Intersection Results

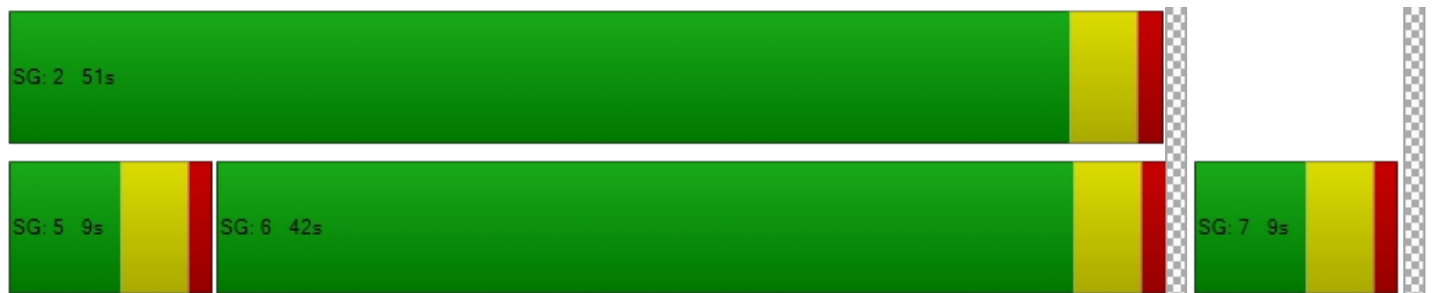
d_M, Delay for Movement [s/veh]	34.30	9.43	49.29	49.29	36.72	36.72
Movement LOS	C	A	D	D	D	D
d_A, Approach Delay [s/veh]	17.00		49.29		36.72	
Approach LOS	B		D		D	
d_I, Intersection Delay [s/veh]	29.91					
Intersection LOS	C					
Intersection V/C	0.925					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.977	5.220	4.537
Bicycle LOS	F	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Scenario 4 4 EAP PM MIT

Report File: \...\EAP PM MIT.pdf

8/4/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.930	34.8	C
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.625	18.8	B
7	Menifee Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	SEB Right	0.755	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	34.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.930

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔↔↔			↔↔			↔↔↔			↔↔↔		
Lane Configuration	↔↔↔			↔↔			↔↔↔			↔↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	0	0	0	0	7	7	33	13	0	34	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	117	153	232	84	124	32	49	1090	82	178	805	90
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	53	80	29	43	11	17	377	28	62	279	31
Total Analysis Volume [veh/h]	162	212	321	116	172	44	68	1510	114	247	1115	125
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permis	Permis	Permis	Permis	Permis	Permis	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	29	0	31	59	0	22	50	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	15	0	0	23	0	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	25	6	56	56	17	67	67
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.05	0.51	0.51	0.16	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.14	0.11	0.20	0.10	0.12	0.04	0.45	0.45	0.14	0.34	0.35
s, saturation flow rate [veh/h]	1165	1870	1589	1169	1805	1745	1832	1788	1745	1832	1769
c, Capacity [veh/h]	188	425	362	196	411	89	927	905	275	1122	1083
d1, Uniform Delay [s]	50.60	37.01	41.11	48.19	37.27	51.53	24.20	24.46	45.48	12.57	12.63
k, delay calibration	0.11	0.11	0.26	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.91	0.90	15.63	2.84	1.05	12.64	11.75	13.01	10.33	2.02	2.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.50	0.89	0.59	0.53	0.76	0.88	0.89	0.90	0.56	0.57
d, Delay for Lane Group [s/veh]	61.51	37.91	56.74	51.04	38.32	64.17	35.95	37.47	55.82	14.59	14.77
Lane Group LOS	E	D	E	D	D	E	D	D	E	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.05	5.06	9.90	3.28	5.20	2.16	21.00	21.24	7.37	9.17	9.01
50th-Percentile Queue Length [ft/ln]	126.30	126.53	247.60	81.99	130.08	54.01	525.03	530.96	184.13	229.36	225.36
95th-Percentile Queue Length [veh/ln]	8.74	8.75	15.07	5.90	8.94	3.89	28.52	28.80	11.82	14.14	13.94
95th-Percentile Queue Length [ft/ln]	218.46	218.77	376.63	147.58	223.60	97.22	712.92	719.90	295.40	353.55	348.46

Movement, Approach, & Intersection Results

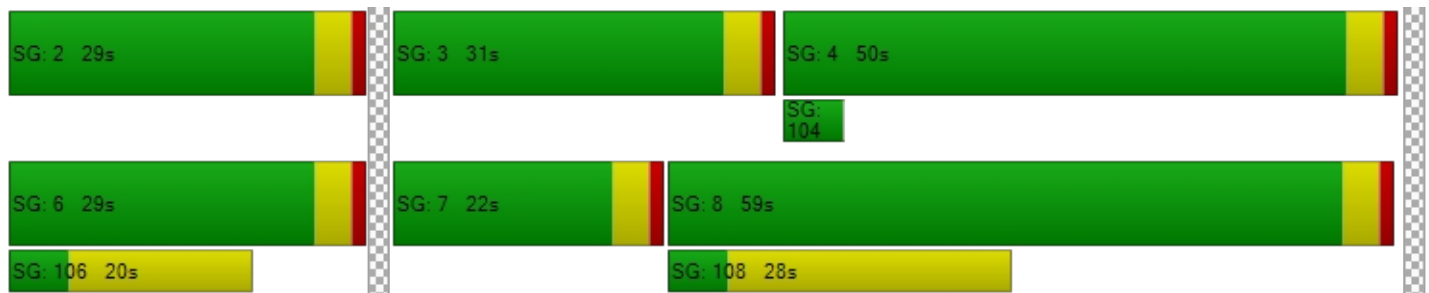
d_M, Delay for Movement [s/veh]	61.51	37.91	56.74	51.04	38.32	38.32	64.17	36.65	37.47	55.82	14.67	14.77
Movement LOS	E	D	E	D	D	D	E	D	D	E	B	B
d_A, Approach Delay [s/veh]	52.11			42.76			37.81			21.51		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	34.80											
Intersection LOS	C											
Intersection V/C	0.930											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	46.37			46.37			46.37			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.442			2.191			3.129			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	455			455			1000			836		
d_b, Bicycle Delay [s]	32.84			32.84			13.75			18.62		
I_b,int, Bicycle LOS Score for Intersection	2.706			2.107			2.956			2.786		
Bicycle LOS	B			B			C			C		

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔↔			↔↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	0	7	7	20	7	0	20	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	48	70	85	40	63	74	1157	152	52	924	64
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	13	18	22	10	16	19	302	40	14	241	17
Total Analysis Volume [veh/h]	116	50	73	89	42	66	77	1208	159	54	965	67
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	5	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	15	0	0	23	0	43	43	43	9	9	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	24	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No	No	No	No	
Maximum Recall		No			No		No	No	No	No	No	
Pedestrian Recall		No			No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	8	8	5	54	66	4	52	52
g / C, Green / Cycle	0.10	0.10	0.09	0.09	0.06	0.60	0.74	0.04	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.07	0.07	0.05	0.06	0.04	0.35	0.10	0.03	0.28	0.28
s, saturation flow rate [veh/h]	1781	1693	1781	1688	1745	3489	1558	1745	1832	1791
c, Capacity [veh/h]	174	165	158	150	103	2072	1146	74	1058	1034
d1, Uniform Delay [s]	39.28	39.60	39.41	40.00	41.76	11.38	3.51	42.66	11.27	11.27
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.37	6.51	3.12	6.37	10.22	1.21	0.05	12.74	1.65	1.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.74	0.56	0.72	0.75	0.58	0.14	0.73	0.49	0.49
d, Delay for Lane Group [s/veh]	43.65	46.11	42.52	46.36	51.98	12.59	3.56	55.40	12.92	12.96
Lane Group LOS	D	D	D	D	D	B	A	E	B	B
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.66	2.91	2.00	2.56	1.96	7.04	0.67	1.44	6.07	5.95
50th-Percentile Queue Length [ft/ln]	66.42	72.83	50.10	64.11	48.96	176.05	16.85	35.94	151.82	148.72
95th-Percentile Queue Length [veh/ln]	4.78	5.24	3.61	4.62	3.53	11.39	1.21	2.59	10.11	9.95
95th-Percentile Queue Length [ft/ln]	119.56	131.09	90.17	115.40	88.13	284.86	30.33	64.70	252.86	248.72

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.65	46.11	46.11	42.52	46.36	46.36	51.98	12.59	3.56	55.40	12.94	12.96
Movement LOS	D	D	D	D	D	D	D	B	A	E	B	B
d_A, Approach Delay [s/veh]	44.91			44.63			13.70			15.05		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	18.76											
Intersection LOS	B											
Intersection V/C	0.625											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.102			2.069			2.875			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	244			422			867			111		
d_b, Bicycle Delay [s]	34.67			28.01			14.45			40.14		
I_b,int, Bicycle LOS Score for Intersection	1.954			1.885			2.751			2.456		
Bicycle LOS	A			A			C			B		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	13	0	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	426	406	3	14	127
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	115	110	1	4	34
Total Analysis Volume [veh/h]	82	460	438	3	15	137
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal Group	5	2	6	0	7	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	20	40	20	0	20	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C
C, Cycle Length [s]	27	27	27	27
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	15	9	4
g / C, Green / Cycle	0.09	0.57	0.34	0.13
(v / s)_i Volume / Saturation Flow Rate	0.05	0.27	0.26	0.11
s, saturation flow rate [veh/h]	1603	1683	1681	1446
c, Capacity [veh/h]	138	964	569	190
d1, Uniform Delay [s]	11.89	3.40	8.03	11.39
k, delay calibration	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.00	0.37	2.31	7.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.48	0.78	0.80
d, Delay for Lane Group [s/veh]	15.89	3.77	10.34	18.89
Lane Group LOS	B	A	B	B
Critical Lane Group	Yes	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.50	0.30	1.60	1.01
50th-Percentile Queue Length [ft/ln]	12.38	7.47	40.08	25.27
95th-Percentile Queue Length [veh/ln]	0.89	0.54	2.89	1.82
95th-Percentile Queue Length [ft/ln]	22.29	13.45	72.15	45.48

Movement, Approach, & Intersection Results

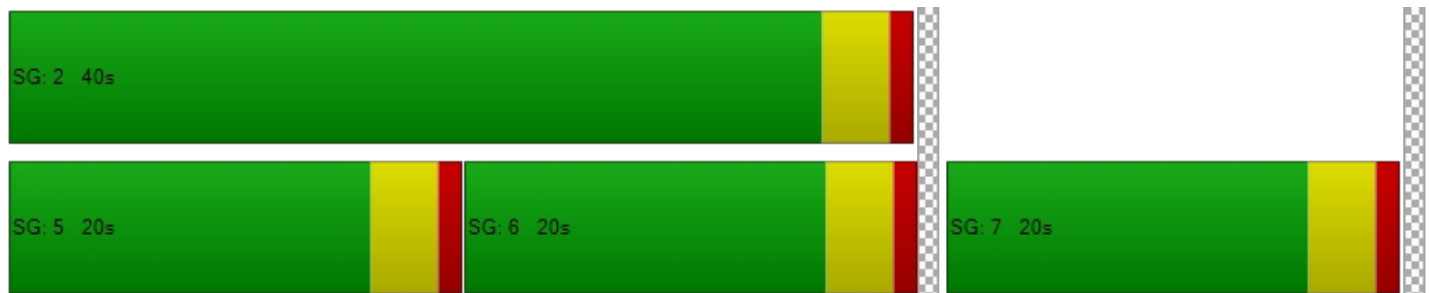
d_M, Delay for Movement [s/veh]	15.89	3.77	10.34	10.34	18.89	18.89
Movement LOS	B	A	B	B	B	B
d_A, Approach Delay [s/veh]	5.60		10.34		18.89	
Approach LOS	A		B		B	
d_I, Intersection Delay [s/veh]	9.22					
Intersection LOS	A					
Intersection V/C	0.755					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.027	4.860	4.383
Bicycle LOS	F	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**EXISTING PLUS AMBIENT
GROWTH PLUS
CUMULATIVE PROJECTS
PLUS PROJECT CONDITION
WITH IMPROVEMENTS**

Vistro File: \...\2018-0099 EACP AM.vistro

Scenario 6 EACP- AM MIT

Report File: \...\EACP AM MIT.pdf

8/4/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.969	41.9	D
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	0.914	47.2	D
6	Palomar Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	SB Right	0.539	18.1	B
7	Menifee Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	SEB Right	0.904	22.7	C
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Left	0.756	42.5	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	41.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.969

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	85	205	348	133	186	24	43	846	134	260	1104	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	126	35	19	39	48	50	24	137	113	44	215	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	100	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	214	248	381	177	241	75	69	1017	252	314	1463	140
Peak Hour Factor	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120	0.9120
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	68	104	49	66	21	19	279	69	86	401	38
Total Analysis Volume [veh/h]	235	272	418	194	264	82	76	1115	276	344	1604	154
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Overla	Protect	Permis	Permis	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	5	2	2	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	15	23	23	19	27	0	10	57	57	21	68	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	0	0	0	15	0	0	23	23	0	25	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	
Maximum Recall	No	No	No	No	No		No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	19	40	15	23	23	6	53	68	17	64	64
g / C, Green / Cycle	0.09	0.16	0.34	0.12	0.19	0.19	0.05	0.44	0.57	0.14	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.07	0.15	0.26	0.11	0.14	0.05	0.04	0.32	0.18	0.10	0.48	0.49
s, saturation flow rate [veh/h]	3459	1870	1589	1781	1870	1589	1745	3489	1558	3389	1832	1777
c, Capacity [veh/h]	317	298	534	220	358	304	90	1537	881	485	975	946
d1, Uniform Delay [s]	53.11	49.63	35.91	51.71	45.69	41.38	56.46	27.61	13.77	49.02	25.22	25.96
k, delay calibration	0.11	0.14	0.49	0.11	0.13	0.11	0.11	0.50	0.24	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.41	13.55	10.73	10.84	3.61	0.47	18.96	3.02	0.44	1.92	13.01	16.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.91	0.78	0.88	0.74	0.27	0.85	0.73	0.31	0.71	0.90	0.93
d, Delay for Lane Group [s/veh]	56.52	63.18	46.64	62.55	49.30	41.85	75.41	30.63	14.21	50.94	38.23	42.39
Lane Group LOS	E	E	D	E	D	D	E	C	B	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.60	9.12	12.52	6.40	7.76	2.12	2.76	13.55	3.99	5.05	24.97	26.39
50th-Percentile Queue Length [ft/ln]	90.09	228.04	312.98	159.88	193.92	53.02	68.92	338.79	99.85	126.21	624.22	659.79
95th-Percentile Queue Length [veh/ln]	6.49	14.07	18.32	10.54	12.32	3.82	4.96	19.59	7.19	8.73	33.16	34.82
95th-Percentile Queue Length [ft/ln]	162.16	351.86	458.05	263.57	308.11	95.43	124.06	489.72	179.73	218.34	829.10	870.42

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.52	63.18	46.64	62.55	49.30	41.85	75.41	30.63	14.21	50.94	40.11	42.39
Movement LOS	E	E	D	E	D	D	E	C	B	D	D	D
d_A, Approach Delay [s/veh]	54.01			52.93			29.86			42.05		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	41.86											
Intersection LOS	D											
Intersection V/C	0.969											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.762			2.400			3.019			0.000		
Crosswalk LOS	C			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	317			383			883			1067		
d_b, Bicycle Delay [s]	42.50			39.20			18.70			13.07		
I_b,int, Bicycle LOS Score for Intersection	3.086			2.451			2.770			3.294		
Bicycle LOS	C			B			C			C		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	47.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.914

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌⇌			⇌⇌⇌			⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	379	153	151	156	176	92	72	676	528	230	1007	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	69	12	63	15	18	75	36	127	31	40	129	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	463	171	220	177	201	171	111	830	580	279	1176	111
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	126	46	60	48	55	46	30	225	157	76	319	30
Total Analysis Volume [veh/h]	502	185	239	192	218	185	120	900	629	303	1275	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	5	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	30	0	0	23	0	11	38	38	29	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	24	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No	No	No	No	
Maximum Recall		No			No		No	No	No	No	No	
Pedestrian Recall		No			No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26	16	16	16	10	39	69	23	52	52
g / C, Green / Cycle	0.22	0.22	0.22	0.14	0.14	0.14	0.08	0.32	0.57	0.19	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.19	0.19	0.15	0.11	0.12	0.12	0.07	0.26	0.40	0.17	0.38	0.39
s, saturation flow rate [veh/h]	1781	1828	1589	1781	1870	1589	1745	3489	1558	1745	1832	1778
c, Capacity [veh/h]	386	396	344	242	254	216	138	1122	890	336	797	774
d1, Uniform Delay [s]	45.60	45.37	43.34	50.24	50.73	50.72	54.66	37.23	18.48	47.34	31.05	31.37
k, delay calibration	0.28	0.27	0.16	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.86	13.33	3.65	5.82	8.22	9.41	14.97	6.09	4.70	8.81	13.34	15.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.87	0.69	0.79	0.86	0.86	0.87	0.80	0.71	0.90	0.88	0.90
d, Delay for Lane Group [s/veh]	61.45	58.71	47.00	56.06	58.95	60.14	69.63	43.32	23.18	56.15	44.39	46.46
Lane Group LOS	E	E	D	E	E	E	E	D	C	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.56	11.32	6.88	5.97	6.98	5.99	4.15	12.91	13.18	9.63	21.14	21.37
50th-Percentile Queue Length [ft/ln]	288.90	283.07	172.10	149.27	174.45	149.82	103.87	322.83	329.60	240.87	528.52	534.29
95th-Percentile Queue Length [veh/ln]	17.13	16.84	11.19	9.98	11.31	10.01	7.48	18.81	19.14	14.73	28.68	28.95
95th-Percentile Queue Length [ft/ln]	428.27	421.03	279.67	249.46	282.75	250.19	186.97	470.16	478.47	368.13	717.03	723.83

Movement, Approach, & Intersection Results

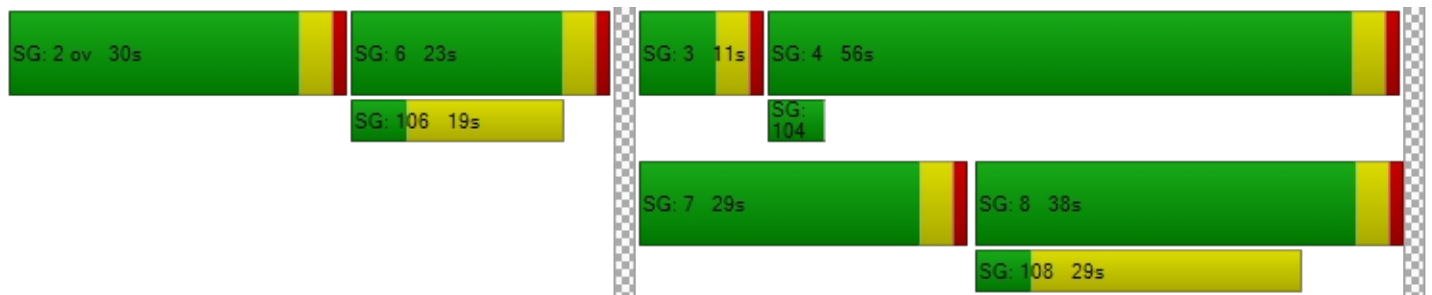
d_M, Delay for Movement [s/veh]	60.58	58.71	47.00	56.06	58.95	60.14	69.63	43.32	23.18	56.15	45.32	46.46
Movement LOS	E	E	D	E	E	E	E	D	C	E	D	D
d_A, Approach Delay [s/veh]	56.70			58.38			37.55			47.33		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	47.15											
Intersection LOS	D											
Intersection V/C	0.914											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.652			2.395			3.112			0.000		
Crosswalk LOS	B			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	433			317			567			867		
d_b, Bicycle Delay [s]	36.82			42.50			30.82			19.27		
I_b,int, Bicycle LOS Score for Intersection	3.088			2.541			2.920			2.960		
Bicycle LOS	C			B			C			C		

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	18.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.539

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	55	158	191	115	193	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	26	13	0	51	39
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	400	0	0	140
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	190	612	120	252	331
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	52	166	33	68	90
Total Analysis Volume [veh/h]	79	206	664	130	274	359
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	3	0	2	0	0	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	5	0	0	5
Maximum Green [s]	30	0	30	0	0	30
Amber [s]	3.0	0.0	3.0	0.0	0.0	3.0
All red [s]	1.0	0.0	1.0	0.0	0.0	1.0
Split [s]	28	0	82	0	0	82
Vehicle Extension [s]	3.0	0.0	3.0	0.0	0.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	6	0	12	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	0.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	0.0	2.0
Minimum Recall	No		No			No
Maximum Recall	No		No			No
Pedestrian Recall	No		No			No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	78	78	78	78
g / C, Green / Cycle	0.22	0.22	0.71	0.71	0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.05	0.14	0.39	0.09	0.39	0.21
s, saturation flow rate [veh/h]	1603	1431	1683	1431	694	1683
c, Capacity [veh/h]	350	312	1193	1014	414	1193
d1, Uniform Delay [s]	35.36	39.27	7.69	5.12	22.59	5.92
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.50	10.48	1.87	0.26	8.12	0.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.66	0.56	0.13	0.66	0.30
d, Delay for Lane Group [s/veh]	36.86	49.75	9.56	5.38	30.71	6.56
Lane Group LOS	D	D	A	A	C	A
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.89	5.96	7.21	0.93	6.52	2.95
50th-Percentile Queue Length [ft/ln]	47.27	149.08	180.16	23.30	163.09	73.87
95th-Percentile Queue Length [veh/ln]	3.40	9.97	11.61	1.68	10.71	5.32
95th-Percentile Queue Length [ft/ln]	85.08	249.20	290.23	41.94	267.81	132.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.86	49.75	9.56	5.38	30.71	6.56
Movement LOS	D	D	A	A	C	A
d_A, Approach Delay [s/veh]	46.18		8.88		17.02	
Approach LOS	D		A		B	
d_I, Intersection Delay [s/veh]	18.10					
Intersection LOS	B					
Intersection V/C	0.539					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37
I_p,int, Pedestrian LOS Score for Intersection	2.565	2.352	2.440
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.443	5.177
Bicycle LOS	D	F	F

Sequence

Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	22.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.904

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	286	628	530	13	6	185
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	126	227	0	0	54
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	310	779	778	14	6	246
Peak Hour Factor	0.8730	0.8730	0.8730	0.8730	0.8730	0.8730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	89	223	223	4	2	70
Total Analysis Volume [veh/h]	355	892	891	16	7	282
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal Group	5	2	6	0	7	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	39	85	46	0	35	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	9	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	C
C, Cycle Length [s]	63	63	63	63	63
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	40	20	20	15
g / C, Green / Cycle	0.26	0.64	0.32	0.32	0.24
(v / s)_i Volume / Saturation Flow Rate	0.22	0.53	0.27	0.27	0.20
s, saturation flow rate [veh/h]	1603	1683	1683	1673	1434
c, Capacity [veh/h]	411	1073	535	532	338
d1, Uniform Delay [s]	22.40	8.81	20.08	20.13	23.07
k, delay calibration	0.11	0.50	0.13	0.13	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.53	7.52	4.64	4.93	6.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.83	0.85	0.85	0.86
d, Delay for Lane Group [s/veh]	27.93	16.33	24.72	25.06	29.29
Lane Group LOS	C	B	C	C	C
Critical Lane Group	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.24	8.79	6.30	6.35	4.38
50th-Percentile Queue Length [ft/ln]	131.10	219.84	157.51	158.80	109.38
95th-Percentile Queue Length [veh/ln]	9.00	13.66	10.42	10.49	7.81
95th-Percentile Queue Length [ft/ln]	224.99	341.42	260.42	262.13	195.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	27.93	16.33	24.89	25.06	29.29	29.29
Movement LOS	C	B	C	C	C	C
d_A, Approach Delay [s/veh]	19.64		24.89		29.29	
Approach LOS	B		C		C	
d_I, Intersection Delay [s/veh]	22.73					
Intersection LOS	C					
Intersection V/C	0.904					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	6.190	4.881	4.609
Bicycle LOS	F	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	42.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.756

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	TWO			TWO			TWO			TWO		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	279	317	39	124	272	292	264	327	283	47	561	189
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	86	0	5	185	26	12	39	0	0	13	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	120	200	31	10	0	200	100	100	108	28	200	38
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	410	616	72	144	468	530	387	479	402	77	796	240
Peak Hour Factor	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230	0.8230
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	187	22	44	142	161	118	146	122	23	242	73
Total Analysis Volume [veh/h]	498	748	87	175	569	644	470	582	488	94	967	292
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Overla	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	22	40	0	17	35	35	20	53	0	10	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	26	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	No		No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	30	30	13	25	51	22	56	56	5	39	39
g / C, Green / Cycle	0.15	0.25	0.25	0.11	0.21	0.42	0.18	0.47	0.47	0.04	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.14	0.23	0.23	0.10	0.16	0.41	0.14	0.30	0.32	0.03	0.27	0.18
s, saturation flow rate [veh/h]	3459	1870	1803	1781	3560	1589	3459	1870	1598	3459	3560	1589
c, Capacity [veh/h]	519	464	447	193	736	673	634	875	748	146	1163	519
d1, Uniform Delay [s]	47.64	38.92	38.98	50.73	40.89	25.10	42.70	16.31	16.69	55.73	30.96	27.47
k, delay calibration	0.11	0.28	0.28	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.04	16.14	17.28	14.46	1.78	25.62	1.73	3.64	4.90	4.64	7.00	4.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.96	0.91	0.92	0.91	0.77	0.96	0.74	0.64	0.68	0.64	0.83	0.56
d, Delay for Lane Group [s/veh]	58.68	55.05	56.25	65.19	42.67	50.72	44.43	19.95	21.59	60.37	37.96	31.83
Lane Group LOS	E	E	E	E	D	D	D	B	C	E	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.83	13.30	13.04	5.75	7.52	18.65	6.27	9.07	8.65	1.48	12.50	6.43
50th-Percentile Queue Length [ft/ln]	195.72	332.58	326.06	143.78	188.10	466.35	156.65	226.87	216.14	36.91	312.60	160.79
95th-Percentile Queue Length [veh/ln]	12.42	19.29	18.97	9.68	12.02	25.74	10.37	14.02	13.47	2.66	18.30	10.59
95th-Percentile Queue Length [ft/ln]	310.43	482.13	474.13	242.11	300.56	643.43	259.29	350.38	336.70	66.43	457.58	264.77

Movement, Approach, & Intersection Results

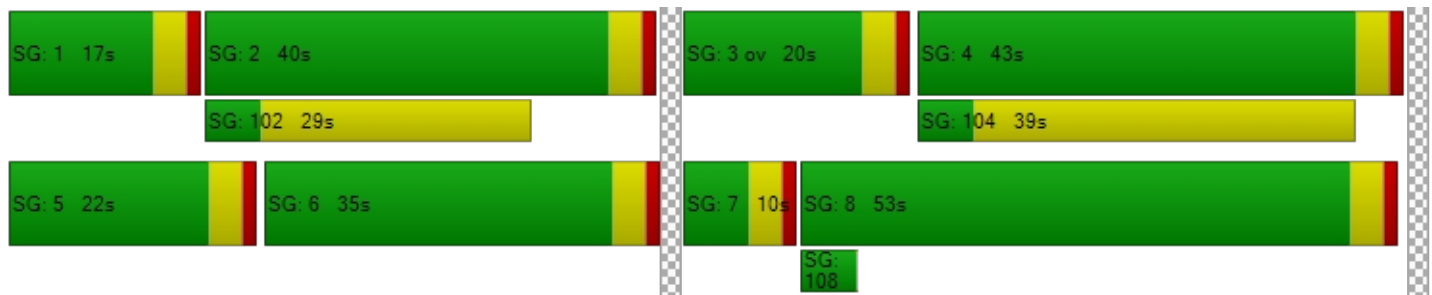
d_M, Delay for Movement [s/veh]	58.68	55.57	56.25	65.19	42.67	50.72	44.43	20.00	21.59	60.37	37.96	31.83
Movement LOS	E	E	E	E	D	D	D	C	C	E	D	C
d_A, Approach Delay [s/veh]	56.78			49.24			27.96			38.19		
Approach LOS	E			D			C			D		
d_I, Intersection Delay [s/veh]	42.53											
Intersection LOS	D											
Intersection V/C	0.756											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.872	2.939	0.000	2.915
Crosswalk LOS	C	C	F	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	517	817	650
d_b, Bicycle Delay [s]	29.40	33.00	21.00	27.34
I_b,int, Bicycle LOS Score for Intersection	2.659	2.705	2.830	2.676
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Scenario 6 EACP- PM MIT

Report File: \...\EACP PM MIT.pdf

8/4/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
4	Menifee Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	EB Left	1.066	54.2	D
5	Briggs Road (NS) / SR-74 (EW)	Signalized	HCM 6th Edition	WB Left	0.739	26.3	C
6	Palomar Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	SB Right	0.777	23.7	C
7	Menifee Road (NS) / Matthews Road (EW)	Signalized	HCM 6th Edition	NB Left	0.871	15.9	B
10	Menifee Road (NS) / McCall Boulevard (EW)	Signalized	HCM 6th Edition	SB Left	0.630	33.0	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 4: Menifee Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	54.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.066

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	TWO			TWO			TWO			TWO		
Lane Configuration	TWO			TWO			TWO			TWO		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	370.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	80	147	223	81	119	24	40	1016	66	171	741	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	231	53	91	23	46	39	50	256	231	73	177	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	100	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	314	206	323	107	170	64	92	1313	300	251	1048	128
Peak Hour Factor	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220	0.7220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	109	71	112	37	59	22	32	455	104	87	363	44
Total Analysis Volume [veh/h]	435	285	447	148	235	89	127	1819	416	348	1452	177
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Overla	Protect	Permis	Permis	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	5	2	2	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	19	29	29	14	24	0	10	64	64	13	67	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	25	25	0	15	0	0	23	23	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	
Maximum Recall	No	No	No	No	No		No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	22	38	10	17	17	9	60	79	12	63	63
g / C, Green / Cycle	0.13	0.18	0.32	0.08	0.14	0.14	0.07	0.50	0.66	0.10	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.13	0.15	0.28	0.08	0.13	0.06	0.07	0.52	0.27	0.10	0.44	0.46
s, saturation flow rate [veh/h]	3459	1870	1589	1781	1870	1589	1745	3489	1558	3389	1832	1765
c, Capacity [veh/h]	434	343	500	149	266	226	127	1750	1029	331	965	929
d1, Uniform Delay [s]	52.50	47.22	39.25	54.94	50.54	46.81	55.66	29.92	9.45	54.17	24.23	25.00
k, delay calibration	0.11	0.16	0.50	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.75	7.67	21.11	31.87	9.50	1.12	36.93	32.47	1.18	37.99	8.97	11.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.00	0.83	0.89	0.99	0.88	0.39	1.00	1.04	0.40	1.05	0.84	0.88
d, Delay for Lane Group [s/veh]	73.26	54.89	60.36	86.81	60.04	47.93	92.58	62.39	10.63	92.16	33.20	36.42
Lane Group LOS	F	D	E	F	E	D	F	F	B	F	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.77	8.91	15.33	5.79	7.61	2.49	5.14	32.05	5.14	6.73	21.35	22.49
50th-Percentile Queue Length [ft/ln]	194.21	222.84	383.33	144.74	190.35	62.37	128.50	801.13	128.59	168.20	533.76	562.36
95th-Percentile Queue Length [veh/ln]	12.35	13.81	21.76	9.74	12.14	4.49	8.86	42.63	8.86	11.19	28.93	30.27
95th-Percentile Queue Length [ft/ln]	308.86	345.25	543.88	243.40	303.48	112.27	221.45	1065.7	221.57	279.75	723.21	756.81

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.26	54.89	60.36	86.81	60.04	47.93	92.58	62.39	10.63	92.16	34.62	36.42
Movement LOS	F	D	E	F	E	D	F	F	B	F	C	D
d_A, Approach Delay [s/veh]	63.83			66.15			54.90			44.91		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	54.23											
Intersection LOS	D											
Intersection V/C	1.066											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	51.34			51.34			51.34			0.00		
I_p,int, Pedestrian LOS Score for Intersection	2.820			2.405			3.173			0.000		
Crosswalk LOS	C			B			C			F		
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	417			333			1000			1050		
d_b, Bicycle Delay [s]	37.60			41.67			15.00			13.54		
I_b,int, Bicycle LOS Score for Intersection	3.485			2.338			3.508			3.191		
Bicycle LOS	C			B			D			C		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Briggs Road (NS) / SR-74 (EW)

Control Type:	Signalized	Delay (sec / veh):	26.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.739

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	⇌⇌⇌			⇌⇌⇌			⇌⇌⇌			⇌⇌⇌		
Lane Configuration	⇌⇌⇌			⇌⇌⇌			⇌⇌⇌			⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	100	46	67	82	38	54	64	1093	139	50	869	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	4.50	4.50	4.50	4.50
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	93	22	60	10	18	48	85	165	120	76	148	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	197	70	130	95	58	104	152	1302	265	128	1052	81
Peak Hour Factor	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580	0.9580
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	18	34	25	15	27	40	340	69	33	275	21
Total Analysis Volume [veh/h]	206	73	136	99	61	109	159	1359	277	134	1098	85
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protect	Permis	Overla	Protect	Permis	Permis
Signal Group	0	2	0	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	5	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	15	0	0	23	0	53	53	53	9	9	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	0	0	14	0	0	24	24	0	0	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No	No	No	No	
Maximum Recall		No			No		No	No	No	No	No	
Pedestrian Recall		No			No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	9	9	9	11	55	69	10	53	53
g / C, Green / Cycle	0.11	0.11	0.11	0.09	0.09	0.09	0.11	0.55	0.69	0.10	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.09	0.06	0.03	0.07	0.09	0.39	0.18	0.08	0.33	0.33
s, saturation flow rate [veh/h]	1781	1826	1589	1781	1870	1589	1745	3489	1558	1745	1832	1787
c, Capacity [veh/h]	189	194	169	164	172	146	196	1902	1077	169	970	946
d1, Uniform Delay [s]	43.35	43.34	43.73	43.70	42.66	44.31	43.41	16.97	5.80	44.25	16.45	16.48
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.15	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.27	5.14	8.65	3.53	1.23	7.27	7.83	2.33	0.18	8.17	2.93	3.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.73	0.81	0.60	0.35	0.74	0.81	0.71	0.26	0.79	0.62	0.62
d, Delay for Lane Group [s/veh]	48.62	48.48	52.39	47.23	43.89	51.57	51.24	19.30	5.98	52.42	19.38	19.51
Lane Group LOS	D	D	D	D	D	D	D	B	A	D	B	B
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.56	3.64	3.67	2.50	1.47	2.91	4.24	11.45	1.97	3.61	9.82	9.64
50th-Percentile Queue Length [ft/ln]	88.96	90.98	91.84	62.62	36.72	72.81	106.01	286.17	49.14	90.26	245.38	240.91
95th-Percentile Queue Length [veh/ln]	6.41	6.55	6.61	4.51	2.64	5.24	7.62	17.00	3.54	6.50	14.95	14.73
95th-Percentile Queue Length [ft/ln]	160.13	163.77	165.31	112.72	66.10	131.05	190.43	424.88	88.46	162.47	373.82	368.18

Movement, Approach, & Intersection Results

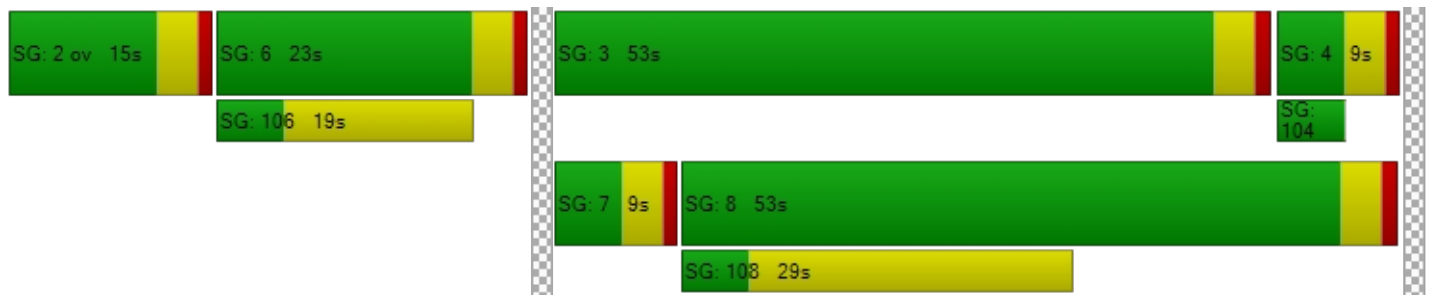
d_M, Delay for Movement [s/veh]	48.57	48.48	52.39	47.23	43.89	51.57	51.24	19.30	5.98	52.42	19.44	19.51
Movement LOS	D	D	D	D	D	D	D	B	A	D	B	B
d_A, Approach Delay [s/veh]	49.81			48.23			20.07			22.80		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	26.26											
Intersection LOS	C											
Intersection V/C	0.739											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.354	2.281	3.047	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	220	380	980	100
d_b, Bicycle Delay [s]	39.61	32.81	13.01	45.13
I_b,int, Bicycle LOS Score for Intersection	2.244	2.003	3.040	2.646
Bicycle LOS	B	B	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Palomar Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	23.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.777

Intersection Setup

Name	Southbound		Northwestbound		Southeastbound	
Approach						
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Southbound		Northwestbound		Southeastbound	
Base Volume Input [veh/h]	21	108	61	28	227	92
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	20	58	43	0	43	26
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	400	0	0	140
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	170	506	29	279	262
Peak Hour Factor	0.9520	0.9520	0.9520	0.9520	0.9520	0.9520
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	45	133	8	73	69
Total Analysis Volume [veh/h]	44	179	532	30	293	275
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	3	0	2	0	0	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	5	0	0	5
Maximum Green [s]	30	0	30	0	0	30
Amber [s]	3.0	0.0	3.0	0.0	0.0	3.0
All red [s]	1.0	0.0	1.0	0.0	0.0	1.0
Split [s]	23	0	97	0	0	97
Vehicle Extension [s]	3.0	0.0	3.0	0.0	0.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	6	0	12	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	0.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	0.0	2.0
Minimum Recall	No		No			No
Maximum Recall	No		No			No
Pedestrian Recall	No		No			No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	93	93
g / C, Green / Cycle	0.16	0.16	0.78	0.78
(v / s)_i Volume / Saturation Flow Rate	0.03	0.13	0.34	0.65
s, saturation flow rate [veh/h]	1603	1431	1667	872
c, Capacity [veh/h]	254	227	1292	721
d1, Uniform Delay [s]	43.70	48.58	4.58	15.95
k, delay calibration	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.48	23.90	1.07	8.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.17	0.79	0.43	0.79
d, Delay for Lane Group [s/veh]	45.19	72.48	5.65	24.45
Lane Group LOS	D	E	A	C
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.24	6.65	4.30	12.68
50th-Percentile Queue Length [ft/ln]	31.08	166.34	107.41	317.03
95th-Percentile Queue Length [veh/ln]	2.24	10.88	7.70	18.52
95th-Percentile Queue Length [ft/ln]	55.95	272.10	192.39	463.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.19	72.48	5.65	5.65	24.45	24.45
Movement LOS	D	E	A	A	C	C
d_A, Approach Delay [s/veh]	67.09		5.65		24.45	
Approach LOS	E		A		C	
d_I, Intersection Delay [s/veh]	23.67					
Intersection LOS	C					
Intersection V/C	0.777					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.550	2.160	2.354
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.060	5.070
Bicycle LOS	D	F	F

Sequence




Ring 1	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Menifee Road (NS) / Matthews Road (EW)

Control Type:	Signalized	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.871

Intersection Setup

Name	Northbound		Southbound		Southeastbound	
Approach	Northbound		Southbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Southeastbound	
Base Volume Input [veh/h]	73	377	378	3	13	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	43	391	302	0	0	46
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	783	695	3	14	153
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	211	188	1	4	41
Total Analysis Volume [veh/h]	129	846	751	3	15	165
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal Group	5	2	6	0	7	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	10	47	37	0	13	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C
C, Cycle Length [s]	48	48	48	48
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	32	24	8
g / C, Green / Cycle	0.10	0.68	0.49	0.16
(v / s)_i Volume / Saturation Flow Rate	0.08	0.50	0.45	0.12
s, saturation flow rate [veh/h]	1603	1683	1682	1443
c, Capacity [veh/h]	167	1140	824	226
d1, Uniform Delay [s]	21.01	5.04	11.34	19.56
k, delay calibration	0.11	0.31	0.24	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.46	2.75	9.24	6.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.74	0.91	0.80
d, Delay for Lane Group [s/veh]	28.47	7.79	20.58	25.84
Lane Group LOS	C	A	C	C
Critical Lane Group	Yes	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	1.62	3.29	7.47	2.11
50th-Percentile Queue Length [ft/ln]	40.43	82.25	186.76	52.87
95th-Percentile Queue Length [veh/ln]	2.91	5.92	11.95	3.81
95th-Percentile Queue Length [ft/ln]	72.77	148.05	298.82	95.17

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	28.47	7.79	20.58	20.58	25.84	25.84
Movement LOS	C	A	C	C	C	C
d_A, Approach Delay [s/veh]	10.53		20.58		25.84	
Approach LOS	B		C		C	
d_I, Intersection Delay [s/veh]	15.94					
Intersection LOS	B					
Intersection V/C	0.871					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.741	5.377	4.429
Bicycle LOS	F	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 10: Menifee Road (NS) / McCall Boulevard (EW)

Control Type:	Signalized	Delay (sec / veh):	33.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.630

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	T			T			T			T		
Lane Configuration	T			T			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	2	0	0	1	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00	330.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	152	186	29	47	219	193	233	298	248	17	212	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	239	0	7	184	20	30	26	0	0	43	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	120	200	31	10	0	200	100	100	108	28	200	38
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	632	61	66	412	421	372	436	366	46	463	88
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	170	16	18	111	113	100	117	98	12	124	24
Total Analysis Volume [veh/h]	299	680	66	71	443	453	400	469	394	49	498	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protect	Permis	Permis	Protect	Permis	Overla	Protect	Permis	Permis	Protect	Permis	Permis
Signal Group	5	2	0	1	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	16	48	0	10	42	42	19	53	0	9	43	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	26	26	0	0	0	0	34	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	No		No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	27	27	6	21	52	27	67	67	4	44	44
g / C, Green / Cycle	0.10	0.23	0.23	0.05	0.18	0.43	0.22	0.56	0.56	0.03	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.09	0.20	0.20	0.04	0.12	0.28	0.12	0.25	0.25	0.01	0.14	0.06
s, saturation flow rate [veh/h]	3459	1870	1812	1781	3560	1589	3459	1870	1593	3459	3560	1589
c, Capacity [veh/h]	348	422	409	90	625	686	770	1040	886	119	1310	585
d1, Uniform Delay [s]	51.16	40.67	40.67	55.33	43.15	19.46	36.87	8.36	8.39	56.11	22.01	20.34
k, delay calibration	0.11	0.13	0.13	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.25	8.43	8.68	13.80	1.49	4.94	0.54	1.38	1.66	2.29	0.84	0.60
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.90	0.90	0.79	0.71	0.66	0.52	0.45	0.45	0.41	0.38	0.16
d, Delay for Lane Group [s/veh]	57.41	49.10	49.35	69.13	44.64	24.40	37.42	9.74	10.05	58.41	22.85	20.94
Lane Group LOS	E	D	D	E	D	C	D	A	B	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.56	11.10	10.79	2.44	5.89	8.47	4.71	4.13	3.64	0.76	4.26	1.56
50th-Percentile Queue Length [ft/ln]	113.99	277.40	269.63	60.88	147.28	211.81	117.75	103.32	90.97	18.95	106.62	38.98
95th-Percentile Queue Length [veh/ln]	8.06	16.56	16.17	4.38	9.87	13.25	8.27	7.44	6.55	1.36	7.65	2.81
95th-Percentile Queue Length [ft/ln]	201.54	413.98	404.27	109.59	246.79	331.14	206.73	185.98	163.74	34.11	191.29	70.17

Movement, Approach, & Intersection Results

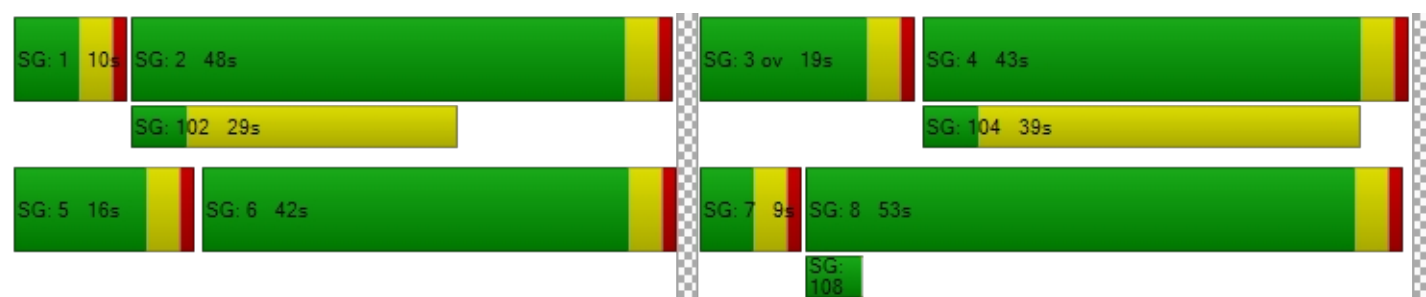
d_M, Delay for Movement [s/veh]	57.41	49.21	49.35	69.13	44.64	24.40	37.42	9.75	10.05	58.41	22.85	20.94
Movement LOS	E	D	D	E	D	C	D	A	B	E	C	C
d_A, Approach Delay [s/veh]	51.57			36.95			18.60			25.28		
Approach LOS	D			D			B			C		
d_I, Intersection Delay [s/veh]	33.02											
Intersection LOS	C											
Intersection V/C	0.630											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.782	2.816	0.000	2.783
Crosswalk LOS	C	C	F	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	633	817	650
d_b, Bicycle Delay [s]	24.07	28.02	21.00	27.34
I_b,int, Bicycle LOS Score for Intersection	2.422	2.357	2.602	2.089
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX F
AUTOMATED CAR WASH DATA

3873 Pyrite Street, Riverside, CA

Month	Year	Sales \$ ¹	Cost Per Wash ²	Monthly Washes	Days Operational ³	Daily Washes	Daily Trips
March	2019	\$ 2,816.00	\$ 7.00	403	30	14	28
April	2019	\$ 5,162.00	\$ 7.00	738	30	25	50
May	2019	\$ 2,711.00	\$ 7.00	388	29	14	28
June	2019	\$ 4,985.00	\$ 7.00	713	30	24	48
July	2019	\$ 6,145.00	\$ 7.00	878	31	29	58
August	2019	\$ 5,870.00	\$ 7.00	839	31	28	56
September	2019	\$ 5,608.00	\$ 7.00	802	30	27	54
October	2019	\$ 3,433.00	\$ 7.00	491	30	17	34
November	2019	\$ 3,127.00	\$ 7.00	447	29	16	32
December	2019	\$ 1,285.00	\$ 7.00	184	29	7	14
January	2020	\$ 2,599.00	\$ 7.00	372	30	13	26
February	2020	\$ 3,000.00	\$ 7.00	429	28	16	32
AVERAGE		\$ 3,895.08	\$ 7.00	557	30	19	38

XX Highest daily trip average for 12-month period

¹ Monthly Sales

² Average cost per wash is \$7.00

³ Generally equal to number of days in month less days out of service

33401 Highway 74, Homeland, CA

Month	Year	Sales \$ ¹	Cost Per Wash ²	Monthly Washes	Days Operational ³	Daily Washes	Daily Trips
March	2019	\$ 5,416.00	\$ 7.00	774	31	25	50
April	2019	\$ 9,889.00	\$ 7.00	1413	30	48	96
May	2019	\$ 4,600.00	\$ 7.00	658	31	22	44
June	2019	\$ 8,692.00	\$ 7.00	1242	30	42	84
July	2019	\$ 8,837.00	\$ 7.00	1263	31	41	82
August	2019	\$ 8,145.00	\$ 7.00	1164	31	38	76
September	2019	\$ 8,077.00	\$ 7.00	1154	30	39	78
October	2019	\$ 8,204.00	\$ 7.00	1172	31	38	76
November	2019	\$ 5,708.00	\$ 7.00	816	29	29	58
December	2019	\$ 2,526.00	\$ 7.00	361	31	12	24
January	2020	\$ 3,603.00	\$ 7.00	515	31	17	34
February	2020	\$ 4,607.00	\$ 7.00	659	29	23	46
AVERAGE		\$ 6,525.33	\$ 7.00	933	31	31	62

XX Highest daily trip average for 12-month period

¹ Monthly Sales

² Average cost per wash is \$7.00

³ Generally equal to number of days in month less days out of service

Note: Both studied sites are owned by the Project applicant, are located in the same region, and are similar in style and operation to the proposed Project.

ABBASCO, INC # 2655649 - M
 3873 PYRITE STREET
 RIVERSIDE, CA 92509

Service Station Computer Systems, Inc.
 Computerized Daily Book
 Copyright © 1984-2020

Date: 6/29/2020
 Name:
 Time: 8:36:00 AM-8:31:00 PM

Shift 1 of 1

13 MONTH DEPARTMENT HISTORY

Site: 1

Department Group:

Department	Site 1	Feb '20	Jan '20	Dec '19	Nov '19	Oct '19	Sep '19	Aug '19	Jul '19	Jun '19	May '19	Apr '19	Mar '19	Feb '19	Ending Date: 2/29/2020 11:59:59 PM
87 STORE	Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Qty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88 CAR WASH	Sales	3,000.00	2,599.00	1,285.00	3,127.00	3,433.00	5,608.00	5,870.00	6,145.00	4,985.00	2,711.00	5,162.00	2,816.00	1,035.00	47,776.00
	Qty	28.00	30.00	29.00	29.00	30.00	30.00	31.00	31.00	30.00	29.00	30.00	30.00	21.00	378.00
94 STORE	Sales	0.00	0.00	0.00	0.00	1.49	0.00	0.00	288.54	7.98	7.98	0.00	0.00	0.00	305.99
	Qty	0.00	0.00	0.00	0.00	1.00	11.00	0.00	112.00	2.00	2.00	0.00	0.00	0.00	128.00
98 SERVICE	Sales	39.46	45.90	40.10	46.20	59.70	65.80	83.40	70.40	69.00	72.40	73.50	74.30	59.92	800.08
	Qty	390.00	459.00	-1,689.00	462.00	597.00	658.00	834.00	704.00	690.00	724.00	735.00	743.00	601.00	5,908.00
99 EDI Default	Sales	0.00	0.00	0.00	219.27	0.00	0.00	0.00	1.89	0.00	0.00	0.00	0.00	-2.09	219.07
	Qty	0.00	0.00	-1.00	142.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	1.00	147.00
Site 1	Sales	155,124.24	156,192.91	154,450.85	155,852.42	164,050.18	173,546.80	183,480.31	187,685.56	184,730.70	190,266.24	190,559.23	188,732.31	151,216.32	2,235,887.07
Site 1	Qty	70,635.00	72,529.00	65,611.00	72,611.00	79,799.00	62,886.00	89,905.00	91,785.00	109,468.00	93,036.00	93,559.00	94,766.00	74,033.00	1,070,623.00

13 MONTH DEPARTMENT HISTORY

Department	Site 3	Jan '20	Feb '20	Jan '21	Dec '19	Nov '19	Oct '19	Sep '19	Aug '19	Jul '19	Jun '19	May '19	Apr '19	Mar '19	Feb '19	13 Month Total
85 DISCOUNTS	Sales	0.00	0.00	0.00	0.00	0.00	0.00	-4.50	0.00	-12.00	0.00	0.00	0.00	-1.50	0.00	-18.00
	COGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Qty	0.00	0.00	0.00	0.00	0.00	0.00	-7.00	0.00	8.00	0.00	0.00	0.00	1.00	0.00	1.00
	G.P.	0.00	0.00	0.00	0.00	0.00	0.00	-4.50	0.00	-12.00	0.00	0.00	0.00	-1.50	0.00	-18.00
	Margin	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0
86 MOTOR	Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	COGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Qty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	G.P.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Margin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87 STORE	Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	COGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Qty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	670.62	0.00	0.00	0.00	0.00	670.62
	G.P.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	86,300.00	0.00	0.00	0.00	0.00	86,300.00
	Margin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-670.62	0.00	0.00	0.00	0.00	-670.62
88 CAR WASH	Sales	4,607.00	4,607.00	3,603.00	2,526.00	5,708.00	8,204.00	8,077.00	8,145.00	8,837.00	8,692.00	4,600.00	9,889.00	5,416.00	2,454.00	80,758.00
	COGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Qty	29.00	29.00	31.00	31.00	29.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	27.00	392.00
	G.P.	4,607.00	4,607.00	3,603.00	2,526.00	5,708.00	8,204.00	8,077.00	8,145.00	8,837.00	8,692.00	4,600.00	9,889.00	5,416.00	2,454.00	80,758.00
	Margin	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Sales	1.89	1.89	0.00	0.00	1.89	5.67	3.78	1.89	344.99	15.75	0.00	1.89	0.00	0.00	377.75
	COGS	1.84	1.84	0.00	0.00	3.50	5.52	3.68	1.84	48.42	879.73	0.00	1.84	157.74	0.00	1,104.11
	Qty	1.00	1.00	0.00	0.00	12.00	3.00	408,020.00	1.00	303.00	129,152.00	0.00	1.00	4.00	0.00	537,497.00
	G.P.	0.05	0.05	0.00	0.00	-1.61	0.15	0.10	0.05	296.57	-863.98	0.00	0.05	-157.74	0.00	-726.36
	Margin	2.6	2.6	0.0	0.0	-85.3	2.6	2.5	2.6	86.0	-5,485.6	0.0	2.6	0.0	0.0	-192.3
	Sales	35.50	35.50	46.34	48.86	40.90	56.00	68.99	49.70	48.00	56.70	52.80	67.20	61.20	47.40	679.59
	COGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Qty	355.00	355.00	466.00	494.00	415.00	560.00	681.00	497.00	480.00	567.00	528.00	672.00	612.00	474.00	6,801.00
	G.P.	35.50	35.50	46.34	48.86	40.90	56.00	68.99	49.70	48.00	56.70	52.80	67.20	61.20	47.40	679.59
	Margin	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Sales	0.00	0.00	1.69	6.76	376.47	0.00	0.00	14.44	23.18	2.38	6.67	40.64	0.00	9.29	481.52
	COGS	0.00	0.00	0.86	3.45	189.00	0.00	0.00	2.44	0.00	0.49	0.00	4.59	0.00	0.00	39.95
	Qty	0.00	0.00	2.00	4.00	28.00	0.00	0.00	2.00	8.00	2.00	9.00	7.00	0.00	5.00	228.00
	G.P.	0.00	0.00	0.83	3.31	348.36	0.00	0.00	14.44	20.74	2.38	6.18	36.05	0.00	9.29	441.57
	Margin	0.0	0.0	48.9	48.9	92.5	0.0	0.0	100.0	89.5	100.0	92.5	88.7	0.0	100.0	91.7
Site 3	Sales	182,692.99	179,368.94	181,159.91	184,186.73	208,251.56	209,179.38	234,864.02	223,563.78	223,719.89	200,431.07	221,051.52	205,263.43	164,147.08	2,617,670.30	
Site 3	COGS	112,675.26	111,210.92	113,361.24	117,094.26	129,945.66	131,105.28	151,819.17	140,063.19	148,154.84	119,576.25	129,707.32	138,947.00	96,086.92	1,859,747.32	
Site 3	Qty	75,326.00	76,230.00	76,090.00	76,229.00	87,037.00	478,496.00	101,933.00	98,049.00	579,825.00	86,756.00	89,836.00	90,649.10	70,892.00	1,986,148.10	
Site 3	G.P.	70,017.73	68,148.02	67,798.67	67,092.47	78,305.90	78,074.10	82,844.85	83,500.59	75,585.05	80,864.82	91,344.20	66,316.43	68,060.16	977,922.98	
Site 3	Margin	38.3	38.0	37.4	36.4	37.6	37.3	35.3	37.3	33.8	40.3	41.3	32.3	41.5	37.4	

Nicholas Lowe

From: Nick Minicilli <nick.minicilli@stctrffic.com>
Sent: Wednesday, November 18, 2020 4:24 PM
To: Marwan Alabbasi; Ryan Fowler
Cc: Eliza Laws; Michael Naggar; Corinne Mostad; Braden Price; Elizabeth Alabbasi; Rumzi Alabbasi; Samar Kassab; Rob Blough; Scott Hildebrandt; Dilesh Sheth; Jennifer Gillen; Nicholas Lowe
Subject: RE: FW: Case 2018-300 - Motte Country Plaza Traffic

Hi Marwan,

Eliza's response is ok with traffic engineering. That response satisfies the review comment.

Nick

From: Marwan Alabbasi <Marwan@alabbasi.biz>
Sent: Monday, November 16, 2020 9:04 PM
To: Ryan Fowler <rfowler@cityofmenifee.us>
Cc: Eliza Laws <eliza.laws@webbassociates.com>; Michael Naggar <mike@mikenaggar.com>; Corinne Mostad <corinne@alabbasi.biz>; Braden Price <braden.price@kwcengineers.com>; Elizabeth Alabbasi <Liz@alabbasi.biz>; Rumzi Alabbasi <Rumzi@alabbasi.biz>; Samar Kassab <samar@alabbasi.biz>; Nick Minicilli <nick.minicilli@stctrffic.com>; Rob Blough <rblough@cityofmenifee.us>; Scott Hildebrandt <scott.hildebrandt@webbassociates.com>; Dilesh Sheth <dilesh.sheth@webbassociates.com>; Jennifer Gillen <jennifer.gillen@webbassociates.com>; Nicholas Lowe <nick.lowe@webbassociates.com>
Subject: Re: FW: Case 2018-300 - Motte Country Plaza Traffic

Thanks Ryan

Rob and Nick please call if we need to discuss further or if you need additional informations

On Mon, Nov 16, 2020 at 8:48 AM Ryan Fowler <rfowler@cityofmenifee.us> wrote:

Marwan and Eliza,

I'm forwarding your inquiry to Rob Blough and Nick Minicilli. Since this relates to a comment on the TIA, I will defer to them to respond to your technical question.

Ryan.

From: Marwan Alabbasi <Marwan@alabbasi.biz>
Sent: Sunday, November 15, 2020 6:44 PM
To: Eliza Laws <eliza.laws@webbassociates.com>; Michael Naggar <mike@mikenaggar.com>; Corinne Mostad <corinne@alabbasi.biz>; Braden Price <braden.price@kwcengineers.com>; Elizabeth Alabbasi <Liz@alabbasi.biz>; Rumzi Alabbasi <Rumzi@alabbasi.biz>; Samar Kassab <samar@alabbasi.biz>
Cc: Ryan Fowler <rfowler@cityofmenifee.us>; Scott Hildebrandt <scott.hildebrandt@webbassociates.com>; Dilesh Sheth <dilesh.sheth@webbassociates.com>; Jennifer Gillen <jennifer.gillen@webbassociates.com>; Nicholas Lowe <nick.lowe@webbassociates.com>
Subject: Re: FW: Case 2018-300 - Motte Country Plaza Traffic

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Ryan

This item is mine and i am very involved in it. we have provided data to Webb and they included in there report from existing car washes we own.

we can not and will not use the high data requested in item #1. please let me know who is asking for it, as i can debate this issue with them. I am not sure what impact increasing daily trip generation will have on project, but i am not willing to accept providing wrong data

please let me know if any further discussion is needed, but we will not address item #1, and further

On Fri, Nov 13, 2020 at 4:29 PM Eliza Laws <eliza.laws@webbassociates.com> wrote:

Good afternoon Ryan,

We have reviewed the Plan Check No. 3 comments and would like clarification from the City regarding Traffic Engineering, Traffic Impact Analysis (TIA) Comment 1: Project Trip Generation, bullet item 1.

The trip generation for the automated car wash was modified using current data from the applicant who owns similar car wash facilities in the region because the standard data available from sources such as ITE and SANDAG are unrealistically high. Per our previous correspondence (see email chain below), the daily car wash trip generation was modified using evidence from similar existing car washes and this data was used consistently for all the applicable technical studies (e.g., air quality, GHG, and noise). The peak hour car wash trip generation conservatively relied upon ITE default data as this information was not available for the existing car washes.

It is unclear why the TIA would need to change the daily trip generation for the car wash; however, if there is additional justification that can be added to the TIA to address the City's concern, please let us know what you are looking for and we would be happy to include.

Please let us know if you have or questions or would like to discuss

Thank you,

Eliza Laws - Senior Environmental Analyst
Albert A. Webb Associates
3788 McCray Street, Riverside, CA 92506
t: 951.320.6055
e: eliza.laws@webbassociates.com w: www.webbassociates.com
[LinkedIn](#) | [Twitter](#) | [Facebook](#) | [YouTube](#)

From: Ryan Fowler <rfowler@cityofmenifee.us>
Sent: Thursday, June 11, 2020 4:52 PM
To: Eliza Laws <eliza.laws@webbassociates.com>
Cc: Jennifer Gillen <jennifer.gillen@webbassociates.com>
Subject: Re: Case 2018-300 - Motte Country Plaza Traffic

Hi Eliza,

Please see response from our air/noise consultant:

Changes to default trip rates/travel distances are fine as long as there is project-specific evidence/justification for the change. Such evidence could include trip counts from a similar facility, a market analysis showing expected customer base/service area, or other fact-based, project-specific information supporting the change in trip information.

My only concern would be if the traffic and noise analyses were using one set of assumptions and the AQ/GHG/Energy sections were using a different set of assumptions.

Thanks,

Chris

From: Eliza Laws <eliza.laws@webbassociates.com>
Sent: Wednesday, June 10, 2020 2:35 PM
To: Ryan Fowler <rfowler@cityofmenifee.us>
Cc: Jennifer Gillen <jennifer.gillen@webbassociates.com>
Subject: Case 2018-300 - Motte Country Plaza Traffic

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Good afternoon Ryan,

I hope this email finds you well.

We are preparing the air quality and greenhouse gas analysis for the subject project and had a question for the City. Typically, the analysis is based on the traffic data from the Traffic Impact Analysis (TIA) that most often is based on the Institute of Traffic Engineers (ITE) published data. However, the daily traffic generated by the project using these sources result in a conservatively high estimate.

If the applicant could provide data from other existing uses that are similar to what is proposed here, would the City be open to this data being used in the air quality and greenhouse gas analysis in lieu of the TIA data?

Please let me know what you think and if you have any questions or would like to discuss.

Thank you in advance for your feedback.

Eliza Laws - Senior Environmental Analyst
Albert A. Webb Associates
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t: 951.320.6055
e: eliza.laws@webbassociates.com w: www.webbassociates.com
[LinkedIn](#) | [Twitter](#) | [Facebook](#) | [YouTube](#)