

CHATEAU SENIOR LIVING FACILITY TRAFFIC IMPACT ANALYSIS

County of San Bernardino

October 9, 2020

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EXECUTIVE SUMMARY

The purpose of this report is to provide an assessment of potential traffic impacts resulting from development of the proposed Chateau Senior Living Facility project and to identify the traffic mitigation measures necessary to maintain the established Level of Service standard for the elements of the impacted roadway system. The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act.

The County of San Bernardino is the lead agency responsible for preparation of the traffic impact analysis, in accordance with California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for Existing (2018) Plus Project traffic conditions, the anticipated opening date with full occupancy of the development in Year 2020, at which time it will be generating trips at its full potential, and for Buildout Year (2040) traffic conditions. For Buildout Year (2040) conditions, the roadway network will include the extension of Green Tree Boulevard between Hesperia Road and Ridgecrest Road.

Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

PROJECT DESCRIPTION

The project site (17853 Yates Road, Victorville, CA 92395) is located north of Yates Road and west of Park Road in the County of San Bernardino. The site is currently vacant. The proposed project includes an application for a Conditional Use Permit (CUP) for the construction and operation of a residential care facility on an 18.47 acre site located in an unincorporated portion of San Bernardino County, within the City of Victorville's sphere of influence. The approximate 274 bed continuing care retirement community would include: a two-story 29,952 square foot medical office building, a two-story 24,722 square foot amenities/rehabilitation building, a three-story 60,192 square foot assisted living building with 123 beds, a three-story 49,768 square foot independent living building with 52 units, and a two-story 47,659 square foot skilled nursing building with 99 beds. The proposed project will feature a wellness center, within the medical office building, and will be equipped with offices, a pharmacy, chronic dialysis, behavioral health, diagnostic testing and clinical wellness suites, with an ambulatory surgical center. Other features include an amenity-rehab center to serve as a gathering spot for residents and visitor and feature a market, coffee and smoothie shop, cafeteria styled restaurant, bistro, gym, beauty salon, and lounge. The second-floor outpatient rehab center offers pain management, audiology, speech pathology, massage, respiratory, physical and occupational therapies, and a training center.

Two full access project driveways are proposed to be provided on Yates Road. The Project East Driveway is proposed to be a signalized full access driveway. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection. The Project West Driveway is proposed to be an emergency-only stop-controlled secondary access, which is located at the southwest corner of the project site.

For purposes of this traffic impact analysis, the proposed project is assumed to be fully operational by Year 2020.

EXISTING CONDITIONS

The study intersections currently operate at Level of Service C or better during the peak hours for Existing traffic conditions (see Table 1), except at the following study intersections that are projected to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

Traffic signals appear to currently be warranted at the following study intersections for Existing conditions:

- Apatite Avenue/Bear Valley Road - #9
- Peach Avenue/Bear Valley Road - #15

PROJECT TRIPS

The proposed project is forecast to generate a total of approximately 2,927 daily trips, including 221 trips during the AM peak hour and 253 trips during the PM peak hour (see Table 2).

FORECAST CONDITIONS

Existing Plus Project Conditions: The study intersections are forecast to operate at Level of Service C or better during the peak hours for Existing Plus Project conditions, except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Project East Driveway/Yates Road - #11
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

The proposed project is forecast to result in no significant impacts at the study intersections for Existing Plus Project conditions (see Table 3), with the following recommended improvements:

- Hesperia Road (NS) at Bear Valley Road (EW) - #1
 - Add northbound right turn overlap phasing.
- Ridgecrest Road (NS) at Chinquapin Drive (EW) - #2
 - Install a new traffic signal. Since the intersection is already operating at deficient Level of Service under Existing conditions, the project should contribute its fair cost based on total traffic volumes. The deficient LOS at the Intersection of Ridgecrest Road and Chinquapin (Intersection #2) is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing turning traffic on Chinquapin Drive.
- Ridgecrest Road (NS) at Bear Valley Road (EW) - #6
 - Provide a second eastbound left turn lane.
- Apatite Avenue (NS) at Bear Valley Road (EW) - #9
 - Install a new traffic signal and provide northbound and southbound left turn lanes. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

- Project East Driveway (NS) at Yates Road (EW) - #11
 - Install a new traffic signal. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.

- Tamarisk Road-I Avenue (NS) at Bear Valley Road (EW) - #14
 - Restripe northbound approach to provide dual left turn lanes and one shared northbound through-right lane.
 - Restripe southbound approach to provide a left turn lane and one shared northbound through-right lane.
 - Modify northbound-southbound signal phasing to protected left turn.

- Peach Avenue (NS) at Bear Valley Road (EW) - #15
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

Opening Year (2020) Without Project: The study intersections are forecast to operate at Level of Service C or better during the peak hours for Opening Year (2020) Without Project conditions (see Table 4), except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

Opening Year (2020) With Project: The study intersections are forecast to operate at Level of Service C or better during the peak hours for Opening Year (2020) With Project conditions (see Table 5), except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Project East Driveway/Bear Valley Road - #11
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

The proposed project is forecast to result in no significant impacts at the study intersections for Opening Year (2020) With Project conditions (see Table 5), with the following recommended improvements:

- Hesperia Road (NS) at Bear Valley Road (EW) - #1
 - Add northbound right turn overlap phasing.

- Ridgecrest Road (NS) at Chinquapin Drive (EW) - #2
 - Install a new traffic signal. Since the intersection is already operating at deficient Level of Service under Existing conditions, the project should contribute its fair cost based on total traffic volumes. The deficient LOS at the Intersection of Ridgecrest Road and Chinquapin (Intersection #2) is only

experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing turning traffic on Chinquapin Drive.

- Ridgecrest Road (NS) at Bear Valley Road (EW) - #6
 - Provide a second eastbound left turn lane.
- Apatite Avenue (NS) at Bear Valley Road (EW) - #9
 - Install a new traffic signal and provide northbound and southbound left turn lanes. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.
- Project East Driveway (NS) at Yates Road (EW) - #11
 - Install a new traffic signal. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.
- Tamarisk Road-I Avenue (NS) at Bear Valley Road (EW) - #14
 - Restripe northbound approach to provide dual left turn lanes and one shared northbound through-right lane.
 - Restripe southbound approach to provide a left turn lane and one shared northbound through-right lane.
 - Modify northbound-southbound signal phasing to protected left turn.
- Peach Avenue (NS) at Bear Valley Road (EW) - #15
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

Since the Green Tree Boulevard Extension project is anticipated to start in March 2021 and will likely be completed before the completion of the proposed Chateau Senior Living Facility project, the new roadway extension will affect the existing alignment of Chinquapin Drive and reduce the existing on Ridgecrest Road such that it is recommended that the installation of the traffic signal at the intersection of Ridgecrest Road and Chinquapin Drive (Intersection #2) be omitted during the near-term conditions until it is warranted based on actual traffic counts after the completion of the Green Tree Boulevard Extension project.

Buildout Year (2040) Without Project: The study intersections are forecast to operate at Level of Service C or better during the peak hours for Buildout Year (2040) Without Project conditions (see Table 6), except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apple Valley Road/Yucca Loma Road - #8
- Apatite Avenue/Bear Valley Road - #9
- Ridgecrest Road/Green Tree Boulevard - #12
- Hesperia Road/Green Tree Boulevard - #13
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

Buildout Year (2040) With Project: The study intersections are forecast to operate at Level of Service C or better during the peak hours for Buildout Year (2040) With Project conditions (see Table 7), except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Vista Point Drive - #3
- Ridgecrest Road/Bear Valley Road - #6
- Apple Valley Road/Yucca Loma Road - #8
- Apatite Avenue/Bear Valley Road - #9
- Project East Driveway/Yates Road - #11
- Ridgecrest Road/Green Tree Boulevard - #12
- Hesperia Road/Green Tree Boulevard - #13
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

The proposed project is forecast to result in no significant impacts at the study intersections for Buildout Year (2040) With Project conditions (see Table 7), with the following recommended improvements:

- Hesperia Road (NS) at Bear Valley Road (EW) - #1
 - Add northbound right turn overlap phasing.
- Ridgecrest Road (NS) at Chinquapin Drive (EW) - #2
 - Install a new traffic signal. Since the intersection is already operating at deficient Level of Service under Existing conditions, the project should contribute its fair cost based on total traffic volumes. The deficient LOS at the Intersection of Ridgecrest Road and Chinquapin (Intersection #2) is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing turning traffic on Chinquapin Drive.
- Ridgecrest Road (NS) at Bluff Crest Street/Vista Point Drive (EW) - #3
 - Restripe to provide eastbound and westbound left turn lanes.
- Ridgecrest Road (NS) at Bear Valley Road (EW) - #6
 - Provide a second eastbound left turn lane.
- Apple Valley Road (NS) at Yucca Loma Road (EW) - #8 [Part of the Green Tree Boulevard Extension Transportation Improvement Project]
 - Provide a second northbound left turn lane.
 - Add southbound right turn overlap phasing.
 - Add eastbound right turn overlap phasing.
 - Provide westbound right turn lane.
- Apatite Avenue (NS) at Bear Valley Road (EW) - #9
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.
- Project East Driveway (NS) at Yates Road (EW) - #11
 - Install a new traffic signal. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.

- Ridgcrest Road (NS) at Green Tree Boulevard (EW) - #12 [Part of the Green Tree Boulevard Extension Transportation Improvement Project]
 - Install a traffic signal.
 - Provide northbound left turn lane.
 - Provide shared northbound left/right lane.
 - Provide northbound right turn lane.
 - Provide eastbound right turn lane.
 - Provide westbound left turn.

- Hesperia Road (NS) at Green Tree Boulevard (EW) - #13 [Part of the Green Tree Boulevard Extension Transportation Improvement Project]
 - Provide third northbound through lane.
 - Provide northbound right turn lane.
 - Add northbound right turn overlap phasing.
 - Provide southbound left turn lane.
 - Provide third southbound through lane.
 - Provide southbound right turn lane.
 - Provide second eastbound left turn lane.
 - Provide two eastbound through lanes.
 - Provide two westbound left turn lanes.
 - Provide two westbound through lanes.
 - Add westbound right turn overlap phasing.

- Tamarisk Road-I Avenue (NS) at Bear Valley Road (EW) - #14
 - Restripe northbound approach to provide dual left turn lanes and one shared northbound through-right lane.
 - Restripe southbound approach to provide a left turn lane and one shared northbound through-right lane.
 - Modify northbound-southbound signal phasing to protected left turn.

- Peach Avenue (NS) at Bear Valley Road (EW) - #15
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

ON-SITE/ACCESS RECOMMENDATIONS

Site-specific circulation and access recommendations are depicted on Figure 34.

The Project East Driveway is proposed to be a signalized full access driveway. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.

The Project West Driveway is proposed to be an emergency-only stop-controlled secondary access, which is located at the southwest corner of the project site.

Yates Road along the project boundary should be constructed at the ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise approved by the County of San Bernardino Public Works Department.

The proposed project driveway should be constructed in conformance with County of San Bernardino standards, including provisions for sight distance requirements and truck turning radii, or as otherwise approved by the County of San Bernardino Public Works Department.

All on-site and site-adjacent improvements, including traffic signing/striping and project driveways, should be constructed as approved by the County of San Bernardino Public Works Department.

On-site parking should be provided to the satisfaction of County of San Bernardino Planning Department.

As is the case for any roadway design, the County of San Bernardino should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

PROJECT DRIVEWAY SIGHT DISTANCE ASSESSMENT

The speed limit on Yates Road is currently posted at 55 miles per hour. Based on Table 405.1A of the 2018 Highway Design Manual to account for single-unit truck making left-turn from stop with a 9.5 second time gap, the minimum corner sight distance is 768 feet determined by the equation of $1.47VT$, where V is the design speed in miles per hour of the major road and T is the time gap in seconds for the minor road vehicle to enter the road. The minimum stopping sight distance standard is 500 feet. Appendix H includes the Highway Design Manual sight distance standards. Figure 35 shows the sight distance analysis for the proposed project driveway on Yates Road. As shown on Figure 35, the proposed project driveway has adequate sight distances when the yellow highlighted triangular areas are clear of visual obstructions that are more than 2 feet in height.

1. INTRODUCTION

This section introduces the project location, proposed development, and study area. Figure 1 shows the project location map and Figure 2 illustrates the project site plan.

PURPOSE AND OBJECTIVES

The purpose of this report is to provide an assessment of the traffic impacts resulting from development of the proposed Chateau Senior Living Facility project. The study objectives include (1) documentation of Existing (2018) traffic conditions in the project vicinity; (2) evaluation of Project and Cumulative traffic impacts; (3) evaluation of the Buildout Year (2040) conditions; and (4) identification of on-site and off-site improvements needed to mitigate potential impacts to the transportation system. This report analyzes traffic impacts for the anticipated opening date with occupancy of the development in Opening Year (2020) and Buildout Year (2040), at which time it will be generating trips at its full potential. For Buildout Year (2040) conditions, the roadway network will include the extension of Green Tree Boulevard between Hesperia Road and Ridgcrest Road.

Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

PROJECT DESCRIPTION

The project site (17853 Yates Road, Victorville, CA 92395) is located north of Yates Road and west of Park Road in the County of San Bernardino. The site is currently vacant. The proposed project includes an application for a Conditional Use Permit (CUP) for the construction and operation of a residential care facility on an 18.47-acre site located in an unincorporated portion of San Bernardino County, within the City of Victorville's sphere of influence. The approximate 274 bed continuing care retirement community would include: a two-story 29,952 square foot medical office building, a two-story 24,722 square foot amenities/rehabilitation building, a three-story 60,192 square foot assisted living building with 123 beds, a three-story 49,768 square foot independent living building with 52 units, and a two-story 47,659 square foot skilled nursing building with 99 beds. The proposed project will feature a wellness center, within the medical office building, and will be equipped with offices, a pharmacy, chronic dialysis, behavioral health, diagnostic testing and clinical wellness suites, with an ambulatory surgical center. Other features include an amenity-rehab center to serve as a gathering spot for residents and visitor and feature a market, coffee and smoothie shop, cafeteria styled restaurant, bistro, gym, beauty salon, and lounge. The second-floor outpatient rehab center offers pain management, audiology, speech pathology, massage, respiratory, physical and occupational therapies, and a training center.

Two full access project driveways are proposed to be provided on Yates Road. The Project East Driveway is proposed to be a signalized full access driveway. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection. The Project West Driveway is proposed to be an emergency-only stop-controlled secondary access, which is located at the southwest corner of the project site.

For purposes of this traffic impact analysis, the proposed project is assumed to be fully operational by Year 2020.

STUDY AREA

Based on the scoping agreement (see Appendix B) with County of San Bernardino and input from adjacent jurisdictions (Cities of Victorville, Hesperia, and Apple Valley), the study area consists of the following study intersections:

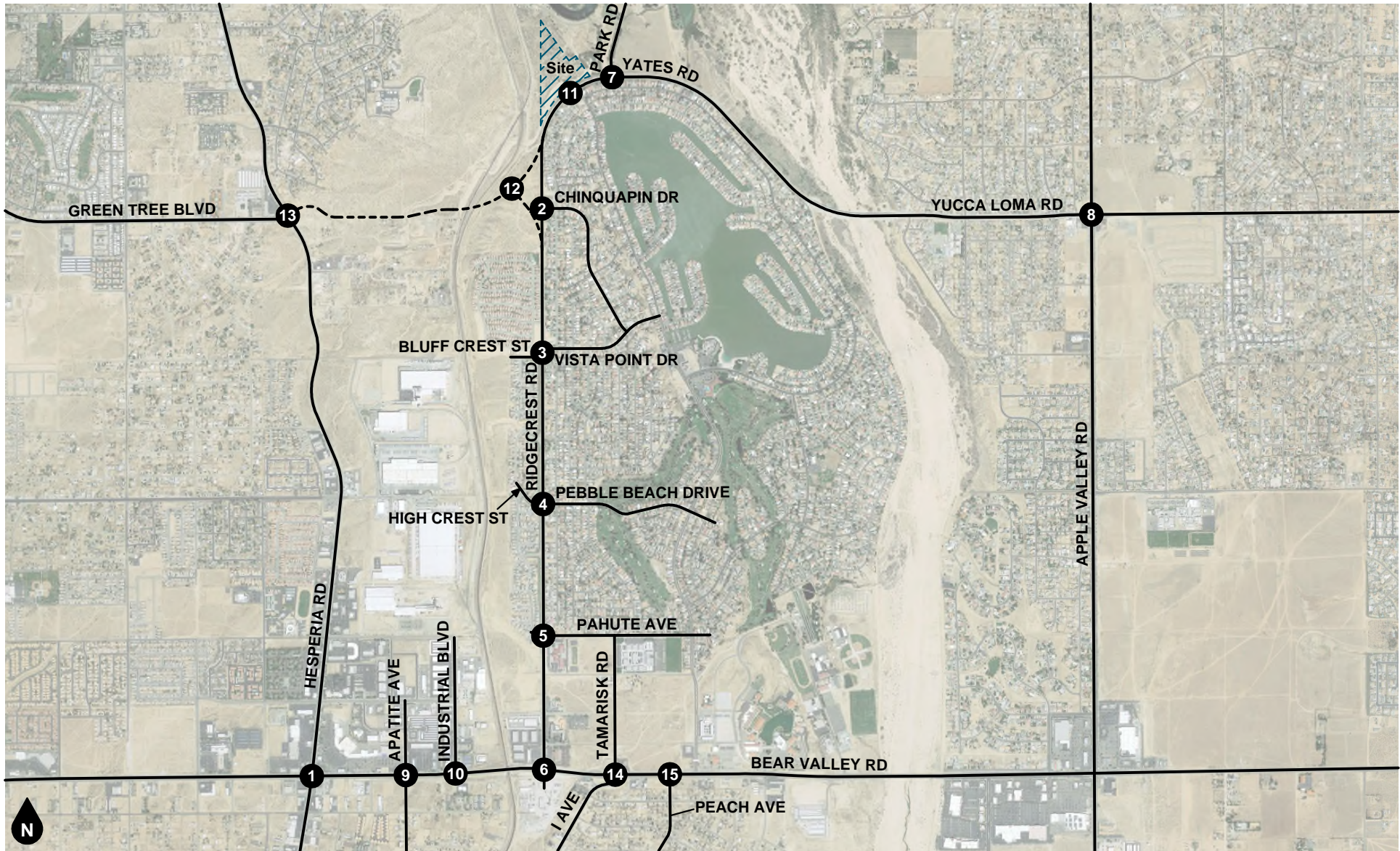
Study Intersections ¹	Jurisdiction
1. Hesperia Road (NS) at Bear Valley Road (EW)	Victorville/Hesperia
2. Ridgecrest Road (NS) at Chinquapin Drive (EW)	County
3. Ridgecrest Road (NS) at Bluffcrest Street/Vista Point Drive (EW)	County/Victorville
4. Ridgecrest Road (NS) at High Crest Street/Pebble Beach Drive (EW)	County/Victorville
5. Ridgecrest Road (NS) at Pahute Drive (EW)	County/Victorville
6. Ridgecrest Road (NS) at Bear Valley Road (EW)	Hesperia/Victorville
7. Park Road (NS) at Yates Road (EW)	County
8. Apple Valley Road (NS) at Yucca Loma Road (EW)	Apple Valley
9. Apatite Avenue (NS) at Bear Valley Road (EW)	Victorville/Hesperia
10. Industrial Boulevard (NS) at Bear Valley Road (EW)	Victorville/Hesperia
11. Project East Driveway (NS) at Yates Road (EW)	County
12. Ridgecrest Road (NS) at Green Tree Boulevard (EW) – future 2040 only	Victorville
13. Hesperia Road (NS) at Green Tree Boulevard (EW) – future 2040 only	Victorville
14. Tamarisk Road/I Avenue (NS) at Bear Valley Road (EW)	Hesperia
15. Peach Avenue (NS) at Bear Valley Road (EW)	Hesperia

ANALYSIS SCENARIOS

The following six (6) scenarios are analyzed for weekday AM and PM peak hour conditions:

- Existing (2018) Conditions
- Existing (2018) Plus Project
- Opening Year (2020) Without Project
- Opening Year (2020) With Project
- Buildout Year (2040) Without Project
- Buildout Year (2040) With Project

¹ (NS) = north-south roadway; (EW) = east-west roadway



Legend
 # Study Intersection

Figure 1
Project Location Map

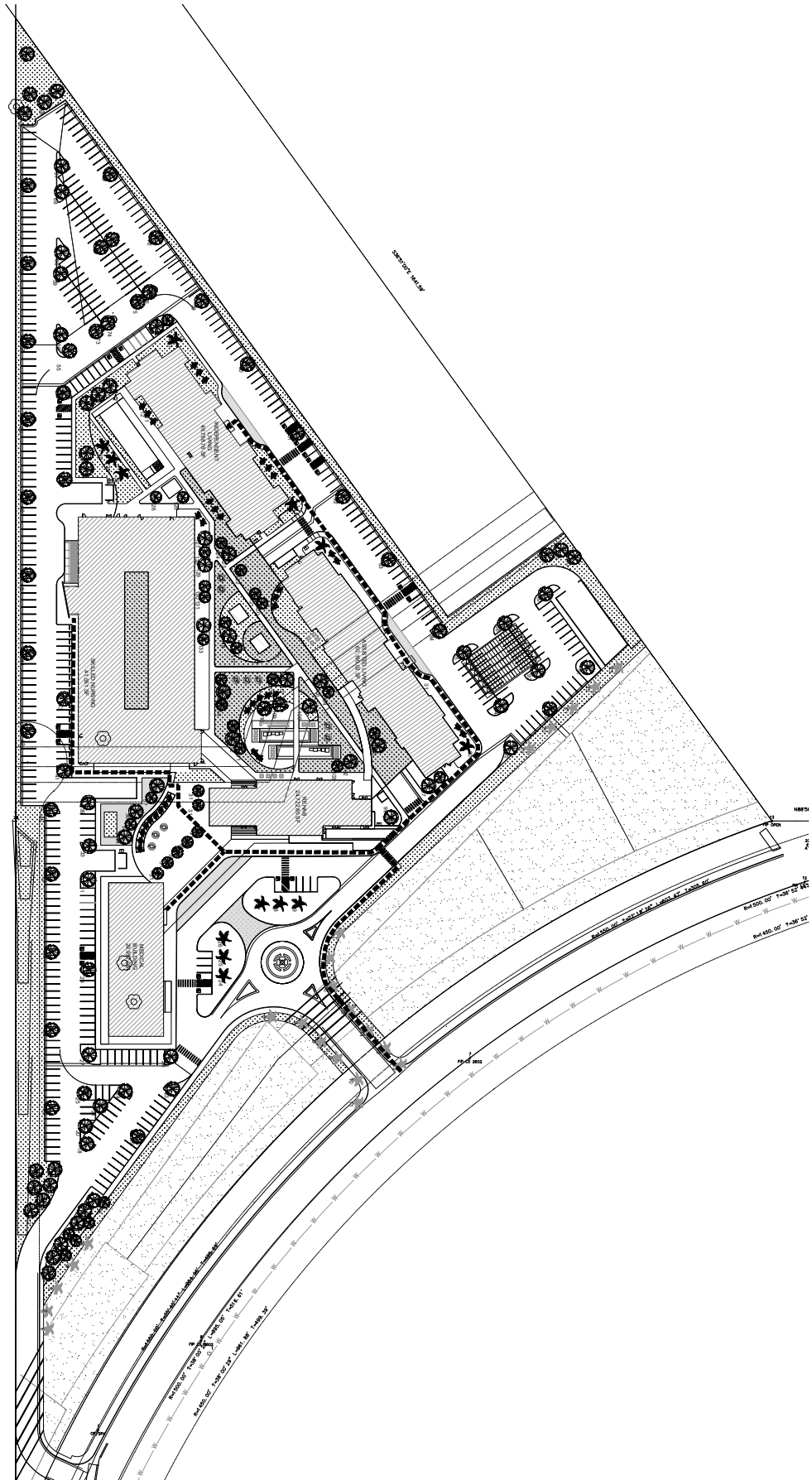


Figure 2
Site Plan

2. METHODOLOGY

This section describes the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

INTERSECTION DELAY METHODOLOGY

The technique used to assess the performance of unsignalized intersections and intersections within the County of San Bernardino and adjacent jurisdictions is known as the intersection delay methodology based on the procedures contained in the Highway Capacity Manual (Transportation Research Board, 6th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. The intersection control delay is then correlated to Level of Service based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

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

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst individual movement (or movements sharing a single lane).

Intersection delay analysis was performed using the Vistro (Version 6.00-00) software. The Level of Service calculations have been performed in accordance with the input parameters specified in Appendix B of the San Bernardino County Congestion Management Program (2016 Update).

PERFORMANCE STANDARDS

County of San Bernardino. Pursuant to the traffic study guideline requirements, the minimum acceptable Level of Service in desert areas is C. Therefore, any intersection operating at Level of Service D, E or F will be considered deficient.

THRESHOLDS OF SIGNIFICANCE

For study intersections within the County of San Bernardino jurisdiction, a project traffic impact is considered significant if the project: (i) changes the Level of Service at an intersection from acceptable under “without

project” conditions to unacceptable under “with project” conditions, or (ii) worsens a Level of Service deficiency under “without project” conditions, which requires mitigation to bring the Level of Service to without project conditions or better.

If a project is forecast to cause a significant traffic impact, feasible mitigation measures that will reduce the impact to a less than significant level are identified. Mitigation measures can be in many forms, including the addition of lanes, traffic control modification, or demand management measures. If no feasible mitigation measures can be identified for a significantly impacted facility, the impact will remain significant and unavoidable and a statement of overriding considerations is required.

3. EXISTING CONDITIONS

EXISTING ROADWAY SYSTEM

Figure 3 identifies the Existing number of through lanes, intersection traffic controls, and intersection geometry based on a field survey of the study area.

Regional access to the project site is provided by the I-15 Freeway and State Route 18. Local north-south circulation is provided by Hesperia Road, Ridgecrest Road, and Apple Valley Road. Local east-west circulation is provided by Yucca Loma Road and Bear Valley Road.

EXISTING ROADWAY VOLUMES

Existing peak hour intersection volumes are based upon AM and PM peak period intersection turning movement counts obtained in March/May 2018 during typical weekday conditions while local schools were in session. The AM peak period was counted between 7:00 AM and 9:00 AM and the PM peak period was counted between 4:00 PM and 6:00 PM. The actual peak hour within the peak period is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, the weekday evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume. Intersection turning movement count worksheets are included in Appendix C. In addition, truck classification counts were conducted at the study intersections. The existing percent of trucks were used in the conversion of trucks to Passenger Car Equivalent (PCE) trips.

The Existing average daily traffic volumes were estimated and factored from peak hour intersection turning movement counts using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach + Exit Volume)} \times 12 = \text{Daily Leg Volume}$$

The conversion factor is estimated based on comparison of peak hour intersection turning movement volumes and the 24-hour roadway segment volumes in the area.

Figure 4 depicts the average daily traffic volumes for Existing traffic conditions. Figure 5 and Figure 6 show the morning peak hour and evening peak hour intersection turning movement volumes for Existing traffic conditions, respectively.

EXISTING INTERSECTION LEVEL OF SERVICE

The morning and evening peak hour Levels of Service for Existing traffic conditions have been calculated and are shown in Table 1. Existing Level of Service calculation worksheets are provided in Appendix D. The study intersections currently operate at Level of Service C or better during the peak hours for Existing traffic conditions (see Table 1), except at the following study intersections that are projected to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

EXISTING TRAFFIC SIGNAL WARRANT ANALYSIS

The unsignalized intersections have been evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California Manual of Uniform Traffic Control Devices (2014 Update).

Traffic signals appear to currently be warranted at the following study intersections for Existing conditions (see Appendix F):

- Apatite Avenue/Bear Valley Road - #9
- Peach Avenue/Bear Valley Road - #15

GENERAL PLAN CONTEXT

The County of San Bernardino General Plan Circulation Element is shown on Figure 7. Existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 7. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The County of San Bernardino General Plan roadway cross-sections are shown on Figure 8.

TRANSIT FACILITIES

Figure 9 shows Existing public transit facilities and routes in the project vicinity.

PEDESTRIAN FACILITIES

Existing pedestrian facilities adjacent to the project site are shown on Figure 10.

Table 1
Existing Intersection Delay and Levels of Service

ID	Study Intersection	Traffic Control ¹	AM Peak Hour		PM Peak Hour	
			Delay ²	LOS ³	Delay ²	LOS ³
1.	Hesperia Road at Bear Valley Road	TS	34.1	C	36.3	D
2.	Ridgecrest Road at Chinquapin Drive	CSS	23.9	C	18.8	C
3.	Ridgecrest Road at Vista Point Drive	CSS	19.0	C	16.9	C
4.	Ridgecrest Road at Pebble Beach Drive	TS	28.4	C	15.3	B
5.	Ridgecrest Road at Pahute Drive	TS	14.5	B	8.6	A
6.	Ridgecrest Road at Bear Valley Road	TS	38.5	D	32.6	C
7.	Park Road at Yates Road	TS	2.0	A	2.9	A
8.	Apple Valley Road at Yucca Loma Road	TS	25.6	C	22.3	C
9.	Apatite Avenue at Bear Valley Road	CSS	1,127.0	F	5,651.4	F
10.	Industrial Boulevard at Bear Valley Road	TS	22.8	C	20.6	C
14.	Tamarisk Road/I Avenue at Bear Valley Road	TS	33.5	C	61.0	E
15.	Peach Avenue at Bear Valley Road	CSS	1,277.1	F	5,093.4	F

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(3) LOS = Level of Service

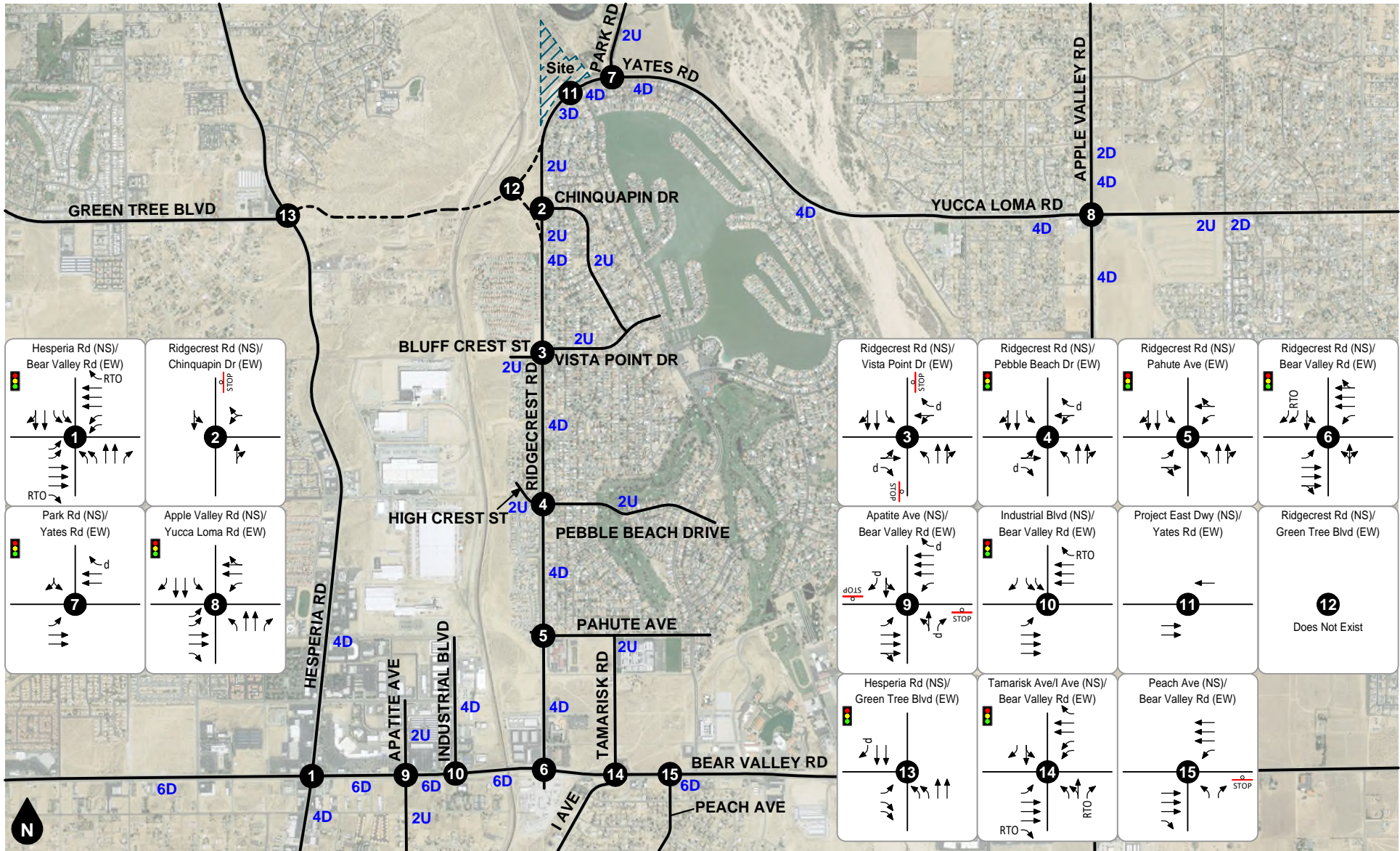
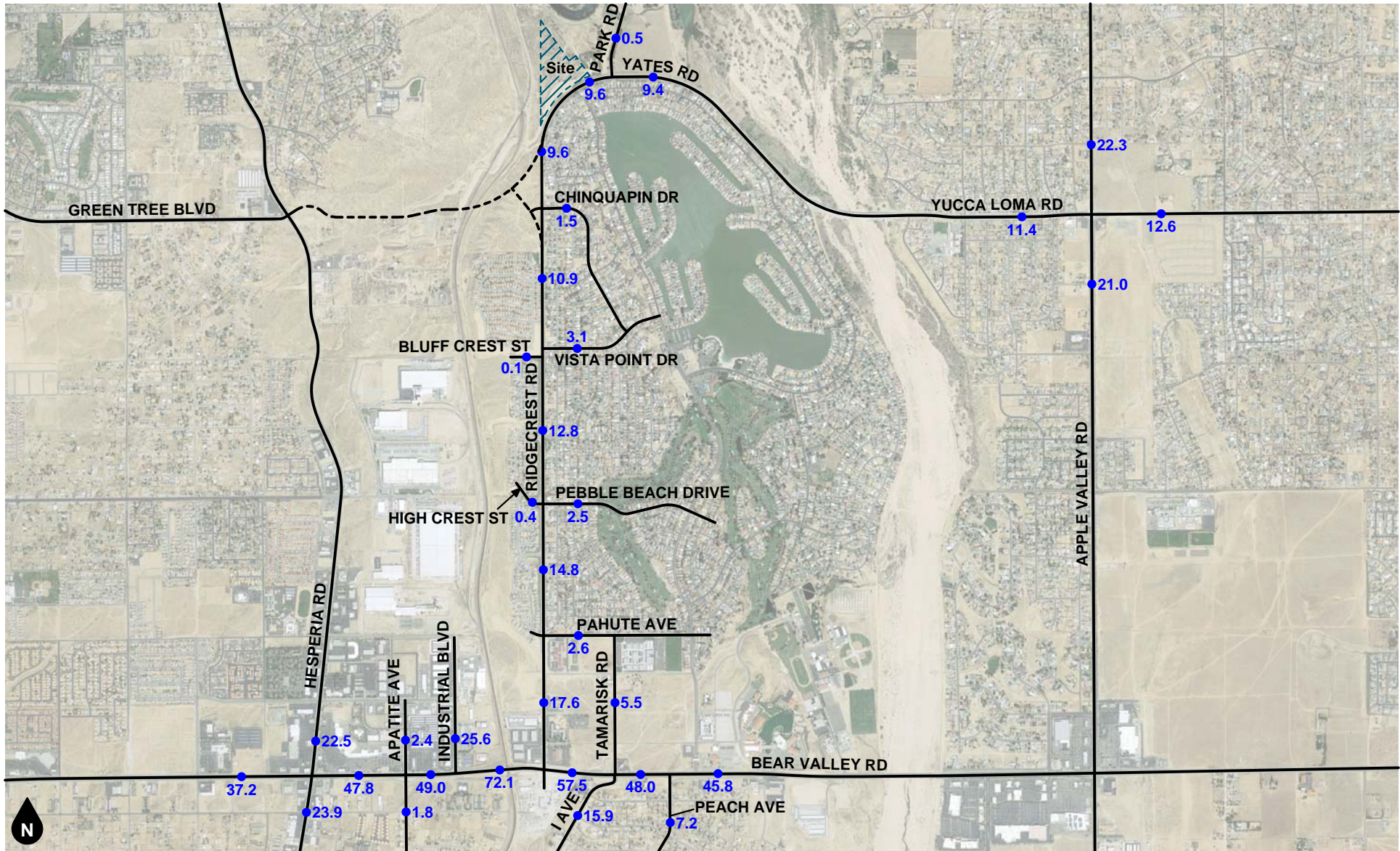
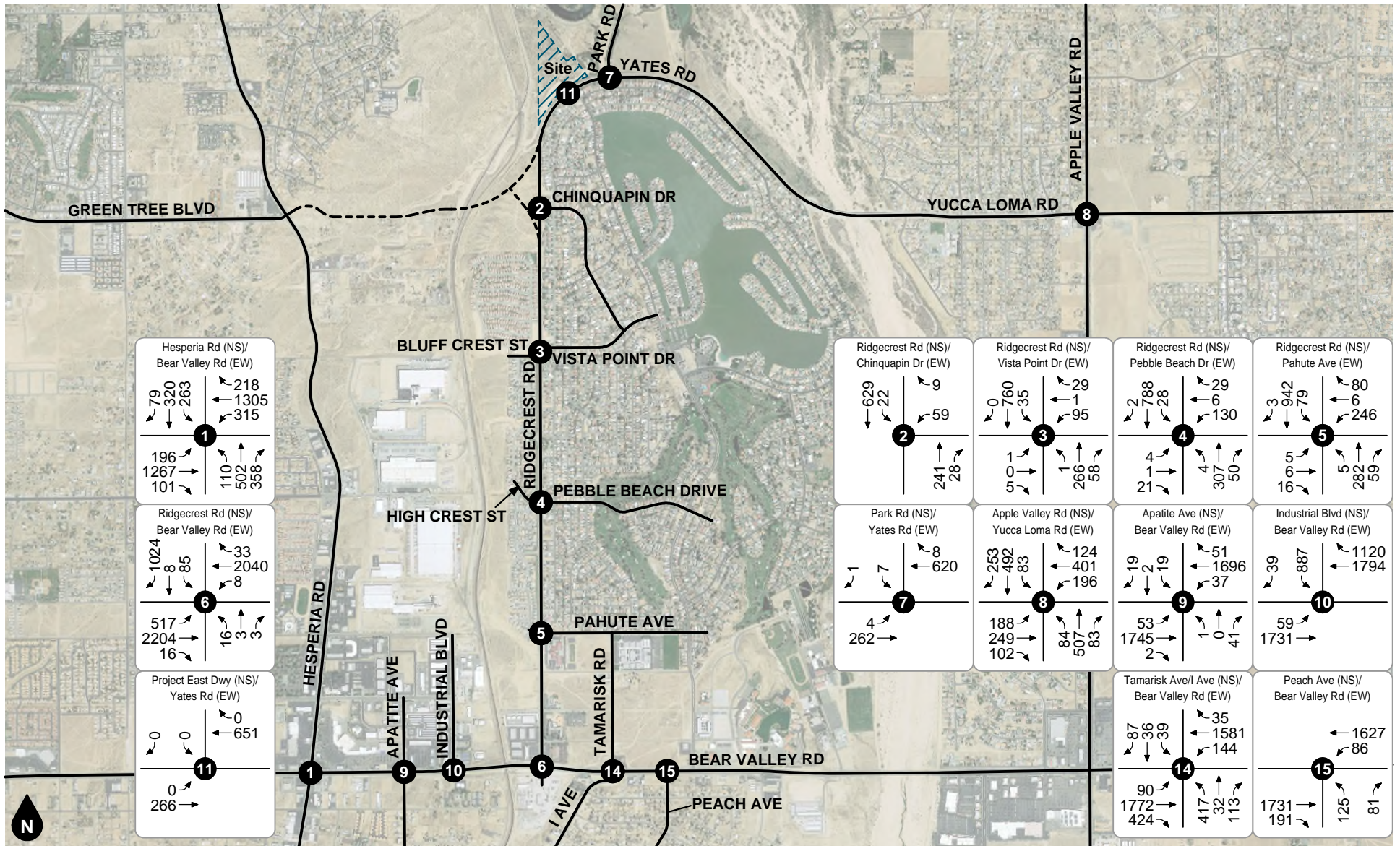


Figure 3
Existing Lane Geometry and Intersection Traffic Controls



Legend
 ●## Vehicles Per Day (1,000's)

Figure 4
Existing (2018) Average Daily Traffic Volumes



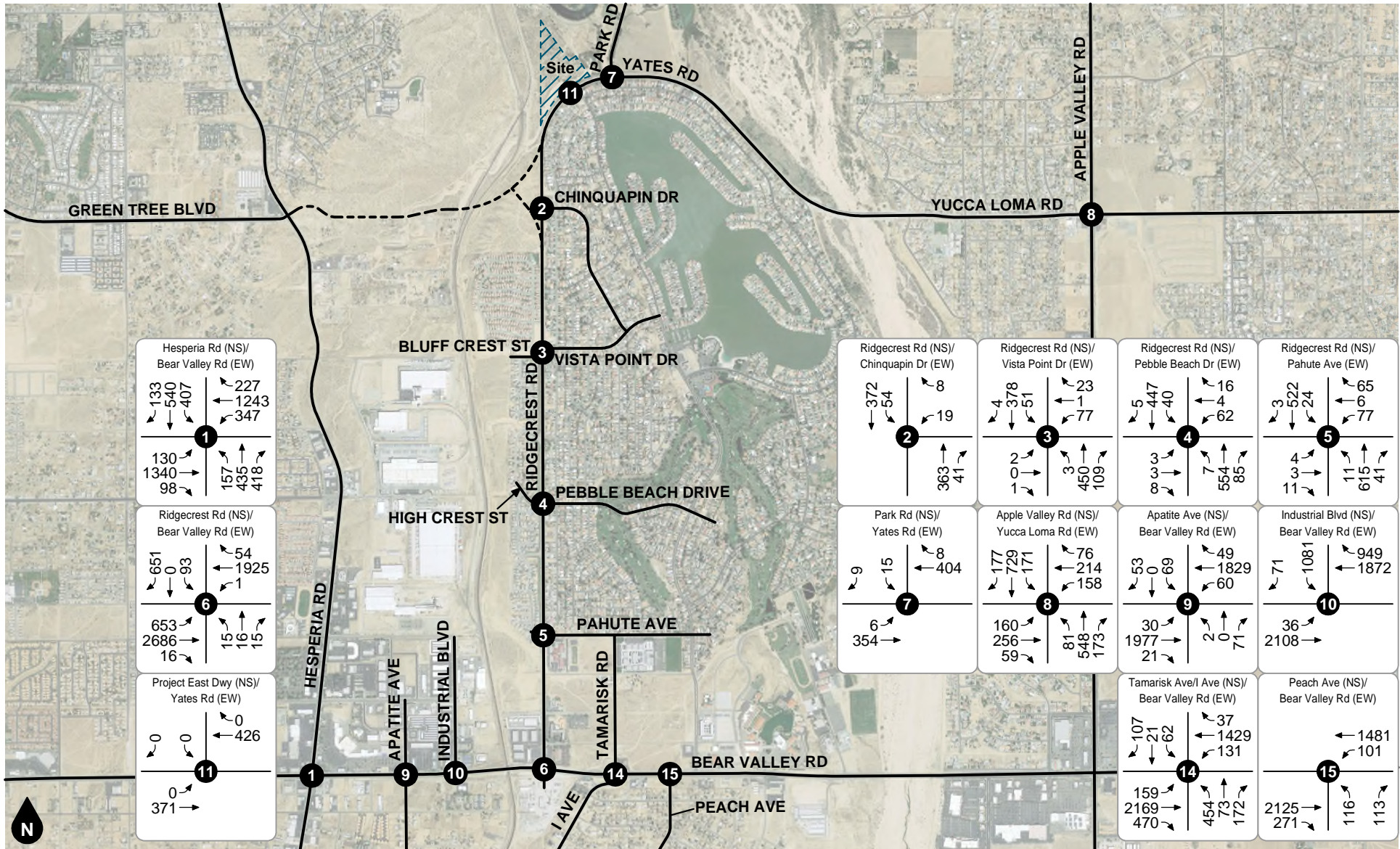
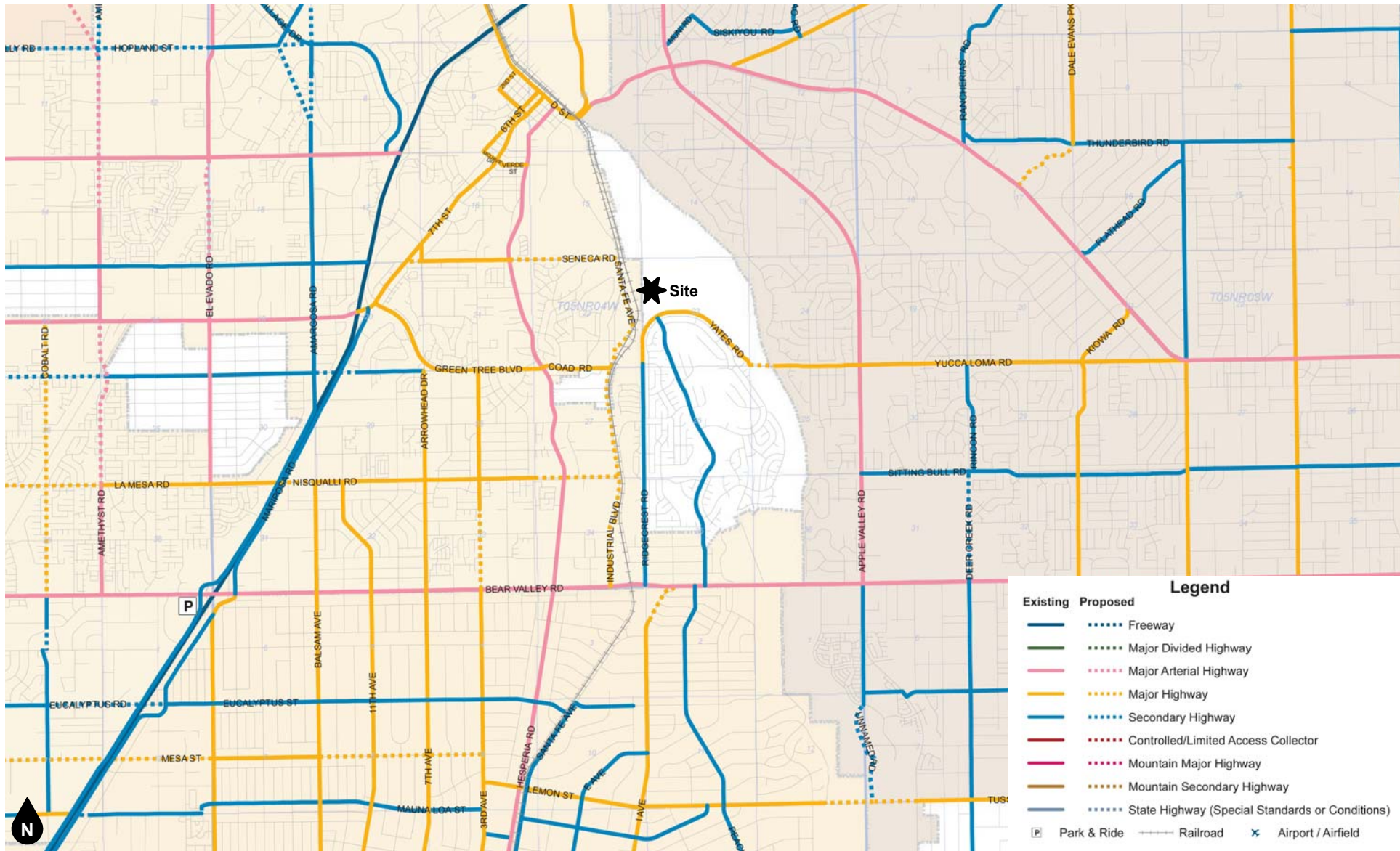


Figure 6
Existing (2018)
PM Peak Hour Intersection Turning Movement Volumes



Source: County of San Bernardino



Figure 7
County of San Bernardino General Plan Circulation Element

Chateau Senior Living Facility
 Traffic Impact Analysis
 19-0215

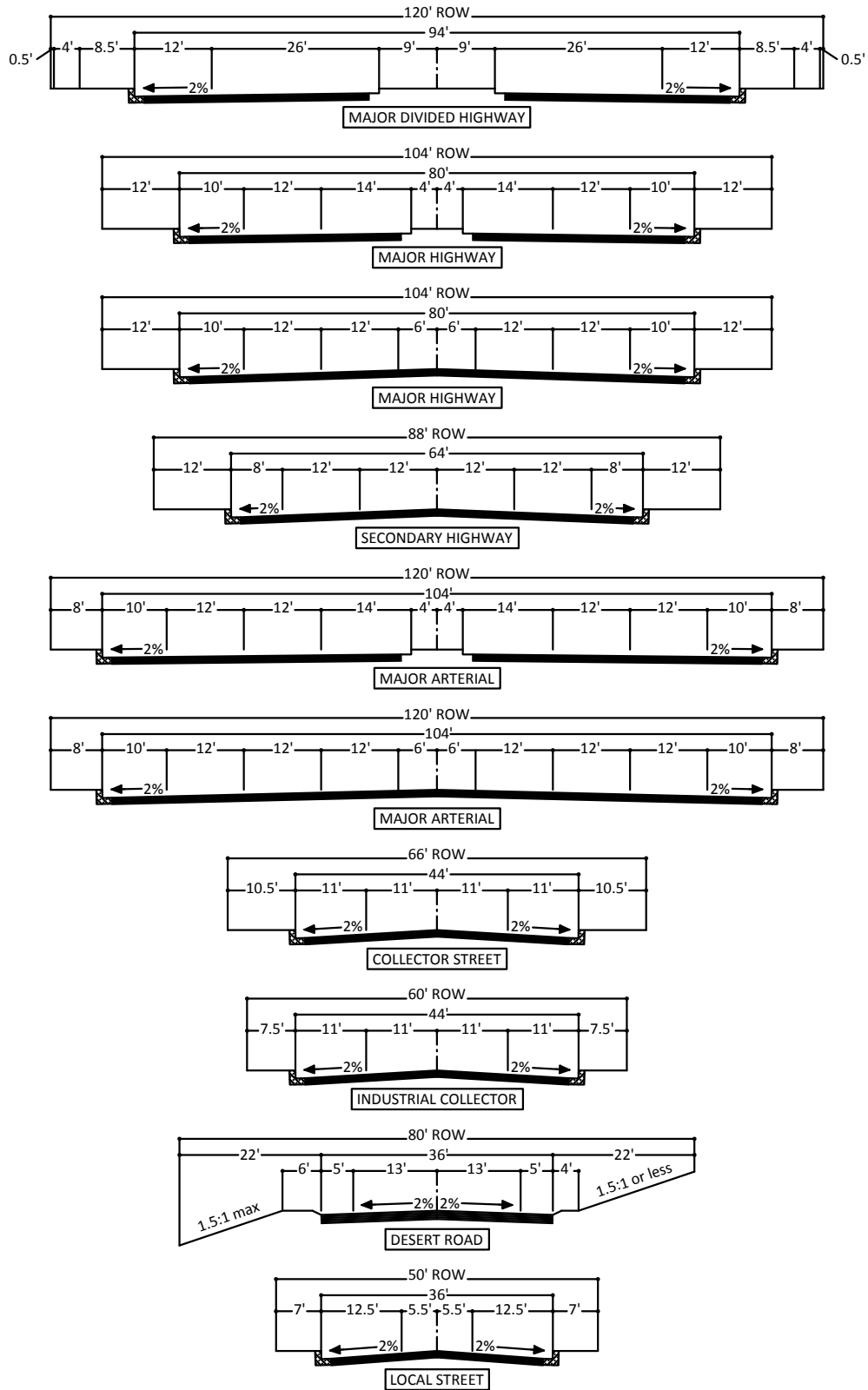
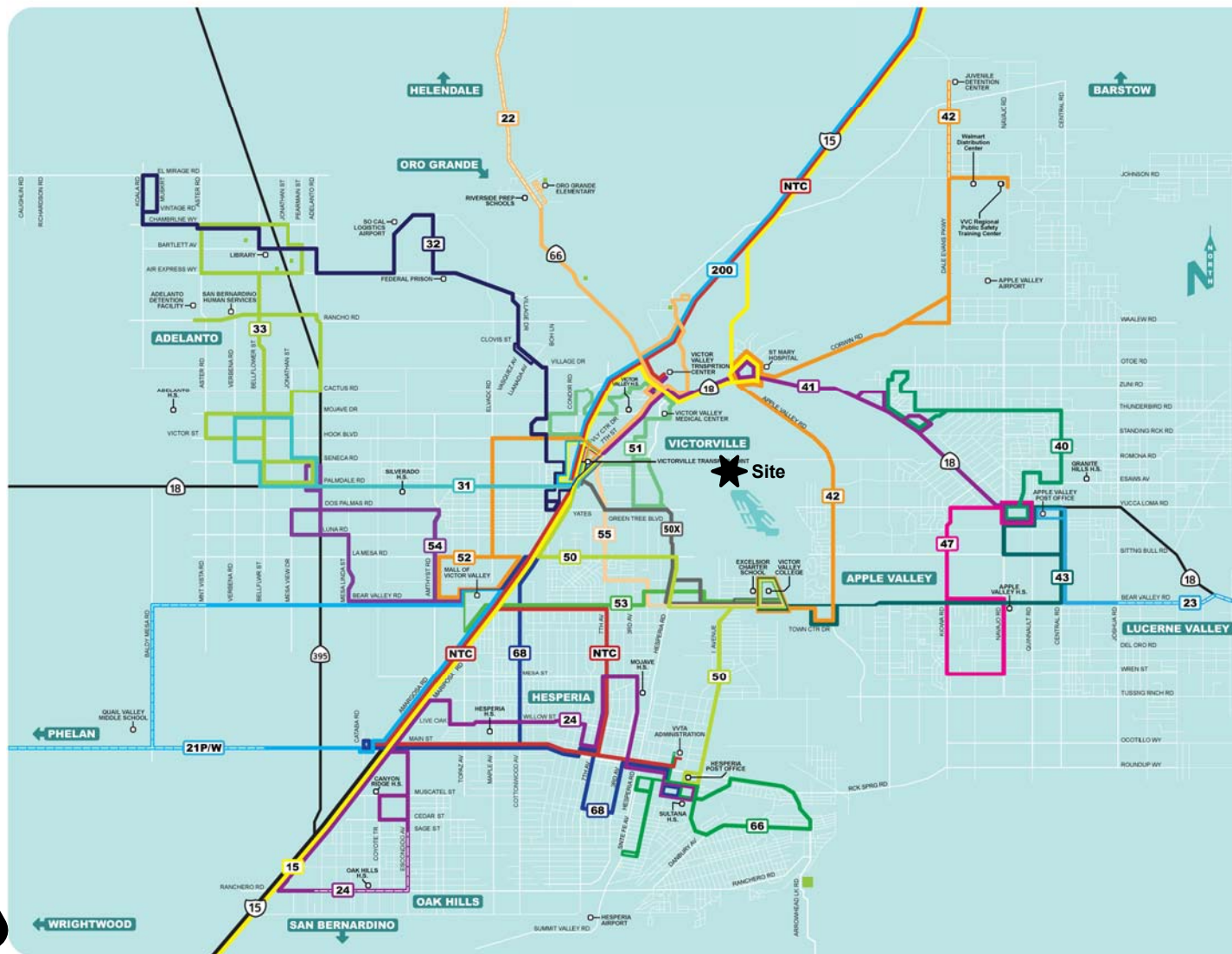


Figure 8

County of San Bernardino General Plan Roadway Cross-Sections

Source: County of San Bernardino





ROUTE DESCRIPTION	
15	SAN BERNARDINO, BARSTOW, VICTORVILLE
219	PHELAN, VICTORVILLE, MALL, PINCH HILLS
21W	PHELAN, VICTORVILLE, MALL, WRIGHTWOOD
22	HELENDALE, VICTORVILLE, SILVER LAKE
23	LUCERNE VALLEY, APPLE VALLEY
24	OAK HILLS, HESPERIA
31	ADELANTO SOUTH, VICTORVILLE
32	ADELANTO NORTH, VICTORVILLE
33	ADELANTO CIRCULATOR
40	APPLE VALLEY NORTH
41	APPLE VALLEY, VICTORVILLE
42	APPLE VALLEY RD, WALMART DIST CTR, COLLEGE
43	APPLE VALLEY, VICTORVILLE, COLLEGE
50	VICTORVILLE, COLLEGE, HESPERIA
50X	VICTORVILLE, COLLEGE, EXPRESS
47	APPLE VALLEY SOUTH DEVIATION
51	VICTORVILLE CIRCULATOR
52	VICTORVILLE, MALL
53	VICTORVILLE, MALL, COLLEGE
54	VICTORVILLE WEST, MALL
55	VICTORVILLE, COLLEGE
66	HESPERIA EAST DEVIATION
68	HESPERIA WEST, TARGET, VICTORVILLE, MALL
101	NTC COMMUTER BARSTOW WALMART WILLIAMS
102	NTC COMMUTER BARSTOW WALMART
103	NTC COMMUTER VICTORVILLE D STREET
104	NTC COMMUTER HESPERIA VVTA PARK & RIDE
105	NTC COMMUTER HELENDALE MARKET
106	NTC COMMUTER BARSTOW WALMART PARK & RIDE
107	NTC COMMUTER HESPERIA VVTA PARK & RIDE
200	NEEDLES, BARSTOW, VICTORVILLE

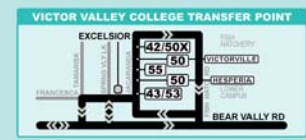
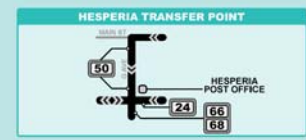
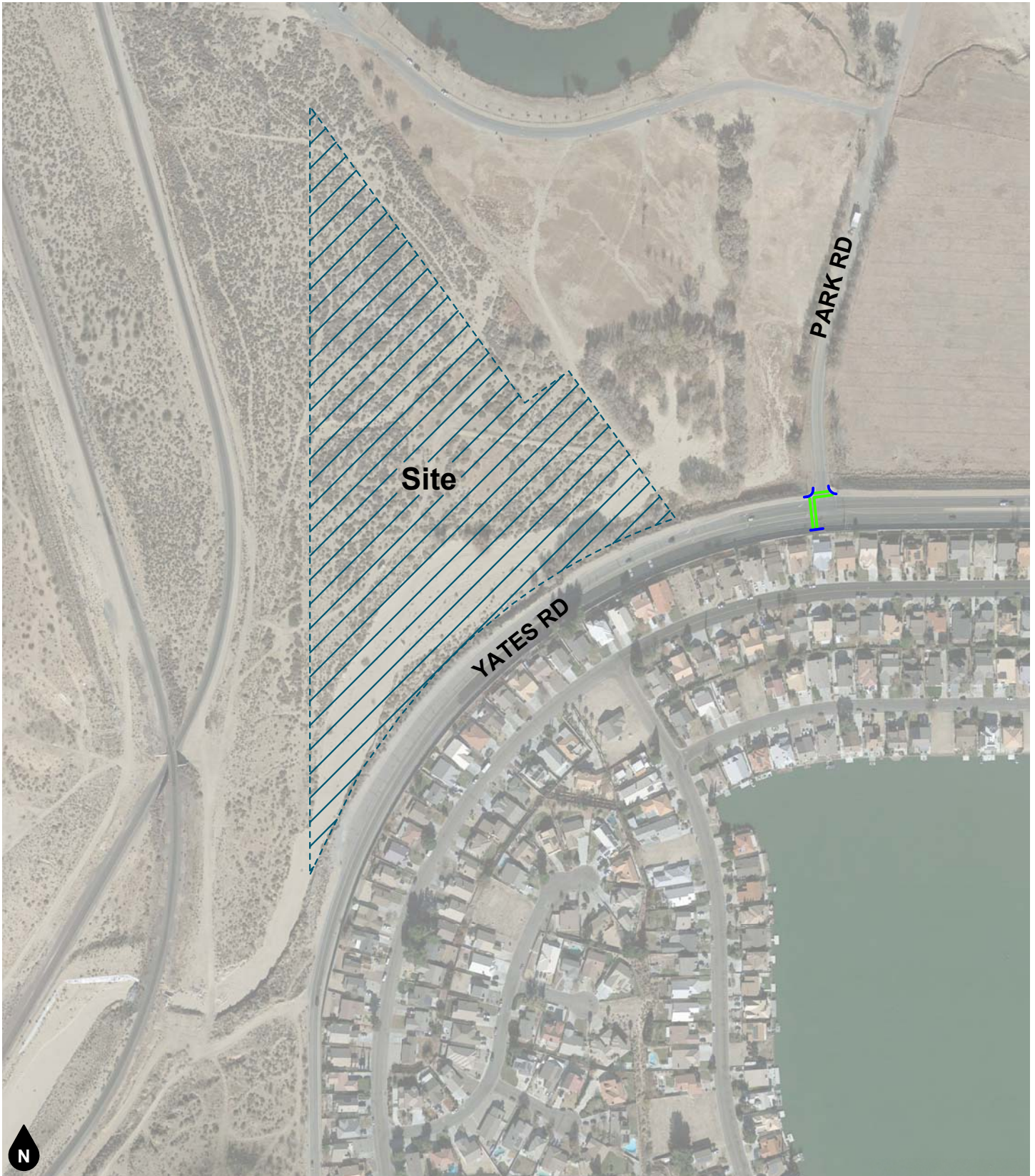


Figure 9
Existing Transit Routes

Source: Victor Valley Transit Authority





Legend

- Sidewalk
- Cross Walk

Figure 10
Existing Pedestrian Facilities

4. PROPOSED PROJECT

PROJECT DESCRIPTION

The site is currently vacant. The project site (17853 Yates Road, Victorville, CA 92395) is located north of Yates Road and west of Park Road in the County of San Bernardino. The site is currently vacant. The proposed project includes an application for a Conditional Use Permit (CUP) for the construction and operation of a residential care facility on an 18.47 acre site located in an unincorporated portion of San Bernardino County, within the City of Victorville's sphere of influence. The approximate 274 bed continuing care retirement community would include: a two-story 29,952 square foot medical office building, a two-story 24,722 square foot amenities/rehabilitation building, a three-story 60,192 square foot assisted living building with 123 beds, a three-story 49,768 square foot independent living building with 52 units, and a two-story 47,659 square foot skilled nursing building with 99 beds. The proposed project will feature a wellness center, within the medical office building, and will be equipped with offices, a pharmacy, chronic dialysis, behavioral health, diagnostic testing and clinical wellness suites, with an ambulatory surgical center. Other features include an amenity-rehab center to serve as a gathering spot for residents and visitor and feature a market, coffee and smoothie shop, cafeteria styled restaurant, bistro, gym, beauty salon, and lounge. The second-floor outpatient rehab center offers pain management, audiology, speech pathology, massage, respiratory, physical and occupational therapies, and a training center.

Two full access project driveways are proposed to be provided on Yates Road. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection. The Project East Driveway is proposed to be a signalized full access driveway. The Project West Driveway is proposed to be an emergency-only stop-controlled secondary access, which is located at the southwest corner of the project site.

TRIP GENERATION

Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017. As shown in Table 2, the proposed project is forecast to generate a total of approximately 2,927 daily trips, including 221 trips during the AM peak hour and 253 trips during the PM peak hour.

The project trips shown in Table 2 consist of the total trips generated for each project land use. As a medical office/clinic trip generated by the project will also be making trips to an assisted living/continuing care/nursing home land use within the project, a double counting of those trips occurs. Fifteen (15) percent of the traffic generated by the project has been identified for the internal interaction between the proposed land uses. In order to analyze a "conservative" scenario in terms of the assignment of project trips, the trip generation from the project site have not been reduced as a result of the internal interaction between the proposed land uses.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 11 shows the forecast directional trip distributions of the project generated trips for existing roadway network without the future Green Tree Boulevard extension.

Figure 12 shows the project trip distribution patterns for the future roadway network system with the future extension of Green Tree Boulevard between Hesperia Road and Ridgecrest Road. Green Tree Boulevard will align with Yates Road south of the project site while Ridgecrest Road will intersect Green Tree Boulevard as a "T" intersection. The construction of Green Tree Boulevard is anticipated to start next year which may be completed after the opening year of the proposed Chateau Senior Living Facility project. For the purpose of this analysis, Green Tree Boulevard extension is only assessed in the Buildout Year (2040) analysis conditions.

The project trip distribution patterns are based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

Based on the identified trip generation and distributions, project average daily traffic volumes for the near-term conditions with existing roadway network have been calculated and shown on Figure 13. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figure 14 and Figure 15, respectively.

Based on the identified trip distribution patterns with the anticipated Green Tree Boulevard extension, project average daily traffic volumes for the long-range conditions with future roadway network have been calculated and shown on Figure 16. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figure 17 and Figure 18, respectively.

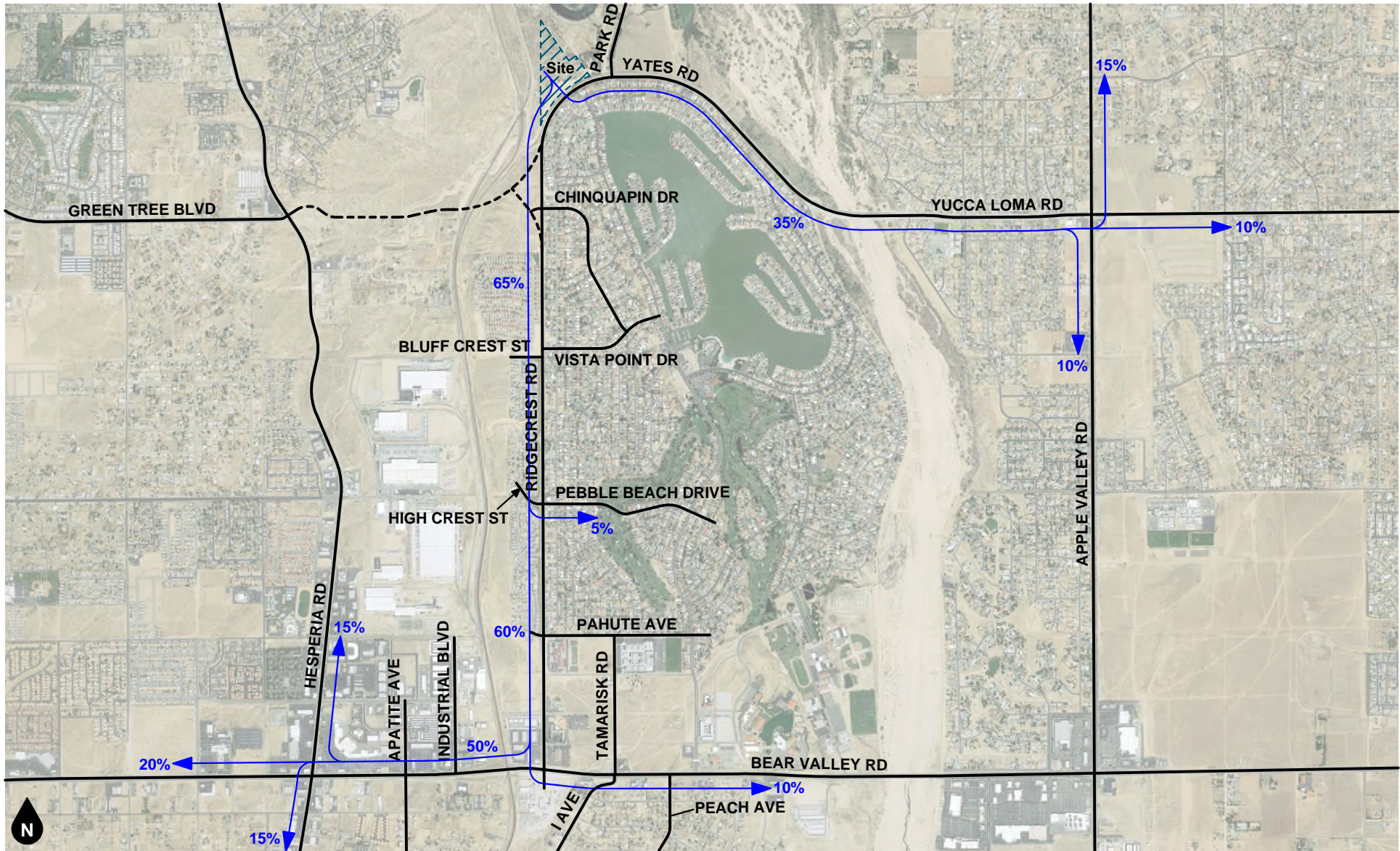
**Table 2
Project Trip Generation**

Trip Generation Rates										
Project				Morning Peak Hour			Evening Peak Hour			Daily
No.	Land Use	Code ¹	Unit ²	In%	Out%	Total	In%	Out%	Total	
1	Assisted Living	ITE 254	OBD	68%	32%	0.18	50%	50%	0.29	4.14
2	Continuing Care Retirement Community	ITE 255	OU	65%	35%	0.15	40%	60%	0.20	2.50
3	Nursing Home	ITE 620	BD	72%	28%	0.17	33%	67%	0.22	3.06
4	Clinic	ITE 630	TSF	78%	22%	3.69	29%	71%	3.28	38.16
5	Medical-Dental Office Building	ITE 720	TSF	78%	22%	2.78	28%	72%	3.46	34.80

Trip Generation									
Project			Morning Peak Hour			Evening Peak Hour			Daily
No.	Land Use	Quantity ²	In	Out	Total	In	Out	Total	
B1	Medical-Dental Office Building	29.952 TSF	65	18	83	29	75	104	1,042
B2	Clinic	24.722 TSF	71	20	91	23	58	81	943
B3	Assisted Living	123 OBD	15	7	22	18	18	36	509
B4	Continuing Care Retirement Community	52 OU	5	3	8	4	6	10	130
B5	Nursing Home	99 BD	12	5	17	7	15	22	303
Total			168	53	221	81	172	253	2,927

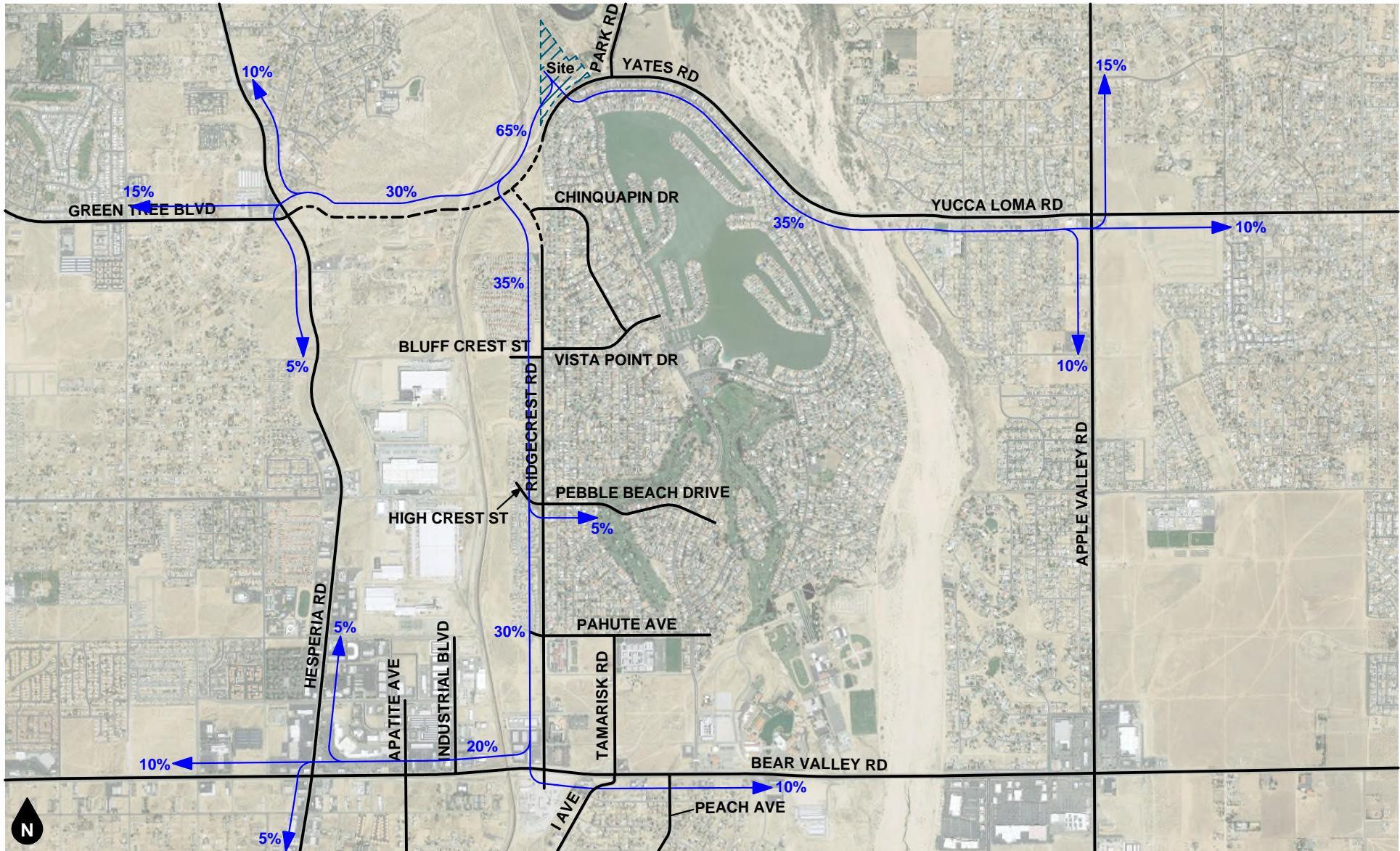
Notes:

- (1) Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition, 2017.
- (2) ODU = Occupied Dwelling Unit; OBD = Occupied Bed; OU = Occupied Unit; BD = Bed; TSF = Thousand Square Feet



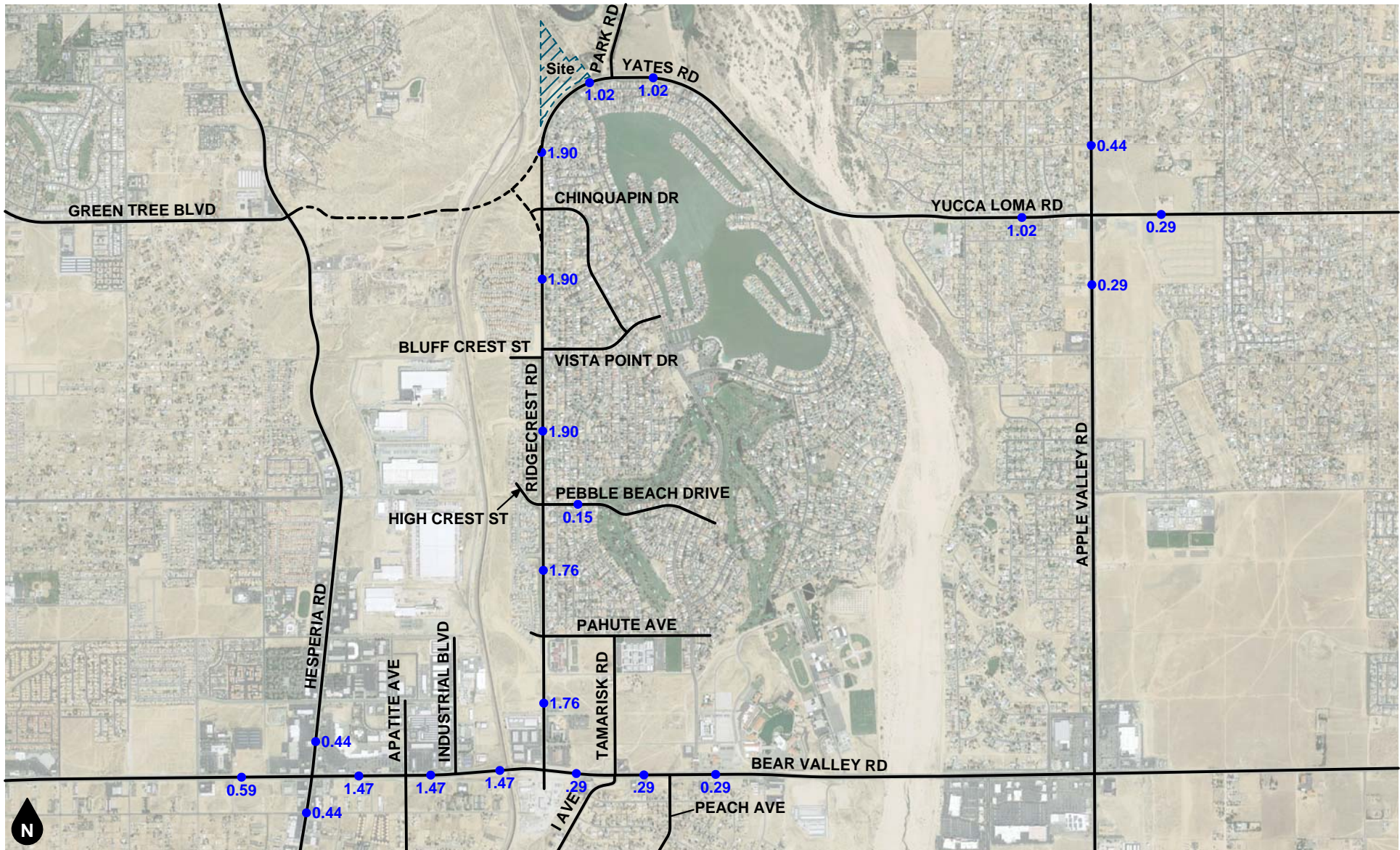
Legend
 ← 10% Percent To/From Project

Figure 11
Near-Term Project Trip Distribution
Without Green Tree Boulevard Extension



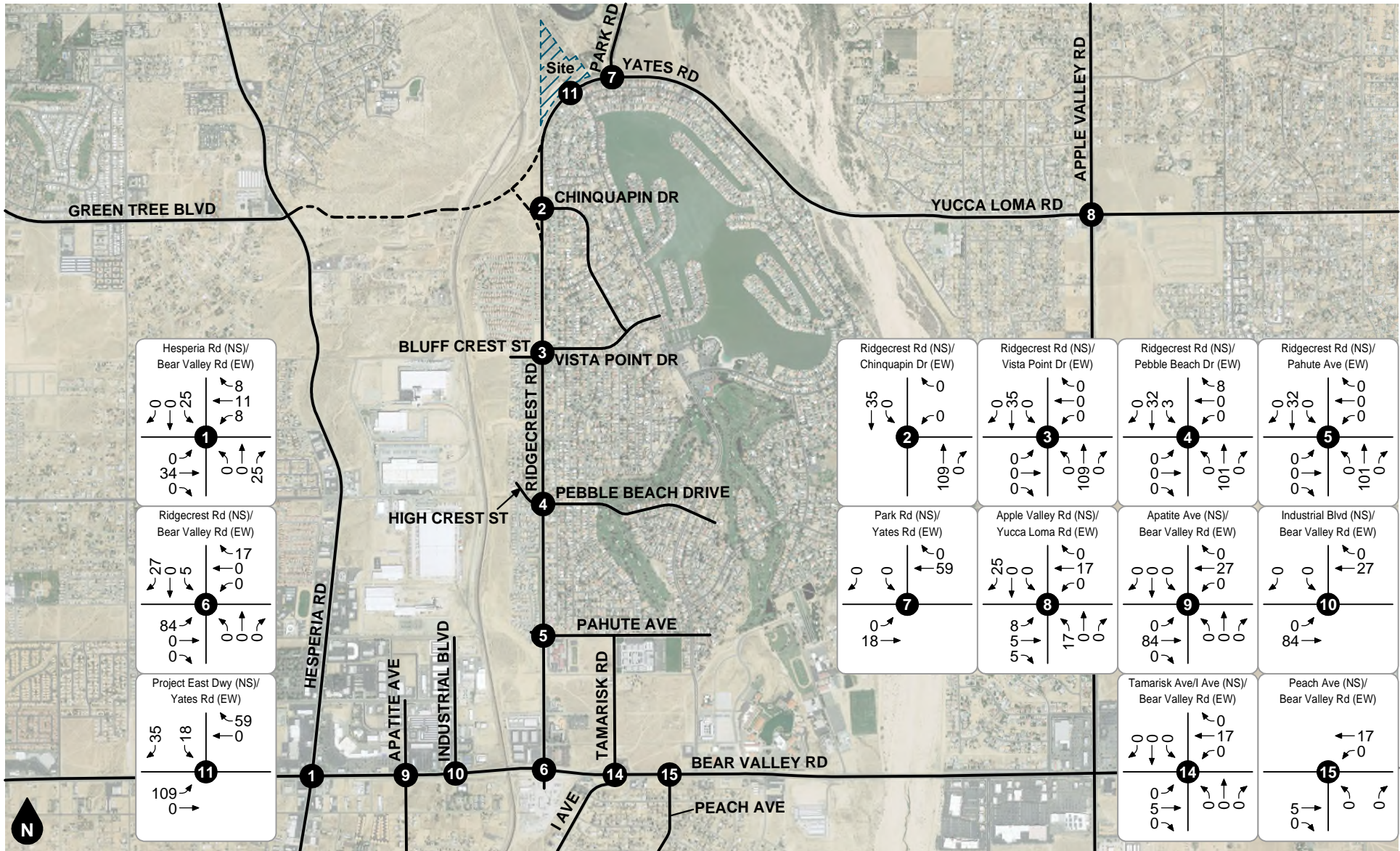
Legend
 ← 10% Percent To/From Project

Figure 12
long-Range Project Trip Distribution
With Green Tree Boulevard Extension



Legend
 ●## Vehicles Per Day (1,000's)

Figure 13
 Project Average Daily Traffic Volumes Without Green Tree Extension



Legend
 # Study Intersection

Figure 14
 Project AM Peak Hour Intersection Turning Movement Volumes
 Without Green Tree Boulevard Extension

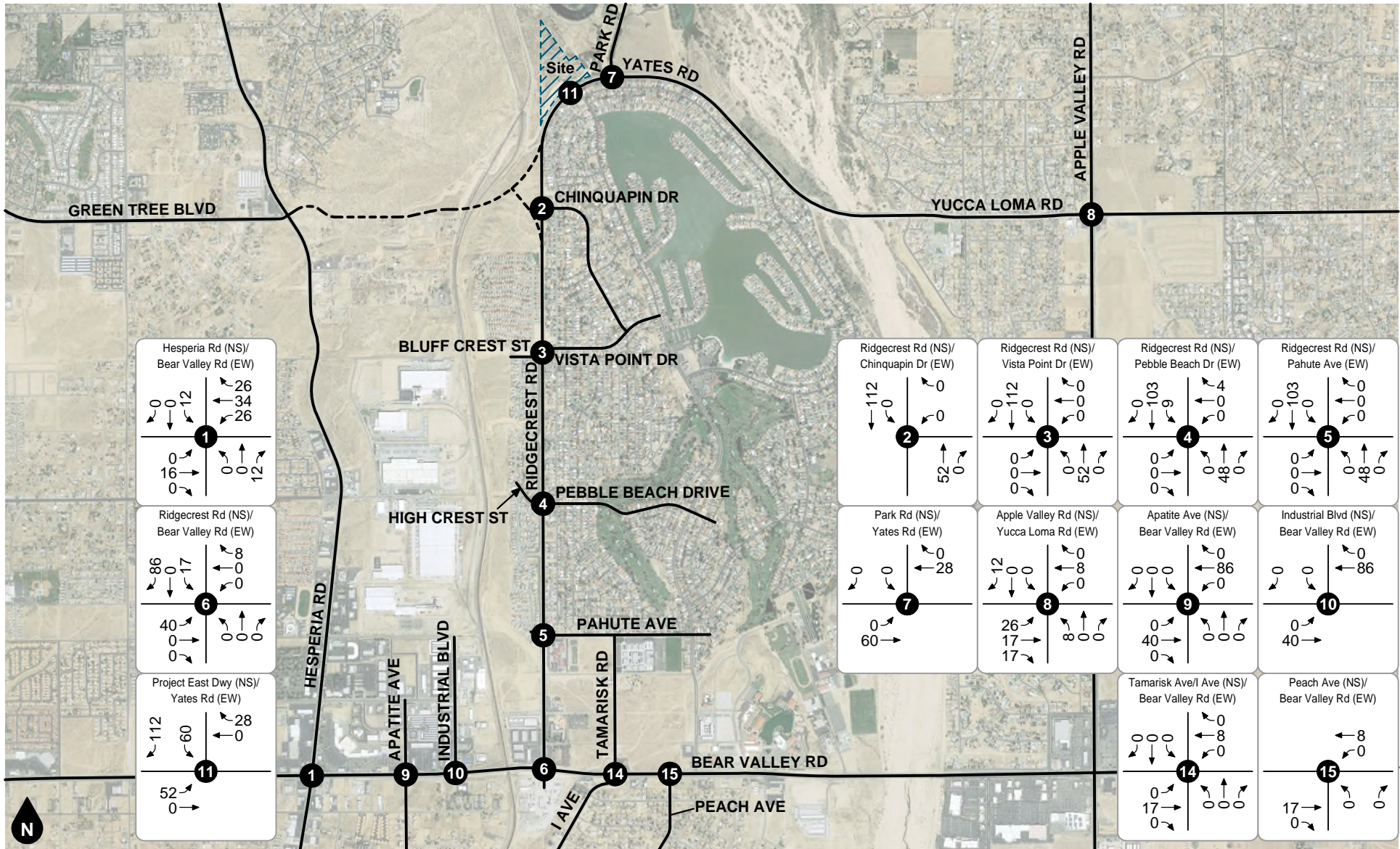
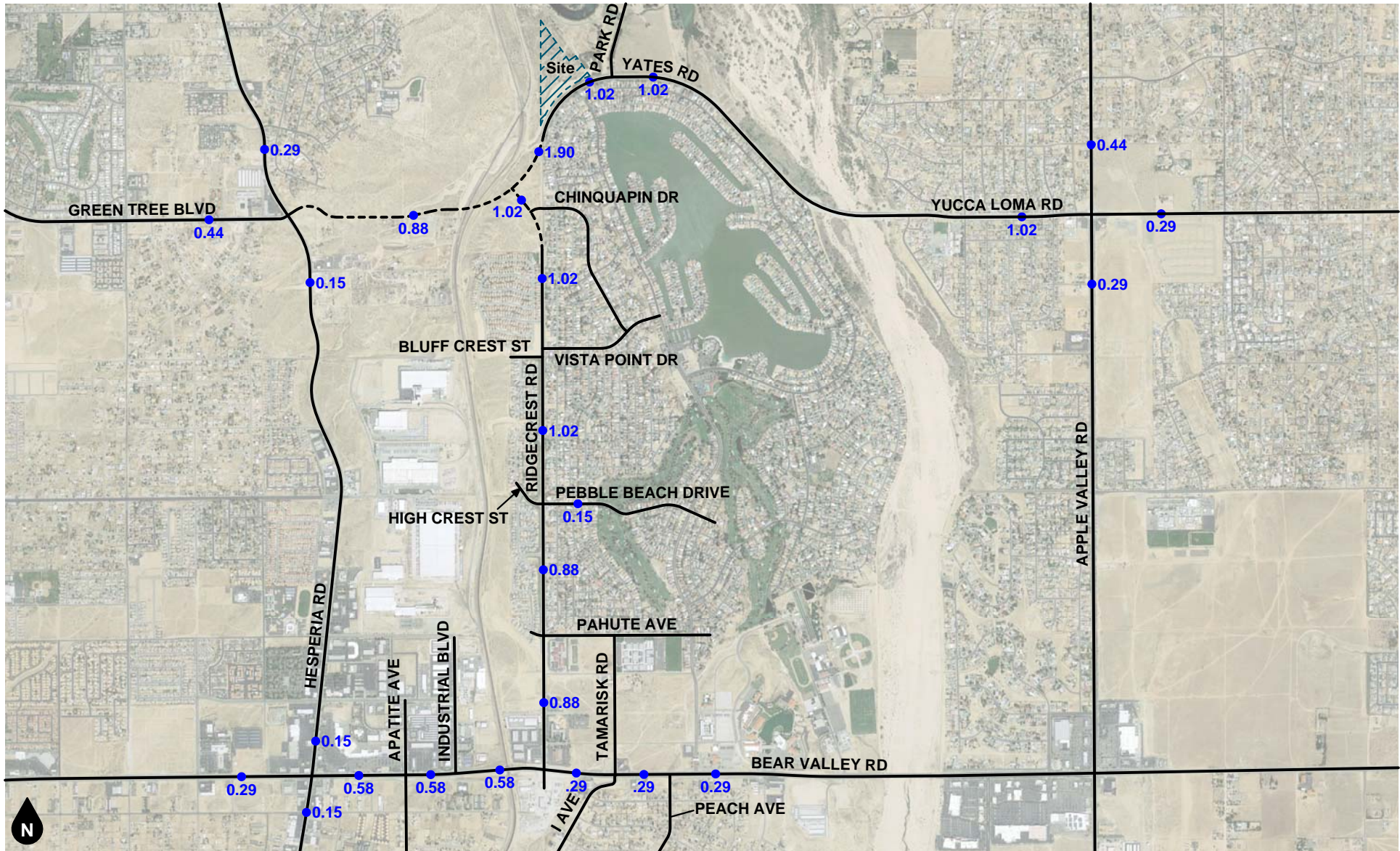


Figure 15
 Project PM Peak Hour Intersection Turning Movement Volumes
 Without Green Tree Extension



Legend
 ●## Vehicles Per Day (1,000's)

Figure 16
 Project Average Daily Traffic Volumes With Green Tree Extension

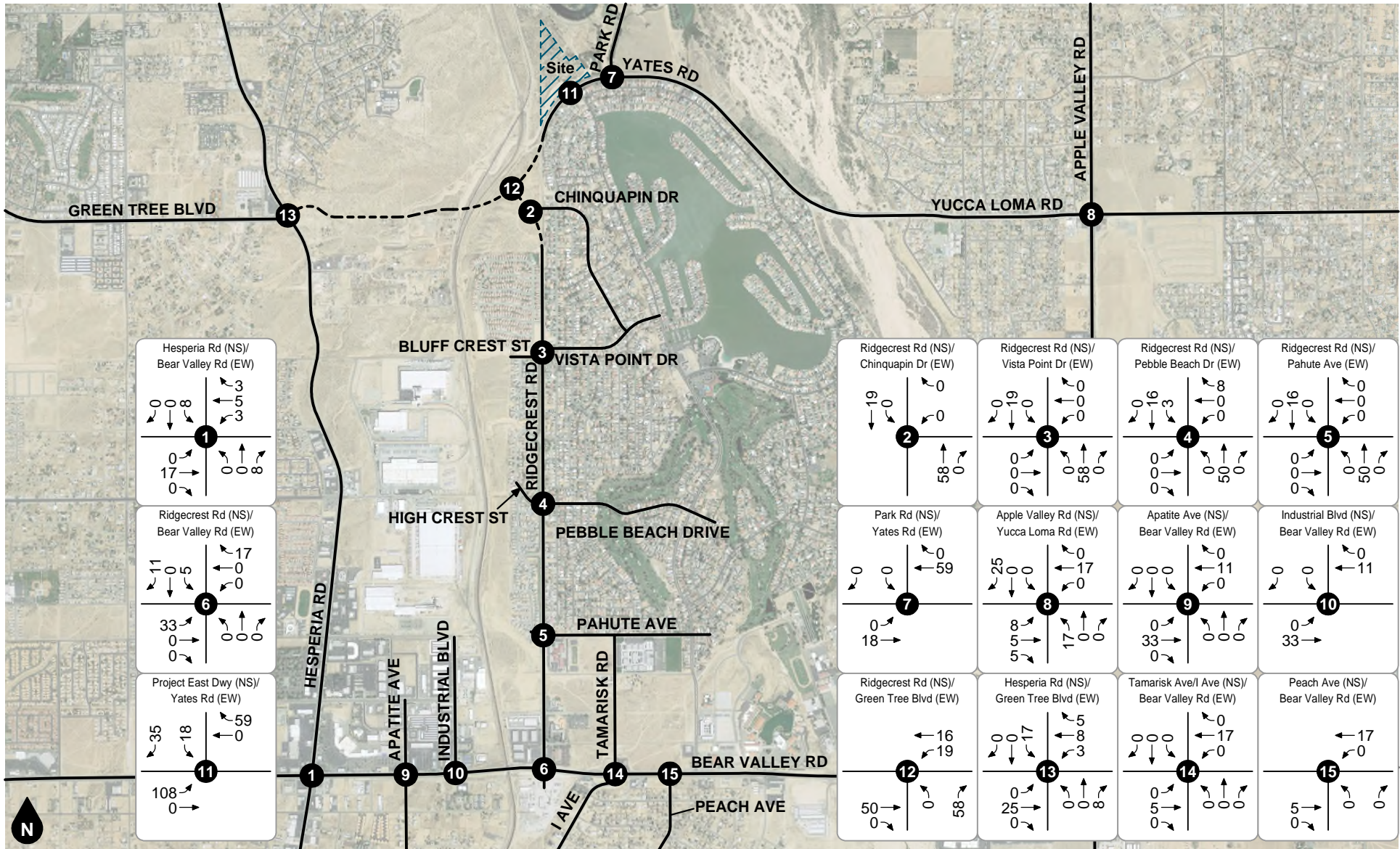


Figure 17
Project AM Peak Hour Intersection Turning Movement Volumes
With Green Tree Boulevard Extension

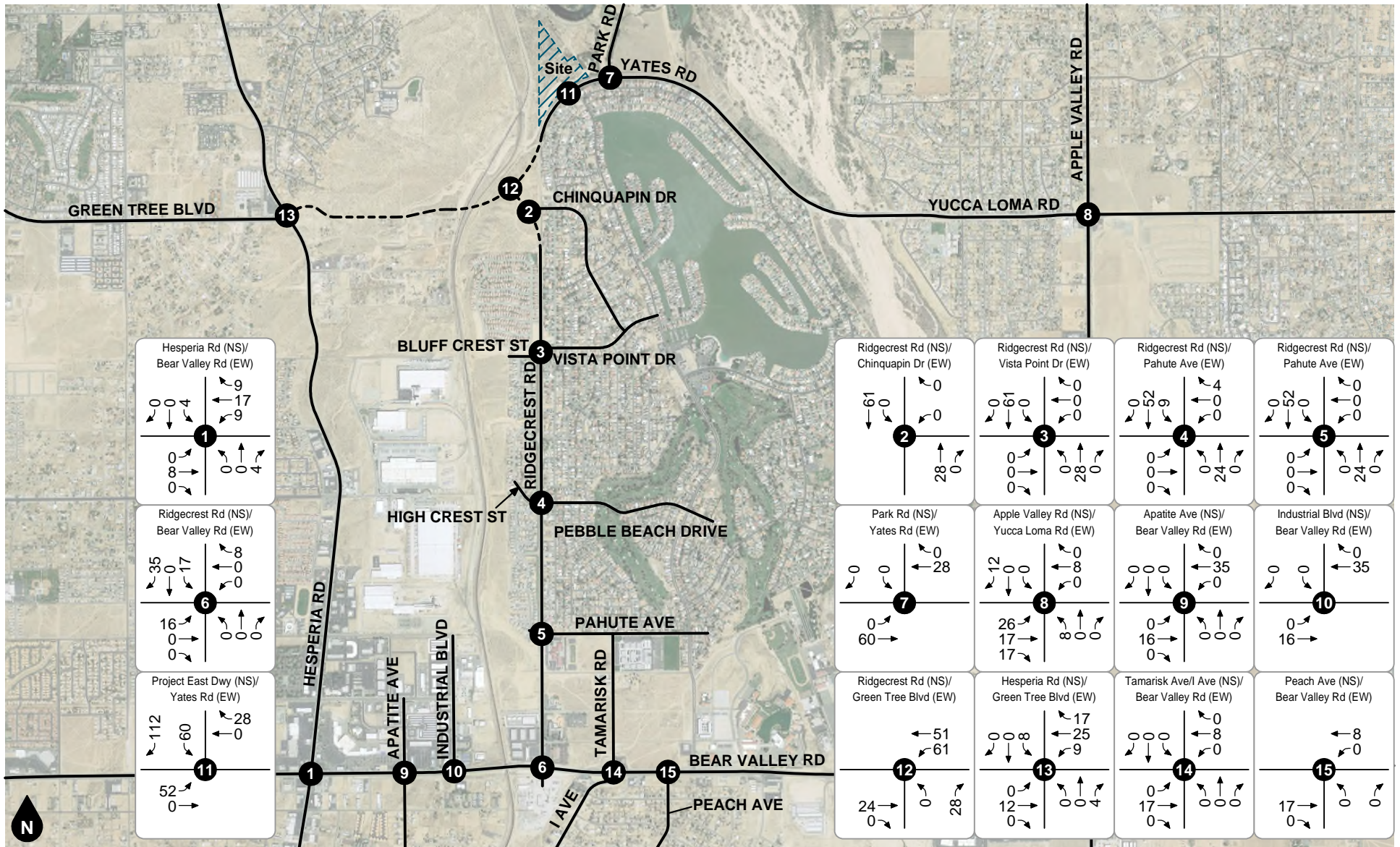


Figure 18
Project PM Peak Hour Intersection Turning Movement Volumes
With Green Tree Boulevard Extension

5. TRAFFIC FORECASTS

METHOD OF PROJECTION

The average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model (SBTAM) Year 2012 and Year 2040 average daily traffic volume forecasts (see Appendix E). This difference defines the growth in traffic volumes over the 28 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2018 and Year 2040. For this purpose, linear growth between the Year 2012 base condition and the forecast Year 2040 condition was assumed. Since the increment between Year 2018 and Year 2040 is 22 years of the 28 year time frame, a factor of 0.79 (i.e., 22/28) was used.

The Buildout Year (2040) Without Project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2012 and Year 2040 peak hour volumes. The traffic model forecasting calculation worksheets are shown in Appendix E. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing intersection turning movement count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

To incorporate future Green Tree Boulevard extension between Hesperia Road and Ridgecrest Road into this analysis, the Buildout Year (2040) traffic forecast are based on the data from the Yucca Loma Road Bridge / Yates Road/ Green Tree Boulevard Transportation Improvement Project Traffic Impact Analysis, prepared by Urban Crossroads, Inc. on August 8, 2008. Green Tree Boulevard will align with Yates Road south of the project site while Ridgecrest Road will intersect Green Tree Boulevard as a "T" intersection. The construction of Green Tree Boulevard is anticipated to start next year which may be completed after the opening year of the proposed Chateau Senior Living Facility project. For purpose of this analysis, Green Tree Boulevard extension is only assessed in the Buildout Year (2040) conditions.

Project traffic volumes were then added to the baseline Year 2040 volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that Buildout Year 2040 volumes reflect at least 10 percent growth over existing traffic volumes. The result of this forecasting procedure is a series of traffic volumes suitable for traffic operations analysis. The Opening Year (2020) traffic projections have been interpolated between Year 2040 traffic volumes and existing 2018 traffic volumes utilizing a portion of the growth increment.

ANALYSIS SCENARIO VOLUME FORECASTS

Existing (2018) Plus Project

The traffic volumes for Existing (2018) Plus Project conditions have been derived by adding the project generated trips to existing traffic volumes. Existing (2018) Plus Project average daily traffic volumes are shown on Figure 19. Existing (2018) Plus Project morning and evening peak hour intersection turning movement volumes are shown on Figure 20 and Figure 21, respectively.

Opening Year (2020) Without Project

Opening Year (2020) Without Project average daily traffic volumes are shown on Figure 22. Opening Year (2020) Without Project morning and evening peak hour intersection turning movement volumes are shown on Figure 23 and Figure 24, respectively.

Opening Year (2020) With Project

To assess Opening Year (2020) With Project traffic conditions, the project generated trips are added to Opening Year (2020) Without Project traffic volumes. Opening Year (2020) With Project average daily traffic volumes are shown on Figure 25. Opening Year (2020) With Project morning and evening peak hour intersection turning movement volumes are shown on Figure 26 and Figure 27, respectively.

Buildout Year (2040) Without Project

Buildout Year (2040) Without Project average daily traffic volumes are shown on Figure 28. Buildout Year (2040) Without Project morning and evening peak hour intersection turning movement volumes are shown on Figure 29 and Figure 30, respectively.

Buildout Year (2040) With Project

To assess Buildout Year (2040) With Project traffic conditions, the project generated trips are added to Buildout Year (2040) Without Project traffic volumes. Buildout Year (2040) With Project average daily traffic volumes are shown on Figure 31. Buildout Year (2040) With Project morning and evening peak hour intersection turning movement volumes are shown on Figure 32 and Figure 33, respectively.

FUTURE TRAFFIC SIGNAL WARRANT ANALYSIS

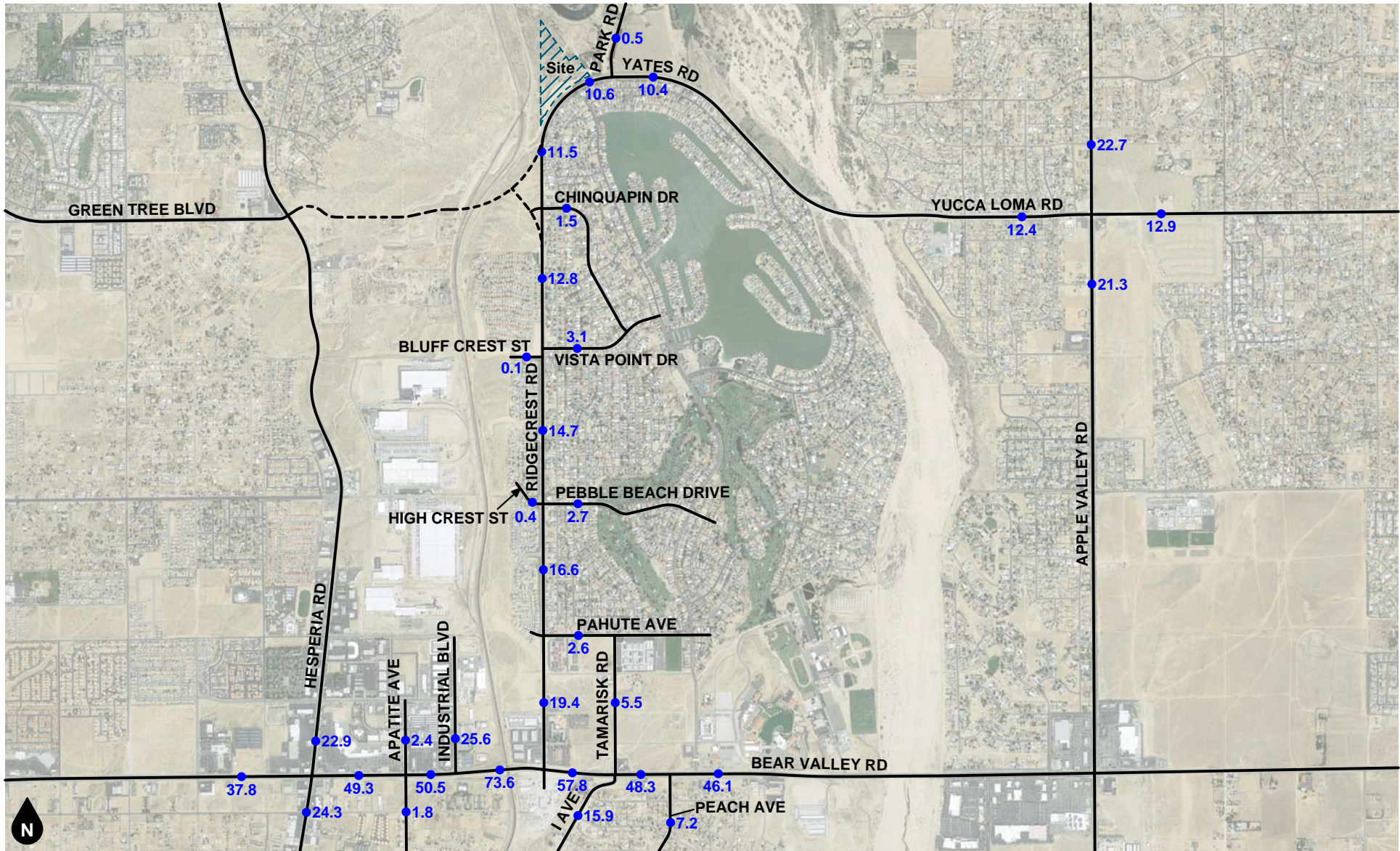
The unsignalized intersections have been evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California Manual of Uniform Traffic Control Devices (2014 Update).

A traffic signal is projected to be warranted at the following study intersection for Existing Plus Project conditions (see Appendix F):

- Project East Driveway/Yates Road - #11

A traffic signal is projected to be warranted at the following study intersection for Buildout Year (2040) Without Project conditions (see Appendix F):

- Ridgecrest Road/ Chinquapin Drive - #2



Legend
 ●## Vehicles Per Day (1,000's)

Figure 19
 Existing (2018) Plus Project Average Daily Traffic Volumes

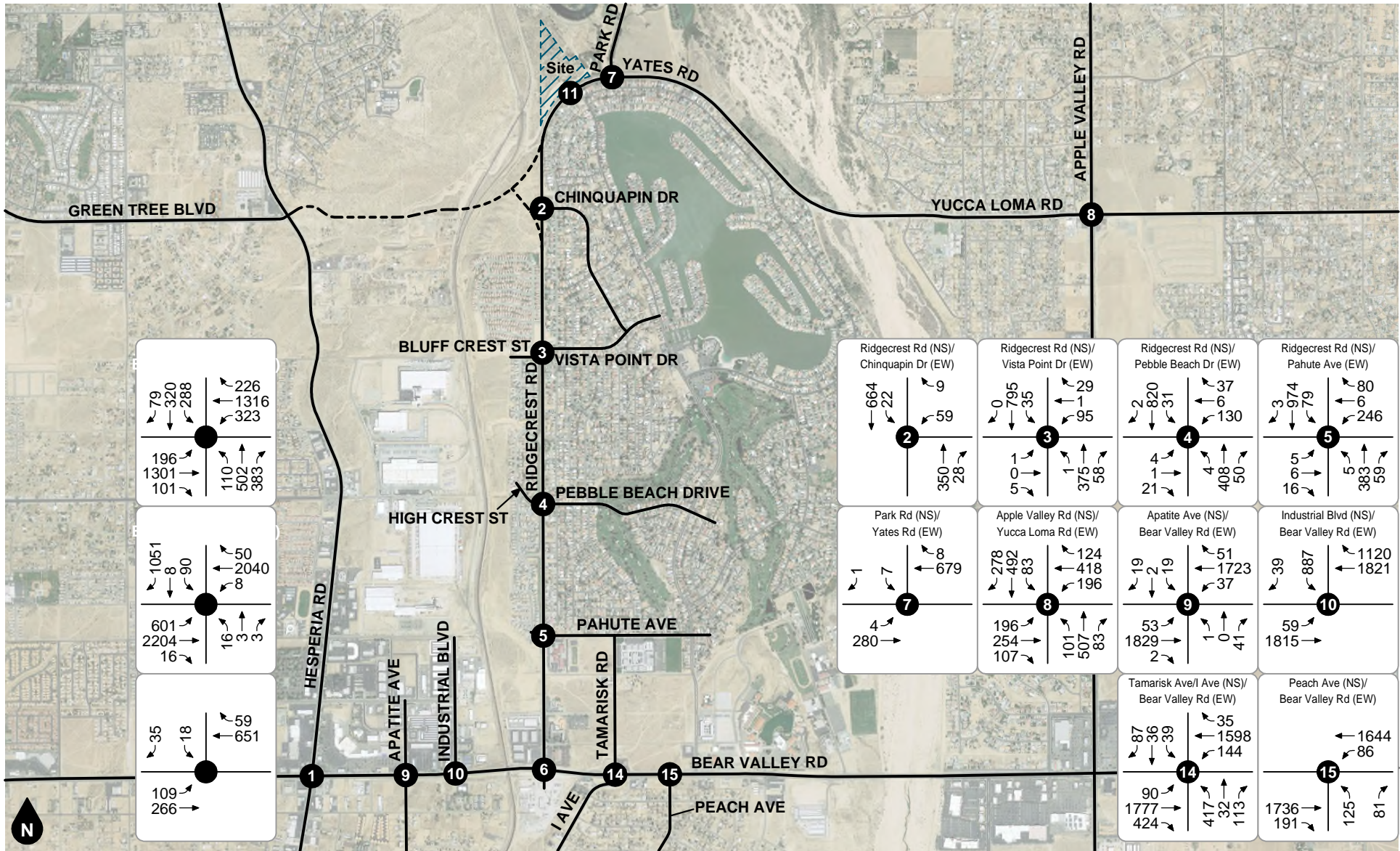


Figure 20
Existing (2018) Plus Project
AM Peak Hour Intersection Turning Movement Volumes

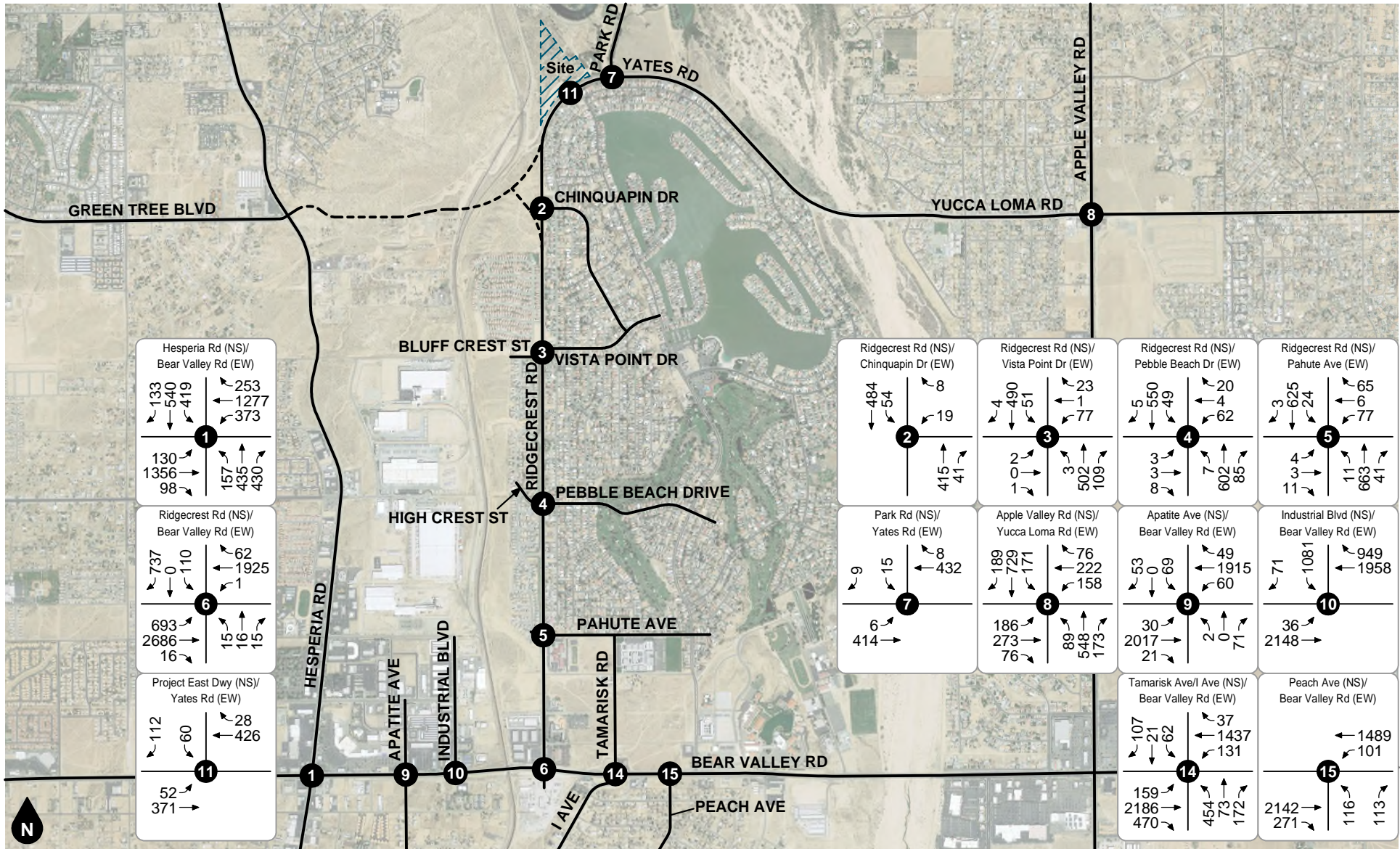
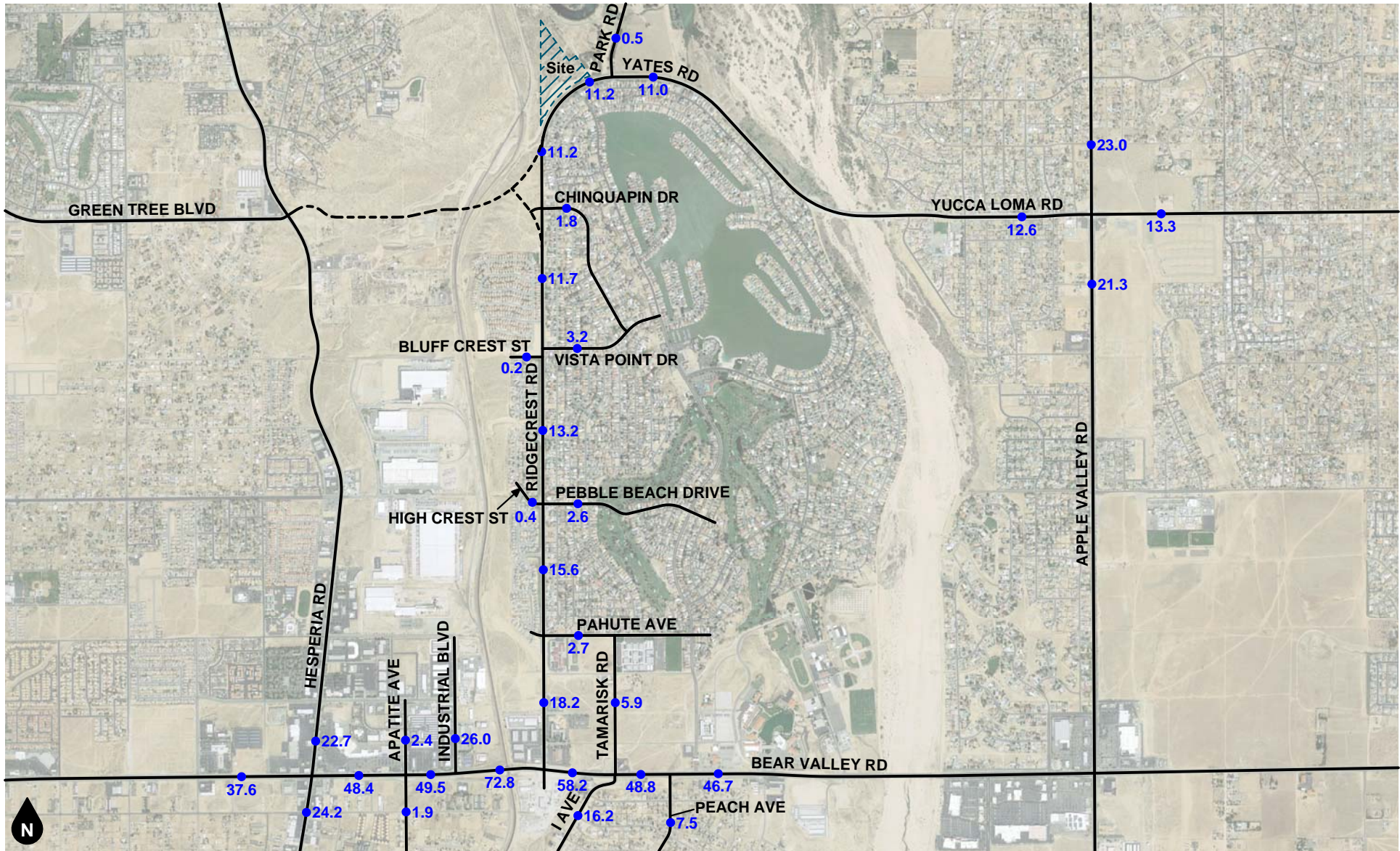


Figure 21
Existing (2018) Plus Project
PM Peak Hour Intersection Turning Movement Volumes



Legend
 ●## Vehicles Per Day (1,000's)

Figure 22
 Opening Year (2020) Without Project Average Daily Traffic Volumes

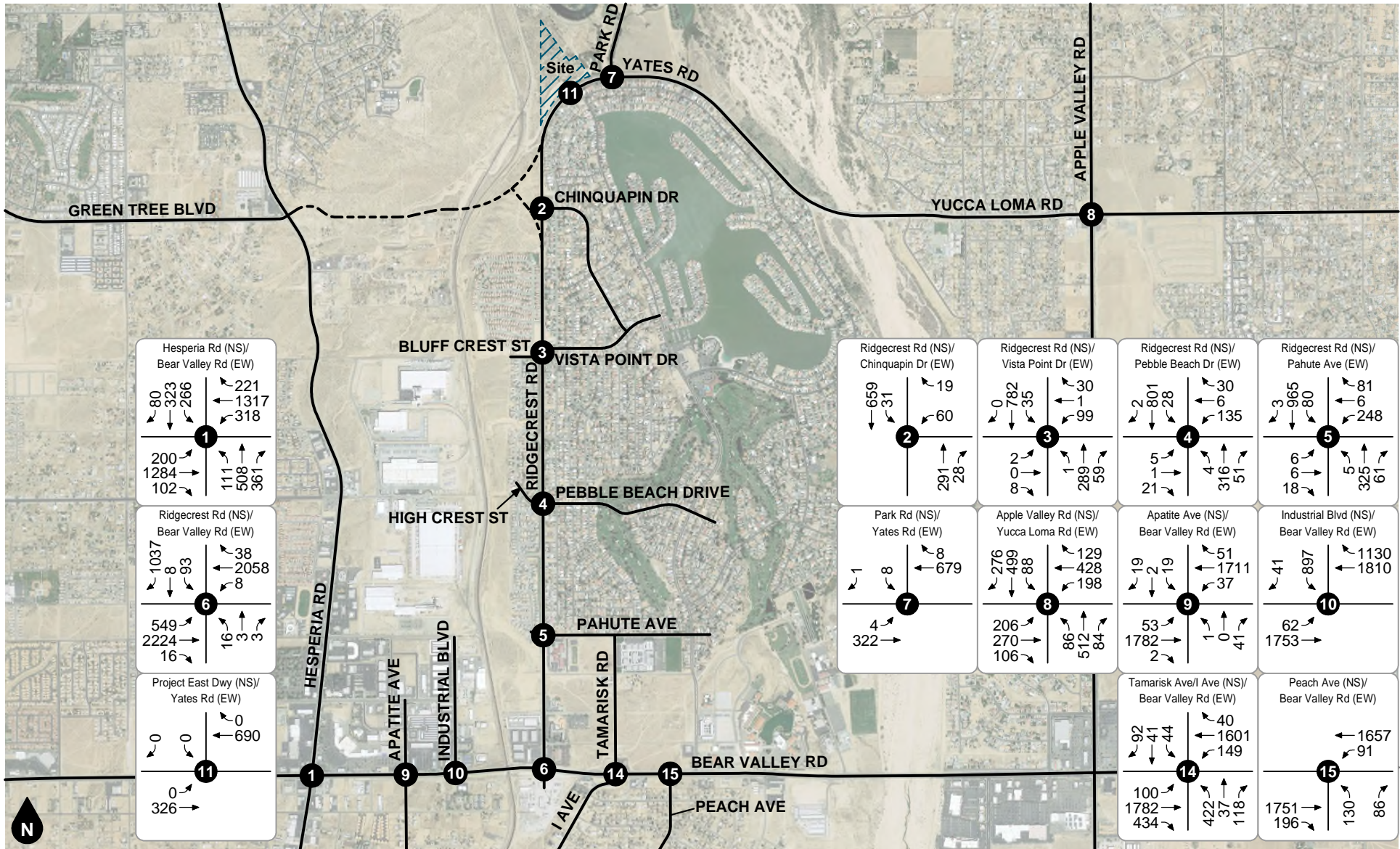


Figure 23
Opening Year (2020) Without Project
AM Peak Hour Intersection Turning Movement Volumes

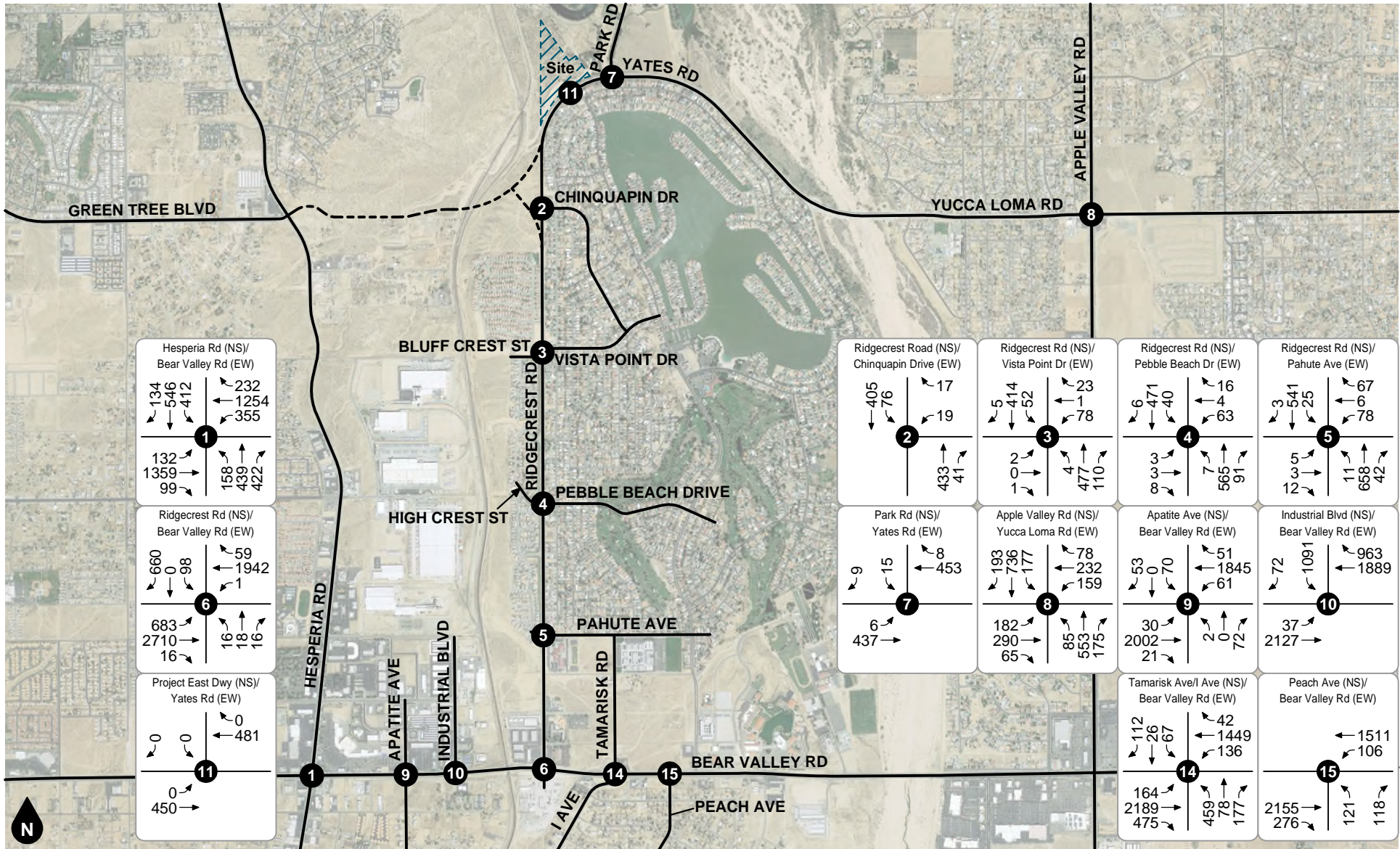
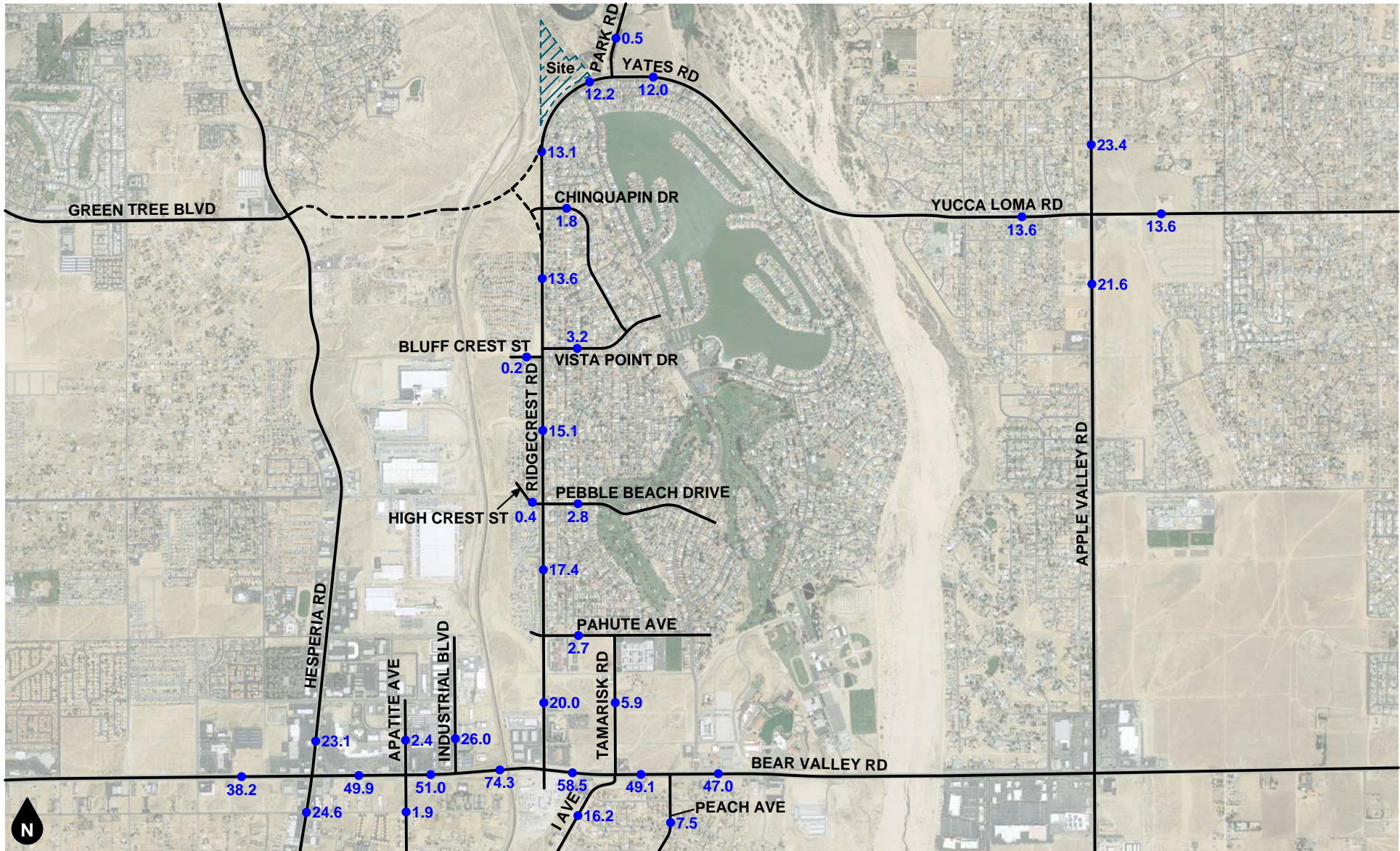


Figure 24
Opening Year (2020) Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend
 ●## Vehicles Per Day (1,000's)

Figure 25
 Opening Year (2020) With Project Average Daily Traffic Volumes

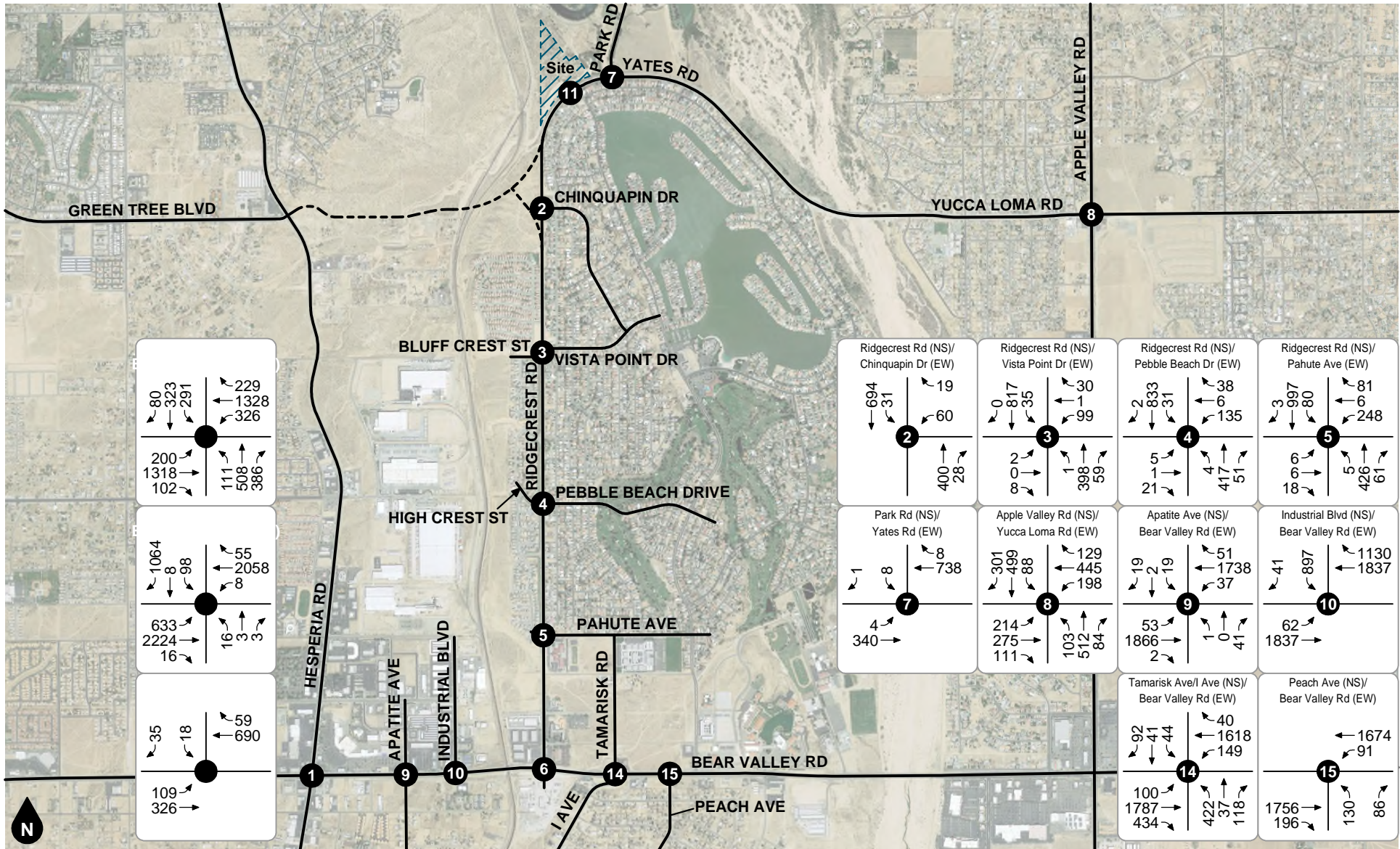


Figure 26
Opening Year (2020) With Project
AM Peak Hour Intersection Turning Movement Volumes

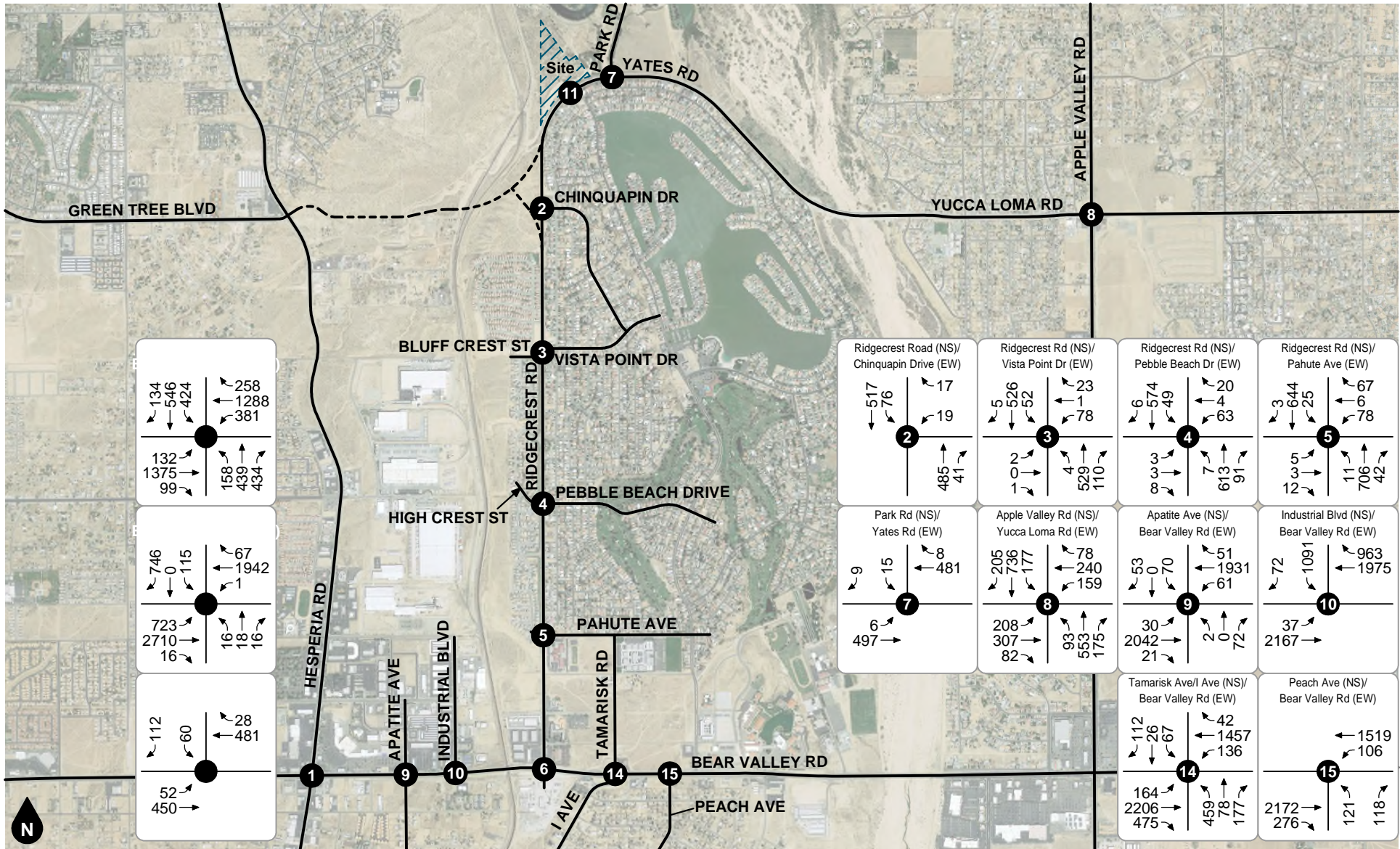
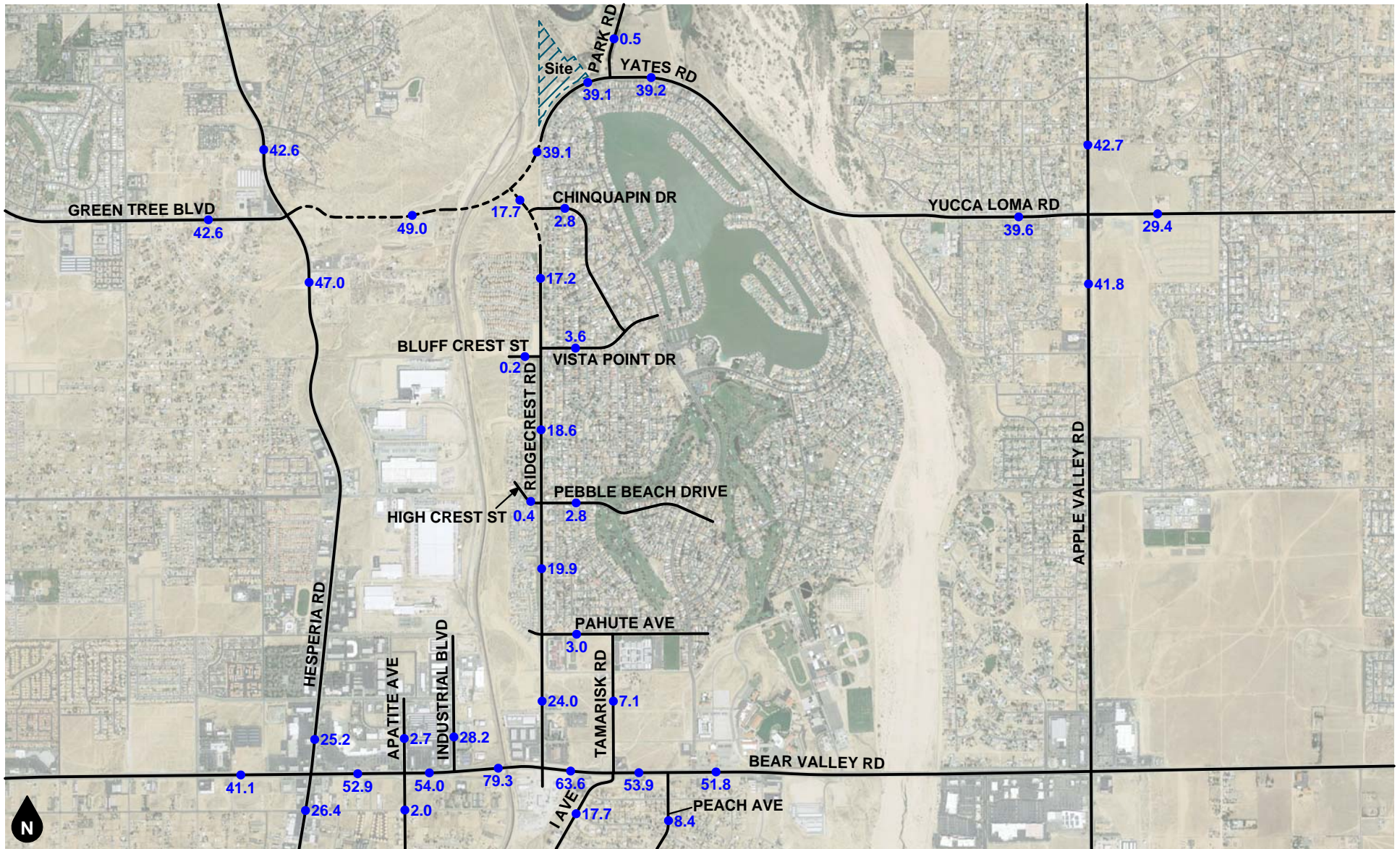


Figure 23
 Opening Year (2020) With Project
 PM Peak Hour Intersection Turning Movement Volumes



Legend
 ●## Vehicles Per Day (1,000's)

Figure 28
Buildout Year (2040) Without Project Average Daily Traffic Volumes

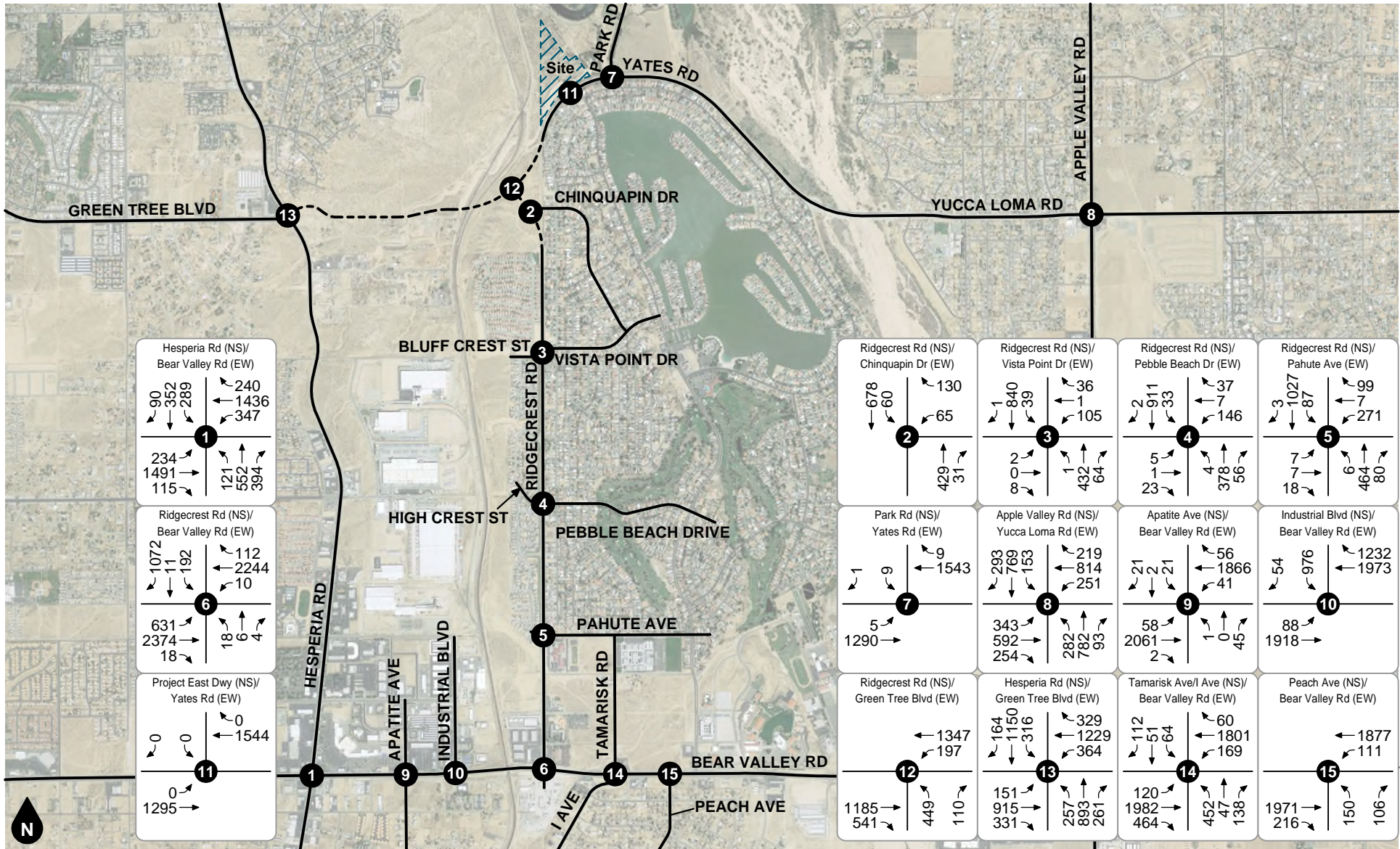


Figure 29
Buildout Year (2040) Without Project
AM Peak Hour Intersection Turning Movement Volumes

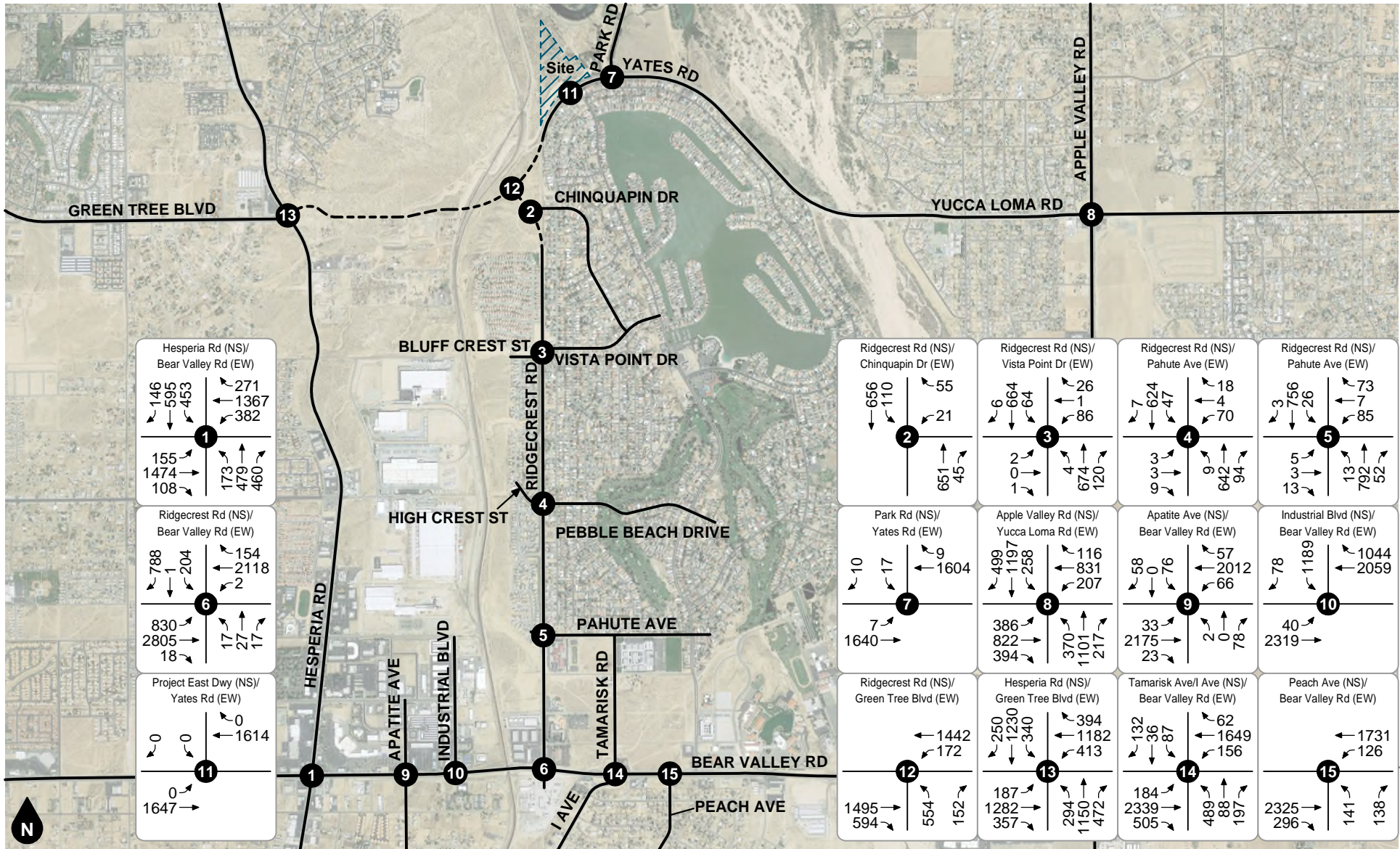
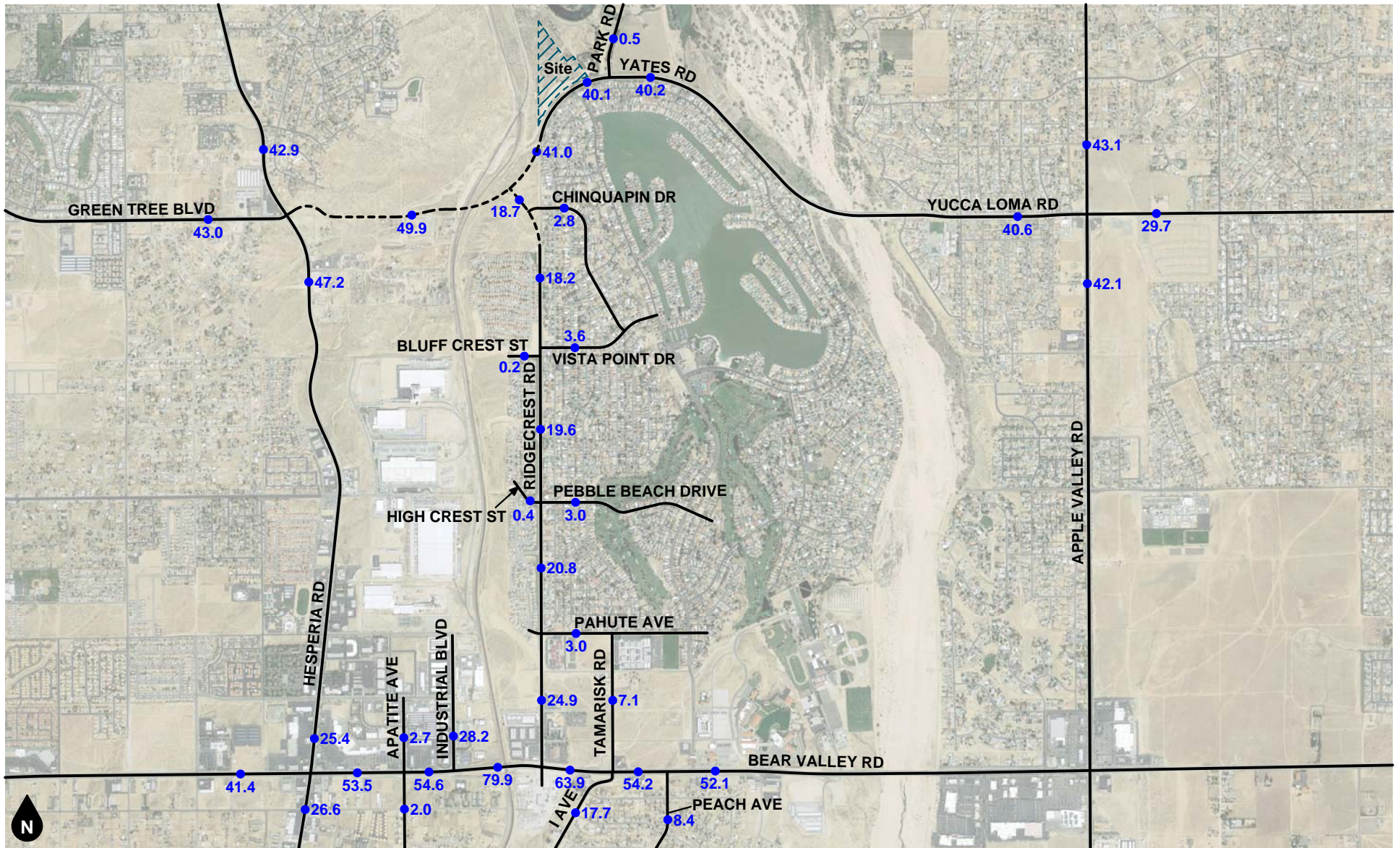


Figure 30
Buildout Year (2040) Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend
 ●## Vehicles Per Day (1,000's)

Figure 27
Buildout Year (2040) With Project Average Daily Traffic Volumes

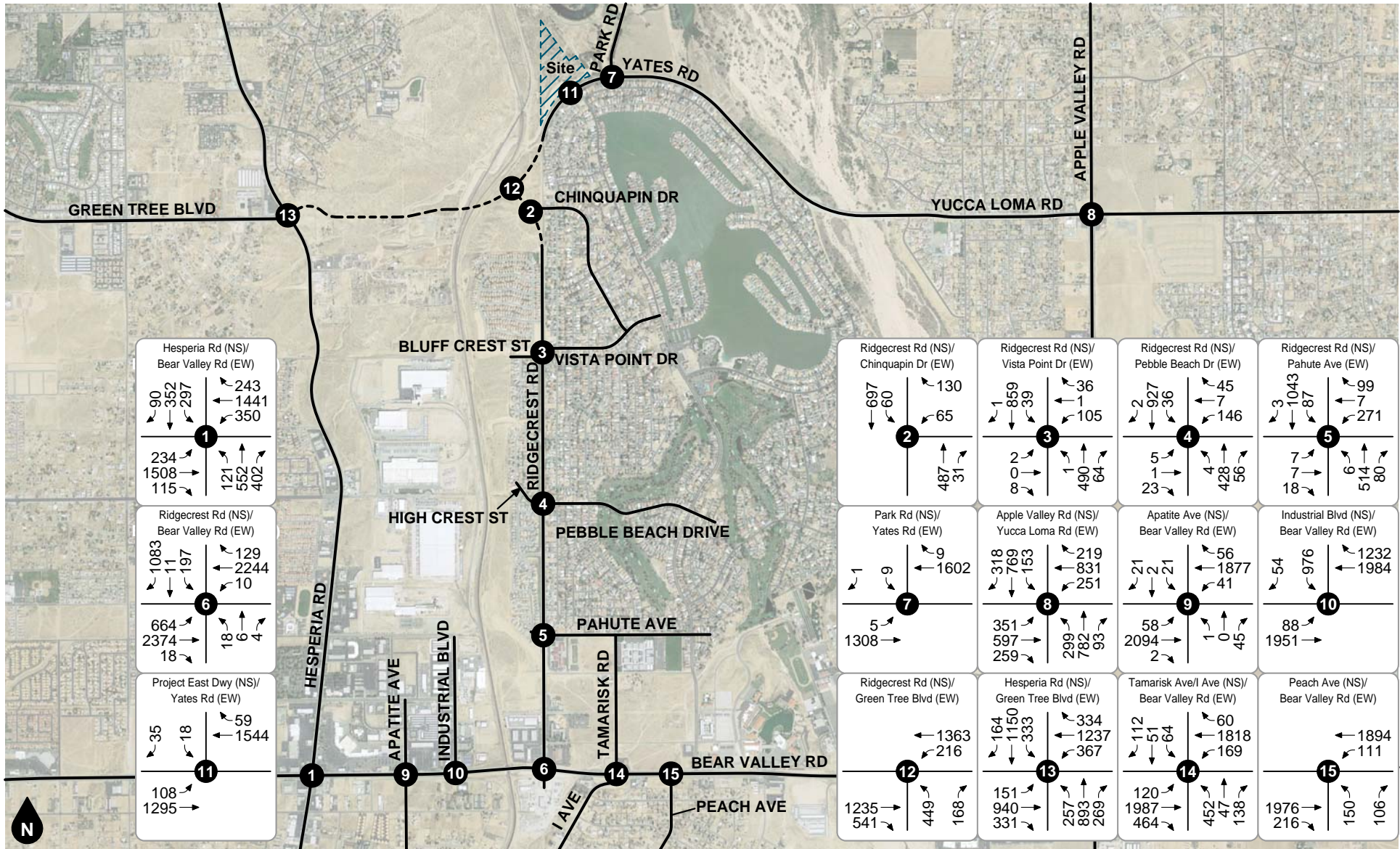


Figure 32
Buildout Year (2040) With Project
AM Peak Hour Intersection Turning Movement Volumes

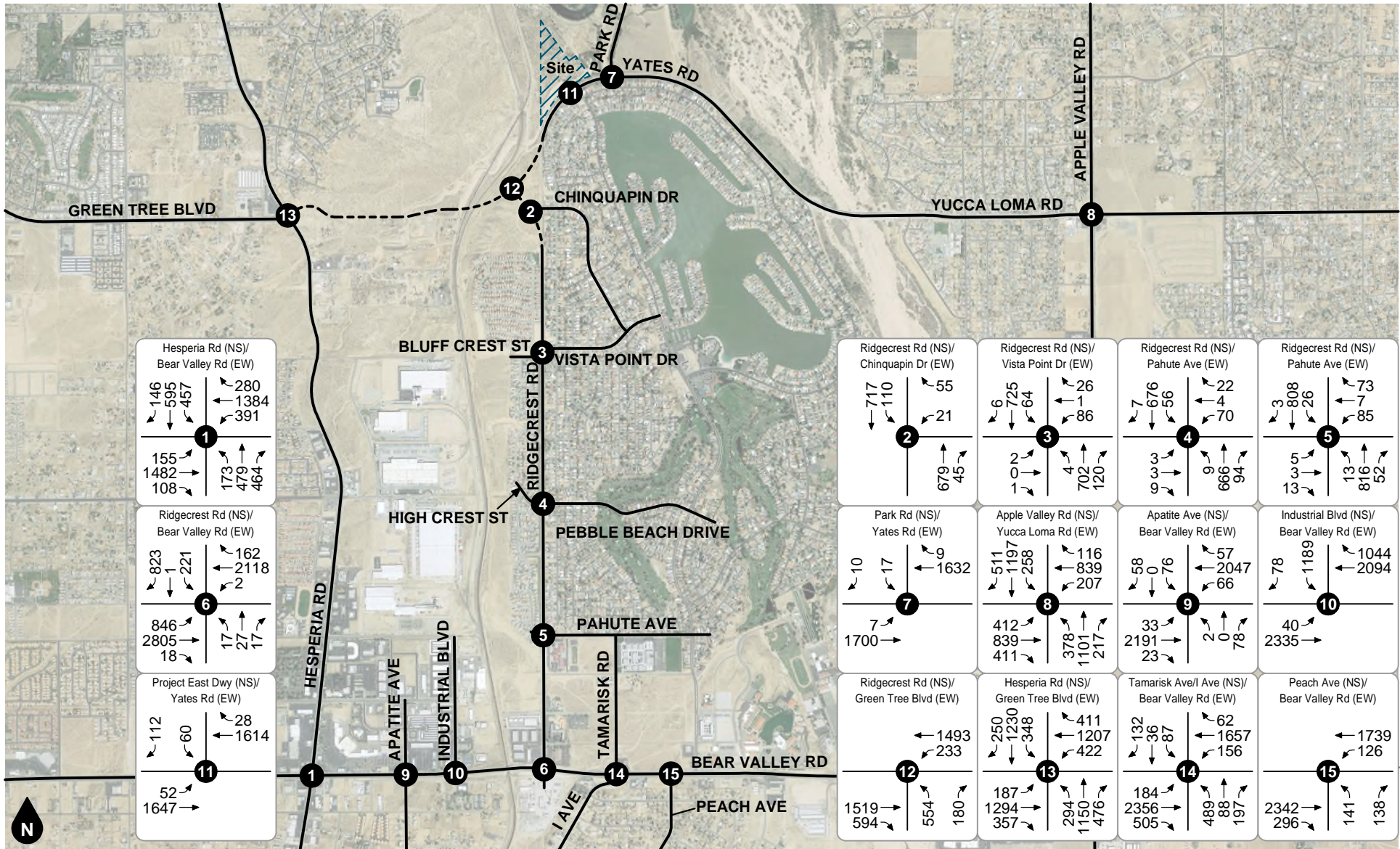


Figure 33
Buildout Year (2040) With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE OPERATIONAL ANALYSIS

This section contains an evaluation of the project impact on the study roadway facilities and identifies the improvements necessary to mitigate the project impact, if any. Level of Service calculation worksheets for the future scenarios presented in this section are contained in Appendix D.

EXISTING PLUS PROJECT

The Existing Plus Project Levels of Service for the study intersections are shown in Table 3. Table 3 shows the intersection delay and Level of Service values at the study intersections without and with improvements.

As shown in Table 3, the study intersections are projected to operate at Level of Service C or better during the peak hours for Existing Plus Project conditions, except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Project East Driveway/Yates Road - #11
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

As also shown in Table 3, the proposed project is forecast to result in no significant impacts at the study intersections for Existing Plus Project conditions, with the following recommended improvements:

- Hesperia Road (NS) at Bear Valley Road (EW) - #1
 - Add northbound right turn overlap phasing.
- Ridgecrest Road (NS) at Chinquapin Drive (EW) - #2
 - Install a new traffic signal. Since the intersection is already operating at deficient Level of Service under Existing conditions, the project should contribute its fair cost based on total traffic volumes. The deficient LOS at the Intersection of Ridgecrest Road and Chinquapin (Intersection #2) is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing turning traffic on Chinquapin Drive.
- Ridgecrest Road (NS) at Bear Valley Road (EW) - #6
 - Provide a second eastbound left turn lane.
- Apatite Avenue (NS) at Bear Valley Road (EW) - #9
 - Install a new traffic signal and provide northbound and southbound left turn lanes. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.
- Project East Driveway (NS) at Yates Road (EW) - #11
 - Install a new traffic signal. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.

- Tamarisk Road-I Avenue (NS) at Bear Valley Road (EW) - #14
 - Restripe northbound approach to provide dual left turn lanes and one shared northbound through-right lane.
 - Restripe southbound approach to provide a left turn lane and one shared northbound through-right lane.
 - Modify northbound-southbound signal phasing to protected left turn.
- Peach Avenue (NS) at Bear Valley Road (EW) - #15
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

OPENING YEAR (2020) WITHOUT PROJECT

The Opening Year (2020) Without Project Levels of Service for the study intersections are shown in Table 4. Table 4 shows the intersection delay and Level of Service values at the study intersections with existing lane geometries.

As shown in Table 4, the study intersections are projected to operate at Level of Service C or better during the peak hours for Opening Year (2020) Without Project traffic conditions), except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

OPENING YEAR (2020) WITH PROJECT

The Opening Year (2020) With Project Levels of Service for the study intersections are shown in Table 5. Table 5 shows the intersection delay and Level of Service values at the study intersections without and with improvements.

As shown in Table 5, the study intersections are projected to operate at Level of Service C or better during the peak hours for Opening Year (2020) With Project conditions, except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apatite Avenue/Bear Valley Road - #9
- Project East Driveway/Bear Valley Road - #11
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

As also shown in Table 5, the proposed project is forecast to result in no significant impacts at the study intersections for Opening Year (2020) With Project conditions, with the following recommended improvements:

- Hesperia Road (NS) at Bear Valley Road (EW) - #1
 - Add northbound right turn overlap phasing.
- Ridgecrest Road (NS) at Chinquapin Drive (EW) - #2
 - Install a new traffic signal. Since the intersection is already operating at deficient Level of Service under Existing conditions, the project should contribute its fair cost based on total traffic volumes. The deficient LOS at the Intersection of Ridgecrest Road and Chinquapin (Intersection #2) is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing turning traffic on Chinquapin Drive.
- Ridgecrest Road (NS) at Bear Valley Road (EW) - #6
 - Provide a second eastbound left turn lane.
- Apatite Avenue (NS) at Bear Valley Road (EW) - #9
 - Install a new traffic signal and provide northbound and southbound left turn lanes. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.
- Project East Driveway (NS) at Yates Road (EW) - #11
 - Install a new traffic signal. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.
- Tamarisk Road-I Avenue (NS) at Bear Valley Road (EW) - #14
 - Restripe northbound approach to provide dual left turn lanes and one shared northbound through-right lane.
 - Restripe southbound approach to provide a left turn lane and one shared northbound through-right lane.
 - Modify northbound-southbound signal phasing to protected left turn.
- Peach Avenue (NS) at Bear Valley Road (EW) - #15
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

Since the Green Tree Boulevard Extension project is anticipated to start in March 2021 and will likely be completed before the completion of the proposed Chateau Senior Living Facility project, the new roadway extension will affect the existing alignment of Chinquapin Drive and reduce the existing on Ridgecrest Road such that it is recommended that the installation of the traffic signal at the intersection of Ridgecrest Road and Chinquapin Drive (Intersection #2) be omitted during the near-term conditions until it is warranted based on actual traffic counts after the completion of the Green Tree Boulevard Extension project.

BUILDOUT YEAR (2040) WITHOUT PROJECT

The Buildout Year (2040) Without Project Levels of Service for the study intersections are shown in Table 6. Table 6 shows the intersection delay and Level of Service values at the study intersections with existing lane geometries.

As shown in Table 6, the study intersections are forecast to operate at Level of Service C or better during the peak hours for Buildout Year (2040) Without Project traffic conditions, except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1

- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Bear Valley Road - #6
- Apple Valley Road/Yucca Loma Road - #8
- Apatite Avenue/Bear Valley Road - #9
- Ridgecrest Road/Green Tree Boulevard - #12
- Hesperia Road/Green Tree Boulevard - #13
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

BUILDOUT YEAR (2040) WITH PROJECT

The Buildout Year (2040) With Project Levels of Service for the study intersections are shown in Table 7. Table 7 shows the intersection delay and Level of Service values at the study intersections without and with improvements.

As shown in Table 7, the study intersections are forecast to operate at Level of Service C or better during the peak hours for Buildout Year (2040) With Project conditions, except at the following study intersections that are forecast to operate at Levels of Service D/E/F during the peak hours:

- Hesperia Road/Bear Valley Road - #1
- Ridgecrest Road/Chinquapin Drive - #2
- Ridgecrest Road/Vista Point Drive - #3
- Ridgecrest Road/Bear Valley Road - #6
- Apple Valley Road/Yucca Loma Road - #8
- Apatite Avenue/Bear Valley Road - #9
- Project East Driveway/Yates Road - #11
- Ridgecrest Road/Green Tree Boulevard - #12
- Hesperia Road/Green Tree Boulevard - #13
- Tamarisk Road-I Avenue/Bear Valley Road - #14
- Peach Avenue/Bear Valley Road - #15

As also shown in Table 7, the proposed project is forecast to result in no significant impacts at the study intersections for Buildout Year (2040) With Project conditions, with the following recommended improvements:

- Hesperia Road (NS) at Bear Valley Road (EW) - #1
 - Add northbound right turn overlap phasing.
- Ridgecrest Road (NS) at Chinquapin Drive (EW) - #2
 - Install a new traffic signal. Since the intersection is already operating at deficient Level of Service under Existing conditions, the project should contribute its fair cost based on total traffic volumes. The deficient LOS at the Intersection of Ridgecrest Road and Chinquapin (Intersection #2) is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing turning traffic on Chinquapin Drive.
- Ridgecrest Road (NS) at Bluff Crest Street/Vista Point Drive (EW) - #3
 - Restripe to provide eastbound and westbound left turn lanes.
- Ridgecrest Road (NS) at Bear Valley Road (EW) - #6
 - Provide a second eastbound left turn lane

- Apple Valley Road (NS) at Yucca Loma Road (EW) - #8 [Part of the Green Tree Boulevard Extension Transportation Improvement Project]
 - Provide a second northbound left turn lane.
 - Add southbound right turn overlap phasing.
 - Add eastbound right turn overlap phasing.
 - Provide westbound right turn lane.

- Apatite Avenue (NS) at Bear Valley Road (EW) - #9
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

- Project East Driveway (NS) at Yates Road (EW) - #11
 - Install a new traffic signal. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.

- Ridgecrest Road (NS) at Green Tree Boulevard (EW) - #12 [Part of the Green Tree Boulevard Extension Transportation Improvement Project]
 - Install a traffic signal.
 - Provide northbound left turn lane.
 - Provide shared northbound left/right lane.
 - Provide northbound right turn lane.
 - Provide eastbound right turn lane.
 - Provide westbound left turn.

- Hesperia Road (NS) at Green Tree Boulevard (EW) - #13 [Part of the Green Tree Boulevard Extension Transportation Improvement Project]
 - Provide third northbound through lane.
 - Provide northbound right turn lane.
 - Add northbound right turn overlap phasing.
 - Provide southbound left turn lane.
 - Provide third southbound through lane.
 - Provide southbound right turn lane.
 - Provide second eastbound left turn lane.
 - Provide two eastbound through lanes.
 - Provide two westbound left turn lanes.
 - Provide two westbound through lanes.
 - Add westbound right turn overlap phasing.

- Tamarisk Road-I Avenue (NS) at Bear Valley Road (EW) - #14
 - Restripe northbound approach to provide dual left turn lanes and one shared northbound through-right lane.
 - Restripe southbound approach to provide a left turn lane and one shared northbound through-right lane.
 - Modify northbound-southbound signal phasing to protected left turn.

- Peach Avenue (NS) at Bear Valley Road (EW) - #15
 - Install a new traffic signal. Since a traffic signal is already warranted under Existing conditions, the project should contribute its fair cost based on total traffic volumes.

**Table 3
Existing Plus Project Intersection Delay and Levels of Service**

ID	Study Intersection	Traffic Control ¹	Without Project				With Project				Project Change		Project Impact
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
			Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³			
1.	Hesperia Road at Bear Valley Road -NB Right-Turn Overlap Phasing	TS	34.1	C	36.3	D	38.0	D	39.1	D	+3.9	+2.8	Yes
		TS	--	--	--	--	28.3	C	28.2	C	-5.8	-8.1	No
2.	Ridgecrest Road at Chinquapin Drive -Traffic Signal	CSS	23.9	C	18.8	C	30.8	D	23.0	C	+6.9	+4.2	Yes
		TS	--	--	--	--	4.9	A	2.9	A	-19.0	-15.9	No
3.	Ridgecrest Road at Vista Point Drive	CSS	19.0	C	16.9	C	20.5	C	18.7	C	+1.5	+1.8	No
4.	Ridgecrest Road at Pebble Beach Drive	TS	28.4	C	15.3	B	28.4	C	16.0	B	0.0	+0.7	No
5.	Ridgecrest Road at Pahute Drive	TS	14.5	B	8.6	A	14.5	B	8.6	A	0.0	0.0	No
6.	Ridgecrest Road at Bear Valley Road -2nd EB Left Turn Lane	TS	38.5	D	32.6	C	50.6	D	35.7	D	+12.1	+3.1	Yes
		TS	--	--	--	--	32.5	C	24.1	C	-6.0	-8.5	No
7.	Park Road at Yates Road	TS	2.0	A	2.9	A	2.0	A	2.9	A	0.0	0.0	No
8.	Apple Valley Road at Yucca Loma Road	TS	25.6	C	22.3	C	25.8	C	22.7	C	+0.2	+0.4	No
9.	Apatite Avenue at Bear Valley Road -Traffic Signal; NB Left Turn; SB Left Turn	CSS	1,127.0	F	5,651.4	F	1,404.3	F	5,652.5	F	+277.3	+1.1	Yes
		CSS	--	--	--	--	3.0	A	5.5	A	-1,124.0	-5,645.9	No
10.	Industrial Boulevard at Bear Valley Road	TS	22.8	C	20.6	C	23.0	C	21.7	C	+0.2	+1.1	No
11.	Project East Driveway at Yates Road -Traffic Signal; SB Left Turn; SB Right Turn; EB Left Turn; WB Right Turn	CSS	--	--	--	--	25.5	D	18.4	C	+25.5	+18.4	Yes
		TS	--	--	--	--	3.1	A	6.9	A	+3.1	+6.9	No
14.	Tamarisk Road/I Avenue at Bear Valley Road -2nd NB Left Turn, NB Through-Right, SB Left Turn, SB Through-Right, Modify NB/SB signal phasing	TS	33.5	C	61.0	E	33.7	C	62.6	E	+0.2	+1.6	Yes
		TS	--	--	--	--	26.5	C	31.8	C	-7.0	-29.2	No
15.	Peach Avenue at Bear Valley Road -Traffic Signal	CSS	1,277.1	F	5,093.4	F	1,366.7	F	5,094.4	F	+89.6	+1.0	Yes
		TS	--	--	--	--	8.3	A	10.0	B	-1,268.8	-5,083.4	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(3) LOS = Level of Service

Table 4
Opening Year (2020) Without Project Intersection Delay and Levels of Service

ID	Study Intersection	Traffic Control ¹	AM Peak Hour		PM Peak Hour	
			Delay ²	LOS ³	Delay ²	LOS ³
1.	Hesperia Road at Bear Valley Road	TS	35.2	D	37.7	D
2.	Ridgecrest Road at Chinquapin Drive	CSS	28.9	D	23.2	C
3.	Ridgecrest Road at Vista Point Drive	CSS	19.7	C	17.7	C
4.	Ridgecrest Road at Pebble Beach Drive	TS	30.2	C	15.5	B
5.	Ridgecrest Road at Pahute Drive	TS	14.6	B	8.7	A
6.	Ridgecrest Road at Bear Valley Road	TS	44.7	D	35.2	D
7.	Park Road at Yates Road	TS	2.1	A	2.9	A
8.	Apple Valley Road at Yucca Loma Road	TS	25.9	C	22.9	C
9.	Apatite Avenue at Bear Valley Road	CSS	1,250.3	F	5,684.0	F
10.	Industrial Boulevard at Bear Valley Road	TS	23.7	C	21.2	C
14.	Tamarisk Road/I Avenue at Bear Valley Road	TS	35.2	D	64.6	E
15.	Peach Avenue at Bear Valley Road	CSS	6,046.6	F	5,094.9	F

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(3) LOS = Level of Service

Table 5
Opening Year (2020) With Project Intersection Delay and Levels of Service

ID	Study Intersection	Traffic Control ¹	Without Project				With Project				Project Change		Project Impact
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
			Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³			
1.	Hesperia Road at Bear Valley Road -NB Right-Turn Overlap Phasing	TS	35.2	D	37.7	D	39.2	D	40.8	D	+4.0	+3.1	Yes
		TS	--	--	--	--	28.4	C	29.6	C	-6.8	-8.1	No
2.	Ridgecrest Road at Chinquapin Drive -Traffic Signal	CSS	28.9	D	23.2	C	38.6	E	29.1	D	+9.7	+5.9	Yes
		TS	--	--	--	--	5.4	A	3.4	A	-23.5	-19.8	No
3.	Ridgecrest Road at Vista Point Drive	CSS	19.7	C	17.7	C	21.3	C	19.7	C	+1.6	+2.0	No
4.	Ridgecrest Road at Pebble Beach Drive	TS	30.2	C	15.5	B	30.3	C	16.3	B	+0.1	+0.8	No
5.	Ridgecrest Road at Pahute Drive	TS	14.6	B	8.7	A	14.7	B	8.7	A	+0.1	0.0	No
6.	Ridgecrest Road at Bear Valley Road -2nd EB Left Turn Lane	TS	44.7	D	35.2	D	45.8	D	40.5	D	+1.1	+5.3	Yes
		TS	--	--	--	--	35.5	D	26.4	C	-9.2	-8.8	No
7.	Park Road at Yates Road	TS	2.1	A	2.9	A	2.1	A	2.9	A	0.0	0.0	No
8.	Apple Valley Road at Yucca Loma Road	TS	25.9	C	22.9	C	26.7	C	23.4	C	+0.8	+0.5	No
9.	Apatite Avenue at Bear Valley Road -Traffic Signal; NB Left Turn; SB Left Turn	CSS	1,250.3	F	5,684.0	F	1,559.3	F	5,685.1	F	+309.0	+1.1	Yes
		TS	--	--	--	--	3.0	A	5.6	A	-1,247.3	-5,678.4	No
10.	Industrial Boulevard at Bear Valley Road	TS	23.7	C	21.2	C	23.9	C	22.4	C	+0.2	+1.2	No
11.	Project East Driveway at Yates Road -Traffic Signal; SB Left Turn; SB Right Turn; EB Left Turn; WB Right Turn	CSS	--	--	--	--	28.2	D	21.1	C	+28.2	+21.1	Yes
		TS	--	--	--	--	3.0	A	6.2	A	+3.0	+6.2	No
14.	Tamarisk Road/I Avenue at Bear Valley Road -2nd NB Left Turn, NB Through-Right, SB Left Turn, SB Through-Right, Modify NB/SB signal phasing	TS	35.2	D	64.6	E	35.3	D	66.2	E	+0.1	+1.6	Yes
		TS	--	--	--	--	28.0	C	32.7	C	-7.2	-31.9	No
15.	Peach Avenue at Bear Valley Road -Traffic Signal	CSS	6,046.6	F	5,094.9	F	6,046.7	F	5,096.1	F	+0.1	+1.2	Yes
		TS	--	--	--	--	8.6	A	9.9	A	-6,038.0	-5,085.0	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(3) LOS = Level of Service

Table 6
Buildout Year (2040) Without Project Intersection Delay and Levels of Service

ID	Study Intersection	Traffic Control ¹	AM Peak Hour		PM Peak Hour	
			Delay ²	LOS ³	Delay ²	LOS ³
1.	Hesperia Road at Bear Valley Road	TS	36.3	D	40.6	D
2.	Ridgecrest Road at Chinquapin Drive	CSS	29.1	D	34.8	D
3.	Ridgecrest Road at Vista Point Drive	CSS	21.7	C	23.9	C
4.	Ridgecrest Road at Pebble Beach Drive	TS	30.5	C	16.1	B
5.	Ridgecrest Road at Pahute Drive	TS	14.9	B	8.7	A
6.	Ridgecrest Road at Bear Valley Road	TS	46.0	D	53.2	D
7.	Park Road at Yates Road	TS	2.1	A	3.1	A
8.	Apple Valley Road at Yucca Loma Road	TS	44.8	D	83.5	F
9.	Apatite Avenue at Bear Valley Road	CSS	2,990.0	F	5,687.7	F
10.	Industrial Boulevard at Bear Valley Road	TS	24.5	C	23.4	C
12.	Ridgecrest Road at Green Tree Boulevard	TS	20.7	C	36.1	D
13.	Hesperia Road at Green Tree Boulevard	TS	39.1	D	70.2	E
14.	Tamarisk Road/I Avenue at Bear Valley Road	TS	40.9	D	71.1	E
15.	Peach Avenue at Bear Valley Road	CSS	5,877.5	F	5,119.1	F

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(3) LOS = Level of Service

Table 7 (1 of 2)

Buildout Year (2040) With Project Intersection Delay and Levels of Service

ID	Study Intersection	Traffic Control ¹	Without Project				With Project				Project Change		Project Impact
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
			Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³			
1. Hesperia Road at Bear Valley Road -NB Right-Turn Overlap Phasing	TS	36.3	D	40.6	D	38.1	D	41.6	D	+1.8	+1.0	Yes	
	TS	--	--	--	--	26.8	C	28.9	C	-9.5	-11.7	No	
2. Ridgecrest Road at Chinquapin Drive -Traffic Signal	CSS	29.1	D	34.8	D	29.5	D	38.2	E	+0.4	+3.4	Yes	
	TS	--	--	--	--	6.9	A	3.6	A	-22.2	-31.2	No	
3. Ridgecrest Road at Vista Point Drive -EB Left Turn; WB Left Turn	CSS	21.7	C	23.9	C	22.8	C	25.5	D	+1.1	+1.6	Yes	
	CSS	--	--	--	--	20.2	C	23.8	C	-1.5	-0.1	No	
4. Ridgecrest Road at Pebble Beach Drive	TS	30.5	C	16.1	B	30.5	C	16.8	B	0.0	+0.7	No	
5. Ridgecrest Road at Pahute Drive	TS	14.9	B	8.7	A	15.0	B	8.7	A	+0.1	0.0	No	
6. Ridgecrest Road at Bear Valley Road -2nd EB Left Turn Lane	TS	46.0	D	53.2	D	51.5	D	53.7	D	+5.5	+0.5	Yes	
	TS	--	--	--	--	27.9	C	38.0	D	-18.1	-15.2	No	
7. Park Road at Yates Road	TS	2.1	A	3.1	A	2.2	A	3.1	A	+0.1	0.0	No	
8. Apple Valley Road at Yucca Loma Road -2nd NB Left Turn; SB Right-Turn Overlap Phasing; EB Right-Turn Overlap Phasing; WB Right Turn	TS	44.8	D	83.5	F	48.0	D	89.1	F	+3.2	+5.6	Yes	
	TS	--	--	--	--	28.7	C	50.8	D	-16.1	-32.7	No	
9. Apatite Avenue at Bear Valley Road -Traffic Signal; NB Left Turn; SB Left Turn	CSS	2,990.0	F	5,687.7	F	3,251.5	F	5,688.2	F	+261.5	+0.5	Yes	
	TS	--	--	--	--	3.0	A	5.6	A	-2,987.0	-5,682.1	No	
10. Industrial Boulevard at Bear Valley Road	TS	24.5	C	23.4	C	24.5	C	23.9	C	0.0	+0.5	No	
11. Project East Driveway at Yates Road -Traffic Signal; SB Left Turn; SB Right Turn; EB Left Turn; WB Right Turn	CSS	--	--	--	--	609.1	F	1,846.8	F	+609.1	+1,846.8	Yes	
	TS	--	--	--	--	3.1	A	5.7	A	+3.1	+5.7	No	
12. Ridgecrest Road at Green Tree Boulevard -Traffic Signal, NB Left Turn; NB Shared Left/Right; NB Right Turn; EB Right Turn; WB Left Turn	TS	20.7	C	36.1	D	23.1	C	44.3	D	+23.1	+8.2	Yes	
	TS	--	--	--	--	14.9	B	21.4	C	+14.9	-14.7	No	
13. Hesperia Road at Green Tree Boulevard -3rd NB Thru; NB Right Turn; NB Right-Turn Overlap Phasing; SB Left Turn; 3rd SB Thru; SB Right Turn; 2nd EB Left Turn; 2 EB Thru; 2 WB Left Turn; 2 WB Thru; WB Right-Turn Overlap Phasing	TS	39.1	D	70.2	E	41.0	D	73.2	E	+41.0	+3.0	Yes	
	TS	--	--	--	--	38.6	D	45.8	D	+38.6	-24.4	No	
14. Tamarisk Road/I Avenue at Bear Valley Road -2nd NB Left Turn, NB Through-Right, SB Left Turn, SB Through-Right, Modify NB/SB signal phasing	TS	40.9	D	71.1	E	41.3	D	72.1	E	+0.4	+1.0	Yes	
	TS	--	--	--	--	28.7	C	36.2	D	-12.2	-34.9	No	

Table 7 (2 of 2)

Buildout Year (2040) With Project Intersection Delay and Levels of Service

ID	Study Intersection	Traffic Control ¹	Without Project				With Project				Project Change		Project Impact
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	
			Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³	Delay ²	LOS ³			
15.	Peach Avenue at Bear Valley Road -Traffic Signal	CSS TS	5,877.5	F	5,119.1	F	5,877.8	F	5,121.7	F	+0.3	+2.6	Yes
			--	--	--	--	28.7	A	10.7	B	-5,848.8	-5,108.4	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

(2) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(3) LOS = Level of Service

7. MITIGATION MEASURES

REQUIRED IMPROVEMENTS AND COSTS

Improvements that will eliminate all anticipated roadway operational deficiencies throughout the study area have been identified for Buildout Year (2040) traffic conditions. The improvements were determined through the operations analysis of Section VI.

The approximate costs for the Buildout Year (2040) improvements have generally been estimated using cost guidelines in the Congestion Management Program Handbook (see Appendix G). A unit cost of \$600,000 for installation of a traffic signal has been substituted for the somewhat lower value cited in the Congestion Management Program materials.

The needed improvements and resulting costs are summarized in Table 8 for the study intersections. The total cost of needed and unfunded intersection improvements for the existing roadway network and other funded intersection improvements that are part of the Green Tree Boulevard Extension Transportation Improvement Project are approximately \$3,840,000.

PROJECT FAIR SHARE/DEVELOPMENT IMPACT FEES

The project fair share contributions have also been calculated for Buildout Year (2040) improvement locations. The project share of cost has been based on the proportion of project peak hour intersection turning movement volumes contributed to the improvement location relative to the total new Buildout Year (2040) peak hour intersection turning movement volume.

Table 9 presents a summary of improvement cost and project cost shares at the Buildout Year (2040) intersection improvement locations. The intersection fair share cost calculations are typically based on the higher of the morning and evening peak hour intersection turning movement volumes. As shown in Table 9, the project's fair share of identified intersection costs are \$659,986.

It should be noted that since the intersection of Apatite Avenue and Bear Valley Road (Intersection #9) and intersection of Peach Avenue and Bear Valley Road (Intersection #15) currently satisfy the traffic signal warrant based on Existing traffic conditions, the fair share percentage is calculated based on overall traffic volumes including existing traffic volumes. The project does not trigger the need for the traffic signals because the intersections are already operating at Level of Service F during the peak hours.

The intersection of Ridgecrest Road and Chinquapin Drive (Intersection #2) is already operating at deficient Level of Service under Existing conditions, the project should contribute its fair cost based on total traffic volumes. The deficient LOS at the Intersection of Ridgecrest Road and Chinquapin Drive (Intersection #2) is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing turning traffic on Chinquapin Drive. Since the Green Tree Boulevard Extension project is anticipated to start in March 2021 and will likely be completed before the completion of the proposed Chateau Senior Living Facility project, the new roadway extension will affect the existing alignment of Chinquapin Drive and reduce the existing on Ridgecrest Road such that it is recommended that the installation of the traffic signal at the intersection of Ridgecrest Road and Chinquapin Drive (Intersection #2) be omitted during the near-term conditions until it is warranted based on actual traffic counts after the completion of the Green Tree Boulevard Extension project.

The dollar figures are rough order of magnitude estimates only. They are intended only for the discussion purposes of this traffic impact analysis, and do not imply any legal responsibility or formula for contributions or mitigation.

As mitigation for the potential traffic impacts, the proposed project shall contribute through an adopted traffic impact fee program in addition to any fair share contributions shown within the traffic study which is not covered within this fee program.

ON-SITE/ACCESS RECOMMENDATIONS

Site-specific circulation and access recommendations are depicted on Figure 34.

The Project East Driveway is proposed to be a signalized full access driveway. The proposed signal on Yates at the Project East Driveway (Intersection #11) should be coordinated with the existing signal at Park Road (Intersection #7) by hard line connection.

The Project West Driveway is proposed to be an emergency-only stop-controlled secondary access, which is located at the southwest corner of the project site.

Yates Road along the project boundary should be constructed at the ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise approved by the County of San Bernardino Public Works Department.

The proposed project driveways should be constructed in conformance with County of San Bernardino standards, including provisions for sight distance requirements and truck turning radii, or as otherwise approved by the County of San Bernardino Public Works Department.

All on-site and site-adjacent improvements, including traffic signing/striping and project driveways, should be constructed as approved by the County of San Bernardino Public Works Department.

On-site parking should be provided to the satisfaction of County of San Bernardino Planning Department.

As is the case for any roadway design, the County of San Bernardino should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

SIGHT DISTANCE ANALYSIS

The speed limit on Yates Road is currently posted at 55 miles per hour. Based on Table 405.1A of the 2018 Highway Design Manual to account for single-unit truck making left-turn from stop with a 9.5 second time gap, the minimum corner sight distance is 768 feet determined by the equation of $1.47VT$, where V is the design speed in miles per hour of the major road and T is the time gap in seconds for the minor road vehicle to enter the road. The minimum stopping sight distance standard is 500 feet. Appendix H includes the Highway Design Manual sight distance standards. Figure 35 shows the sight distance analysis for the proposed project driveway on Yates Road. As shown on Figure 35, the proposed project driveway has adequate sight distances when the yellow highlighted triangular areas are clear of visual obstructions that are more than 2 feet in height.

Table 8
Summary of Intersection Improvements and Costs

Intersection	Jurisdiction	Improvements	Funding	Cost
1 Hesperia Rd (NS) at: Bear Valley Rd (EW)	City of Victorville / City of Hesperia	NB Right-Turn Overlap Phasing	Fair Share	\$ 25,000
2 Ridgecrest Rd (NS) at: Chinquapin Dr (EW)	County of San Bernardino	Traffic Signal	Fair Share ¹	\$ 600,000
3 Ridgecrest Rd (NS) at: Bluff Crest St/Vista Point Dr (EW)	County of San Bernardino / City of Victorville	Restripe to provide EB Left Turn; WB Left Turn	Project	\$ 10,000
6 Ridgecrest Rd (NS) at: Bear Valley Rd (EW)	City of Victorville	2nd EB Left Turn Lane	Fair Share	\$ 50,000
8 Apple Valley Rd (NS) at: Yucca Loma Rd (EW)	City of Apple Valley	2nd northbound left turn lane	Green Tree Boulevard Extension	\$ 50,000
		SB right-turn overlap phasing		\$ 25,000
		EB right-turn overlap phasing		\$ 25,000
		WB right turn		\$ 20,000
		Total		\$ 120,000
9 Apatite Ave (NS) at: Bear Valley Rd (EW)	City of Victorville / City of Hesperia	Traffic Signal; NB Left Turn; SB Left Turn	Fair Share ²	\$ 600,000
11 Project East Dwy (NS) at: Yates Rd (EW)	County of San Bernardino	Traffic Signal; SB Left Turn; SB Right Turn; EB Left Turn; WB Right Turn	Project	\$ 600,000
12 Ridgecrest Rd (NS) at: Green Tree Blvd (EW)	City of Victorville	Traffic Signal, NB Left Turn; NB Shared Left/Right; NB Right Turn; EB Right Turn; WB Left Turn	Green Tree Boulevard Extension	\$ 600,000
13 Hesperia Rd (NS) at: Green Tree Blvd (EW)	City of Victorville	3rd NB Thru; NB Right Turn; NB Right-Turn Overlap Phasing; SB Left Turn; 3rd SB Thru; SB Right Turn; 2nd EB Left Turn; 2 EB Thru; 2 WB Left Turn; 2 WB Thru; WB Right-Turn Overlap Phasing	Green Tree Boulevard Extension	\$ 600,000
14 Tamarisk Rd/I Ave (NS) at: Bear Valley Rd (EW)	City of Hesperia	Restripe to provide 2nd NB Left Turn, NB Through-Right, SB Left Turn, SB Through-Right	Fair Share	\$ 10,000
		Modify NB/SB signal phasing		\$ 25,000
		Total		\$ 35,000
15 Peach Ave (NS) at: Bear Valley Road	City of Hesperia	Traffic Signal	Fair Share ²	\$ 600,000
Overall Total Cost				\$ 3,840,000

Notes:

(1) The fair share percentage is calculated based on overall traffic volumes including existing traffic volumes. The deficient LOS at Intersection #2 is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing traffic on Chinquapin Drive.

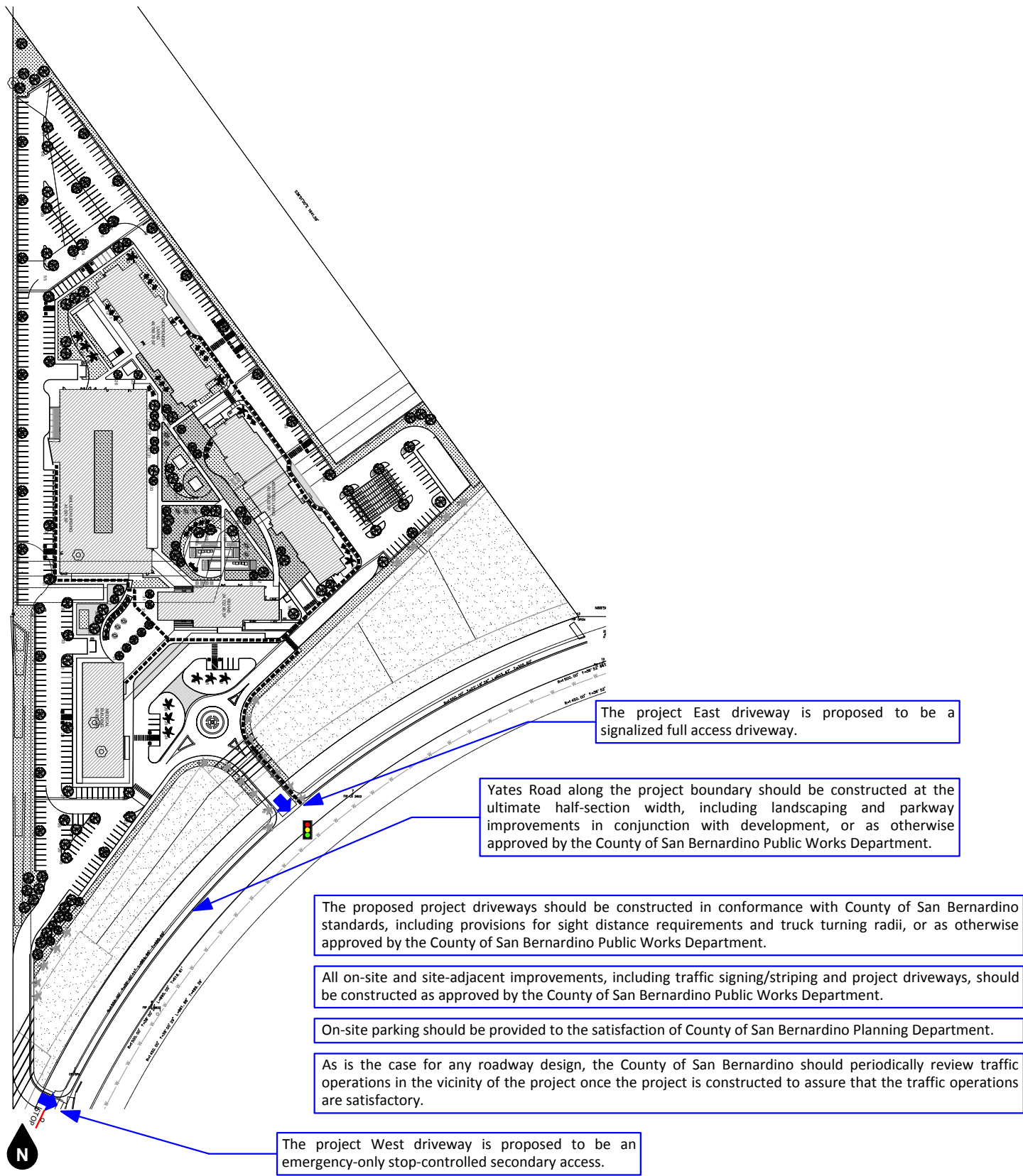
(2) Since the intersection currently satisfy signal warrant based on existing traffic conditions, the fair share percentage is calculated based on overall traffic volumes including existing traffic volumes. The project does not trigger the need for the traffic signal.

**Table 9
Project Fair Share Intersection Traffic Contribution**

Intersection	Jurisdiction	Total Cost	Peak Hour	Intersection Turning Movement Volumes					Total Project Fair Share Cost	Project Contribution Per Jurisdiction		
				Existing	Buildout Year (2040) With Project	Project	Total New	Project % of New		City of Victorville	City of Hesperia	County of San Bernardino
1 Hesperia Rd (NS) at: Bear Valley Rd (EW)	City of Victorville / City of Hesperia	\$ 25,000	AM	5,034	5,705	44	671	6.6%	\$ 1,995	\$ 998	\$ 998	\$ -
			PM	5,475	6,114	51	639	8.0%				
2 Ridgecrest Rd (NS) at: Chinquapin Dr (EW)	County of San Bernardino	\$ 600,000	AM	988	1,470	77	482	5.2% ¹	\$ 32,821	\$ -	\$ -	\$ 32,821
			PM	857	1,627	89	770	5.5% ¹				
6 Ridgecrest Rd (NS) at: Bear Valley Rd (EW)	City of Victorville	\$ 50,000	AM	5,955	6,758	66	803	8.2%	\$ 4,110	\$ 4,110	\$ -	\$ -
			PM	6,125	7,057	76	932	8.2%				
9 Apatite Ave (NS) at: Bear Valley Rd (EW)	City of Victorville / City of Hesperia	\$ 600,000	AM	3,666	4,218	44	552	1.0% ²	\$ 6,608	\$ 3,304	\$ 3,304	\$ -
			PM	4,161	4,631	51	470	1.1% ²				
14 Tamarisk Rd/I Ave (NS) at: Bear Valley Rd (EW)	City of Hesperia	\$ 35,000	AM	4,770	5,482	22	712	3.1%	\$ 1,316	\$ -	\$ 1,316	\$ -
			PM	5,284	5,949	25	665	3.8%				
15 Peach Ave (NS) at: Bear Valley Road	City of Hesperia	\$ 600,000	AM	3,841	4,453	22	612	0.5% ²	\$ 3,137	\$ -	\$ 3,137	\$ -
			PM	4,207	4,782	25	575	0.5% ²				
Project Improvements ³		\$ 610,000	Project Improvements ³					\$ 610,000	\$ -	\$ -	\$ 610,000	
Other Funded Improvements ⁴		\$ 1,320,000	Other Funded Improvements ⁴					\$ -	\$ -	\$ -	\$ -	
Overall Total Cost		\$ 3,840,000	Improvements - Project Fair Share					\$ 659,986	\$ 8,412	\$ 8,755	\$ 642,821	

Notes:

- (1) The fair share percentage is calculated based on overall traffic volumes including existing traffic volumes. The deficient LOS at Intersection #2 is only experienced by the existing residential traffic and turning movements from Chinquapin Drive where the project does not increase the existing traffic on Chinquapin Drive.
- (2) Since the intersection currently satisfy signal warrant based on existing traffic conditions, the fair share percentage is calculated based on overall traffic volumes including existing traffic volumes. The project does not trigger the need for the traffic signal.
- (3) The project will implement the improvements at Intersections #3 and #11.
- (4) Green Tree Boulevard Extension Improvement Project is already approved and funded.






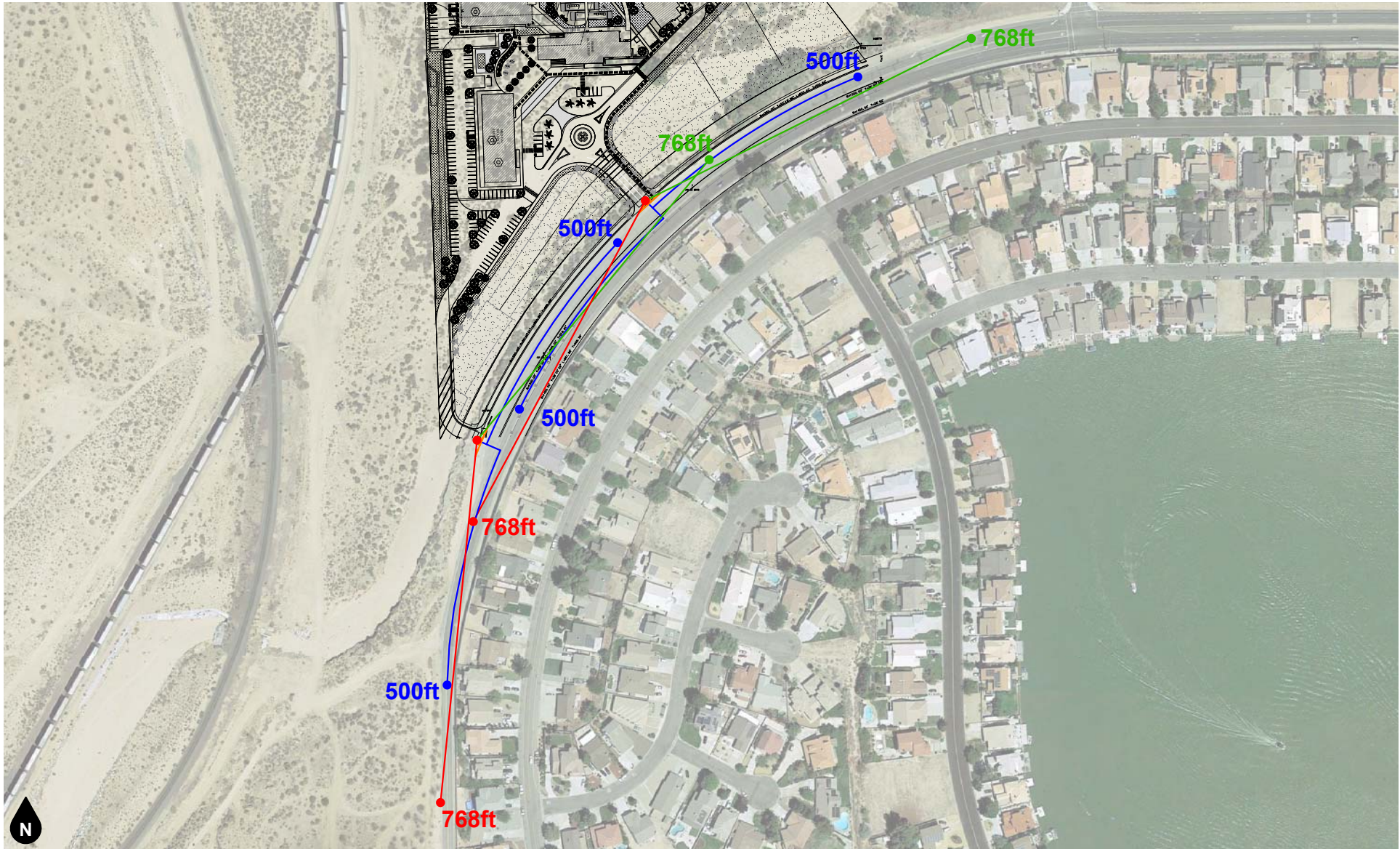
- Legend**
-  Traffic Signal
 -  Stop Sign
 -  Full Access Driveway

Figure 34
Circulation Recommendations



Legend

- Eastbound Corner Sight Distance
- Westbound Corner Sight Distance
- Stopping Sight Distance
- Restricted Use Area

Figure 35
Sight Distance Analysis

APPENDICES

Appendix A Glossary of Transportation Terms

Appendix B Scoping Agreement

Appendix C Intersection Turning Movement Count Worksheets

Appendix D Level of Service Worksheets

Appendix E Traffic Model Forecasting Worksheets

Appendix F Traffic Signal Warrant Worksheets

Appendix G Preliminary Construction Cost Estimates for Congestion Management Program

Appendix H Sight Distance Standards

APPENDIX A
GLOSSARY OF TRANSPORTATION TERMS

GLOSSARY OF TERMS

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
LOS	Level of Service
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CONTROL DELAY: The component of delay, typically expressed in seconds per vehicle, resulting from the type of traffic control at an intersection. Control delay is measured by comparison with the uncontrolled condition; it includes delay incurred by slowing down, stopping/waiting, and speeding up.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic travelling at a given speed to radically alter their speed or trajectory. Corner sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 36 inches above the pavement in the center of the nearest approach lane.

CYCLE LENGTH: The time period in seconds required for a traffic signal to complete one full cycle of indications.

CUL-DE-SAC: A local street open at one end only and with special provisions for turning around.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

PASSENGER CAR EQUIVALENT (PCE): A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SHARED/RECIPROCAL PARKING AGREEMENT: A written binding document executed between property owners to provide a designated number of off-street parking stalls within a designated area to be available for specified businesses or land uses.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queuing to occur.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through an intersection.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle on the major roadway travelling at a given speed to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 6 inches above the pavement.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination (i.e., each trip has two trip-ends). A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheel base as well as the steering mechanism of the vehicle.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B
SCOPING AGREEMENT



SCOPE FOR TRAFFIC STUDY

Project Name:	Mojave Narrows Chateau Senior Living Facility
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This Scope for Traffic Study acknowledges San Bernardino County Department of Public Works, Traffic Division requirements of traffic impact analysis for the project and is subject to change:

Project Address:	17853 Yates Road, Victorville, CA (See Figure 1)		
Project Description:	Continuing Care Retirement Community (See attached Figure 2 and Project Description)		
City:	Victorville, CA		
Project Buildout Year:	2020	Ambient Growth Rate per Year:	
Closest Intersection (Xtn) to the Project			
Xtn N/S Street Name:	Park Road		
Xtn E/W Street Name:	Yates Road		
Thomas Guide Pg+Grid:		County Supervisorial District:	1

	Engineer	Developer
Company:	Kunzman Associates, Inc.	Mojave Narrows Chateau Management LLC
Name:	Tom Huang	Mary Brown
Address:	1111 Town and Country Road, Suite 34	18002 Highway 18
City, State, Zip Code:	Orange, CA 92868	Apple Valley, CA 92307
Phone #:	714-973-8383	626-231-0704
Fax #:	714-973-8821	
Email:	tom@traffic-engineer.com	

By:

Reviewed By:

Print Name: Tom Huang 5/3/2018

Print Name:

Consultant/Developer's
Representative Date

Traffic Division Representative Date



SCOPE FOR TRAFFIC STUDY

Project Name:	Mojave Narrows Chateau Senior Living Facility
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1. Traffic Distribution: Please insert or attach Figure(s) illustrating project trip distribution in percentages and volumes at the study intersections analyzed.
See attached Figure 3.

2. Trip Credit: Exact amount of credit subject to approval by Traffic Division.

Transportation Demand Management (TDM)	Yes/no	No
Existing Active Land Use	Yes/no	No
Previous Land Use	Yes/no	No
Internal Trip Reduction	Yes/no	No
Pass-by Trip Reduction	Yes/no	No

3. Related Projects: Consultant should check with Planning in the San Bernardino County Department of Land Use Services and planning departments of adjoining Cities. Documentation of the consultation from these agencies shall be included in the traffic study. Related projects list shall be submitted to Traffic Division for our review and approval before being incorporated in the study.

4. Freeway Analysis: The potential traffic impact on the following Freeway(s) must be considered.

The applicant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) and can be obtained from <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tiguide.pdf>. If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using HCM procedures. Appendix A of the SANBAG CMP outlines allowable modifications to these procedures. The SANBAG CMP can be viewed online at: http://www.sanbag.ca.gov/planning/subr_congestion.html



SCOPE FOR TRAFFIC STUDY

Project Name:	Mojave Narrows Chateau Senior Living Facility
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5. Trip Generation

Trip Generation Rate(s) Source: ITE Trip Generation			I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other: See attached Table 1.						Edition:		10 th 2017	
Land Use Code	Land Use	Rate Based on	Qty	*AVTE vs	ADT	Weekday a.m. peak		Weekday p.m. peak		Weekend peak hour		
						In	Out	In	Out	In	Out	
I-720	Medical Office Building	Square Feet	29,952	1,042	1,042	65	18	29	75			
I-630	Clinic (Rehabilitation Building)	Square Feet	24,722	943	943	71	20	23	58			
I-254	Assisted Living	Bed	123	509	509	15	7	18	18			
I-255	Continuing Care Retire Community (Independent Living)	Unit	52	130	130	5	3	4	6			
I-620	Nursing Home (Skilled Nursing)	Bed	99	303	303	12	5	7	15			
Total				2,927	2,927	168	53	81	172			

* - Average Vehicle Trip Ends.
For ITE Land Uses provide number and name of Land Use. e.g. LU 814 - Variety Store



SCOPE FOR TRAFFIC STUDY

Project Name:	Mojave Narrows Chateau Senior Living Facility
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6. Study Intersections: At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

Xtn #	% County	Thomas Guide Page+Grid	N/S/E/W Street Name	City	Signalized	CMP
1	0%		Hesperia Road (NS) / Bear Valley Road (EW)	Victorville / Hesperia	Yes	Yes
2	100%		Ridgecrest Road (NS) / Chinguapin Drive (EW)	Victorville	No	No
3	50%		Ridgecrest Road (NS) / Vista Point Drive (EW)	Victorville	No	No
4	50%		Ridgecrest Road (NS) / Pebble Beach Drive (EW)	Victorville	Yes	No
5	75%		Ridgecrest Road (NS) / Pahute Avenue (EW)	Victorville	Yes	No
6	0%		Ridgecrest Road (NS) / Bear Valley Road (EW)	Victorville	Yes	Yes
7	100%		Park Road (NS) / Yates Road (EW)	Victorville	Yes	No
8	0%		Apple Valley Road (NS) / Yucca Loma Road (EW)	Apple Valley	Yes	No
9	100%		Project Driveway (NS) / Yates Road (EW)	Victorville	No	No
10						

Cites to be consulted: Victorville, Hesperia, Apple Valley



SCOPE FOR TRAFFIC STUDY

Project Name:	Mojave Narrows Chateau Senior Living Facility
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7. Other:

Traffic counts may be conducted immediately per the following:
<ul style="list-style-type: none"> • Must be taken on Tuesdays, Wednesdays or Thursdays.
<ul style="list-style-type: none"> • Must exclude holidays, and the first weekdays before and after the holiday.
<ul style="list-style-type: none"> • Must be taken on days when local schools or colleges are in session.
<ul style="list-style-type: none"> • Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents).
<ul style="list-style-type: none"> • Traffic counts used for other traffic studies in the area shall NOT be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%.
<ul style="list-style-type: none"> • New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified.
<ul style="list-style-type: none"> • For all proposed mitigation measures, a conceptual plan for the improvements shall be submitted to our Traffic Studies section for review and approval prior to the approval of the Traffic Impact Analysis. All proposed improvements shall be within the right-of-way.
<ul style="list-style-type: none"> • For all cumulative mitigation measures, a cost estimate for the improvement shall be submitted.
<ul style="list-style-type: none"> • The traffic study will include the sight distance analysis and review the need for a deceleration lane at the project driveway.

This analysis must follow the most current Traffic Impact Study Guidelines for the County as stated in the County's Road Planning and Design Standards.

8. Fees

The County charges on an actual cost basis for review of traffic studies. An initial deposit of \$3400 is required at the time that a land use application is filed with the Department of Land Use Services. If the review costs exceed the initial deposit, the applicant will be expected to provide additional funds and the review will be suspended until the additional funds are deposited.



SCOPE FOR TRAFFIC STUDY

Project Name:	Mojave Narrows Chateau Senior Living Facility
----------------------	---

9. Contact Information:

Please submit a signed copy of this scope for approval by the Traffic Division. Draft scopes may be sent electronically. Final scope with signature should be submitted in person or by US Mail to:

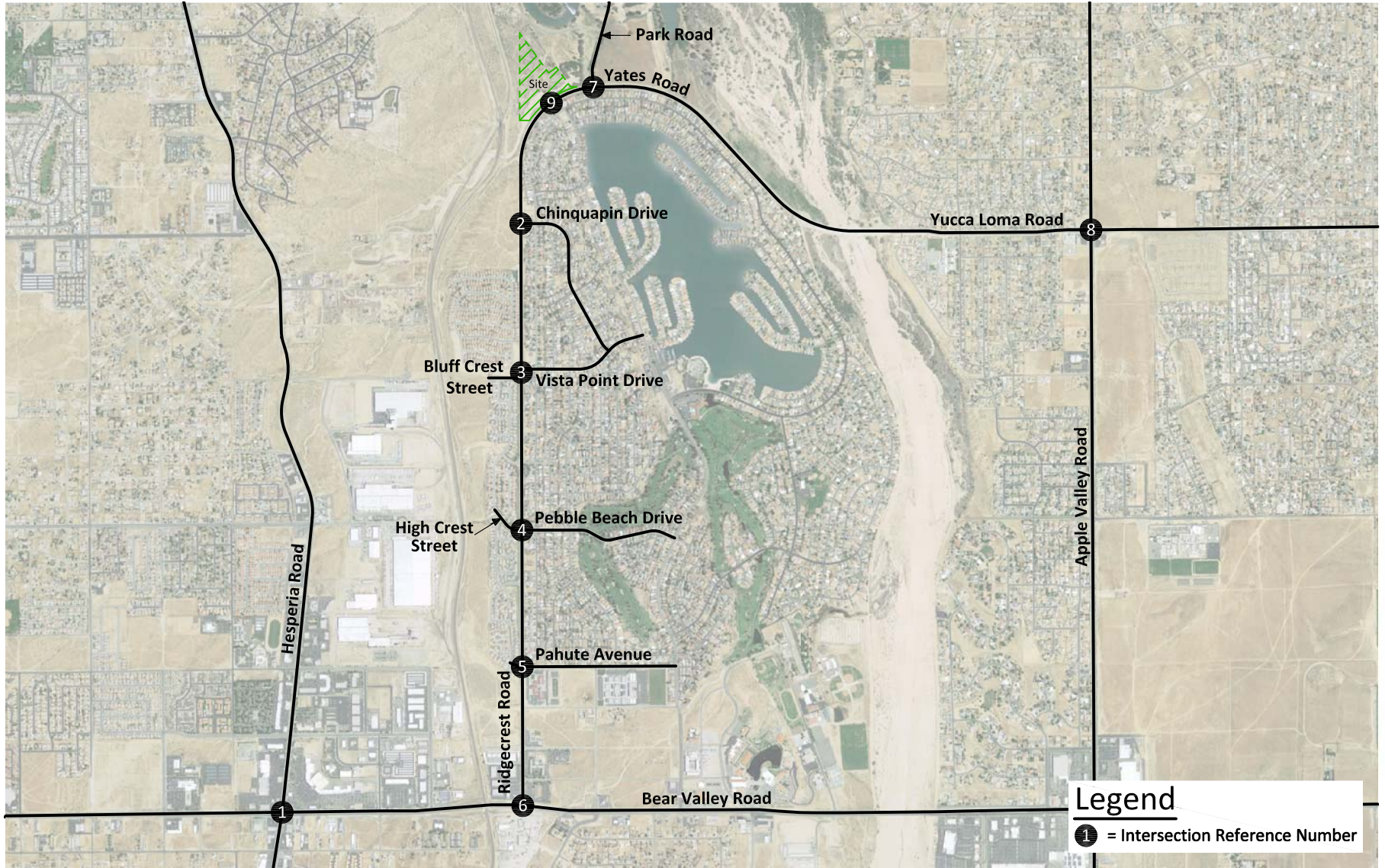
County of San Bernardino
Dept. of Public Works, Traffic Division
825 E. 3rd Street, Rm 115
San Bernardino, CA 92415-0835

Phone: 909-387-8186

Fax: 909-387-7809

Email: epetre@dpw.sbcounty.gov (Ed Petre)

Figure 1
Project Location Map



Legend
 = Intersection Reference Number

Figure 2
Site Plan

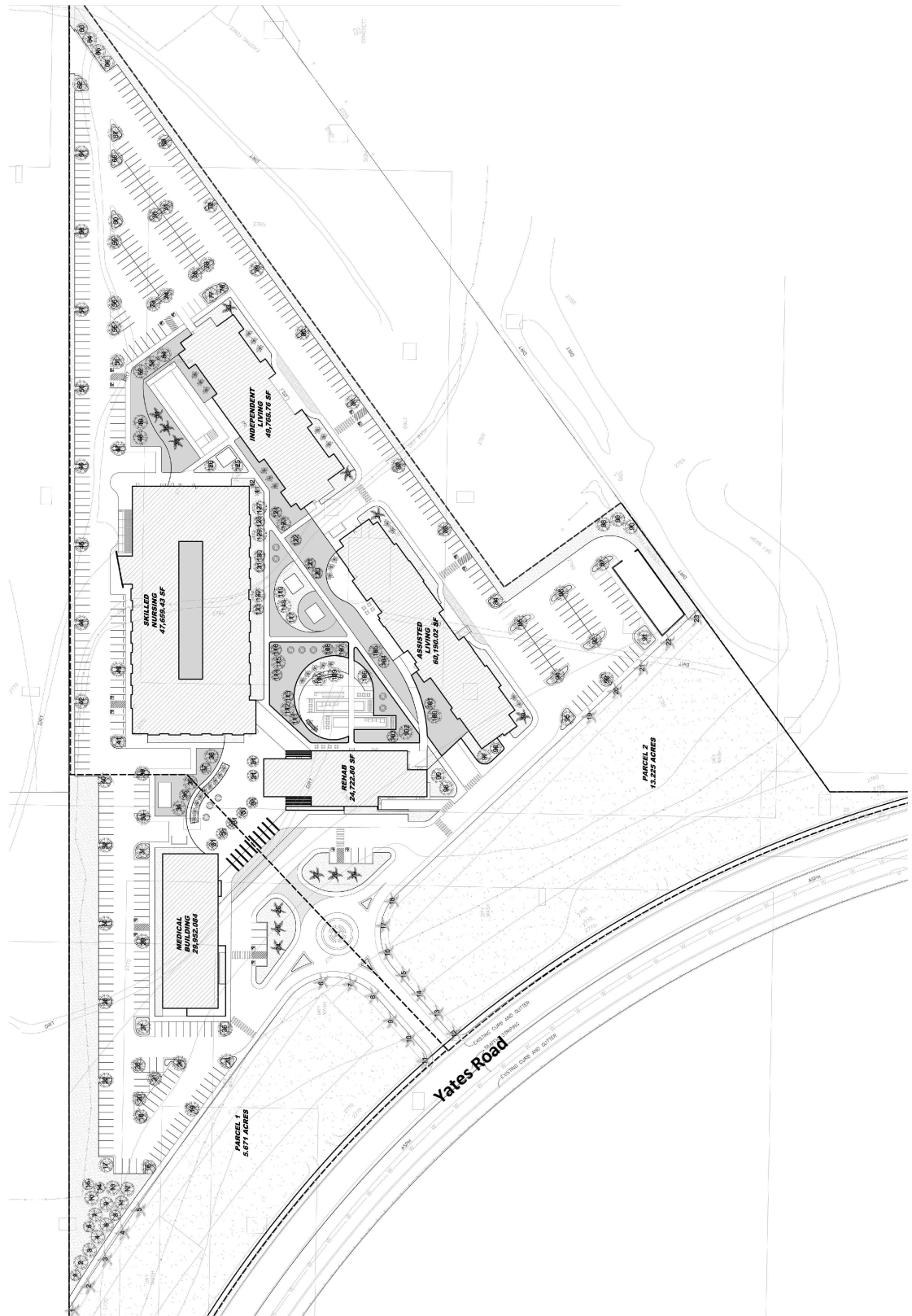


Figure 3
Project Trip Distribution

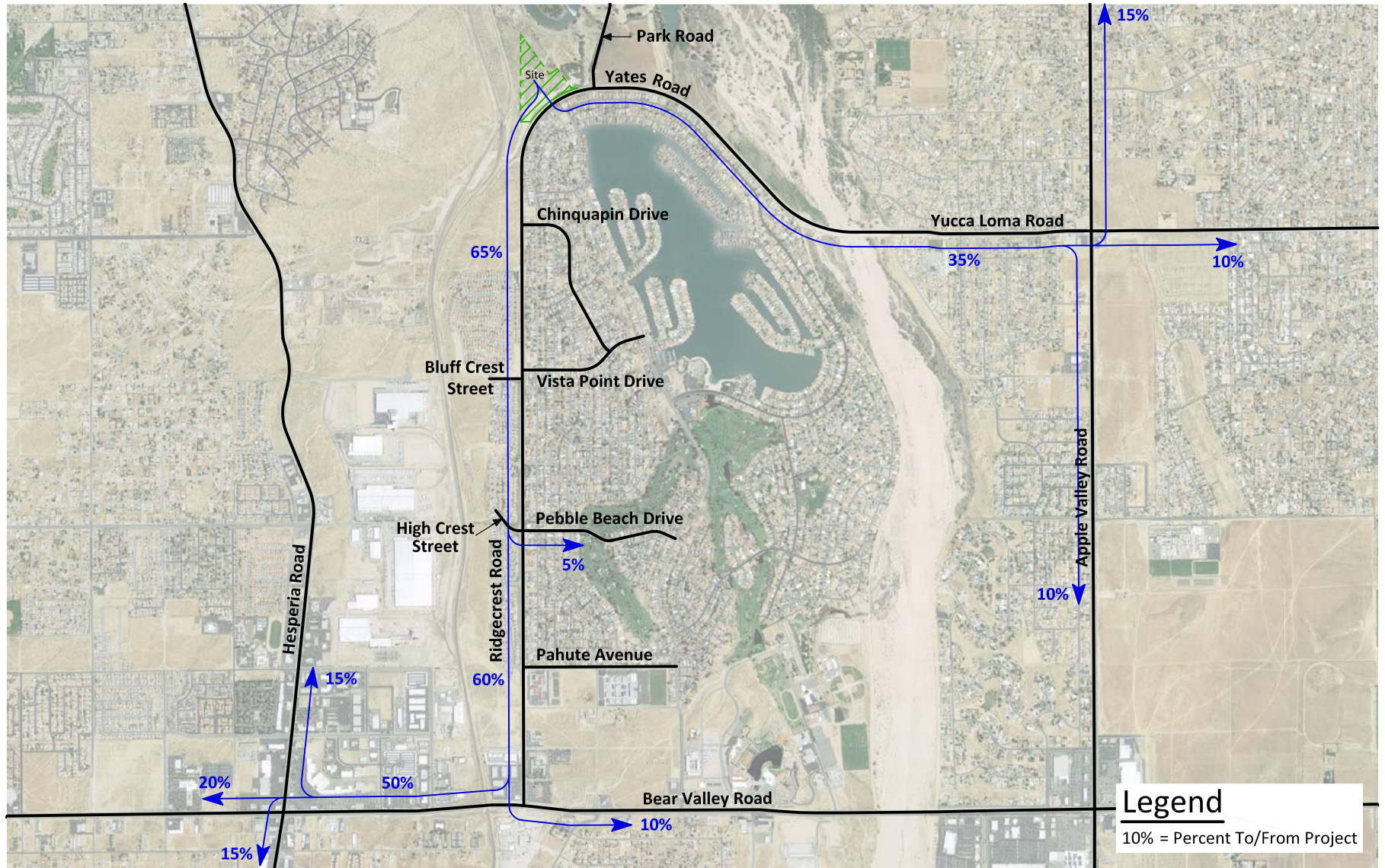


Table 1

Project Trip Generation

Trip Rates										
Project				Morning Peak			Afternoon Peak			Daily
No.	Land Use	Code ¹	Unit ²	In%	Out%	Total	In%	Out%	Total	
1	Assisted Living	ITE 254	OBD	68%	32%	0.18	50%	50%	0.29	4.14
2	Continuing Care Retirement Community	ITE 255	OU	65%	35%	0.15	40%	60%	0.20	2.50
3	Nursing Home	ITE 620	BD	72%	28%	0.17	33%	67%	0.22	3.06
4	Clinic	ITE 630	TSF	78%	22%	3.69	29%	71%	3.28	38.16
5	Medical-Dental Office Building	ITE 720	TSF	78%	22%	2.78	28%	72%	3.46	34.80

Trip Generation									
Project			Morning Peak			Afternoon Peak			Daily
No.	Land Use	Quantity ²	In	Out	Total	In	Out	Total	
B1	Medical-Dental Office Building	29.952 TSF	65	18	83	29	75	104	1,042
B2	Clinic	24.722 TSF	71	20	91	23	58	81	943
B3	Assisted Living (60.192 TSF)	123 OBD	15	7	22	18	18	36	509
B4	Continuing Care Retirement Community (49.768 TSF)	52 OU	5	3	8	4	6	10	130
B5	Nursing Home (47.659 TSF)	99 BD	12	5	17	7	15	22	303
Total (212.293 TSF)			168	53	221	81	172	253	2,927

¹ Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition, 2017.

² ODU = Occupied Dwelling Unit; OBD = Occupied Bed; OU = Occupied Unit; BD = Bed; TSF = Thousand Square Feet

Project Description

The Proposed Project includes an application for a Conditional Use Permit (CUP) for the construction and operation of a residential care facility on an approximate 18.47-acre site located in an unincorporated portion of San Bernardino County, within the City of Victorville's Sphere of Influence. Specifically, the Project Site is located north of Spring Valley Lake, off of Yates Road (See Figure 1). As shown on Figure 2, Site Plan, the approximate 274 bed Continuing Care Retirement Community would include: a two-story, 29,952 square-foot Medical Office Building, a two-story, 24,722 square-foot Amenities/Rehabilitation building, a three-story 60,192 square-foot Assisted Living building with 123 beds, a three-story 49,768 square-foot Independent Living building with 52 units, and a two-story 47,659 square-foot Skilled Nursing building with 99 beds.

The Proposed Project will feature a wellness center, within the medical office building, and will be equipped with offices, a pharmacy, chronic dialysis, behavioral health, diagnostic testing and clinical wellness suites; with an ambulatory surgical center. Other features include an Amenity-Rehab Center to serve as a gathering spot for residents and visitor and feature a market, coffee and smoothie shop, cafeteria styled restaurant, bistro, gym, beauty salon and lounge. The second-floor Outpatient Rehab Center offers pain management, audiology, speech pathology, massage, respiratory, physical & occupational therapies and a training center.

Primary access to the Site would be from Yates Road. Secondary emergency access would be provided from the north via an easement from Mojave Narrows Regional Park for emergency access.

The Project's architectural design elements include a palate of dark browns and white accents. The buildings will have modern design elements with water features and glass towers. Proposed landscaping on-site would incorporate existing trees with the addition of shrubs, palm trees, and other non-native trees.

APPENDIX C
INTERSECTION TURNING MOVEMENT COUNT WORKSHEETS

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

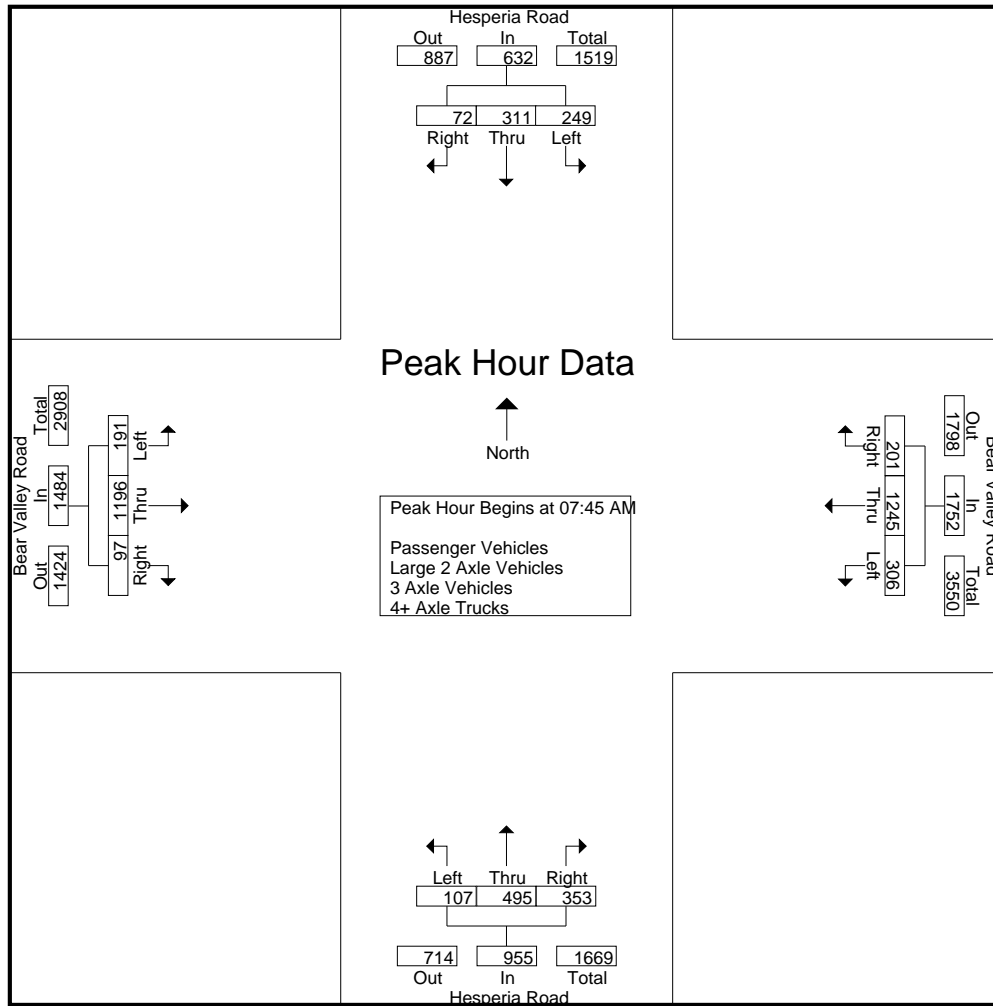
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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	46	47	13	106	52	265	29	346	16	86	40	142	16	209	19	244	838
07:15 AM	32	62	5	99	55	267	41	363	23	104	49	176	36	234	16	286	924
07:30 AM	62	57	10	129	73	252	41	366	19	107	79	205	28	295	24	347	1047
07:45 AM	73	86	19	178	89	324	46	459	34	160	103	297	53	363	29	445	1379
Total	213	252	47	512	269	1108	157	1534	92	457	271	820	133	1101	88	1322	4188
08:00 AM	54	83	17	154	75	318	50	443	23	124	83	230	38	258	17	313	1140
08:15 AM	63	66	17	146	77	319	51	447	22	114	89	225	52	305	25	382	1200
08:30 AM	59	76	19	154	65	284	54	403	28	97	78	203	48	270	26	344	1104
08:45 AM	55	83	19	157	72	315	75	462	34	128	46	208	45	268	27	340	1167
Total	231	308	72	611	289	1236	230	1755	107	463	296	866	183	1101	95	1379	4611
Grand Total	444	560	119	1123	558	2344	387	3289	199	920	567	1686	316	2202	183	2701	8799
Apprch %	39.5	49.9	10.6		17	71.3	11.8		11.8	54.6	33.6		11.7	81.5	6.8		
Total %	5	6.4	1.4	12.8	6.3	26.6	4.4	37.4	2.3	10.5	6.4	19.2	3.6	25	2.1	30.7	
Passenger Vehicles	408	538	110	1056	547	2233	351	3131	194	899	553	1646	301	2058	173	2532	8365
% Passenger Vehicles	91.9	96.1	92.4	94	98	95.3	90.7	95.2	97.5	97.7	97.5	97.6	95.3	93.5	94.5	93.7	95.1
Large 2 Axle Vehicles	28	17	2	47	6	55	22	83	3	19	13	35	12	85	8	105	270
% Large 2 Axle Vehicles	6.3	3	1.7	4.2	1.1	2.3	5.7	2.5	1.5	2.1	2.3	2.1	3.8	3.9	4.4	3.9	3.1
3 Axle Vehicles	5	4	4	13	4	14	7	25	0	1	1	2	2	21	1	24	64
% 3 Axle Vehicles	1.1	0.7	3.4	1.2	0.7	0.6	1.8	0.8	0	0.1	0.2	0.1	0.6	1	0.5	0.9	0.7
4+ Axle Trucks	3	1	3	7	1	42	7	50	2	1	0	3	1	38	1	40	100
% 4+ Axle Trucks	0.7	0.2	2.5	0.6	0.2	1.8	1.8	1.5	1	0.1	0	0.2	0.3	1.7	0.5	1.5	1.1

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 07:45 AM																	
07:45 AM	73	86	19	178	89	324	46	459	34	160	103	297	53	363	29	445	1379
08:00 AM	54	83	17	154	75	318	50	443	23	124	83	230	38	258	17	313	1140
08:15 AM	63	66	17	146	77	319	51	447	22	114	89	225	52	305	25	382	1200
08:30 AM	59	76	19	154	65	284	54	403	28	97	78	203	48	270	26	344	1104
Total Volume	249	311	72	632	306	1245	201	1752	107	495	353	955	191	1196	97	1484	4823
% App. Total	39.4	49.2	11.4		17.5	71.1	11.5		11.2	51.8	37		12.9	80.6	6.5		
PHF	.853	.904	.947	.888	.860	.961	.931	.954	.787	.773	.857	.804	.901	.824	.836	.834	.874

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 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:

	07:45 AM				08:00 AM				07:30 AM				07:30 AM			
+0 mins.	73	86	19	178	75	318	50	443	19	107	79	205	28	295	24	347
+15 mins.	54	83	17	154	77	319	51	447	34	160	103	297	53	363	29	445
+30 mins.	63	66	17	146	65	284	54	403	23	124	83	230	38	258	17	313
+45 mins.	59	76	19	154	72	315	75	462	22	114	89	225	52	305	25	382
Total Volume	249	311	72	632	289	1236	230	1755	98	505	354	957	171	1221	95	1487
% App. Total	39.4	49.2	11.4		16.5	70.4	13.1		10.2	52.8	37		11.5	82.1	6.4	
PHF	.853	.904	.947	.888	.938	.969	.767	.950	.721	.789	.859	.806	.807	.841	.819	.835

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

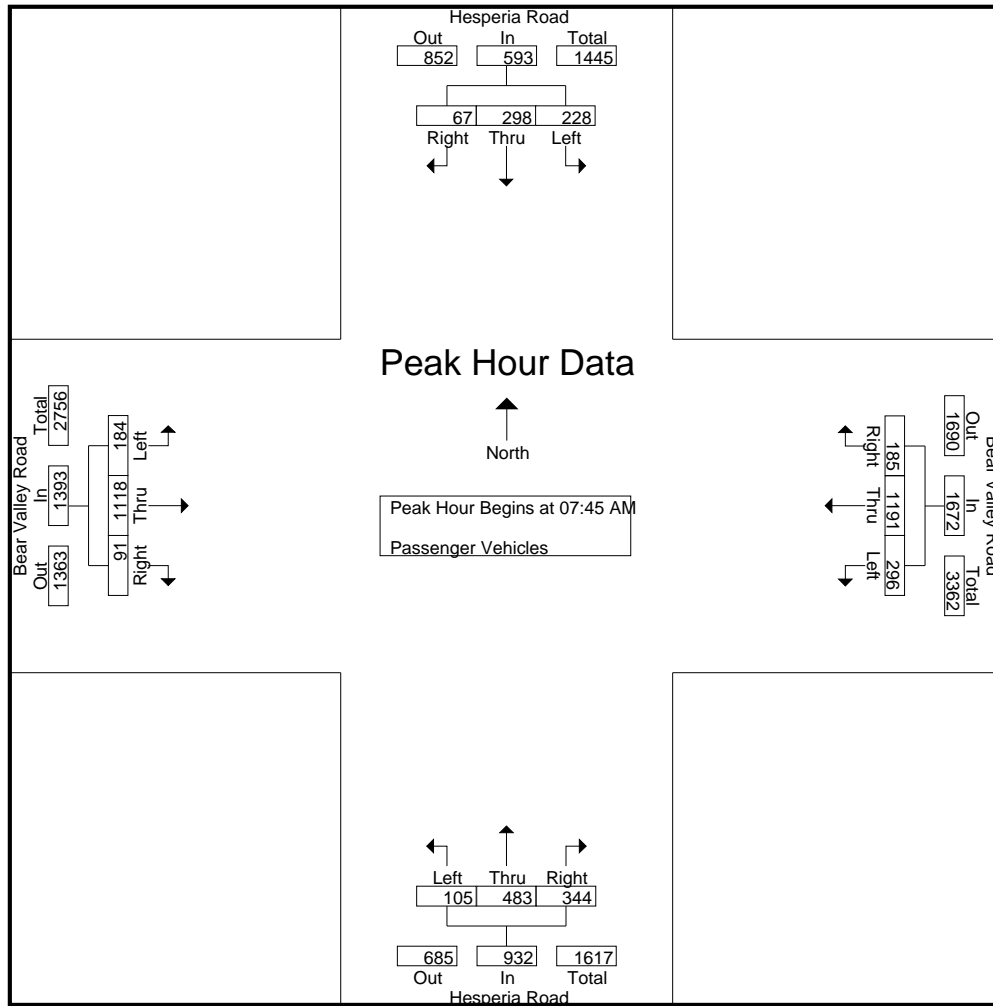
Groups Printed- Passenger Vehicles

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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	42	44	13	99	52	249	21	322	16	83	36	135	14	182	18	214	770
07:15 AM	28	61	3	92	55	255	34	344	22	100	49	171	32	221	14	267	874
07:30 AM	61	56	9	126	73	239	37	349	18	105	78	201	27	281	23	331	1007
07:45 AM	68	84	16	168	88	313	42	443	34	159	100	293	52	343	29	424	1328
Total	199	245	41	485	268	1056	134	1458	90	447	263	800	125	1027	84	1236	3979
08:00 AM	50	79	16	145	73	308	45	426	22	117	80	219	37	245	14	296	1086
08:15 AM	56	63	17	136	73	295	48	416	21	112	87	220	48	281	24	353	1125
08:30 AM	54	72	18	144	62	275	50	387	28	95	77	200	47	249	24	320	1051
08:45 AM	49	79	18	146	71	299	74	444	33	128	46	207	44	256	27	327	1124
Total	209	293	69	571	279	1177	217	1673	104	452	290	846	176	1031	89	1296	4386
Grand Total	408	538	110	1056	547	2233	351	3131	194	899	553	1646	301	2058	173	2532	8365
Apprch %	38.6	50.9	10.4		17.5	71.3	11.2		11.8	54.6	33.6		11.9	81.3	6.8		
Total %	4.9	6.4	1.3	12.6	6.5	26.7	4.2	37.4	2.3	10.7	6.6	19.7	3.6	24.6	2.1	30.3	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	68	84	16	168	88	313	42	443	34	159	100	293	52	343	29	424	1328
08:00 AM	50	79	16	145	73	308	45	426	22	117	80	219	37	245	14	296	1086
08:15 AM	56	63	17	136	73	295	48	416	21	112	87	220	48	281	24	353	1125
08:30 AM	54	72	18	144	62	275	50	387	28	95	77	200	47	249	24	320	1051
Total Volume	228	298	67	593	296	1191	185	1672	105	483	344	932	184	1118	91	1393	4590
% App. Total	38.4	50.3	11.3		17.7	71.2	11.1		11.3	51.8	36.9		13.2	80.3	6.5		
PHF	.838	.887	.931	.882	.841	.951	.925	.944	.772	.759	.860	.795	.885	.815	.784	.821	.864

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	68	84	16	168	88	313	42	443	34	159	100	293	52	343	29	424
+15 mins.	50	79	16	145	73	308	45	426	22	117	80	219	37	245	14	296
+30 mins.	56	63	17	136	73	295	48	416	21	112	87	220	48	281	24	353
+45 mins.	54	72	18	144	62	275	50	387	28	95	77	200	47	249	24	320
Total Volume	228	298	67	593	296	1191	185	1672	105	483	344	932	184	1118	91	1393
% App. Total	38.4	50.3	11.3		17.7	71.2	11.1		11.3	51.8	36.9		13.2	80.3	6.5	
PHF	.838	.887	.931	.882	.841	.951	.925	.944	.772	.759	.860	.795	.885	.815	.784	.821

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

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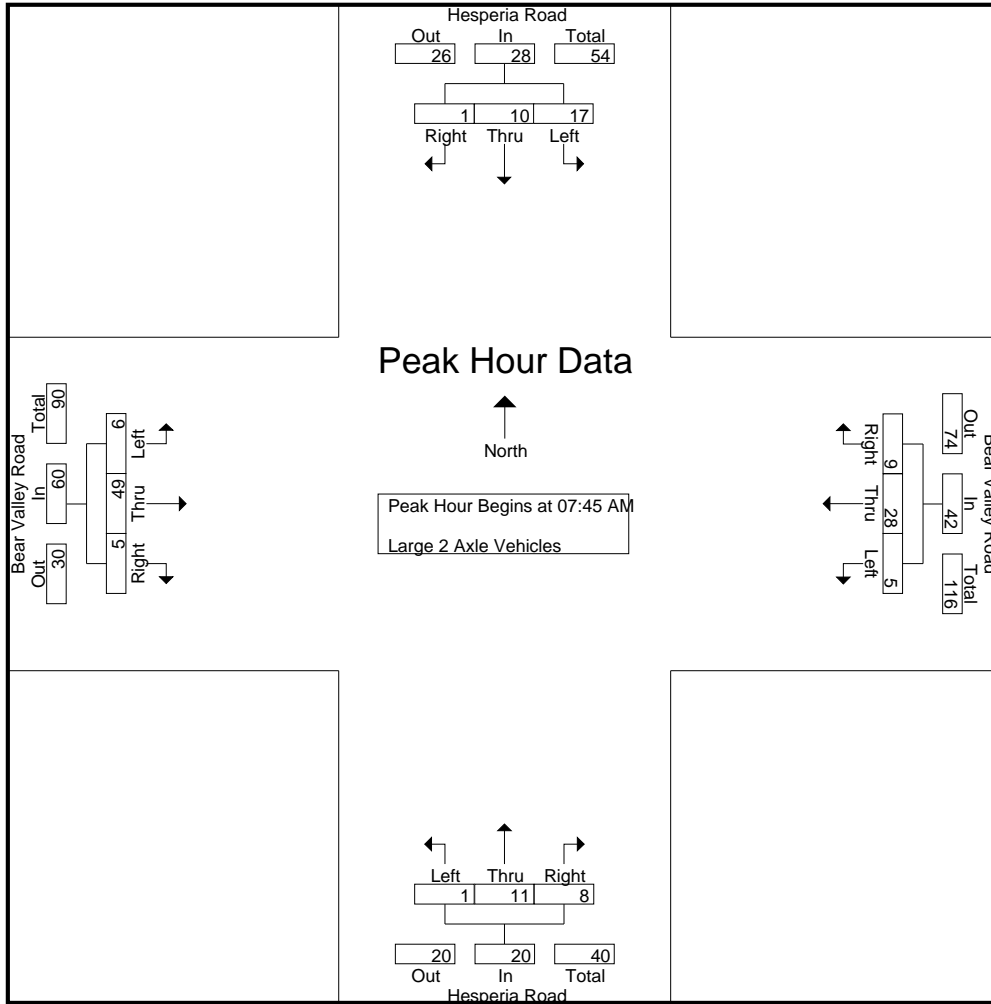
Groups Printed- Large 2 Axle Vehicles

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	3	0	6	0	10	5	15	0	3	4	7	1	15	1	17	45
07:15 AM	3	0	0	3	0	8	3	11	0	3	0	3	3	9	2	14	31
07:30 AM	1	0	0	1	0	4	4	8	1	2	1	4	1	5	0	6	19
07:45 AM	3	2	1	6	1	6	2	9	0	1	3	4	1	15	0	16	35
Total	10	5	1	16	1	28	14	43	1	9	8	18	6	44	3	53	130
08:00 AM	3	3	0	6	0	4	2	6	0	6	2	8	1	6	3	10	30
08:15 AM	6	2	0	8	2	12	2	16	1	2	2	5	3	16	1	20	49
08:30 AM	5	3	0	8	2	6	3	11	0	2	1	3	1	12	1	14	36
08:45 AM	4	4	1	9	1	5	1	7	1	0	0	1	1	7	0	8	25
Total	18	12	1	31	5	27	8	40	2	10	5	17	6	41	5	52	140
Grand Total	28	17	2	47	6	55	22	83	3	19	13	35	12	85	8	105	270
Apprch %	59.6	36.2	4.3		7.2	66.3	26.5		8.6	54.3	37.1		11.4	81	7.6		
Total %	10.4	6.3	0.7	17.4	2.2	20.4	8.1	30.7	1.1	7	4.8	13	4.4	31.5	3	38.9	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	2	1	6	1	6	2	9	0	1	3	4	1	15	0	16	35
08:00 AM	3	3	0	6	0	4	2	6	0	6	2	8	1	6	3	10	30
08:15 AM	6	2	0	8	2	12	2	16	1	2	2	5	3	16	1	20	49
08:30 AM	5	3	0	8	2	6	3	11	0	2	1	3	1	12	1	14	36
Total Volume	17	10	1	28	5	28	9	42	1	11	8	20	6	49	5	60	150
% App. Total	60.7	35.7	3.6		11.9	66.7	21.4		5	55	40		10	81.7	8.3		
PHF	.708	.833	.250	.875	.625	.583	.750	.656	.250	.458	.667	.625	.500	.766	.417	.750	.765

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	3	2	1	6	1	6	2	9	0	1	3	4	1	15	0	16
+15 mins.	3	3	0	6	0	4	2	6	0	6	2	8	1	6	3	10
+30 mins.	6	2	0	8	2	12	2	16	1	2	2	5	3	16	1	20
+45 mins.	5	3	0	8	2	6	3	11	0	2	1	3	1	12	1	14
Total Volume	17	10	1	28	5	28	9	42	1	11	8	20	6	49	5	60
% App. Total	60.7	35.7	3.6		11.9	66.7	21.4		5	55	40		10	81.7	8.3	
PHF	.708	.833	.250	.875	.625	.583	.750	.656	.250	.458	.667	.625	.500	.766	.417	.750

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
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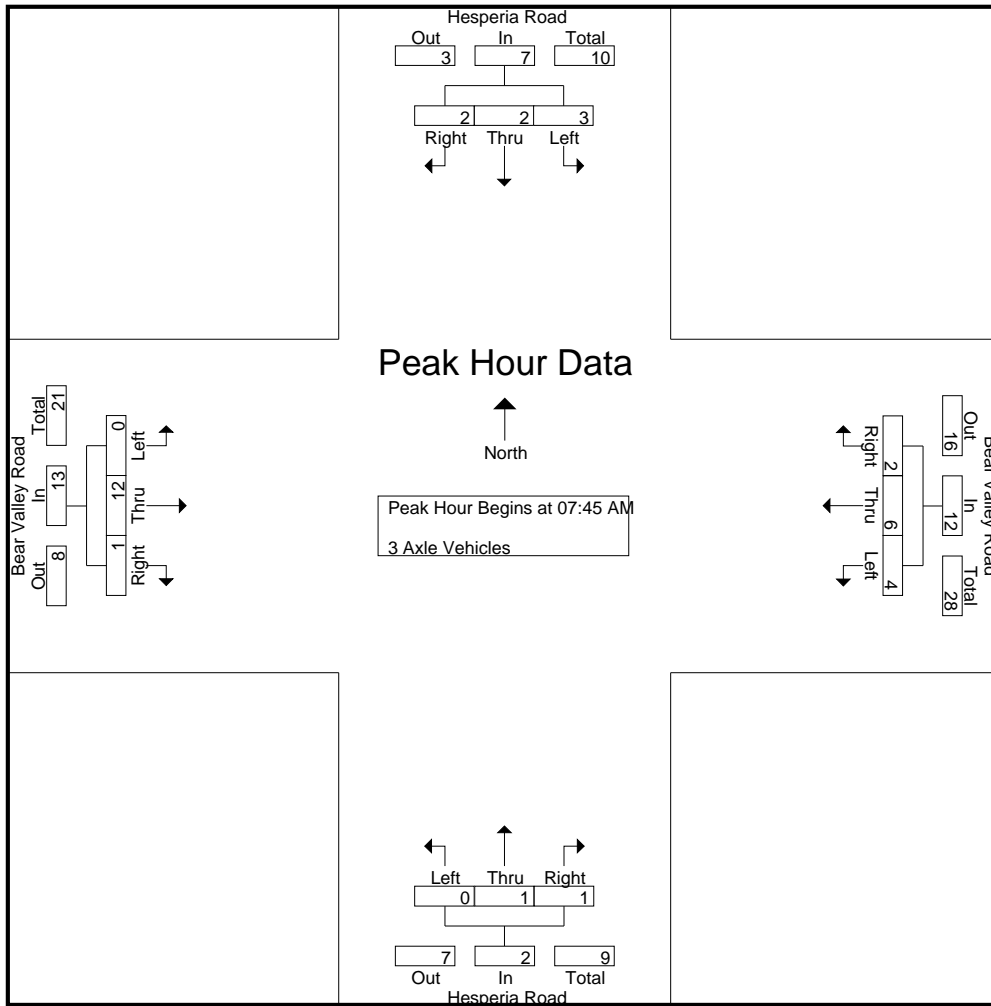
Groups Printed- 3 Axle Vehicles

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	0	1	0	1	1	2	0	0	0	0	1	2	0	3	6
07:15 AM	0	1	1	2	0	0	4	4	0	0	0	0	1	0	0	1	7
07:30 AM	0	1	1	2	0	4	0	4	0	0	0	0	0	3	0	3	9
07:45 AM	2	0	1	3	0	1	0	1	0	0	0	0	0	0	0	0	4
Total	3	2	3	8	0	6	5	11	0	0	0	0	2	5	0	7	26
08:00 AM	0	0	1	1	1	1	1	3	0	1	1	2	0	1	0	1	7
08:15 AM	1	1	0	2	2	4	1	7	0	0	0	0	0	6	0	6	15
08:30 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	5	1	6	8
08:45 AM	1	0	0	1	0	3	0	3	0	0	0	0	0	4	0	4	8
Total	2	2	1	5	4	8	2	14	0	1	1	2	0	16	1	17	38
Grand Total	5	4	4	13	4	14	7	25	0	1	1	2	2	21	1	24	64
Apprch %	38.5	30.8	30.8		16	56	28		0	50	50		8.3	87.5	4.2		
Total %	7.8	6.2	6.2	20.3	6.2	21.9	10.9	39.1	0	1.6	1.6	3.1	3.1	32.8	1.6	37.5	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	2	0	1	3	0	1	0	1	0	0	0	0	0	0	0	0	4
08:00 AM	0	0	1	1	1	1	1	3	0	1	1	2	0	1	0	1	7
08:15 AM	1	1	0	2	2	4	1	7	0	0	0	0	0	6	0	6	15
08:30 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	5	1	6	8
Total Volume	3	2	2	7	4	6	2	12	0	1	1	2	0	12	1	13	34
% App. Total	42.9	28.6	28.6		33.3	50	16.7		0	50	50		0	92.3	7.7		
PHF	.375	.500	.500	.583	.500	.375	.500	.429	.000	.250	.250	.250	.000	.500	.250	.542	.567

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	2	0	1	3	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	1	1	1	1	1	3	0	1	1	2	0	0	1	0
+30 mins.	1	1	0	2	2	4	1	7	0	0	0	0	0	0	6	0
+45 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	5	1	6
Total Volume	3	2	2	7	4	6	2	12	0	1	1	2	0	12	1	13
% App. Total	42.9	28.6	28.6		33.3	50	16.7		0	50	50		0	92.3	7.7	
PHF	.375	.500	.500	.583	.500	.375	.500	.429	.000	.250	.250	.250	.000	.500	.250	.542

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

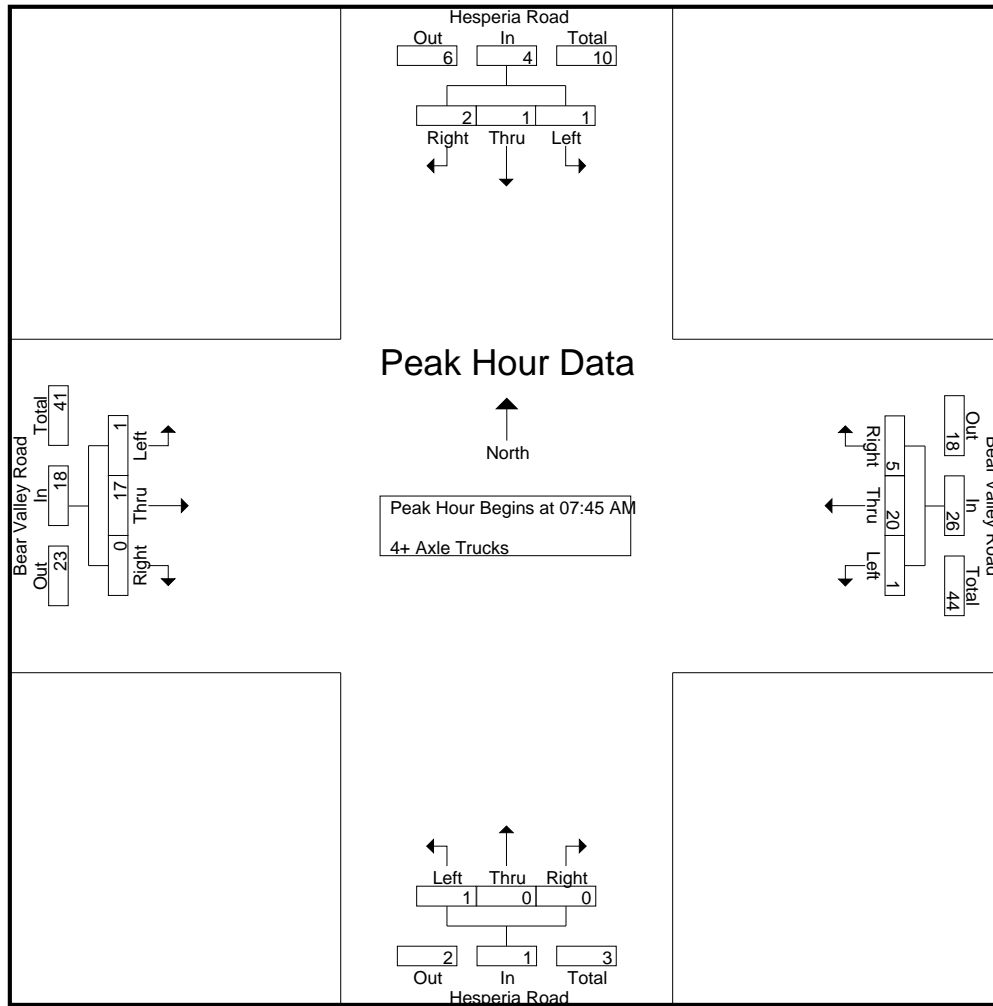
Groups Printed- 4+ Axle Trucks

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	5	2	7	0	0	0	0	0	10	0	10	17
07:15 AM	1	0	1	2	0	4	0	4	1	1	0	2	0	4	0	4	12
07:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	6	1	7	12
07:45 AM	0	0	1	1	0	4	2	6	0	0	0	0	0	5	0	5	12
Total	1	0	2	3	0	18	4	22	1	1	0	2	0	25	1	26	53
08:00 AM	1	1	0	2	1	5	2	8	1	0	0	1	0	6	0	6	17
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	1	2	0	3	11
08:30 AM	0	0	1	1	0	3	1	4	0	0	0	0	0	4	0	4	9
08:45 AM	1	0	0	1	0	8	0	8	0	0	0	0	0	1	0	1	10
Total	2	1	1	4	1	24	3	28	1	0	0	1	1	13	0	14	47
Grand Total	3	1	3	7	1	42	7	50	2	1	0	3	1	38	1	40	100
Apprch %	42.9	14.3	42.9		2	84	14		66.7	33.3	0		2.5	95	2.5		
Total %	3	1	3	7	1	42	7	50	2	1	0	3	1	38	1	40	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	1	1	0	4	2	6	0	0	0	0	0	5	0	5	12
08:00 AM	1	1	0	2	1	5	2	8	1	0	0	1	0	6	0	6	17
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	1	2	0	3	11
08:30 AM	0	0	1	1	0	3	1	4	0	0	0	0	0	4	0	4	9
Total Volume	1	1	2	4	1	20	5	26	1	0	0	1	1	17	0	18	49
% App. Total	25	25	50		3.8	76.9	19.2		100	0	0		5.6	94.4	0		
PHF	.250	.250	.500	.500	.250	.625	.625	.813	.250	.000	.000	.250	.250	.708	.000	.750	.721

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley AM
 Site Code : 07518180
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	1	1	0	4	2	6	0	0	0	0	0	5	0	5
+15 mins.	1	1	0	2	1	5	2	8	1	0	0	1	0	6	0	6
+30 mins.	0	0	0	0	0	8	0	8	0	0	0	0	1	2	0	3
+45 mins.	0	0	1	1	0	3	1	4	0	0	0	0	0	4	0	4
Total Volume	1	1	2	4	1	20	5	26	1	0	0	1	1	17	0	18
% App. Total	25	25	50		3.8	76.9	19.2		100	0	0		5.6	94.4	0	
PHF	.250	.250	.500	.500	.250	.625	.625	.813	.250	.000	.000	.250	.250	.708	.000	.750

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

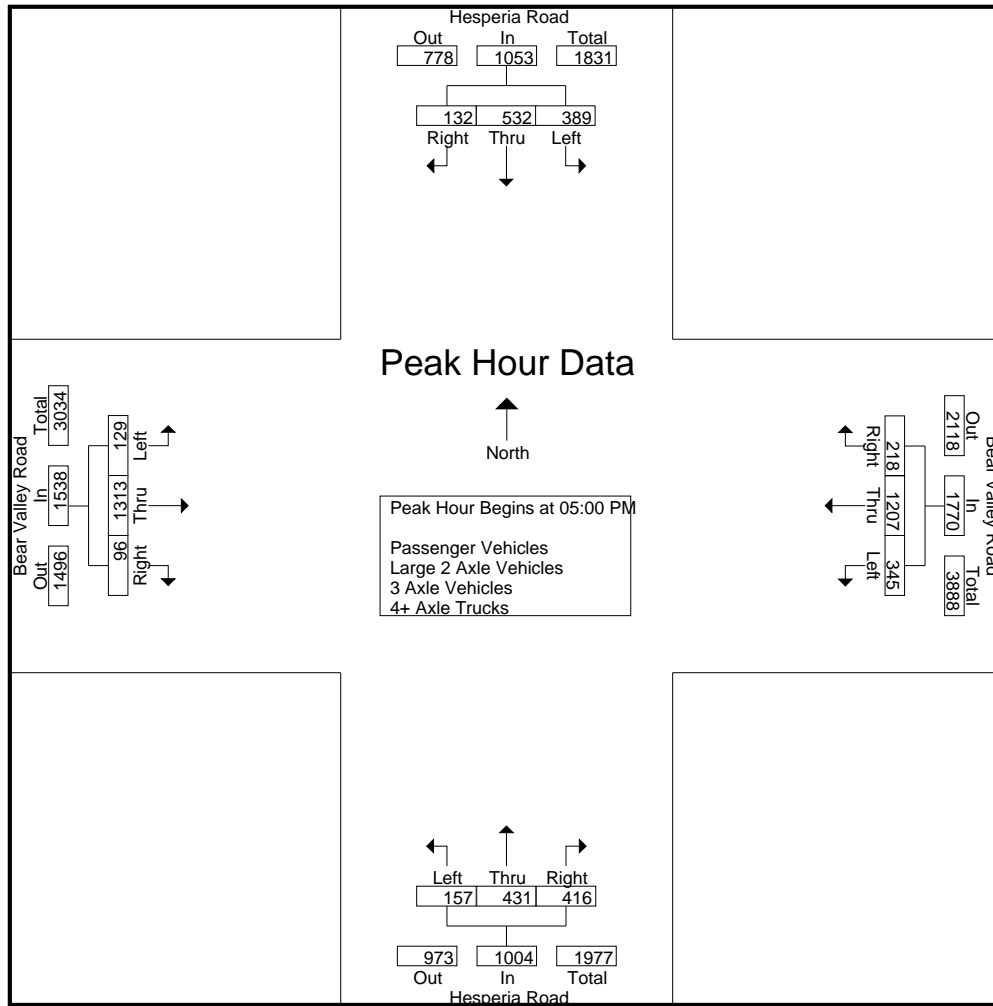
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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	93	131	35	259	67	315	56	438	48	119	96	263	44	292	26	362	1322
04:15 PM	88	120	38	246	78	315	49	442	43	125	87	255	35	310	24	369	1312
04:30 PM	91	121	34	246	87	314	59	460	30	110	96	236	49	317	27	393	1335
04:45 PM	104	119	30	253	76	298	45	419	41	108	67	216	31	292	40	363	1251
Total	376	491	137	1004	308	1242	209	1759	162	462	346	970	159	1211	117	1487	5220
05:00 PM	98	122	37	257	88	301	41	430	56	122	92	270	37	308	27	372	1329
05:15 PM	99	148	32	279	83	285	48	416	40	108	113	261	30	333	21	384	1340
05:30 PM	86	155	24	265	77	309	73	459	34	95	109	238	28	325	23	376	1338
05:45 PM	106	107	39	252	97	312	56	465	27	106	102	235	34	347	25	406	1358
Total	389	532	132	1053	345	1207	218	1770	157	431	416	1004	129	1313	96	1538	5365
Grand Total	765	1023	269	2057	653	2449	427	3529	319	893	762	1974	288	2524	213	3025	10585
Apprch %	37.2	49.7	13.1		18.5	69.4	12.1		16.2	45.2	38.6		9.5	83.4	7		
Total %	7.2	9.7	2.5	19.4	6.2	23.1	4	33.3	3	8.4	7.2	18.6	2.7	23.8	2	28.6	
Passenger Vehicles	732	1004	267	2003	647	2365	412	3424	317	874	759	1950	283	2442	208	2933	10310
% Passenger Vehicles	95.7	98.1	99.3	97.4	99.1	96.6	96.5	97	99.4	97.9	99.6	98.8	98.3	96.8	97.7	97	97.4
Large 2 Axle Vehicles	21	15	1	37	6	62	9	77	2	16	3	21	3	51	3	57	192
% Large 2 Axle Vehicles	2.7	1.5	0.4	1.8	0.9	2.5	2.1	2.2	0.6	1.8	0.4	1.1	1	2	1.4	1.9	1.8
3 Axle Vehicles	3	2	0	5	0	6	0	6	0	3	0	3	0	9	2	11	25
% 3 Axle Vehicles	0.4	0.2	0	0.2	0	0.2	0	0.2	0	0.3	0	0.2	0	0.4	0.9	0.4	0.2
4+ Axle Trucks	9	2	1	12	0	16	6	22	0	0	0	0	2	22	0	24	58
% 4+ Axle Trucks	1.2	0.2	0.4	0.6	0	0.7	1.4	0.6	0	0	0	0	0.7	0.9	0	0.8	0.5

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 05:00 PM																	
05:00 PM	98	122	37	257	88	301	41	430	56	122	92	270	37	308	27	372	1329
05:15 PM	99	148	32	279	83	285	48	416	40	108	113	261	30	333	21	384	1340
05:30 PM	86	155	24	265	77	309	73	459	34	95	109	238	28	325	23	376	1338
05:45 PM	106	107	39	252	97	312	56	465	27	106	102	235	34	347	25	406	1358
Total Volume	389	532	132	1053	345	1207	218	1770	157	431	416	1004	129	1313	96	1538	5365
% App. Total	36.9	50.5	12.5		19.5	68.2	12.3		15.6	42.9	41.4		8.4	85.4	6.2		
PHF	.917	.858	.846	.944	.889	.967	.747	.952	.701	.883	.920	.930	.872	.946	.889	.947	.988

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	104	119	30	253	88	301	41	430	56	122	92	270	37	308	27	372
+15 mins.	98	122	37	257	83	285	48	416	40	108	113	261	30	333	21	384
+30 mins.	99	148	32	279	77	309	73	459	34	95	109	238	28	325	23	376
+45 mins.	86	155	24	265	97	312	56	465	27	106	102	235	34	347	25	406
Total Volume	387	544	123	1054	345	1207	218	1770	157	431	416	1004	129	1313	96	1538
% App. Total	36.7	51.6	11.7		19.5	68.2	12.3		15.6	42.9	41.4		8.4	85.4	6.2	
PHF	.930	.877	.831	.944	.889	.967	.747	.952	.701	.883	.920	.930	.872	.946	.889	.947

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

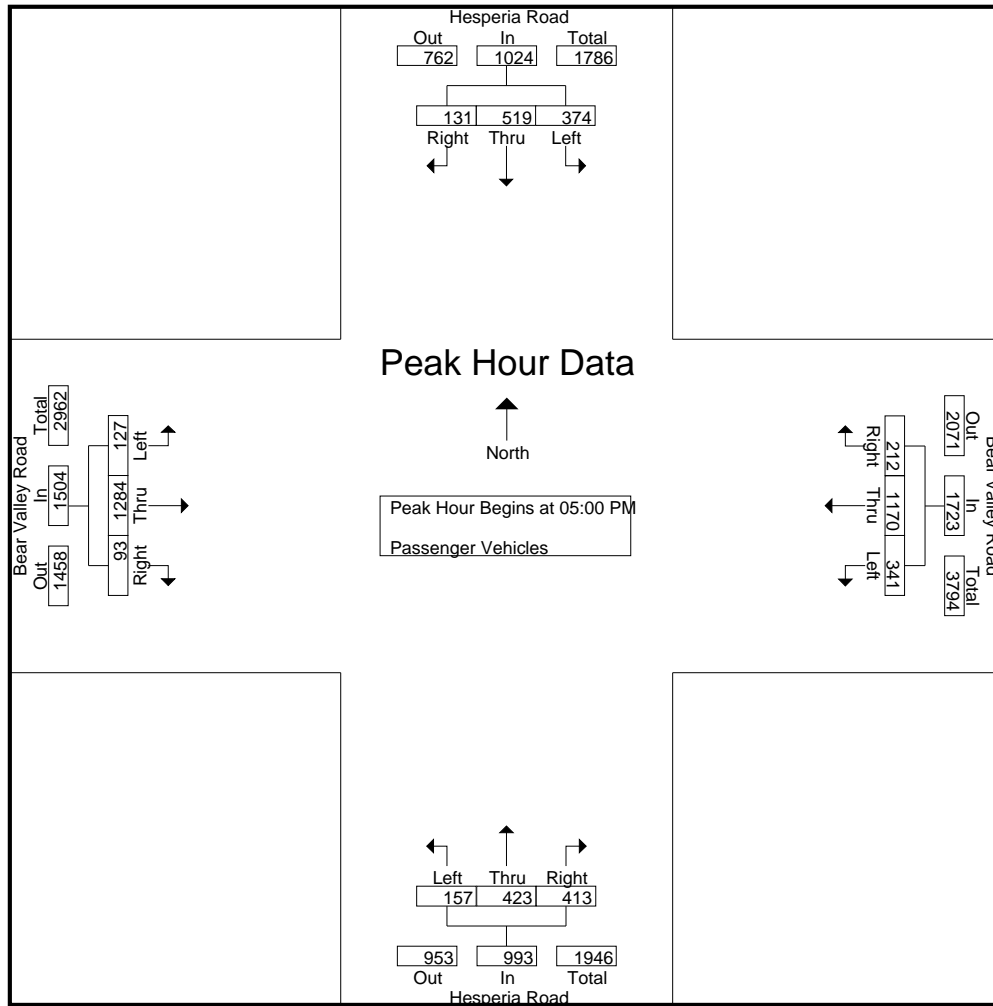
Groups Printed- Passenger Vehicles

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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	87	129	35	251	66	298	54	418	48	117	96	261	43	273	26	342	1272
04:15 PM	85	119	38	242	78	304	46	428	42	121	87	250	35	298	23	356	1276
04:30 PM	89	119	34	242	86	303	57	446	29	108	96	233	48	305	27	380	1301
04:45 PM	97	118	29	244	76	290	43	409	41	105	67	213	30	282	39	351	1217
Total	358	485	136	979	306	1195	200	1701	160	451	346	957	156	1158	115	1429	5066
05:00 PM	96	116	36	248	87	290	39	416	56	120	89	265	37	299	27	363	1292
05:15 PM	93	147	32	272	82	278	48	408	40	104	113	257	29	327	21	377	1314
05:30 PM	81	151	24	256	75	297	72	444	34	94	109	237	28	318	21	367	1304
05:45 PM	104	105	39	248	97	305	53	455	27	105	102	234	33	340	24	397	1334
Total	374	519	131	1024	341	1170	212	1723	157	423	413	993	127	1284	93	1504	5244
Grand Total	732	1004	267	2003	647	2365	412	3424	317	874	759	1950	283	2442	208	2933	10310
Apprch %	36.5	50.1	13.3		18.9	69.1	12		16.3	44.8	38.9		9.6	83.3	7.1		
Total %	7.1	9.7	2.6	19.4	6.3	22.9	4	33.2	3.1	8.5	7.4	18.9	2.7	23.7	2	28.4	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	96	116	36	248	87	290	39	416	56	120	89	265	37	299	27	363	1292
05:15 PM	93	147	32	272	82	278	48	408	40	104	113	257	29	327	21	377	1314
05:30 PM	81	151	24	256	75	297	72	444	34	94	109	237	28	318	21	367	1304
05:45 PM	104	105	39	248	97	305	53	455	27	105	102	234	33	340	24	397	1334
Total Volume	374	519	131	1024	341	1170	212	1723	157	423	413	993	127	1284	93	1504	5244
% App. Total	36.5	50.7	12.8		19.8	67.9	12.3		15.8	42.6	41.6		8.4	85.4	6.2		
PHF	.899	.859	.840	.941	.879	.959	.736	.947	.701	.881	.914	.937	.858	.944	.861	.947	.983

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
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Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	96	116	36	248	87	290	39	416	56	120	89	265	37	299	27	363
+15 mins.	93	147	32	272	82	278	48	408	40	104	113	257	29	327	21	377
+30 mins.	81	151	24	256	75	297	72	444	34	94	109	237	28	318	21	367
+45 mins.	104	105	39	248	97	305	53	455	27	105	102	234	33	340	24	397
Total Volume	374	519	131	1024	341	1170	212	1723	157	423	413	993	127	1284	93	1504
% App. Total	36.5	50.7	12.8		19.8	67.9	12.3		15.8	42.6	41.6		8.4	85.4	6.2	
PHF	.899	.859	.840	.941	.879	.959	.736	.947	.701	.881	.914	.937	.858	.944	.861	.947

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
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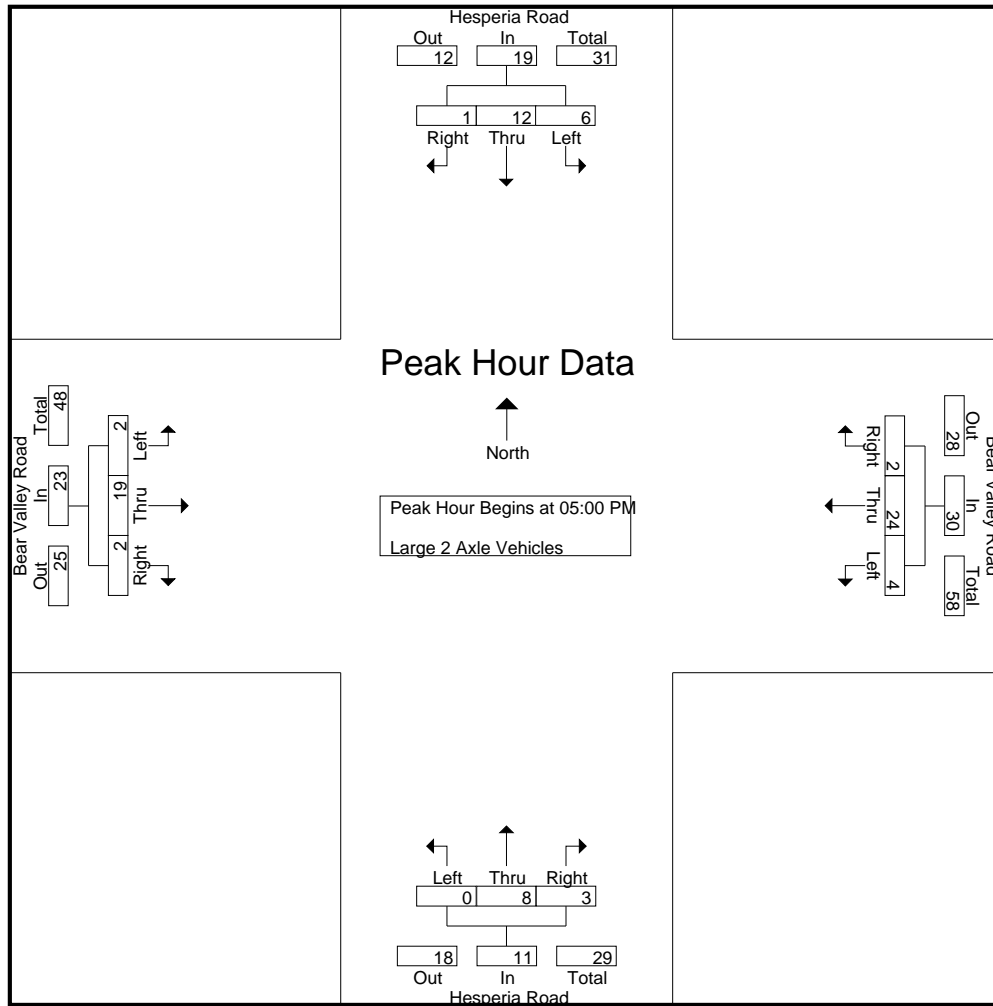
Groups Printed- Large 2 Axle Vehicles

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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	6	1	0	7	1	13	2	16	0	1	0	1	0	10	0	10	34
04:15 PM	3	0	0	3	0	9	2	11	1	3	0	4	0	9	1	10	28
04:30 PM	1	2	0	3	1	8	2	11	1	2	0	3	1	7	0	8	25
04:45 PM	5	0	0	5	0	8	1	9	0	2	0	2	0	6	0	6	22
Total	15	3	0	18	2	38	7	47	2	8	0	10	1	32	1	34	109
05:00 PM	2	5	1	8	1	7	1	9	0	2	3	5	0	6	0	6	28
05:15 PM	0	1	0	1	1	4	0	5	0	4	0	4	1	3	0	4	14
05:30 PM	3	4	0	7	2	9	1	12	0	1	0	1	0	6	2	8	28
05:45 PM	1	2	0	3	0	4	0	4	0	1	0	1	1	4	0	5	13
Total	6	12	1	19	4	24	2	30	0	8	3	11	2	19	2	23	83
Grand Total	21	15	1	37	6	62	9	77	2	16	3	21	3	51	3	57	192
Apprch %	56.8	40.5	2.7		7.8	80.5	11.7		9.5	76.2	14.3		5.3	89.5	5.3		
Total %	10.9	7.8	0.5	19.3	3.1	32.3	4.7	40.1	1	8.3	1.6	10.9	1.6	26.6	1.6	29.7	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	5	1	8	1	7	1	9	0	2	3	5	0	6	0	6	28
05:15 PM	0	1	0	1	1	4	0	5	0	4	0	4	1	3	0	4	14
05:30 PM	3	4	0	7	2	9	1	12	0	1	0	1	0	6	2	8	28
05:45 PM	1	2	0	3	0	4	0	4	0	1	0	1	1	4	0	5	13
Total Volume	6	12	1	19	4	24	2	30	0	8	3	11	2	19	2	23	83
% App. Total	31.6	63.2	5.3		13.3	80	6.7		0	72.7	27.3		8.7	82.6	8.7		
PHF	.500	.600	.250	.594	.500	.667	.500	.625	.000	.500	.250	.550	.500	.792	.250	.719	.741

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
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Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	2	5	1	8	1	7	1	9	0	2	3	5	0	6	0	6
+15 mins.	0	1	0	1	1	4	0	5	0	4	0	4	1	3	0	4
+30 mins.	3	4	0	7	2	9	1	12	0	1	0	1	0	6	2	8
+45 mins.	1	2	0	3	0	4	0	4	0	1	0	1	1	4	0	5
Total Volume	6	12	1	19	4	24	2	30	0	8	3	11	2	19	2	23
% App. Total	31.6	63.2	5.3		13.3	80	6.7		0	72.7	27.3		8.7	82.6	8.7	
PHF	.500	.600	.250	.594	.500	.667	.500	.625	.000	.500	.250	.550	.500	.792	.250	.719

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
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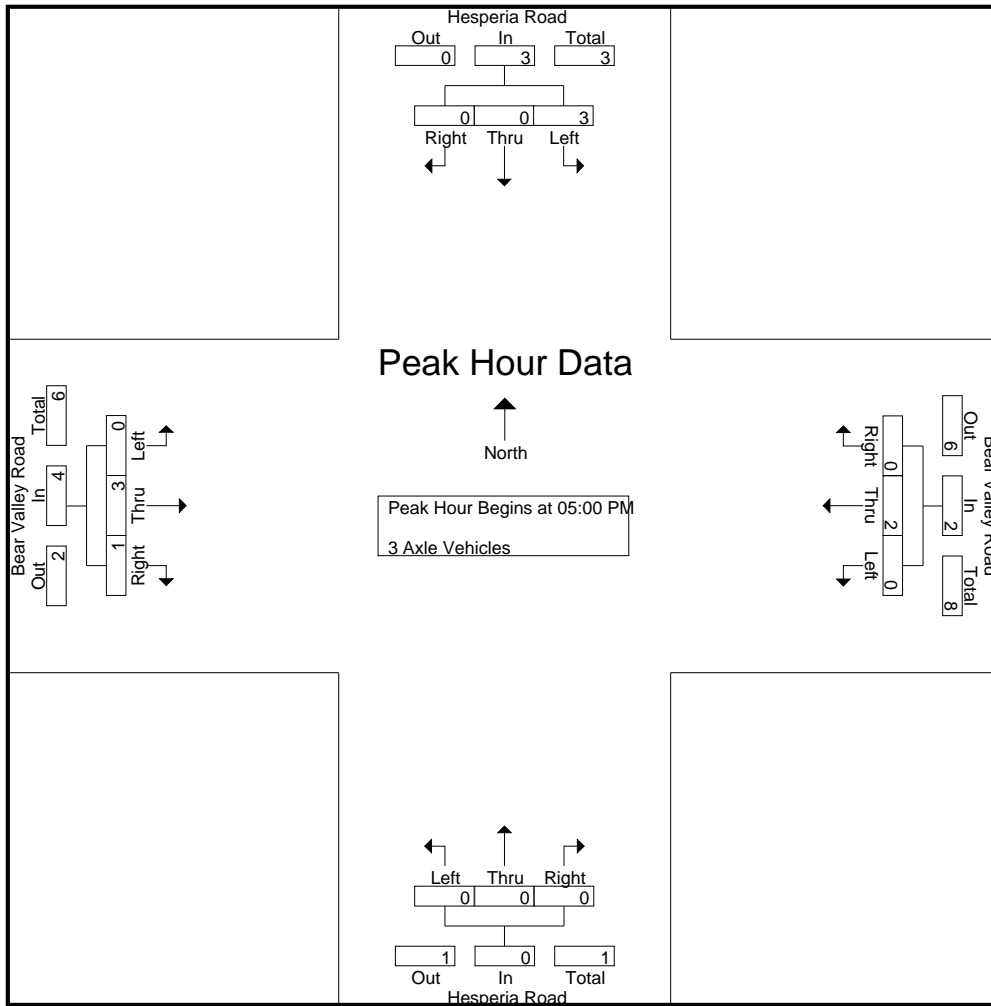
Groups Printed- 3 Axle Vehicles

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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	1	0	1	0	2	0	2	0	1	0	1	0	2	0	2	6
04:15 PM	0	0	0	0	0	2	0	2	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	1	1	2	4
Total	0	2	0	2	0	4	0	4	0	3	0	3	0	6	1	7	16
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
Total	3	0	0	3	0	2	0	2	0	0	0	0	0	3	1	4	9
Grand Total	3	2	0	5	0	6	0	6	0	3	0	3	0	9	2	11	25
Apprch %	60	40	0		0	100	0		0	100	0		0	81.8	18.2		
Total %	12	8	0	20	0	24	0	24	0	12	0	12	0	36	8	44	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
Total Volume	3	0	0	3	0	2	0	2	0	0	0	0	0	3	1	4	9
% App. Total	100	0	0		0	100	0		0	0	0		0	75	25		
PHF	.375	.000	.000	.375	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.250	.333	.750

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3
Total Volume	3	0	0	3	0	2	0	2	0	0	0	0	0	3	1	4
% App. Total	100	0	0		0	100	0		0	0	0		0	75	25	
PHF	.375	.000	.000	.375	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.250	.333

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

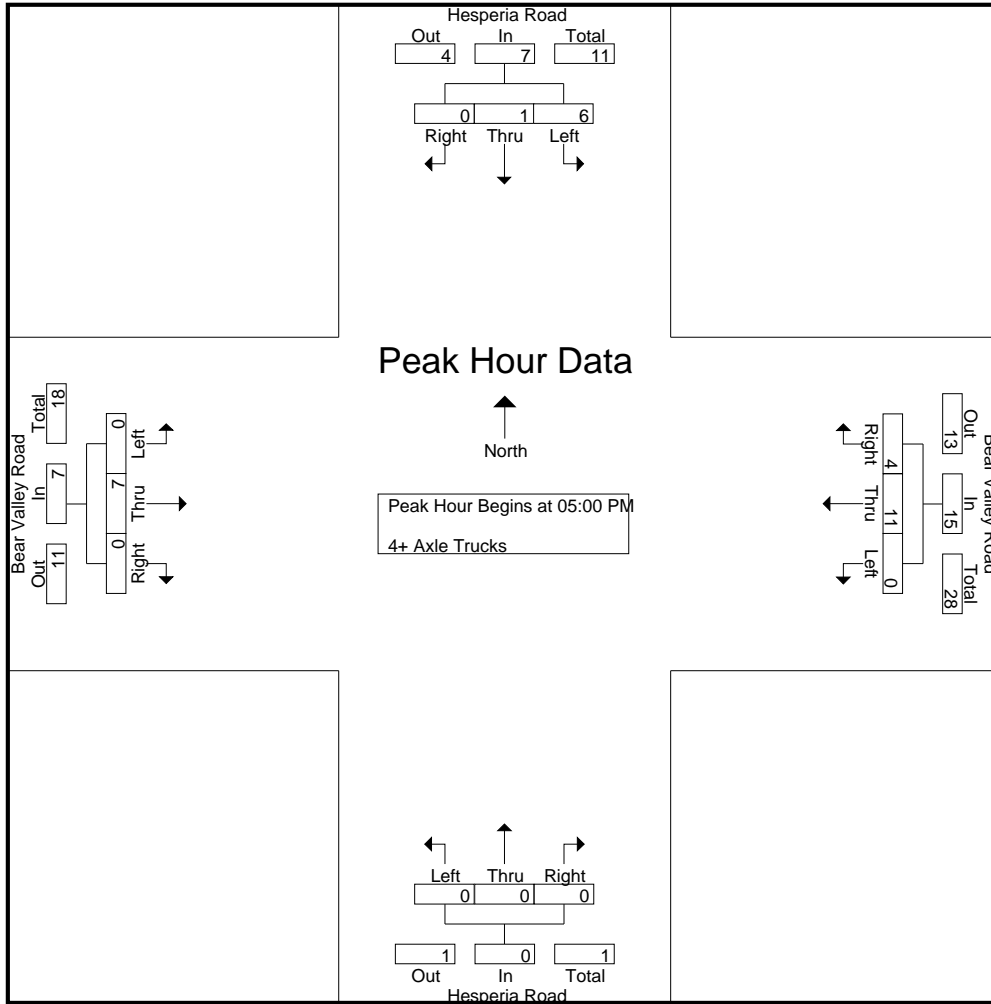
Groups Printed- 4+ Axle Trucks

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	1	7	0	8	10
04:15 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	3	0	3	5
04:30 PM	1	0	0	1	0	3	0	3	0	0	0	0	0	2	0	2	6
04:45 PM	2	0	1	3	0	0	1	1	0	0	0	0	1	3	0	4	8
Total	3	1	1	5	0	5	2	7	0	0	0	0	2	15	0	17	29
05:00 PM	0	1	0	1	0	4	1	5	0	0	0	0	0	2	0	2	8
05:15 PM	4	0	0	4	0	3	0	3	0	0	0	0	0	3	0	3	10
05:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:45 PM	1	0	0	1	0	3	3	6	0	0	0	0	0	1	0	1	8
Total	6	1	0	7	0	11	4	15	0	0	0	0	0	7	0	7	29
Grand Total	9	2	1	12	0	16	6	22	0	0	0	0	2	22	0	24	58
Apprch %	75	16.7	8.3		0	72.7	27.3		0	0	0		8.3	91.7	0		
Total %	15.5	3.4	1.7	20.7	0	27.6	10.3	37.9	0	0	0	0	3.4	37.9	0	41.4	

Start Time	Hesperia Road Southbound				Bear Valley Road Westbound				Hesperia Road Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	4	1	5	0	0	0	0	0	2	0	2	8
05:15 PM	4	0	0	4	0	3	0	3	0	0	0	0	0	3	0	3	10
05:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:45 PM	1	0	0	1	0	3	3	6	0	0	0	0	0	1	0	1	8
Total Volume	6	1	0	7	0	11	4	15	0	0	0	0	0	7	0	7	29
% App. Total	85.7	14.3	0		0	73.3	26.7		0	0	0		0	100	0		
PHF	.375	.250	.000	.438	.000	.688	.333	.625	.000	.000	.000	.000	.000	.583	.000	.583	.725

City of Victorville
 N/S: Hesperia Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 01_VIC_Hesperia Rd_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	0	1	0	1	0	4	1	5	0	0	0	0	0	2	0	2
+15 mins.	4	0	0	4	0	3	0	3	0	0	0	0	0	3	0	3
+30 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1
+45 mins.	1	0	0	1	0	3	3	6	0	0	0	0	0	1	0	1
Total Volume	6	1	0	7	0	11	4	15	0	0	0	0	0	7	0	7
% App. Total	85.7	14.3	0		0	73.3	26.7		0	0	0		0	100	0	
PHF	.375	.250	.000	.438	.000	.688	.333	.625	.000	.000	.000	.000	.000	.583	.000	.583

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

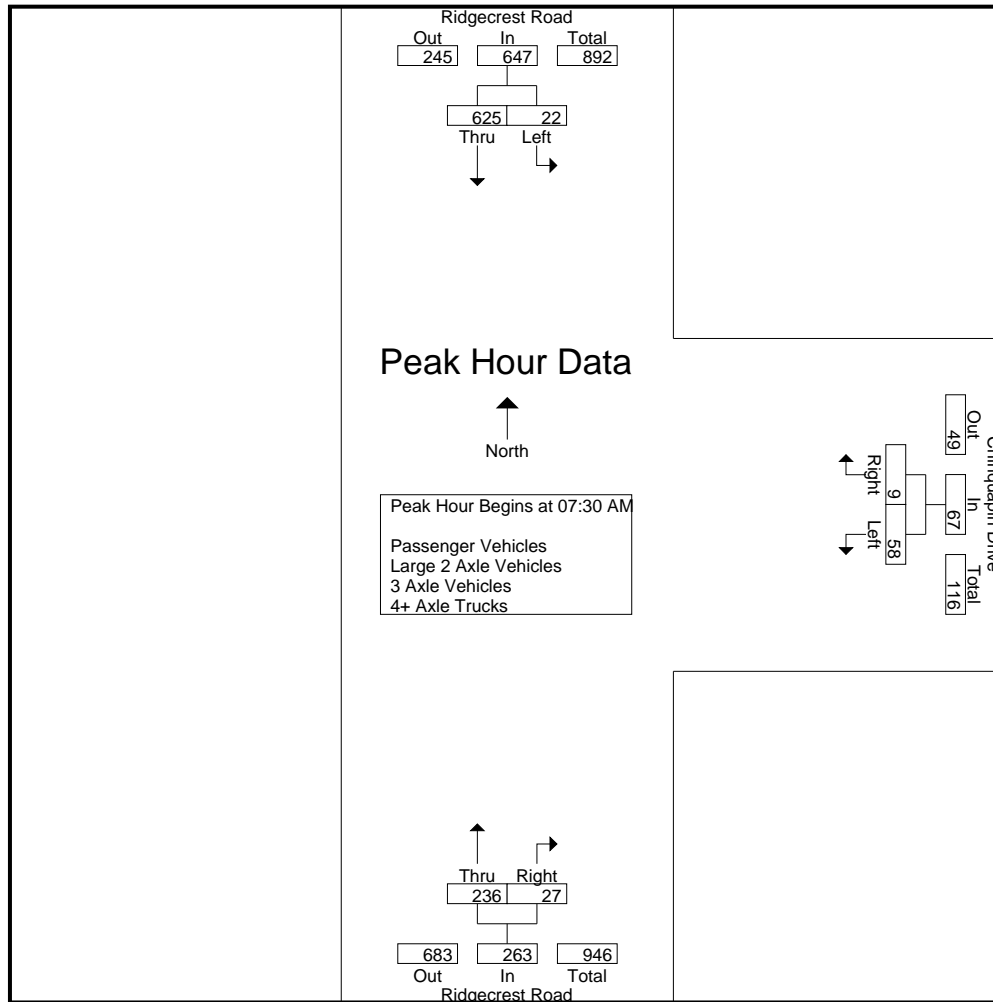
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	82	84	18	2	20	46	1	47	151
07:15 AM	0	116	116	18	1	19	42	0	42	177
07:30 AM	2	157	159	21	5	26	59	6	65	250
07:45 AM	5	187	192	14	2	16	59	4	63	271
Total	9	542	551	71	10	81	206	11	217	849
08:00 AM	8	177	185	14	0	14	59	10	69	268
08:15 AM	7	104	111	9	2	11	59	7	66	188
08:30 AM	4	103	107	15	1	16	59	12	71	194
08:45 AM	7	113	120	12	3	15	51	3	54	189
Total	26	497	523	50	6	56	228	32	260	839
Grand Total	35	1039	1074	121	16	137	434	43	477	1688
Apprch %	3.3	96.7		88.3	11.7		91	9		
Total %	2.1	61.6	63.6	7.2	0.9	8.1	25.7	2.5	28.3	
Passenger Vehicles	35	1018	1053	118	16	134	423	40	463	1650
% Passenger Vehicles	100	98	98	97.5	100	97.8	97.5	93	97.1	97.7
Large 2 Axle Vehicles	0	15	15	3	0	3	8	3	11	29
% Large 2 Axle Vehicles										
3 Axle Vehicles	0	5	5	0	0	0	2	0	2	7
% 3 Axle Vehicles	0	0.5	0.5	0	0	0	0.5	0	0.4	0.4
4+ Axle Trucks	0	1	1	0	0	0	1	0	1	2
% 4+ Axle Trucks	0	0.1	0.1	0	0	0	0.2	0	0.2	0.1

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest 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 07:30 AM										
07:30 AM	2	157	159	21	5	26	59	6	65	250
07:45 AM	5	187	192	14	2	16	59	4	63	271
08:00 AM	8	177	185	14	0	14	59	10	69	268
08:15 AM	7	104	111	9	2	11	59	7	66	188
Total Volume	22	625	647	58	9	67	236	27	263	977
% App. Total	3.4	96.6		86.6	13.4		89.7	10.3		
PHF	.688	.836	.842	.690	.450	.644	1.00	.675	.953	.901

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 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:

	07:15 AM			07:00 AM			07:45 AM		
+0 mins.	0	116	116	18	2	20	59	4	63
+15 mins.	2	157	159	18	1	19	59	10	69
+30 mins.	5	187	192	21	5	26	59	7	66
+45 mins.	8	177	185	14	2	16	59	12	71
Total Volume	15	637	652	71	10	81	236	33	269
% App. Total	2.3	97.7		87.7	12.3		87.7	12.3	
PHF	.469	.852	.849	.845	.500	.779	1.000	.688	.947

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

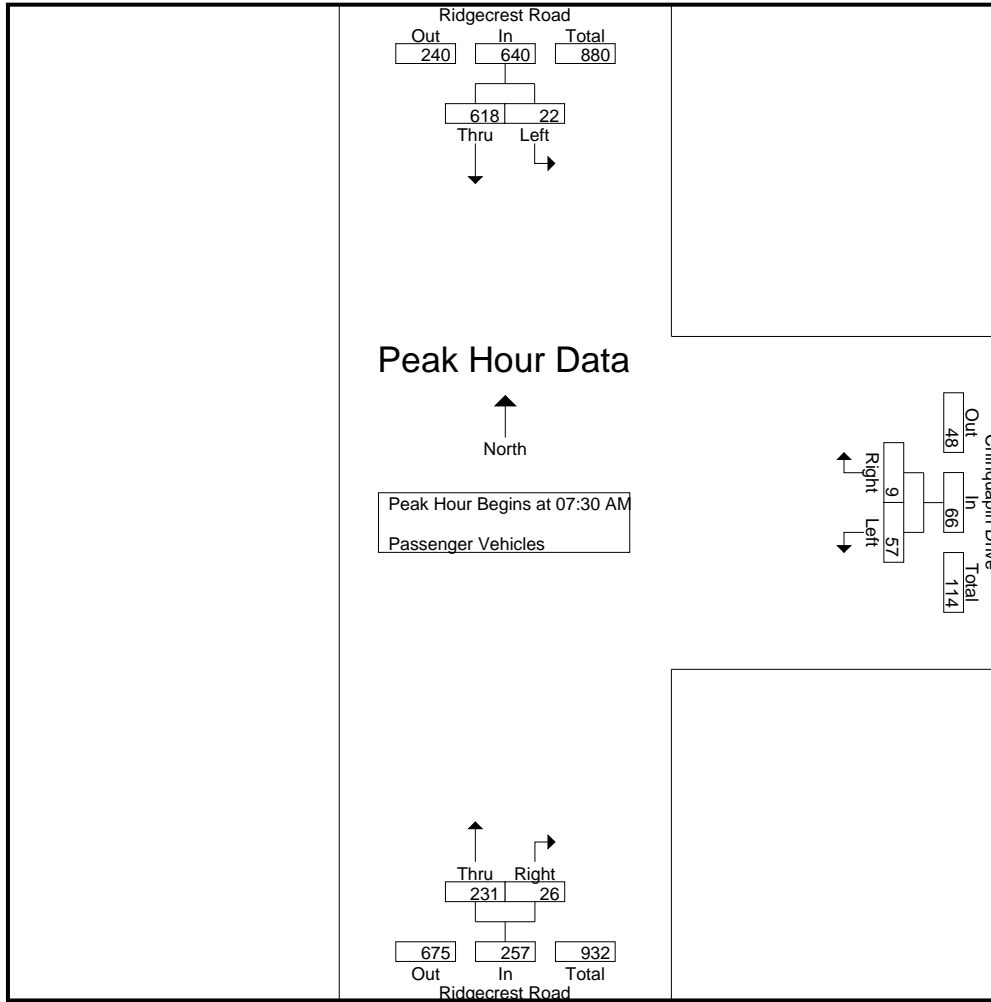
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	80	82	18	2	20	45	0	45	147
07:15 AM	0	112	112	18	1	19	41	0	41	172
07:30 AM	2	155	157	21	5	26	59	6	65	248
07:45 AM	5	185	190	13	2	15	57	4	61	266
Total	9	532	541	70	10	80	202	10	212	833
08:00 AM	8	174	182	14	0	14	59	10	69	265
08:15 AM	7	104	111	9	2	11	56	6	62	184
08:30 AM	4	101	105	13	1	14	59	11	70	189
08:45 AM	7	107	114	12	3	15	47	3	50	179
Total	26	486	512	48	6	54	221	30	251	817
Grand Total	35	1018	1053	118	16	134	423	40	463	1650
Apprch %	3.3	96.7		88.1	11.9		91.4	8.6		
Total %	2.1	61.7	63.8	7.2	1	8.1	25.6	2.4	28.1	

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	2	155	157	21	5	26	59	6	65	248
07:45 AM	5	185	190	13	2	15	57	4	61	266
08:00 AM	8	174	182	14	0	14	59	10	69	265
08:15 AM	7	104	111	9	2	11	56	6	62	184
Total Volume	22	618	640	57	9	66	231	26	257	963
% App. Total	3.4	96.6		86.4	13.6		89.9	10.1		
PHF	.688	.835	.842	.679	.450	.635	.979	.650	.931	.905

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	2	155	157	21	5	26	59	6	65
+15 mins.	5	185	190	13	2	15	57	4	61
+30 mins.	8	174	182	14	0	14	59	10	69
+45 mins.	7	104	111	9	2	11	56	6	62
Total Volume	22	618	640	57	9	66	231	26	257
% App. Total	3.4	96.6		86.4	13.6		89.9	10.1	
PHF	.688	.835	.842	.679	.450	.635	.979	.650	.931

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

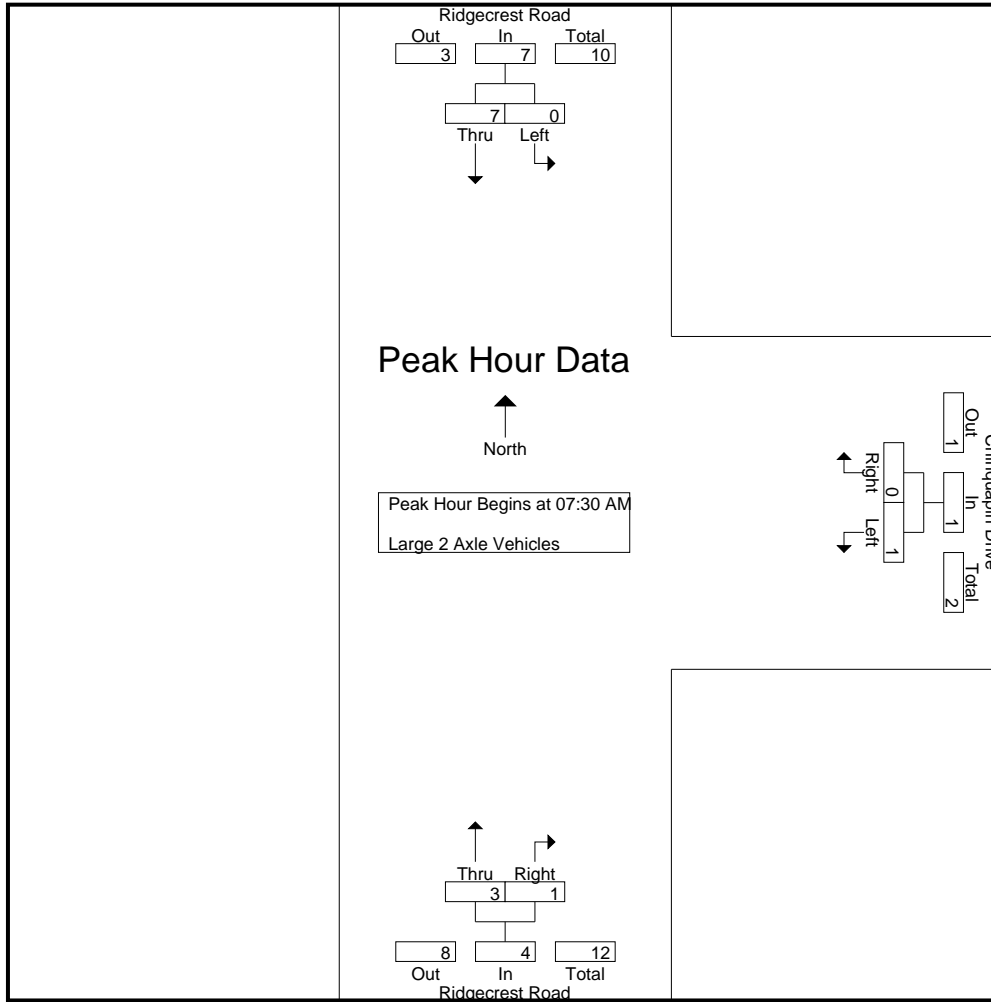
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	1	2	2
07:15 AM	0	4	4	0	0	0	1	0	1	5
07:30 AM	0	2	2	0	0	0	0	0	0	2
07:45 AM	0	2	2	1	0	1	0	0	0	3
Total	0	8	8	1	0	1	2	1	3	12
08:00 AM	0	3	3	0	0	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	3	1	4	4
08:30 AM	0	0	0	2	0	2	0	1	1	3
08:45 AM	0	4	4	0	0	0	3	0	3	7
Total	0	7	7	2	0	2	6	2	8	17
Grand Total	0	15	15	3	0	3	8	3	11	29
Apprch %	0	100		100	0		72.7	27.3		
Total %	0	51.7	51.7	10.3	0	10.3	27.6	10.3	37.9	

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	2	2	0	0	0	0	0	0	2
07:45 AM	0	2	2	1	0	1	0	0	0	3
08:00 AM	0	3	3	0	0	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	3	1	4	4
Total Volume	0	7	7	1	0	1	3	1	4	12
% App. Total	0	100		100	0		75	25		
PHF	.000	.583	.583	.250	.000	.250	.250	.250	.250	.750

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	2	2	0	0	0	0	0	0
+15 mins.	0	2	2	1	0	1	0	0	0
+30 mins.	0	3	3	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	3	1	4
Total Volume	0	7	7	1	0	1	3	1	4
% App. Total	0	100		100	0		75	25	
PHF	.000	.583	.583	.250	.000	.250	.250	.250	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

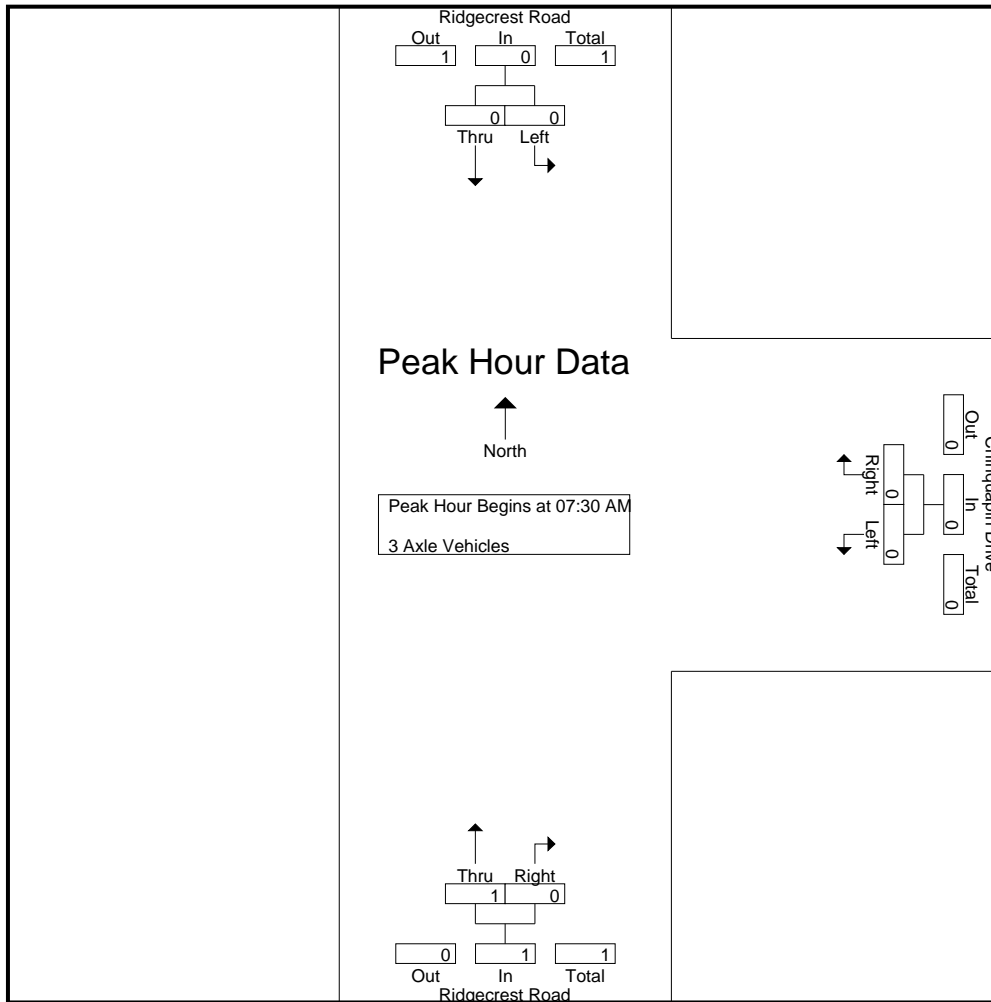
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	2	2	0	0	0	1	0	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	0	0	0	0	0	1
08:45 AM	0	2	2	0	0	0	1	0	1	3
Total	0	3	3	0	0	0	1	0	1	4
Grand Total	0	5	5	0	0	0	2	0	2	7
Apprch %	0	100		0	0		100	0		
Total %	0	71.4	71.4	0	0	0	28.6	0	28.6	

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

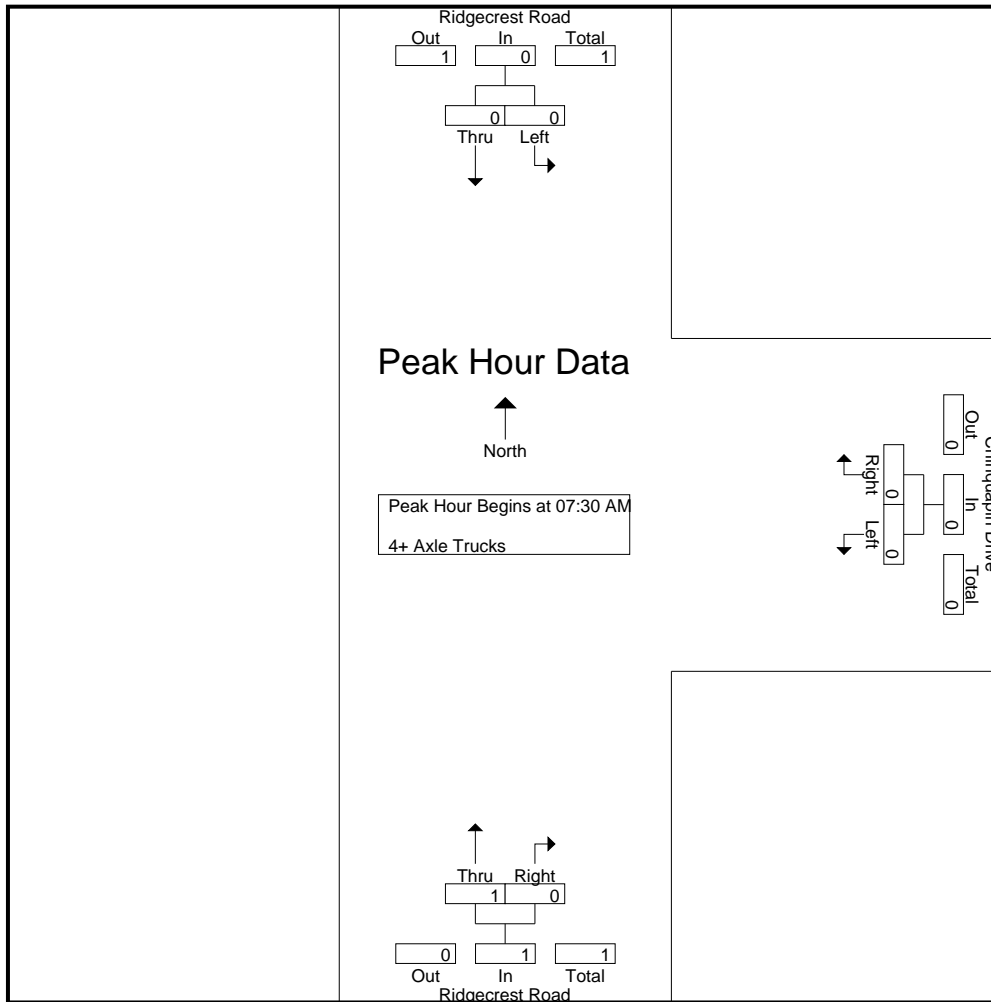
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
Grand Total	0	1	1	0	0	0	1	0	1	2
Apprch %	0	100		0	0		100	0		
Total %	0	50	50	0	0	0	50	0	50	

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

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

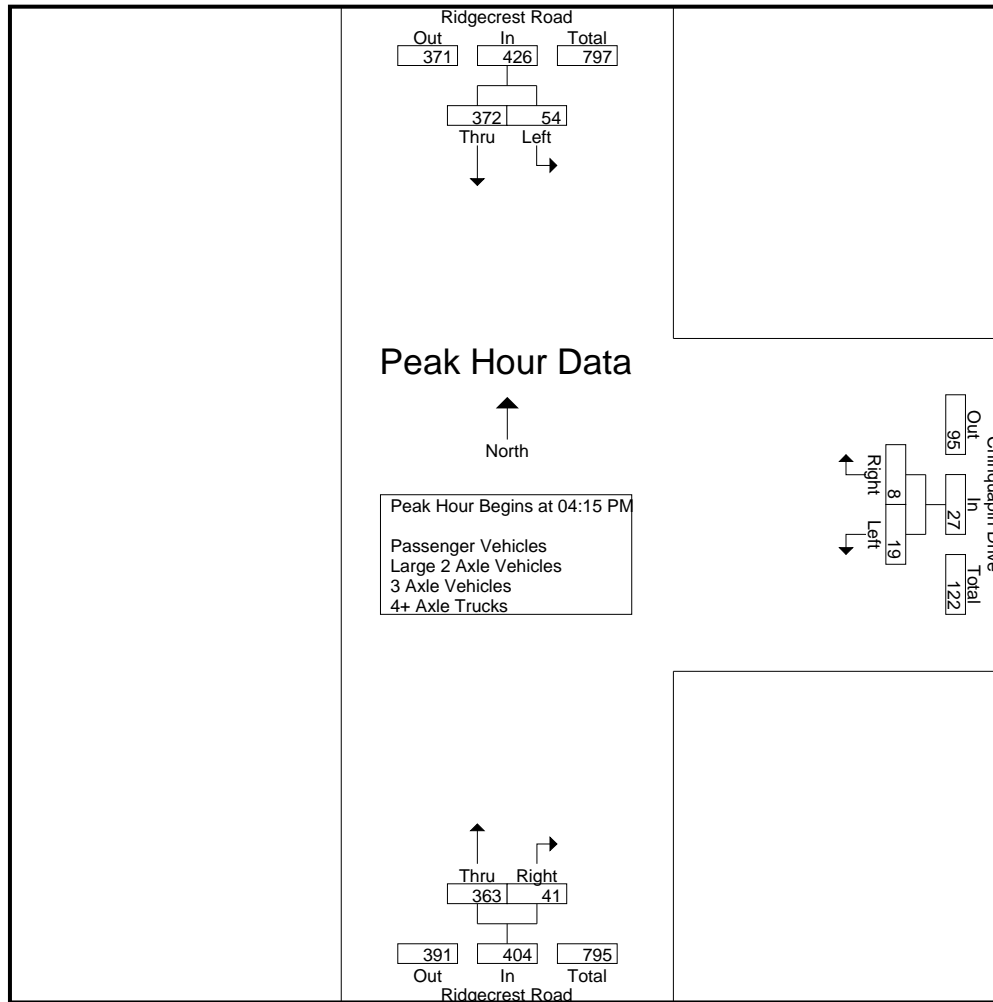
Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	23	82	105	10	0	10	78	10	88	203
04:15 PM	10	97	107	5	3	8	66	5	71	186
04:30 PM	11	91	102	6	3	9	95	13	108	219
04:45 PM	17	87	104	4	0	4	99	15	114	222
Total	61	357	418	25	6	31	338	43	381	830
05:00 PM	16	97	113	4	2	6	103	8	111	230
05:15 PM	7	76	83	9	2	11	62	5	67	161
05:30 PM	10	68	78	8	3	11	85	5	90	179
05:45 PM	15	71	86	9	2	11	59	9	68	165
Total	48	312	360	30	9	39	309	27	336	735
Grand Total	109	669	778	55	15	70	647	70	717	1565
Apprch %	14	86		78.6	21.4		90.2	9.8		
Total %	7	42.7	49.7	3.5	1	4.5	41.3	4.5	45.8	
Passenger Vehicles	109	669	778	55	15	70	646	70	716	1564
% Passenger Vehicles	100	100	100	100	100	100	99.8	100	99.9	99.9
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
% Large 2 Axle Vehicles										
3 Axle Vehicles	0	0	0	0	0	0	1	0	1	1
% 3 Axle Vehicles	0	0	0	0	0	0	0.2	0	0.1	0.1
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:15 PM	10	97	107	5	3	8	66	5	71	186
04:30 PM	11	91	102	6	3	9	95	13	108	219
04:45 PM	17	87	104	4	0	4	99	15	114	222
05:00 PM	16	97	113	4	2	6	103	8	111	230
Total Volume	54	372	426	19	8	27	363	41	404	857
% App. Total	12.7	87.3		70.4	29.6		89.9	10.1		
PHF	.794	.959	.942	.792	.667	.750	.881	.683	.886	.932

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 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			05:00 PM			04:15 PM		
+0 mins.	10	97	107	4	2	6	66	5	71
+15 mins.	11	91	102	9	2	11	95	13	108
+30 mins.	17	87	104	8	3	11	99	15	114
+45 mins.	16	97	113	9	2	11	103	8	111
Total Volume	54	372	426	30	9	39	363	41	404
% App. Total	12.7	87.3		76.9	23.1		89.9	10.1	
PHF	.794	.959	.942	.833	.750	.886	.881	.683	.886

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

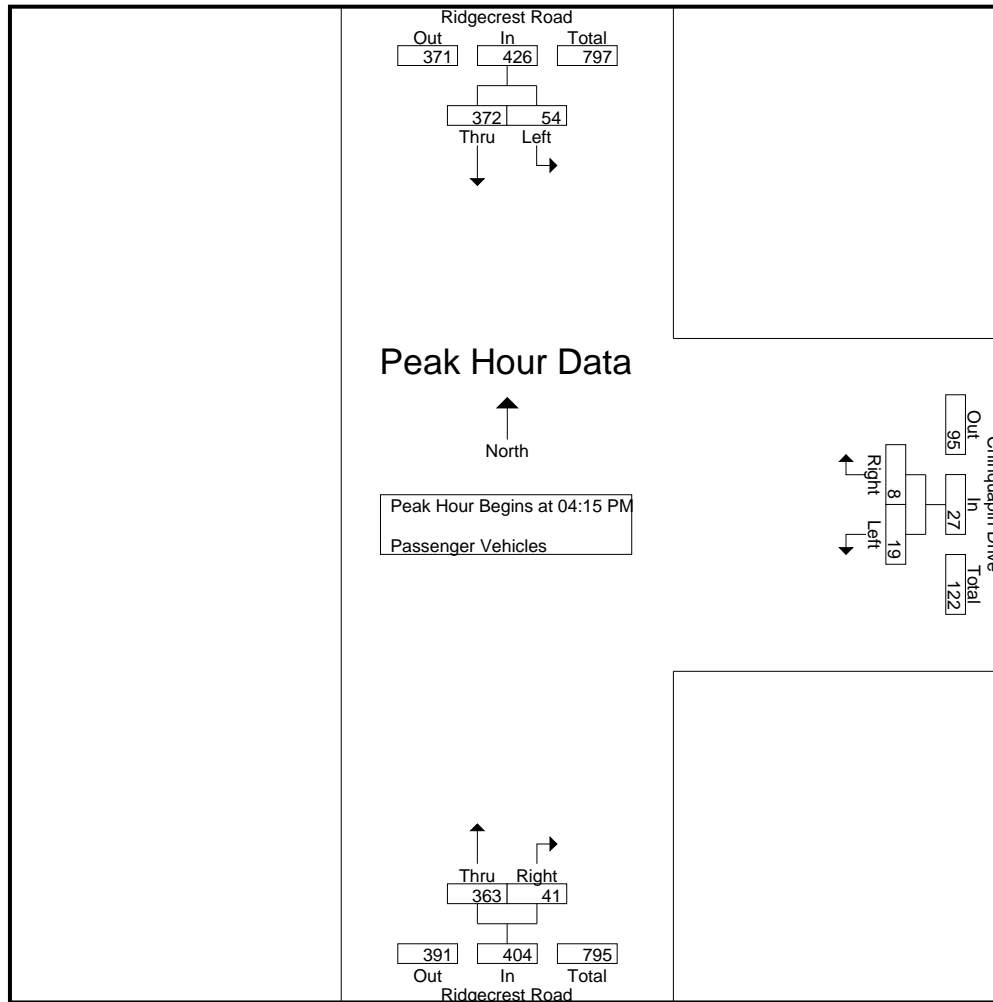
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	23	82	105	10	0	10	78	10	88	203
04:15 PM	10	97	107	5	3	8	66	5	71	186
04:30 PM	11	91	102	6	3	9	95	13	108	219
04:45 PM	17	87	104	4	0	4	99	15	114	222
Total	61	357	418	25	6	31	338	43	381	830
05:00 PM	16	97	113	4	2	6	103	8	111	230
05:15 PM	7	76	83	9	2	11	62	5	67	161
05:30 PM	10	68	78	8	3	11	85	5	90	179
05:45 PM	15	71	86	9	2	11	58	9	67	164
Total	48	312	360	30	9	39	308	27	335	734
Grand Total	109	669	778	55	15	70	646	70	716	1564
Apprch %	14	86		78.6	21.4		90.2	9.8		
Total %	7	42.8	49.7	3.5	1	4.5	41.3	4.5	45.8	

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	10	97	107	5	3	8	66	5	71	186
04:30 PM	11	91	102	6	3	9	95	13	108	219
04:45 PM	17	87	104	4	0	4	99	15	114	222
05:00 PM	16	97	113	4	2	6	103	8	111	230
Total Volume	54	372	426	19	8	27	363	41	404	857
% App. Total	12.7	87.3		70.4	29.6		89.9	10.1		
PHF	.794	.959	.942	.792	.667	.750	.881	.683	.886	.932

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	10	97	107	5	3	8	66	5	71
+15 mins.	11	91	102	6	3	9	95	13	108
+30 mins.	17	87	104	4	0	4	99	15	114
+45 mins.	16	97	113	4	2	6	103	8	111
Total Volume	54	372	426	19	8	27	363	41	404
% App. Total	12.7	87.3		70.4	29.6		89.9	10.1	
PHF	.794	.959	.942	.792	.667	.750	.881	.683	.886

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

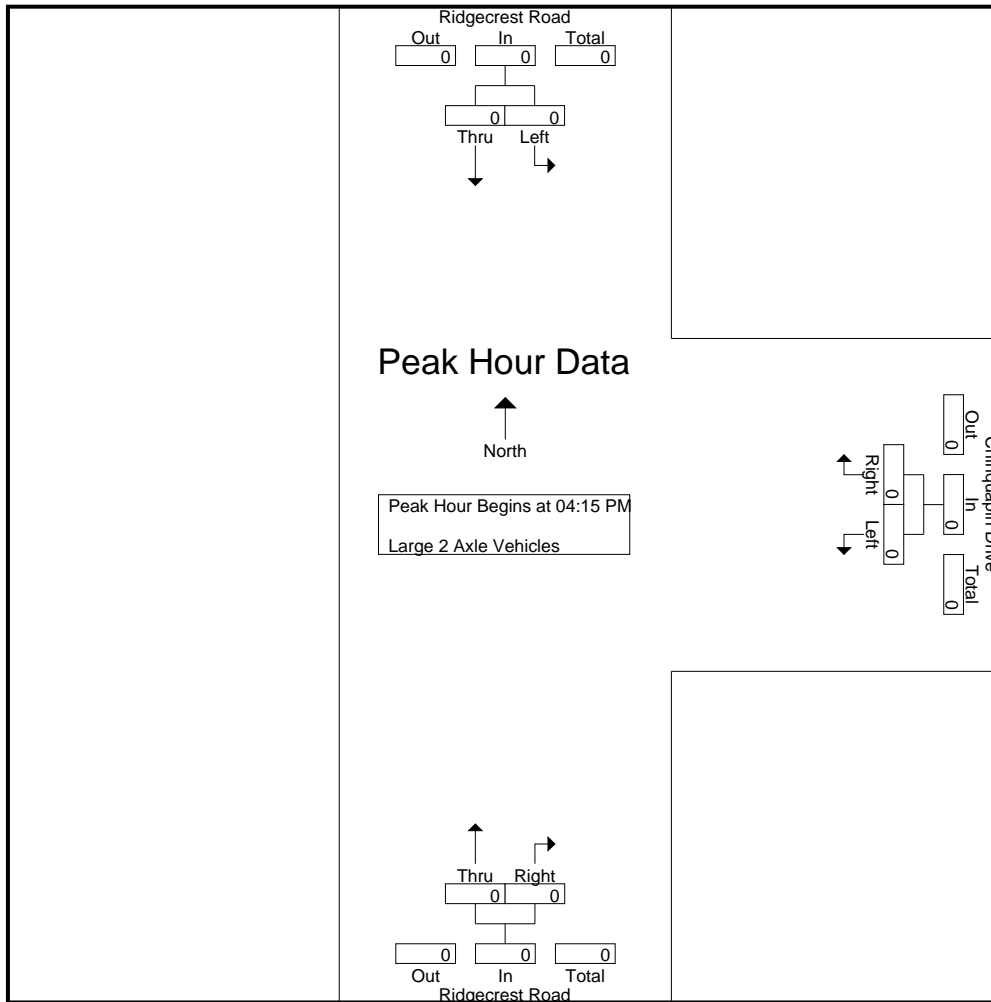
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

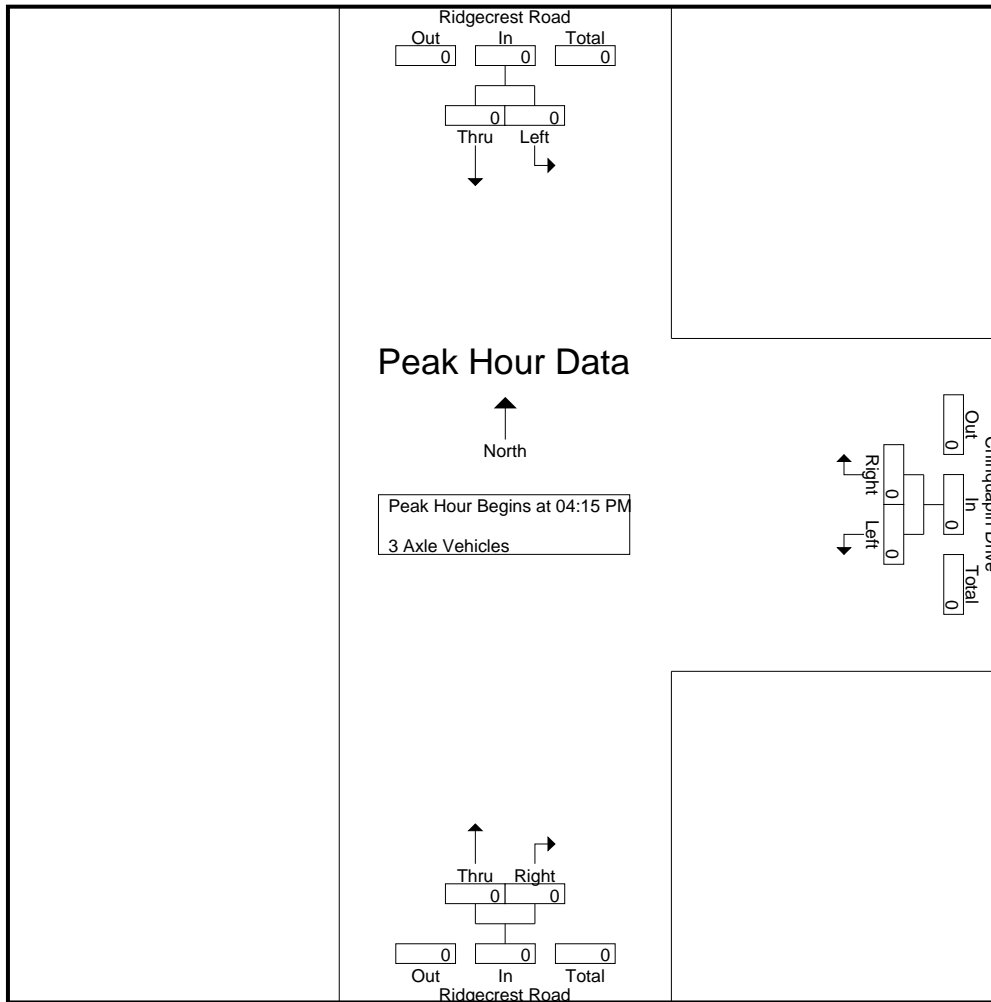
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	1	0	1	1
Grand Total	0	0	0	0	0	0	1	0	1	1
Apprch %	0	0		0	0		100	0		
Total %	0	0		0	0		100	0	100	

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

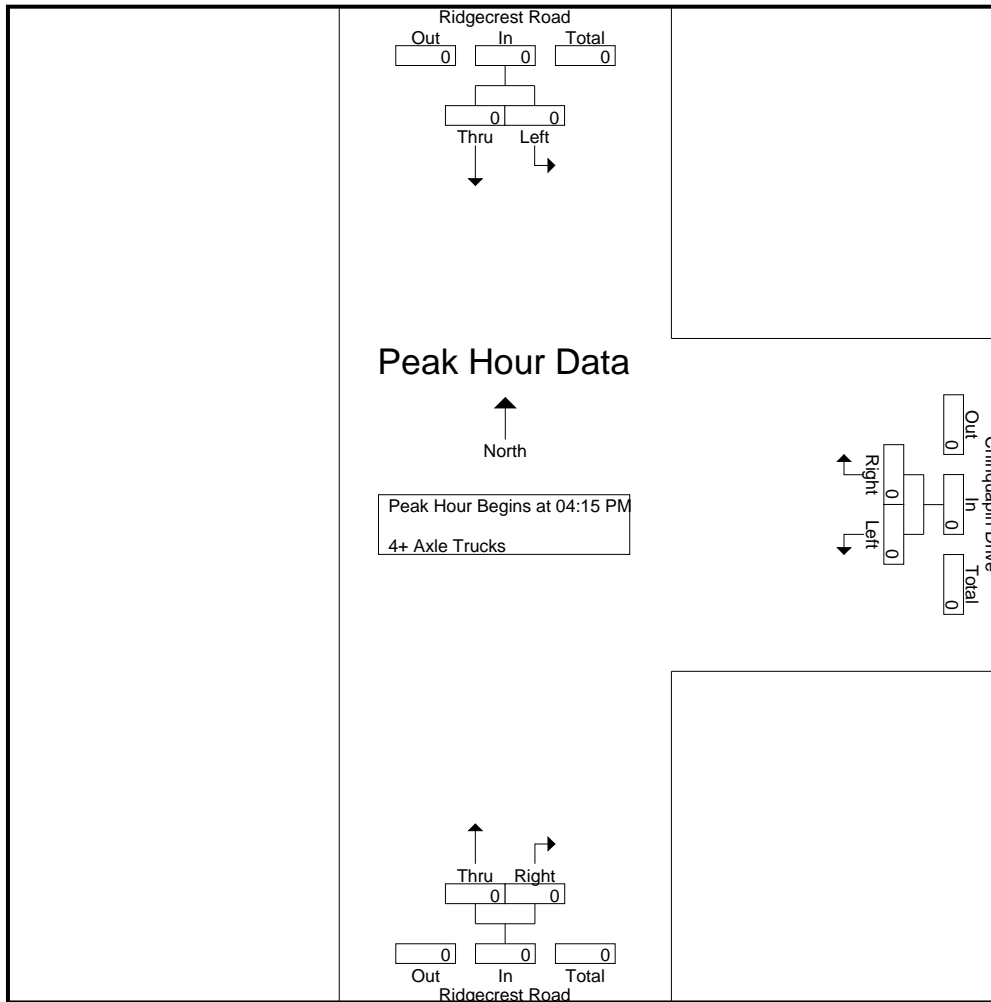
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ridgecrest Road Southbound			Chinquapin Drive Westbound			Ridgecrest Road Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Chinquapin Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_Chinquapin PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgcrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgcrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

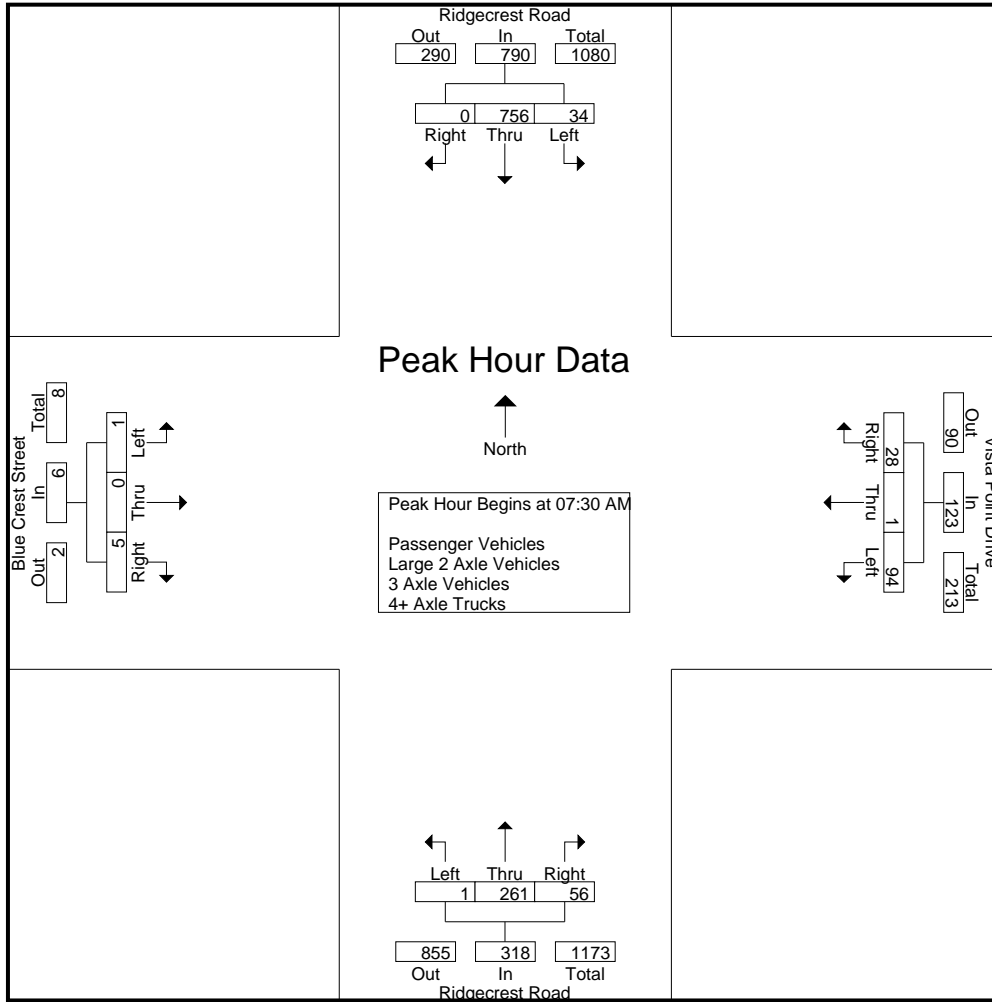
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	101	0	105	30	0	5	35	0	40	10	50	1	1	1	3	193
07:15 AM	5	134	0	139	43	0	7	50	0	44	5	49	0	0	0	0	238
07:30 AM	10	173	0	183	27	1	6	34	0	52	11	63	0	0	2	2	282
07:45 AM	7	217	0	224	20	0	11	31	0	64	18	82	1	0	0	1	338
Total	26	625	0	651	120	1	29	150	0	200	44	244	2	1	3	6	1051
08:00 AM	15	179	0	194	30	0	4	34	0	67	14	81	0	0	0	0	309
08:15 AM	2	187	0	189	17	0	7	24	1	78	13	92	0	0	3	3	308
08:30 AM	9	110	0	119	24	0	6	30	0	76	9	85	0	0	0	0	234
08:45 AM	6	134	0	140	30	0	4	34	1	56	6	63	0	0	0	0	237
Total	32	610	0	642	101	0	21	122	2	277	42	321	0	0	3	3	1088
Grand Total	58	1235	0	1293	221	1	50	272	2	477	86	565	2	1	6	9	2139
Apprch %	4.5	95.5	0		81.2	0.4	18.4		0.4	84.4	15.2		22.2	11.1	66.7		
Total %	2.7	57.7	0	60.4	10.3	0	2.3	12.7	0.1	22.3	4	26.4	0.1	0	0.3	0.4	
Passenger Vehicles	55	1215	0	1270	217	1	47	265	2	461	82	545	2	1	6	9	2089
% Passenger Vehicles	94.8	98.4	0	98.2	98.2	100	94	97.4	100	96.6	95.3	96.5	100	100	100	100	97.7
Large 2 Axle Vehicles	3	18	0	21	3	0	3	6	0	14	4	18	0	0	0	0	45
% Large 2 Axle Vehicles	5.2	1.5	0	1.6	1.4	0	6	2.2	0	2.9	4.7	3.2	0	0	0	0	2.1
3 Axle Vehicles	0	1	0	1	1	0	0	1	0	1	0	1	0	0	0	0	3
% 3 Axle Vehicles	0	0.1	0	0.1	0.5	0	0	0.4	0	0.2	0	0.2	0	0	0	0	0.1
4+ Axle Trucks	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% 4+ Axle Trucks	0	0.1	0	0.1	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.1

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street 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 07:30 AM																	
07:30 AM	10	173	0	183	27	1	6	34	0	52	11	63	0	0	2	2	282
07:45 AM	7	217	0	224	20	0	11	31	0	64	18	82	1	0	0	1	338
08:00 AM	15	179	0	194	30	0	4	34	0	67	14	81	0	0	0	0	309
08:15 AM	2	187	0	189	17	0	7	24	1	78	13	92	0	0	3	3	308
Total Volume	34	756	0	790	94	1	28	123	1	261	56	318	1	0	5	6	1237
% App. Total	4.3	95.7	0		76.4	0.8	22.8		0.3	82.1	17.6		16.7	0	83.3		
PHF	.567	.871	.000	.882	.783	.250	.636	.904	.250	.837	.778	.864	.250	.000	.417	.500	.915

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
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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:

	07:30 AM				07:00 AM				07:45 AM				07:00 AM			
+0 mins.	10	173	0	183	30	0	5	35	0	64	18	82	1	1	1	3
+15 mins.	7	217	0	224	43	0	7	50	0	67	14	81	0	0	0	0
+30 mins.	15	179	0	194	27	1	6	34	1	78	13	92	0	0	2	2
+45 mins.	2	187	0	189	20	0	11	31	0	76	9	85	1	0	0	1
Total Volume	34	756	0	790	120	1	29	150	1	285	54	340	2	1	3	6
% App. Total	4.3	95.7	0		80	0.7	19.3		0.3	83.8	15.9		33.3	16.7	50	
PHF	.567	.871	.000	.882	.698	.250	.659	.750	.250	.913	.750	.924	.500	.250	.375	.500

City of Victorville
 N/S: Ridgcrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgcrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
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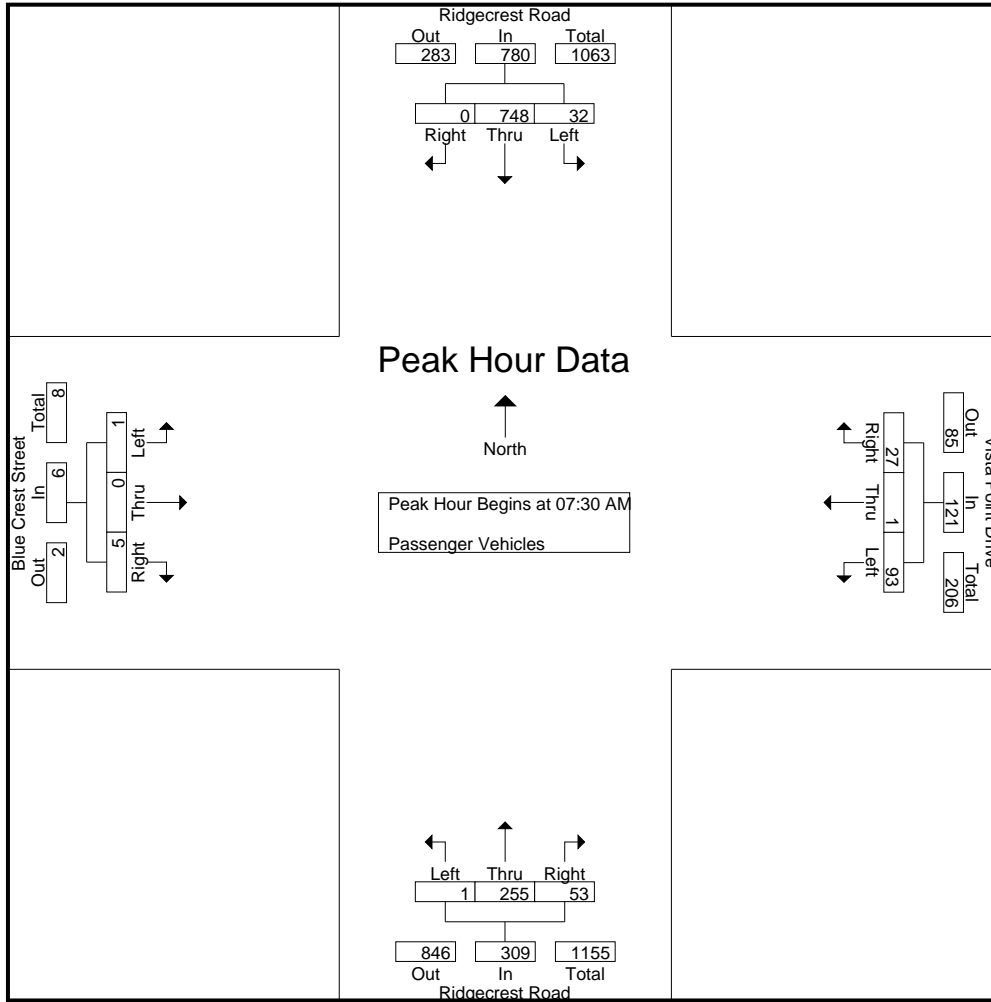
Groups Printed- Passenger Vehicles

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	99	0	103	30	0	4	34	0	37	10	47	1	1	1	3	187
07:15 AM	5	130	0	135	43	0	6	49	0	43	4	47	0	0	0	0	231
07:30 AM	9	172	0	181	26	1	6	33	0	52	10	62	0	0	2	2	278
07:45 AM	6	215	0	221	20	0	11	31	0	62	16	78	1	0	0	1	331
Total	24	616	0	640	119	1	27	147	0	194	40	234	2	1	3	6	1027
08:00 AM	15	178	0	193	30	0	3	33	0	66	14	80	0	0	0	0	306
08:15 AM	2	183	0	185	17	0	7	24	1	75	13	89	0	0	3	3	301
08:30 AM	9	109	0	118	23	0	6	29	0	72	9	81	0	0	0	0	228
08:45 AM	5	129	0	134	28	0	4	32	1	54	6	61	0	0	0	0	227
Total	31	599	0	630	98	0	20	118	2	267	42	311	0	0	3	3	1062
Grand Total	55	1215	0	1270	217	1	47	265	2	461	82	545	2	1	6	9	2089
Apprch %	4.3	95.7	0		81.9	0.4	17.7		0.4	84.6	15		22.2	11.1	66.7		
Total %	2.6	58.2	0	60.8	10.4	0	2.2	12.7	0.1	22.1	3.9	26.1	0.1	0	0.3	0.4	

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	9	172	0	181	26	1	6	33	0	52	10	62	0	0	2	2	278
07:45 AM	6	215	0	221	20	0	11	31	0	62	16	78	1	0	0	1	331
08:00 AM	15	178	0	193	30	0	3	33	0	66	14	80	0	0	0	0	306
08:15 AM	2	183	0	185	17	0	7	24	1	75	13	89	0	0	3	3	301
Total Volume	32	748	0	780	93	1	27	121	1	255	53	309	1	0	5	6	1216
% App. Total	4.1	95.9	0		76.9	0.8	22.3		0.3	82.5	17.2		16.7	0	83.3		
PHF	.533	.870	.000	.882	.775	.250	.614	.917	.250	.850	.828	.868	.250	.000	.417	.500	.918

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	9	172	0	181	26	1	6	33	0	52	10	62	0	0	2	2
+15 mins.	6	215	0	221	20	0	11	31	0	62	16	78	1	0	0	1
+30 mins.	15	178	0	193	30	0	3	33	0	66	14	80	0	0	0	0
+45 mins.	2	183	0	185	17	0	7	24	1	75	13	89	0	0	3	3
Total Volume	32	748	0	780	93	1	27	121	1	255	53	309	1	0	5	6
% App. Total	4.1	95.9	0		76.9	0.8	22.3		0.3	82.5	17.2		16.7	0	83.3	
PHF	.533	.870	.000	.882	.775	.250	.614	.917	.250	.850	.828	.868	.250	.000	.417	.500

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

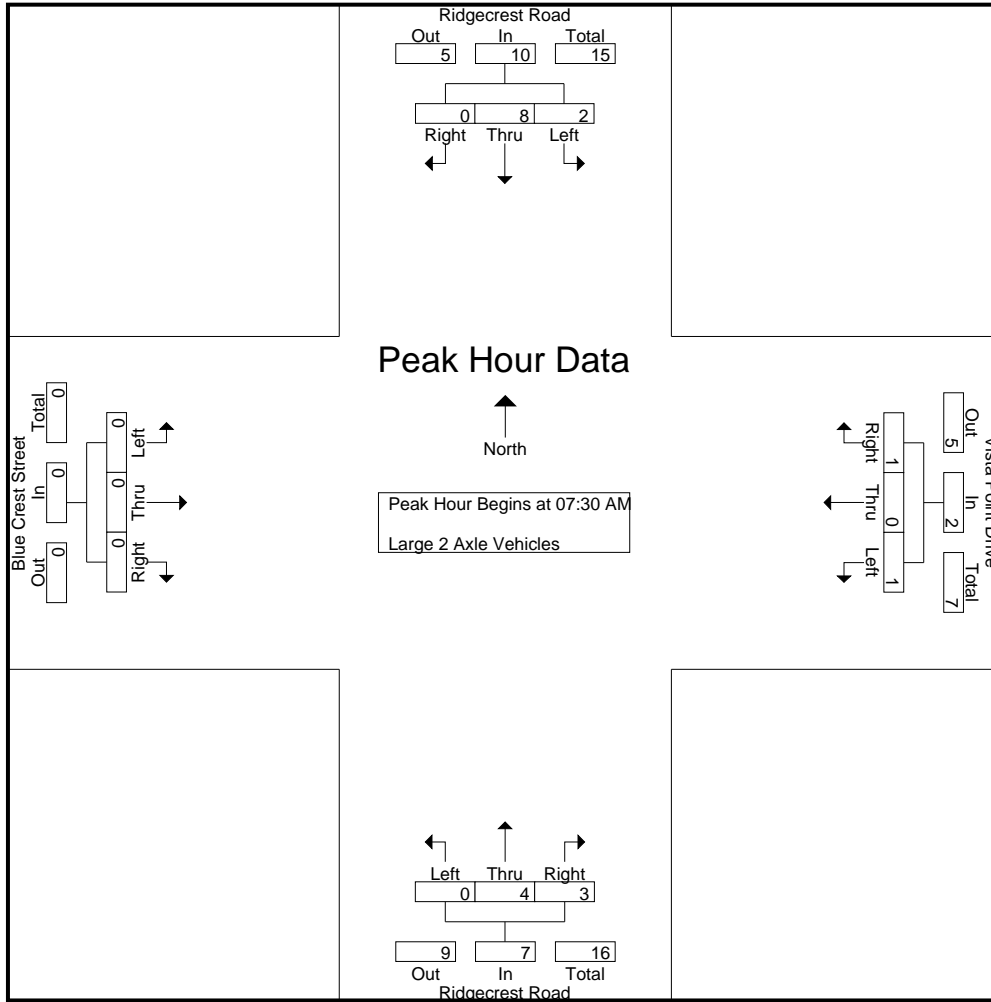
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	2	0	2	0	0	1	1	0	3	0	3	0	0	0	0	6
07:15 AM	0	4	0	4	0	0	1	1	0	1	1	2	0	0	0	0	7
07:30 AM	1	1	0	2	1	0	0	1	0	0	1	1	0	0	0	0	4
07:45 AM	1	2	0	3	0	0	0	0	0	0	2	2	0	0	0	0	5
Total	2	9	0	11	1	0	2	3	0	4	4	8	0	0	0	0	22
08:00 AM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
08:15 AM	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
08:30 AM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
08:45 AM	1	4	0	5	2	0	0	2	0	2	0	2	0	0	0	0	9
Total	1	9	0	10	2	0	1	3	0	10	0	10	0	0	0	0	23
Grand Total	3	18	0	21	3	0	3	6	0	14	4	18	0	0	0	0	45
Apprch %	14.3	85.7	0		50	0	50		0	77.8	22.2		0	0	0		
Total %	6.7	40	0	46.7	6.7	0	6.7	13.3	0	31.1	8.9	40	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	1	0	2	1	0	0	1	0	0	1	1	0	0	0	0	4
07:45 AM	1	2	0	3	0	0	0	0	0	0	2	2	0	0	0	0	5
08:00 AM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
08:15 AM	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
Total Volume	2	8	0	10	1	0	1	2	0	4	3	7	0	0	0	0	19
% App. Total	20	80	0		50	0	50		0	57.1	42.9		0	0	0		
PHF	.500	.500	.000	.625	.250	.000	.250	.500	.000	.333	.375	.583	.000	.000	.000	.000	.679

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	1	0	2	1	0	0	1	0	0	1	1	0	0	0	0
+15 mins.	1	2	0	3	0	0	0	0	0	0	2	2	0	0	0	0
+30 mins.	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0
+45 mins.	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0
Total Volume	2	8	0	10	1	0	1	2	0	4	3	7	0	0	0	0
% App. Total	20	80	0		50	0	50		0	57.1	42.9		0	0	0	
PHF	.500	.500	.000	.625	.250	.000	.250	.500	.000	.333	.375	.583	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

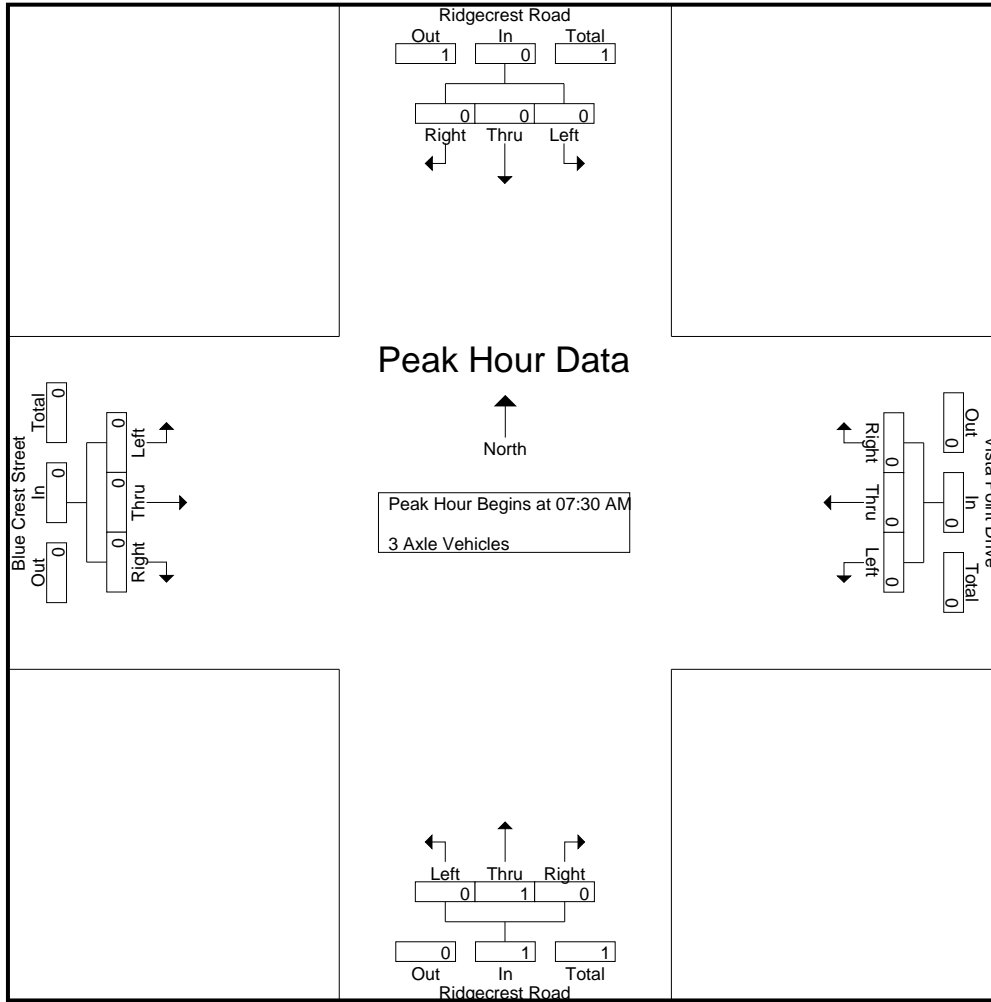
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
Grand Total	0	1	0	1	1	0	0	1	0	1	0	1	0	0	0	0	3
Apprch %	0	100	0		100	0	0		0	100	0		0	0	0		
Total %	0	33.3	0	33.3	33.3	0	0	33.3	0	33.3	0	33.3	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

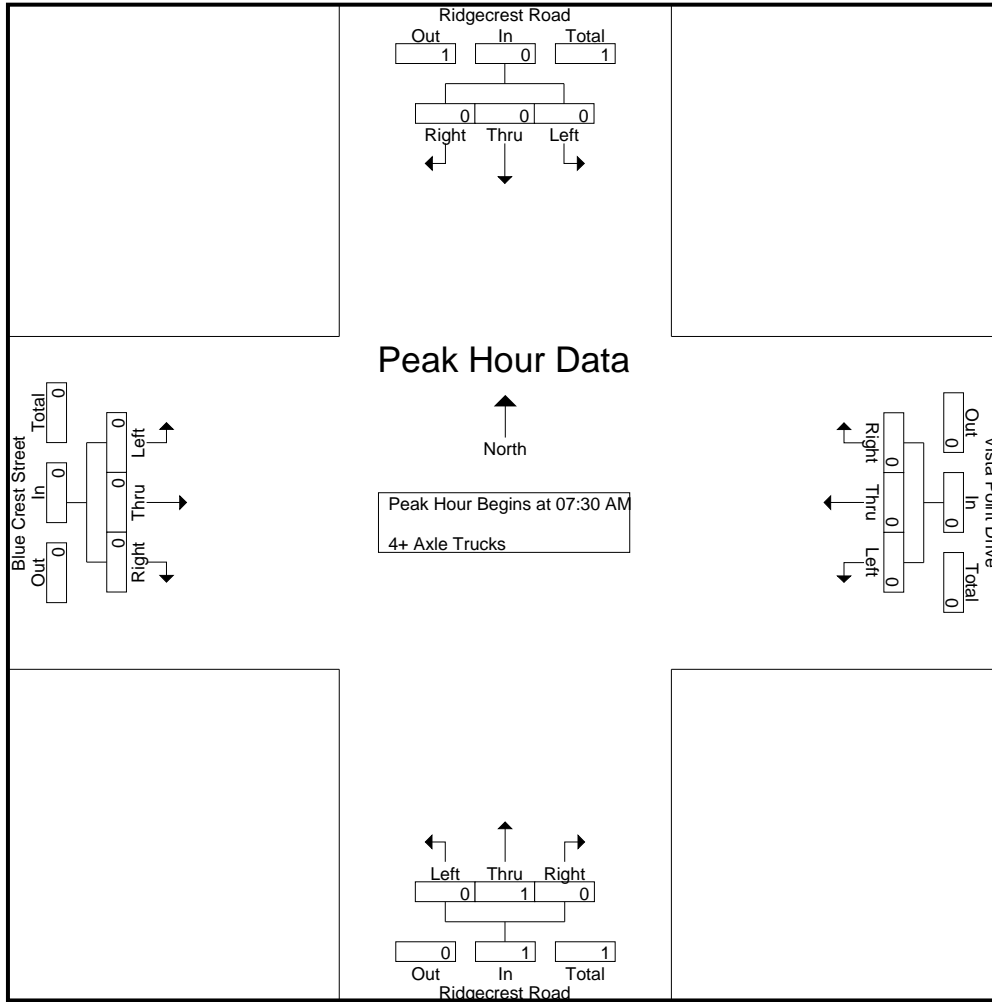
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	50	0	50	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point AM
 Site Code : 07518372
 Start Date : 5/10/2018
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgcrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgcrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
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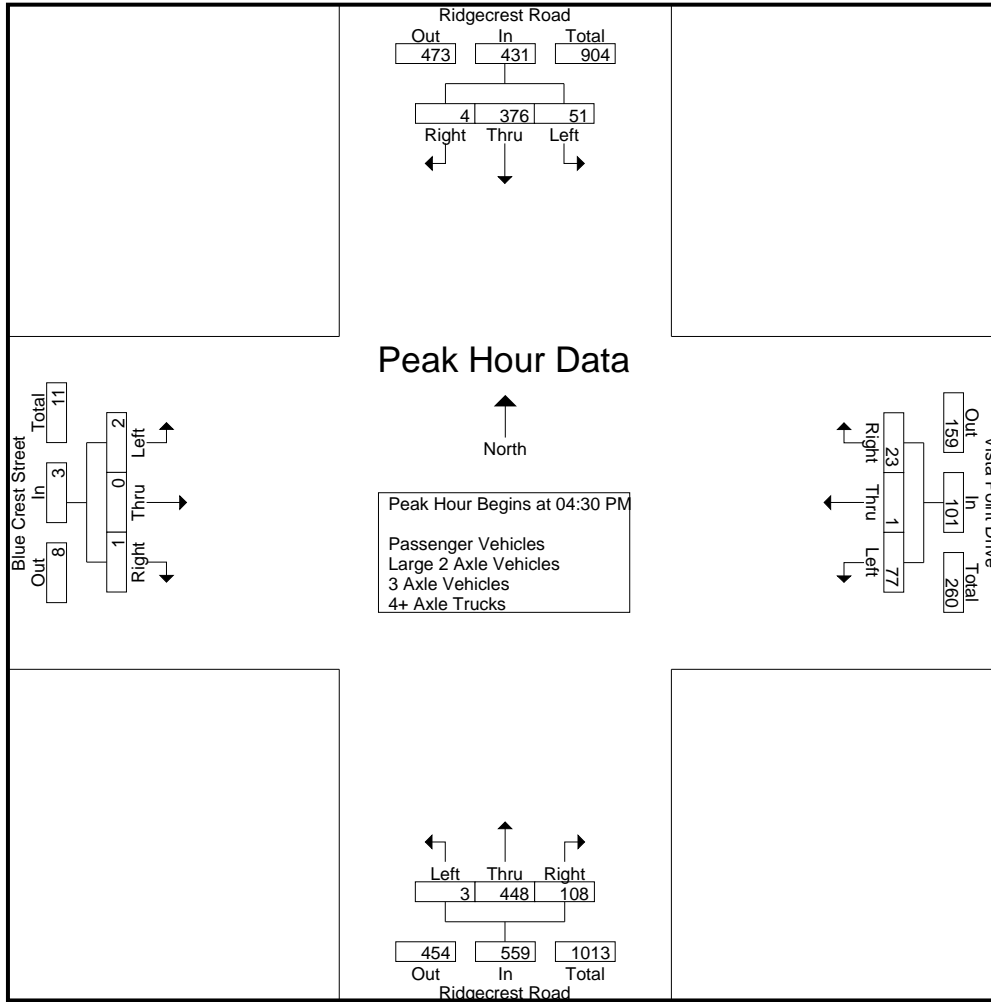
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	11	80	1	92	11	0	7	18	0	108	21	129	1	0	0	1	240
04:15 PM	10	115	0	125	23	0	3	26	1	85	25	111	0	0	0	0	262
04:30 PM	10	88	0	98	25	0	6	31	1	104	25	130	0	0	0	0	259
04:45 PM	14	95	3	112	17	0	5	22	1	116	29	146	0	0	0	0	280
Total	45	378	4	427	76	0	21	97	3	413	100	516	1	0	0	1	1041
05:00 PM	11	74	0	85	10	0	9	19	1	114	30	145	0	0	1	1	250
05:15 PM	16	119	1	136	25	1	3	29	0	114	24	138	2	0	0	2	305
05:30 PM	14	81	0	95	17	0	6	23	0	107	24	131	0	0	1	1	250
05:45 PM	17	91	0	108	12	0	6	18	1	92	23	116	1	0	0	1	243
Total	58	365	1	424	64	1	24	89	2	427	101	530	3	0	2	5	1048
Grand Total	103	743	5	851	140	1	45	186	5	840	201	1046	4	0	2	6	2089
Apprch %	12.1	87.3	0.6		75.3	0.5	24.2		0.5	80.3	19.2		66.7	0	33.3		
Total %	4.9	35.6	0.2	40.7	6.7	0	2.2	8.9	0.2	40.2	9.6	50.1	0.2	0	0.1	0.3	
Passenger Vehicles	103	738	5	846	139	1	45	185	5	837	200	1042	4	0	2	6	2079
% Passenger Vehicles	100	99.3	100	99.4	99.3	100	100	99.5	100	99.6	99.5	99.6	100	0	100	100	99.5
Large 2 Axle Vehicles	0	5	0	5	1	0	0	1	0	3	1	4	0	0	0	0	10
% Large 2 Axle Vehicles	0	0.7	0	0.6	0.7	0	0	0.5	0	0.4	0.5	0.4	0	0	0	0	0.5
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street 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	10	88	0	98	25	0	6	31	1	104	25	130	0	0	0	0	259
04:45 PM	14	95	3	112	17	0	5	22	1	116	29	146	0	0	0	0	280
05:00 PM	11	74	0	85	10	0	9	19	1	114	30	145	0	0	1	1	250
05:15 PM	16	119	1	136	25	1	3	29	0	114	24	138	2	0	0	2	305
Total Volume	51	376	4	431	77	1	23	101	3	448	108	559	2	0	1	3	1094
% App. Total	11.8	87.2	0.9		76.2	1	22.8		0.5	80.1	19.3		66.7	0	33.3		
PHF	.797	.790	.333	.792	.770	.250	.639	.815	.750	.966	.900	.957	.250	.000	.250	.375	.897

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 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				04:30 PM				04:45 PM				05:00 PM			
+0 mins.	10	88	0	98	25	0	6	31	1	116	29	146	0	0	1	1
+15 mins.	14	95	3	112	17	0	5	22	1	114	30	145	2	0	0	2
+30 mins.	11	74	0	85	10	0	9	19	0	114	24	138	0	0	1	1
+45 mins.	16	119	1	136	25	1	3	29	0	107	24	131	1	0	0	1
Total Volume	51	376	4	431	77	1	23	101	2	451	107	560	3	0	2	5
% App. Total	11.8	87.2	0.9		76.2	1	22.8		0.4	80.5	19.1		60	0	40	
PHF	.797	.790	.333	.792	.770	.250	.639	.815	.500	.972	.892	.959	.375	.000	.500	.625

City of Victorville
 N/S: Ridgcrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgcrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

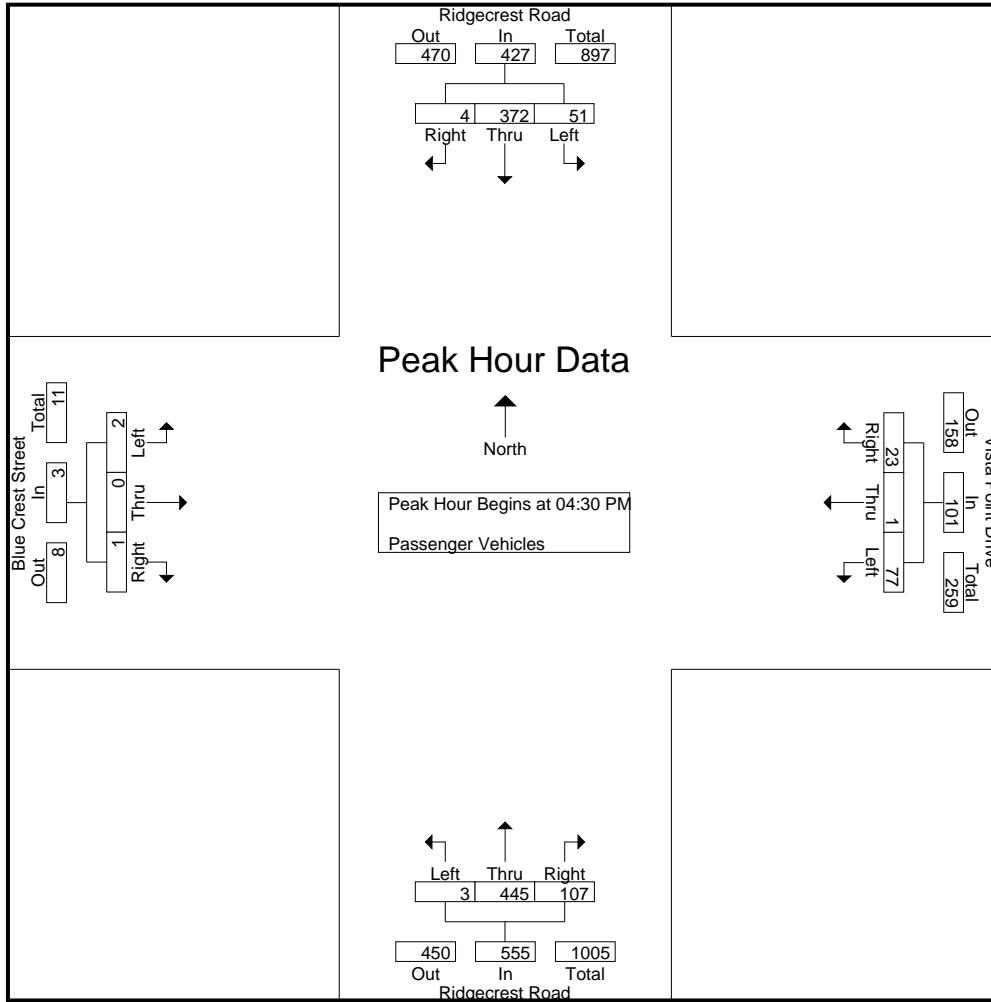
Groups Printed- Passenger Vehicles

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	11	80	1	92	11	0	7	18	0	108	21	129	1	0	0	1	240
04:15 PM	10	115	0	125	23	0	3	26	1	85	25	111	0	0	0	0	262
04:30 PM	10	88	0	98	25	0	6	31	1	104	25	130	0	0	0	0	259
04:45 PM	14	95	3	112	17	0	5	22	1	116	29	146	0	0	0	0	280
Total	45	378	4	427	76	0	21	97	3	413	100	516	1	0	0	1	1041
05:00 PM	11	74	0	85	10	0	9	19	1	112	29	142	0	0	1	1	247
05:15 PM	16	115	1	132	25	1	3	29	0	113	24	137	2	0	0	2	300
05:30 PM	14	81	0	95	16	0	6	22	0	107	24	131	0	0	1	1	249
05:45 PM	17	90	0	107	12	0	6	18	1	92	23	116	1	0	0	1	242
Total	58	360	1	419	63	1	24	88	2	424	100	526	3	0	2	5	1038
Grand Total	103	738	5	846	139	1	45	185	5	837	200	1042	4	0	2	6	2079
Apprch %	12.2	87.2	0.6		75.1	0.5	24.3		0.5	80.3	19.2		66.7	0	33.3		
Total %	5	35.5	0.2	40.7	6.7	0	2.2	8.9	0.2	40.3	9.6	50.1	0.2	0	0.1	0.3	

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	10	88	0	98	25	0	6	31	1	104	25	130	0	0	0	0	259
04:45 PM	14	95	3	112	17	0	5	22	1	116	29	146	0	0	0	0	280
05:00 PM	11	74	0	85	10	0	9	19	1	112	29	142	0	0	1	1	247
05:15 PM	16	115	1	132	25	1	3	29	0	113	24	137	2	0	0	2	300
Total Volume	51	372	4	427	77	1	23	101	3	445	107	555	2	0	1	3	1086
% App. Total	11.9	87.1	0.9		76.2	1	22.8		0.5	80.2	19.3		66.7	0	33.3		
PHF	.797	.809	.333	.809	.770	.250	.639	.815	.750	.959	.922	.950	.250	.000	.250	.375	.905

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	10	88	0	98	25	0	6	31	1	104	25	130	0	0	0	0
+15 mins.	14	95	3	112	17	0	5	22	1	116	29	146	0	0	0	0
+30 mins.	11	74	0	85	10	0	9	19	1	112	29	142	0	0	1	1
+45 mins.	16	115	1	132	25	1	3	29	0	113	24	137	2	0	0	2
Total Volume	51	372	4	427	77	1	23	101	3	445	107	555	2	0	1	3
% App. Total	11.9	87.1	0.9		76.2	1	22.8		0.5	80.2	19.3		66.7	0	33.3	
PHF	.797	.809	.333	.809	.770	.250	.639	.815	.750	.959	.922	.950	.250	.000	.250	.375

City of Victorville
 N/S: Ridgcrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgcrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

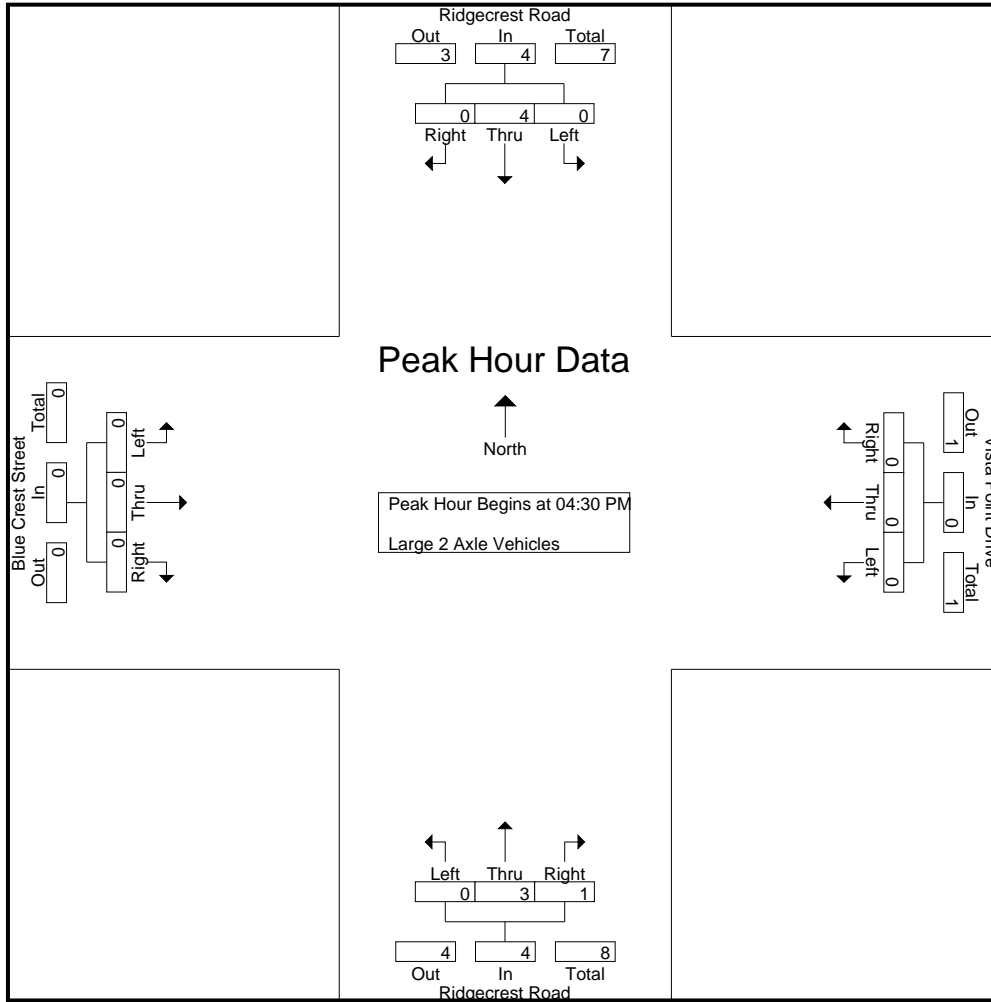
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
05:15 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	5	0	5	1	0	0	1	0	3	1	4	0	0	0	0	10
Grand Total	0	5	0	5	1	0	0	1	0	3	1	4	0	0	0	0	10
Apprch %	0	100	0		100	0	0		0	75	25		0	0	0		
Total %	0	50	0	50	10	0	0	10	0	30	10	40	0	0	0	0	

Start Time	Ridgcrest Road Southbound				Vista Point Drive Westbound				Ridgcrest Road Northbound				Blue Crest Street 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
05:15 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
Total Volume	0	4	0	4	0	0	0	0	0	3	1	4	0	0	0	0	8
% App. Total	0	100	0		0	0	0		0	75	25		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.250	.333	.000	.000	.000	.000	.400

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0
+45 mins.	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	4	0	4	0	0	0	0	0	3	1	4	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	75	25	0	0	0	0	0
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.250	.333	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

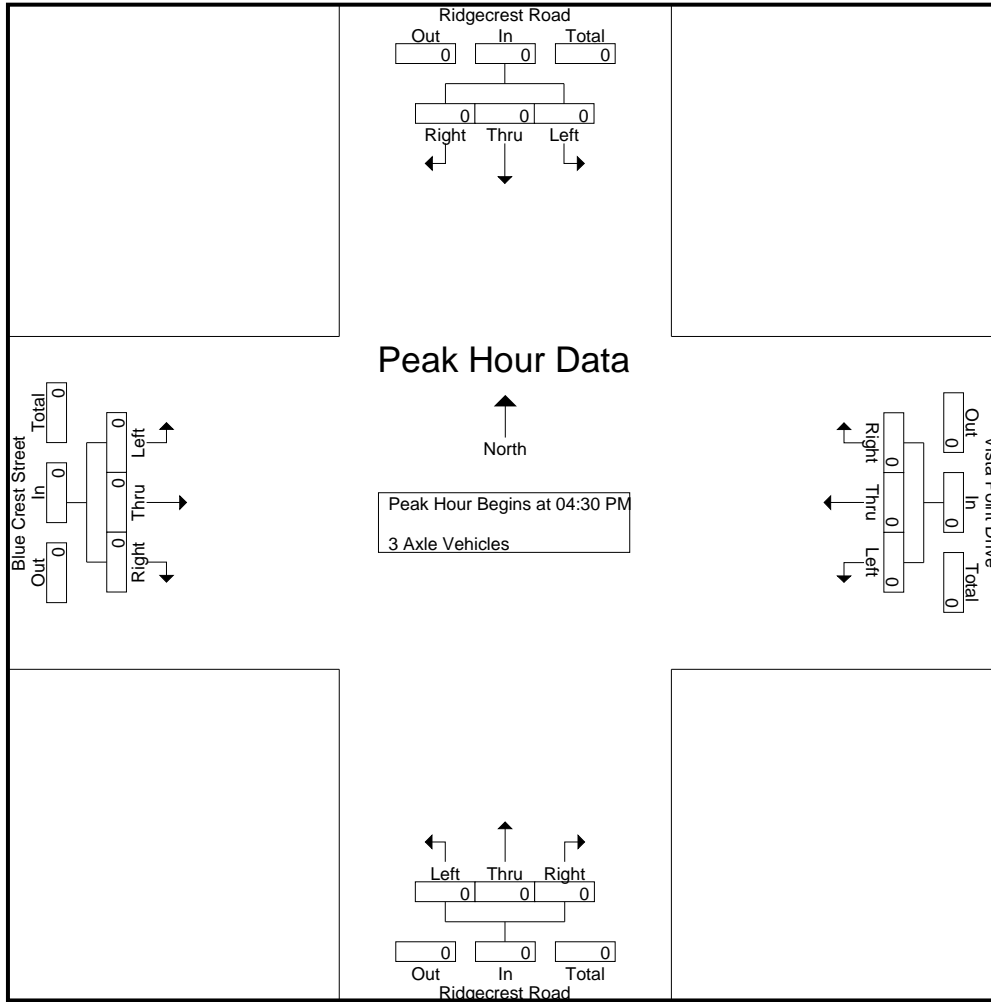
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

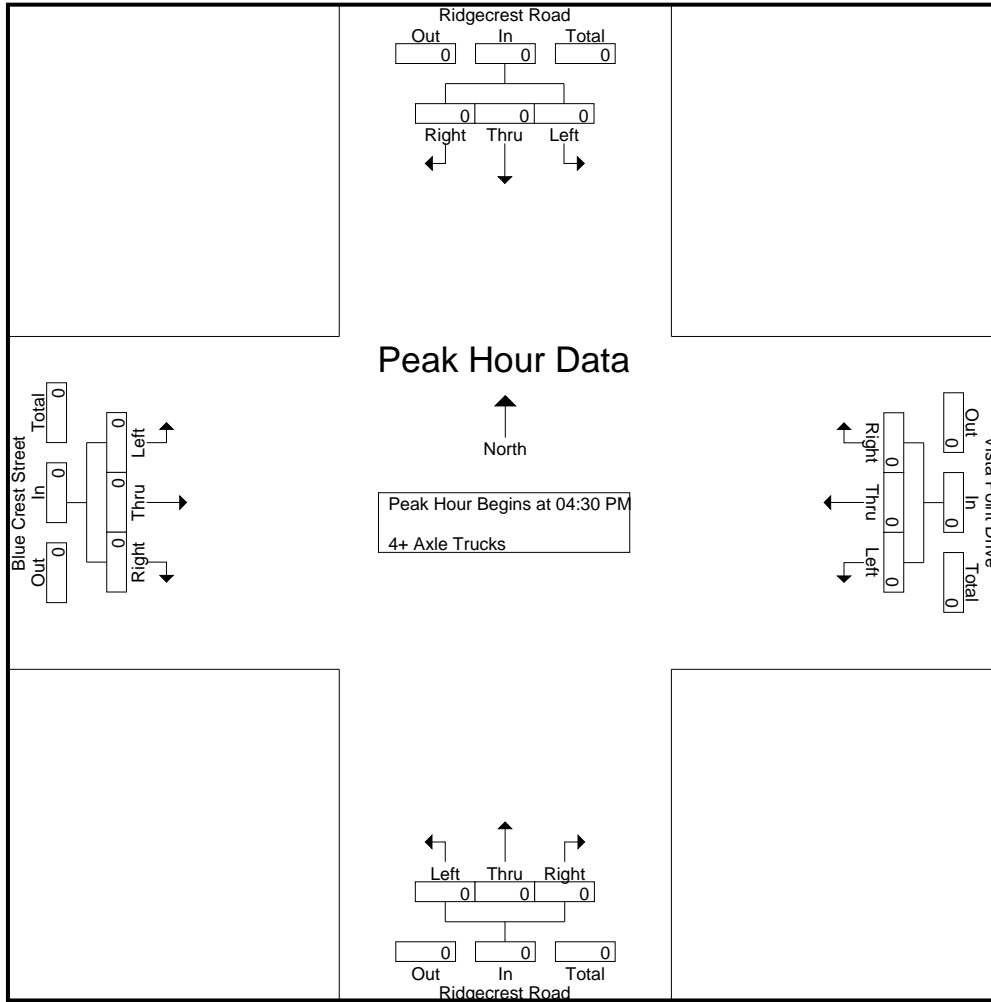
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Ridgecrest Road Southbound				Vista Point Drive Westbound				Ridgecrest Road Northbound				Blue Crest Street 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Blue Crest Street/Vista Point Drive
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Blue Crest_Vista Point PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

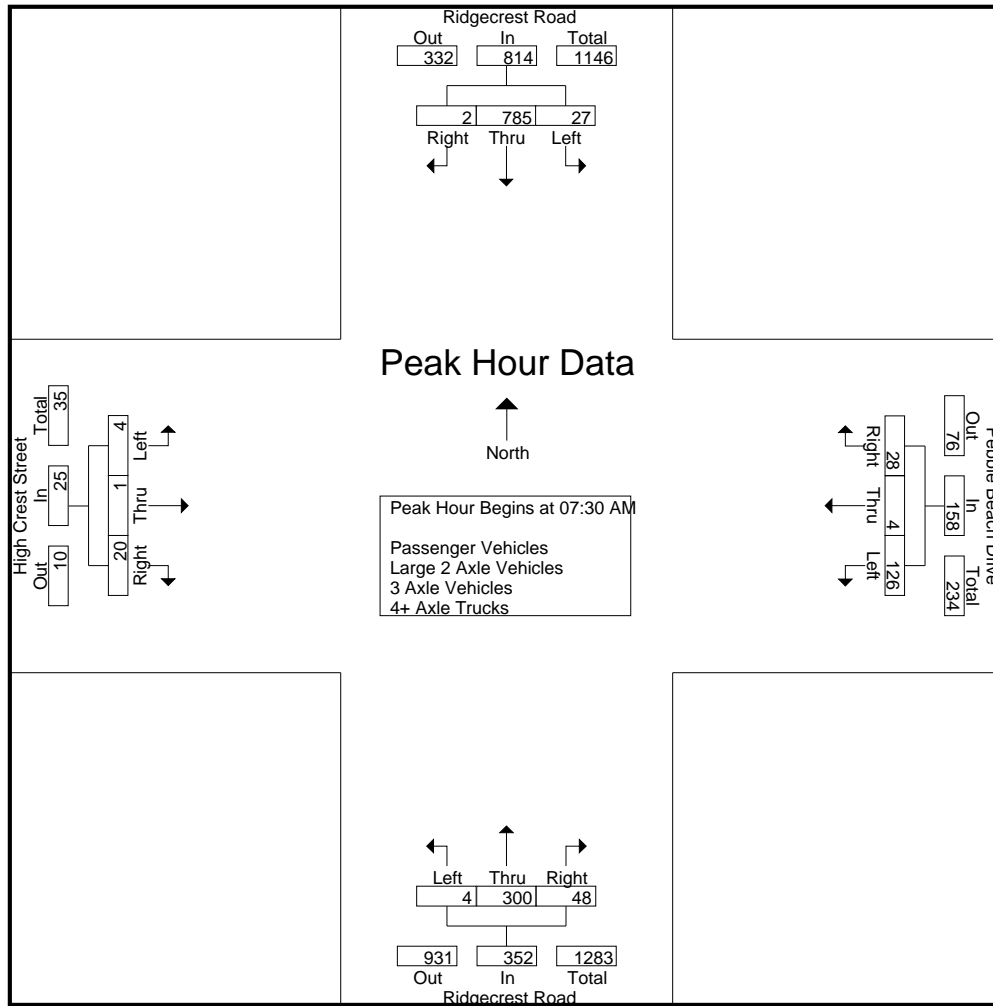
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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	143	2	147	26	0	6	32	0	47	4	51	0	1	6	7	237
07:15 AM	3	150	1	154	23	1	4	28	1	45	7	53	0	2	6	8	243
07:30 AM	7	169	0	176	36	1	6	43	0	69	7	76	2	0	1	3	298
07:45 AM	8	223	0	231	39	0	9	48	1	74	13	88	1	0	7	8	375
Total	20	685	3	708	124	2	25	151	2	235	31	268	3	3	20	26	1153
08:00 AM	6	191	0	197	24	1	6	31	1	64	13	78	1	1	6	8	314
08:15 AM	6	202	2	210	27	2	7	36	2	93	15	110	0	0	6	6	362
08:30 AM	0	128	1	129	27	1	4	32	2	71	10	83	1	1	3	5	249
08:45 AM	3	168	1	172	21	0	3	24	0	58	9	67	0	0	3	3	266
Total	15	689	4	708	99	4	20	123	5	286	47	338	2	2	18	22	1191
Grand Total	35	1374	7	1416	223	6	45	274	7	521	78	606	5	5	38	48	2344
Apprch %	2.5	97	0.5		81.4	2.2	16.4		1.2	86	12.9		10.4	10.4	79.2		
Total %	1.5	58.6	0.3	60.4	9.5	0.3	1.9	11.7	0.3	22.2	3.3	25.9	0.2	0.2	1.6	2	
Passenger Vehicles	34	1353	7	1394	218	4	42	264	6	495	74	575	5	3	36	44	2277
% Passenger Vehicles	97.1	98.5	100	98.4	97.8	66.7	93.3	96.4	85.7	95	94.9	94.9	100	60	94.7	91.7	97.1
Large 2 Axle Vehicles	1	20	0	21	3	1	3	7	1	24	4	29	0	2	2	4	61
% Large 2 Axle Vehicles	2.9	1.5	0	1.5	1.3	16.7	6.7	2.6	14.3	4.6	5.1	4.8	0	40	5.3	8.3	2.6
3 Axle Vehicles	0	1	0	1	1	1	0	2	0	2	0	2	0	0	0	0	5
% 3 Axle Vehicles	0	0.1	0	0.1	0.4	16.7	0	0.7	0	0.4	0	0.3	0	0	0	0	0.2
4+ Axle Trucks	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
% 4+ Axle Trucks	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0	0	0	0

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 07:30 AM																	
07:30 AM	7	169	0	176	36	1	6	43	0	69	7	76	2	0	1	3	298
07:45 AM	8	223	0	231	39	0	9	48	1	74	13	88	1	0	7	8	375
08:00 AM	6	191	0	197	24	1	6	31	1	64	13	78	1	1	6	8	314
08:15 AM	6	202	2	210	27	2	7	36	2	93	15	110	0	0	6	6	362
Total Volume	27	785	2	814	126	4	28	158	4	300	48	352	4	1	20	25	1349
% App. Total	3.3	96.4	0.2		79.7	2.5	17.7		1.1	85.2	13.6		16	4	80		
PHF	.844	.880	.250	.881	.808	.500	.778	.823	.500	.806	.800	.800	.500	.250	.714	.781	.899

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
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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:

	07:30 AM				07:30 AM				07:45 AM				07:15 AM			
+0 mins.	7	169	0	176	36	1	6	43	1	74	13	88	0	2	6	8
+15 mins.	8	223	0	231	39	0	9	48	1	64	13	78	2	0	1	3
+30 mins.	6	191	0	197	24	1	6	31	2	93	15	110	1	0	7	8
+45 mins.	6	202	2	210	27	2	7	36	2	71	10	83	1	1	6	8
Total Volume	27	785	2	814	126	4	28	158	6	302	51	359	4	3	20	27
% App. Total	3.3	96.4	0.2		79.7	2.5	17.7		1.7	84.1	14.2		14.8	11.1	74.1	
PHF	.844	.880	.250	.881	.808	.500	.778	.823	.750	.812	.850	.816	.500	.375	.714	.844

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

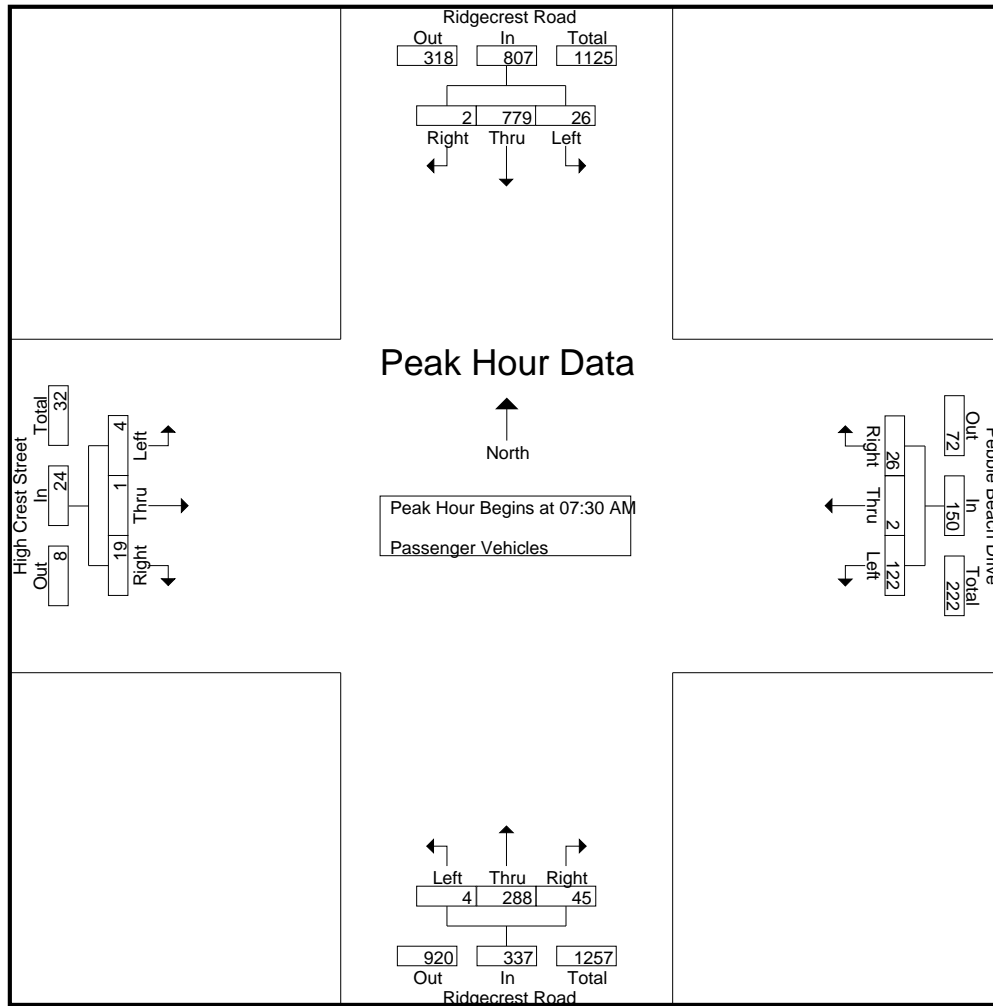
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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	142	2	146	26	0	6	32	0	40	4	44	0	0	6	6	228
07:15 AM	3	147	1	151	23	1	3	27	0	45	6	51	0	2	5	7	236
07:30 AM	6	167	0	173	35	0	6	41	0	66	7	73	2	0	1	3	290
07:45 AM	8	221	0	229	38	0	9	47	1	71	11	83	1	0	7	8	367
Total	19	677	3	699	122	1	24	147	1	222	28	251	3	2	19	24	1121
08:00 AM	6	189	0	195	23	1	6	30	1	61	13	75	1	1	5	7	307
08:15 AM	6	202	2	210	26	1	5	32	2	90	14	106	0	0	6	6	354
08:30 AM	0	124	1	125	26	1	4	31	2	69	10	81	1	0	3	4	241
08:45 AM	3	161	1	165	21	0	3	24	0	53	9	62	0	0	3	3	254
Total	15	676	4	695	96	3	18	117	5	273	46	324	2	1	17	20	1156
Grand Total	34	1353	7	1394	218	4	42	264	6	495	74	575	5	3	36	44	2277
Apprch %	2.4	97.1	0.5		82.6	1.5	15.9		1	86.1	12.9		11.4	6.8	81.8		
Total %	1.5	59.4	0.3	61.2	9.6	0.2	1.8	11.6	0.3	21.7	3.2	25.3	0.2	0.1	1.6	1.9	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	6	167	0	173	35	0	6	41	0	66	7	73	2	0	1	3	290
07:45 AM	8	221	0	229	38	0	9	47	1	71	11	83	1	0	7	8	367
08:00 AM	6	189	0	195	23	1	6	30	1	61	13	75	1	1	5	7	307
08:15 AM	6	202	2	210	26	1	5	32	2	90	14	106	0	0	6	6	354
Total Volume	26	779	2	807	122	2	26	150	4	288	45	337	4	1	19	24	1318
% App. Total	3.2	96.5	0.2		81.3	1.3	17.3		1.2	85.5	13.4		16.7	4.2	79.2		
PHF	.813	.881	.250	.881	.803	.500	.722	.798	.500	.800	.804	.795	.500	.250	.679	.750	.898

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	6	167	0	173	35	0	6	41	0	66	7	73	2	0	1	3
+15 mins.	8	221	0	229	38	0	9	47	1	71	11	83	1	0	7	8
+30 mins.	6	189	0	195	23	1	6	30	1	61	13	75	1	1	5	7
+45 mins.	6	202	2	210	26	1	5	32	2	90	14	106	0	0	6	6
Total Volume	26	779	2	807	122	2	26	150	4	288	45	337	4	1	19	24
% App. Total	3.2	96.5	0.2		81.3	1.3	17.3		1.2	85.5	13.4		16.7	4.2	79.2	
PHF	.813	.881	.250	.881	.803	.500	.722	.798	.500	.800	.804	.795	.500	.250	.679	.750

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

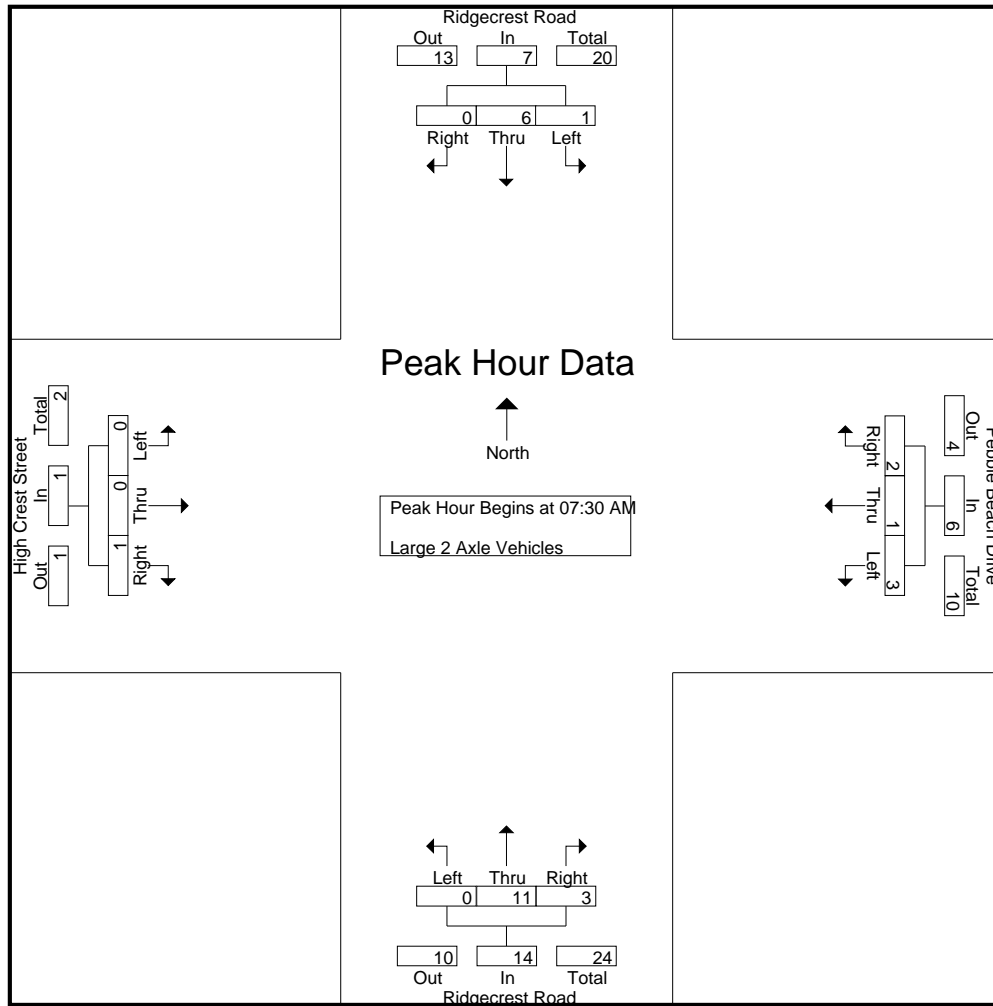
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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	1	0	1	0	0	0	0	0	6	0	6	0	1	0	1	8
07:15 AM	0	3	0	3	0	0	1	1	1	0	1	2	0	0	1	1	7
07:30 AM	1	2	0	3	1	0	0	1	0	3	0	3	0	0	0	0	7
07:45 AM	0	2	0	2	1	0	0	1	0	2	2	4	0	0	0	0	7
Total	1	8	0	9	2	0	1	3	1	11	3	15	0	1	1	2	29
08:00 AM	0	2	0	2	1	0	0	1	0	3	0	3	0	0	1	1	7
08:15 AM	0	0	0	0	0	1	2	3	0	3	1	4	0	0	0	0	7
08:30 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	1	0	1	6
08:45 AM	0	7	0	7	0	0	0	0	0	5	0	5	0	0	0	0	12
Total	0	12	0	12	1	1	2	4	0	13	1	14	0	1	1	2	32
Grand Total	1	20	0	21	3	1	3	7	1	24	4	29	0	2	2	4	61
Apprch %	4.8	95.2	0		42.9	14.3	42.9		3.4	82.8	13.8		0	50	50		
Total %	1.6	32.8	0	34.4	4.9	1.6	4.9	11.5	1.6	39.3	6.6	47.5	0	3.3	3.3	6.6	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	2	0	3	1	0	0	1	0	3	0	3	0	0	0	0	7
07:45 AM	0	2	0	2	1	0	0	1	0	2	2	4	0	0	0	0	7
08:00 AM	0	2	0	2	1	0	0	1	0	3	0	3	0	0	1	1	7
08:15 AM	0	0	0	0	0	1	2	3	0	3	1	4	0	0	0	0	7
Total Volume	1	6	0	7	3	1	2	6	0	11	3	14	0	0	1	1	28
% App. Total	14.3	85.7	0		50	16.7	33.3		0	78.6	21.4		0	0	100		
PHF	.250	.750	.000	.583	.750	.250	.250	.500	.000	.917	.375	.875	.000	.000	.250	.250	1.00

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	2	0	3	1	0	0	1	0	3	0	3	0	0	0	0
+15 mins.	0	2	0	2	1	0	0	1	0	2	2	4	0	0	0	0
+30 mins.	0	2	0	2	1	0	0	1	0	3	0	3	0	0	1	1
+45 mins.	0	0	0	0	0	1	2	3	0	3	1	4	0	0	0	0
Total Volume	1	6	0	7	3	1	2	6	0	11	3	14	0	0	1	1
% App. Total	14.3	85.7	0		50	16.7	33.3		0	78.6	21.4		0	0	100	
PHF	.250	.750	.000	.583	.750	.250	.250	.500	.000	.917	.375	.875	.000	.000	.250	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

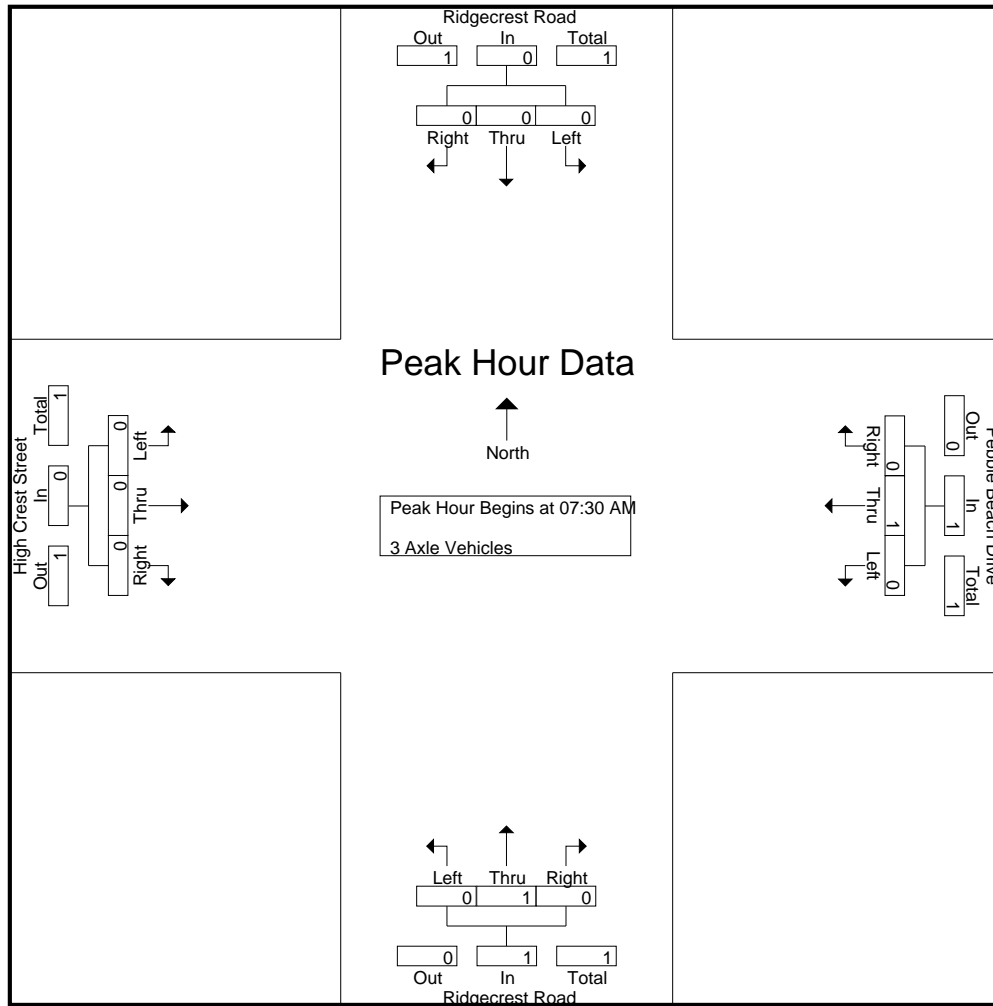
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
Grand Total	0	1	0	1	1	1	0	2	0	2	0	2	0	0	0	0	5
Apprch %	0	100	0		50	50	0		0	100	0		0	0	0		
Total %	0	20	0	20	20	20	0	40	0	40	0	40	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
% App. Total	0	0	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.500

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
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 Page No : 1

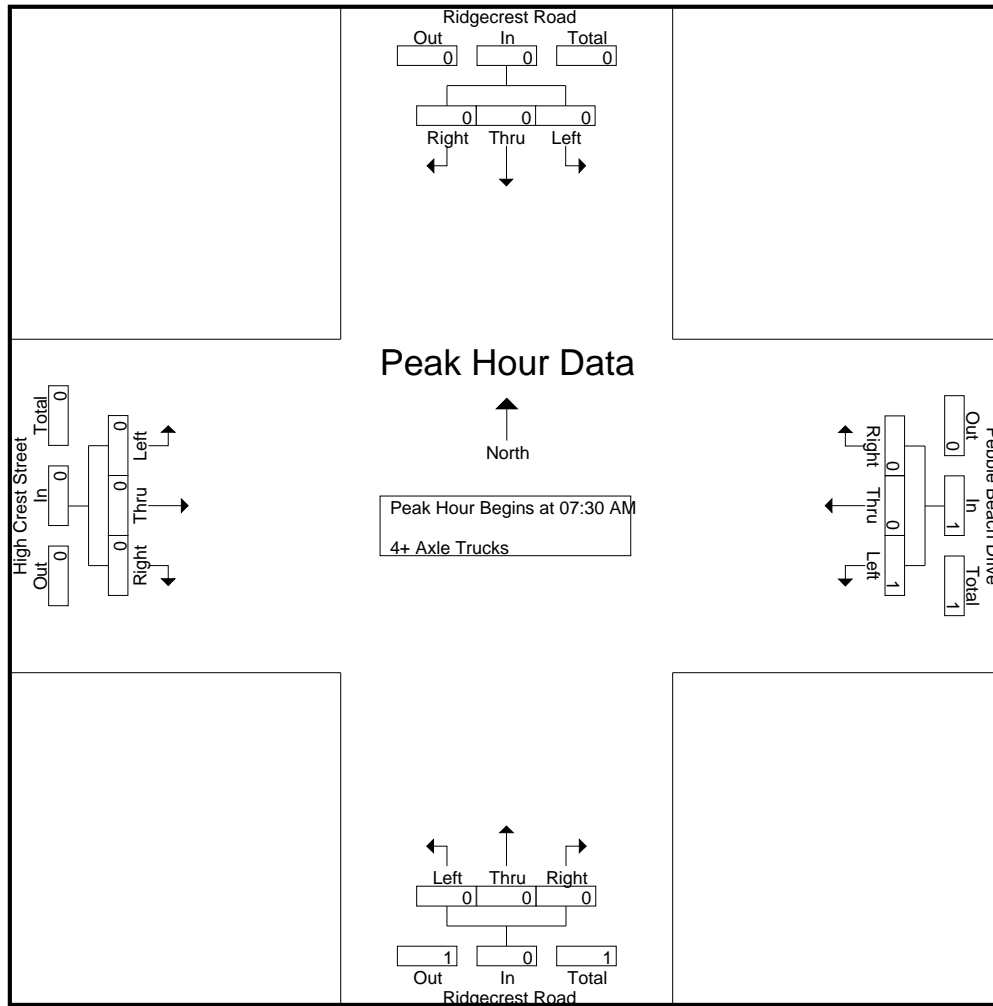
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		100	0	0		0	0	0		0	0	0		
Total %	0	0	0	0	100	0	0	100	0	0	0	0	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0		100	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

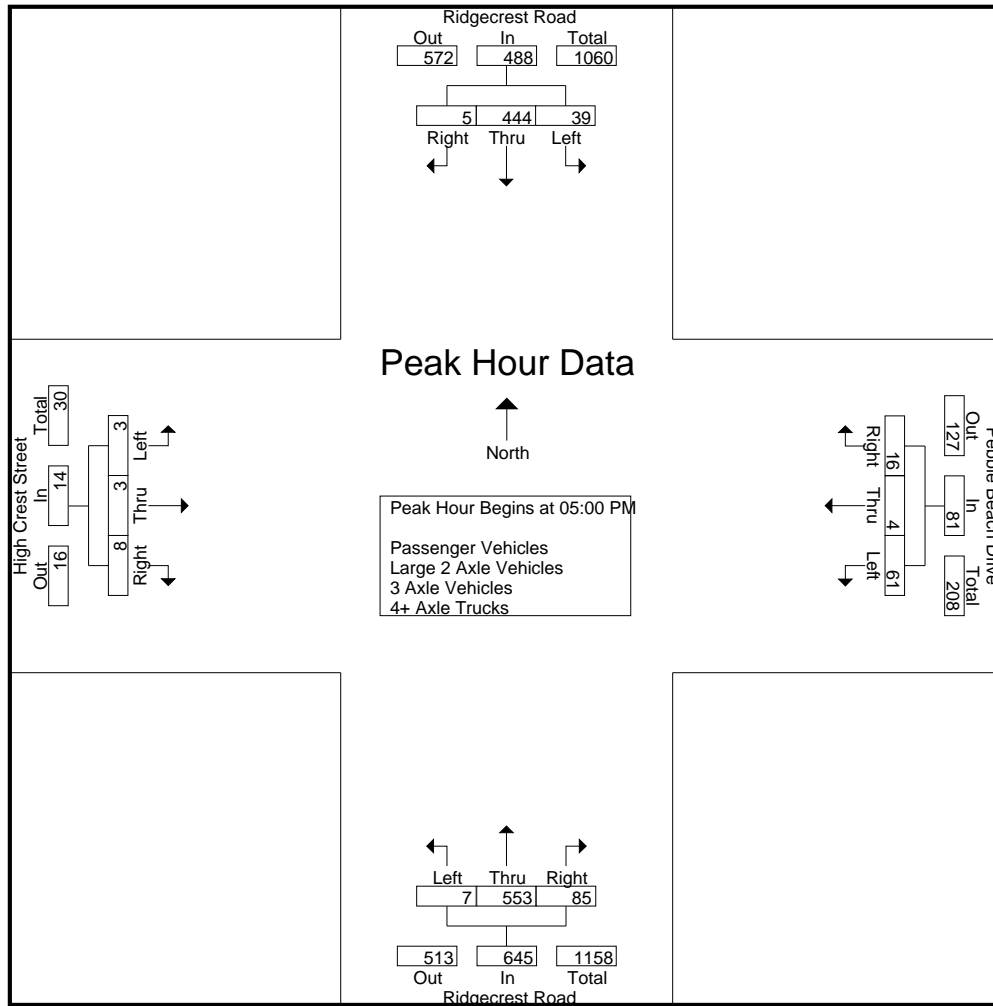
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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	107	0	111	14	3	5	22	3	133	20	156	0	1	5	6	295
04:15 PM	5	106	1	112	13	0	5	18	2	130	20	152	0	2	1	3	285
04:30 PM	6	99	0	105	18	0	4	22	2	135	19	156	1	0	1	2	285
04:45 PM	5	110	0	115	18	0	4	22	2	139	13	154	0	0	0	0	291
Total	20	422	1	443	63	3	18	84	9	537	72	618	1	3	7	11	1156
05:00 PM	8	107	0	115	12	0	4	16	0	136	27	163	0	2	1	3	297
05:15 PM	14	127	3	144	14	1	4	19	3	150	19	172	1	0	1	2	337
05:30 PM	9	98	0	107	14	2	5	21	2	127	18	147	1	0	3	4	279
05:45 PM	8	112	2	122	21	1	3	25	2	140	21	163	1	1	3	5	315
Total	39	444	5	488	61	4	16	81	7	553	85	645	3	3	8	14	1228
Grand Total	59	866	6	931	124	7	34	165	16	1090	157	1263	4	6	15	25	2384
Apprch %	6.3	93	0.6		75.2	4.2	20.6		1.3	86.3	12.4		16	24	60		
Total %	2.5	36.3	0.3	39.1	5.2	0.3	1.4	6.9	0.7	45.7	6.6	53	0.2	0.3	0.6	1	
Passenger Vehicles	58	855	6	919	119	6	34	159	16	1083	157	1256	4	6	15	25	2359
% Passenger Vehicles	98.3	98.7	100	98.7	96	85.7	100	96.4	100	99.4	100	99.4	100	100	100	100	99
Large 2 Axle Vehicles	1	11	0	12	5	1	0	6	0	7	0	7	0	0	0	0	25
% Large 2 Axle Vehicles	1.7	1.3	0	1.3	4	14.3	0	3.6	0	0.6	0	0.6	0	0	0	0	1
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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	8	107	0	115	12	0	4	16	0	136	27	163	0	2	1	3	297
05:15 PM	14	127	3	144	14	1	4	19	3	150	19	172	1	0	1	2	337
05:30 PM	9	98	0	107	14	2	5	21	2	127	18	147	1	0	3	4	279
05:45 PM	8	112	2	122	21	1	3	25	2	140	21	163	1	1	3	5	315
Total Volume	39	444	5	488	61	4	16	81	7	553	85	645	3	3	8	14	1228
% App. Total	8	91	1		75.3	4.9	19.8		1.1	85.7	13.2		21.4	21.4	57.1		
PHF	.696	.874	.417	.847	.726	.500	.800	.810	.583	.922	.787	.938	.750	.375	.667	.700	.911

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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				04:00 PM				04:30 PM				05:00 PM			
+0 mins.	8	107	0	115	14	3	5	22	2	135	19	156	0	2	1	3
+15 mins.	14	127	3	144	13	0	5	18	2	139	13	154	1	0	1	2
+30 mins.	9	98	0	107	18	0	4	22	0	136	27	163	1	0	3	4
+45 mins.	8	112	2	122	18	0	4	22	3	150	19	172	1	1	3	5
Total Volume	39	444	5	488	63	3	18	84	7	560	78	645	3	3	8	14
% App. Total	8	91	1		75	3.6	21.4		1.1	86.8	12.1		21.4	21.4	57.1	
PHF	.696	.874	.417	.847	.875	.250	.900	.955	.583	.933	.722	.938	.750	.375	.667	.700

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

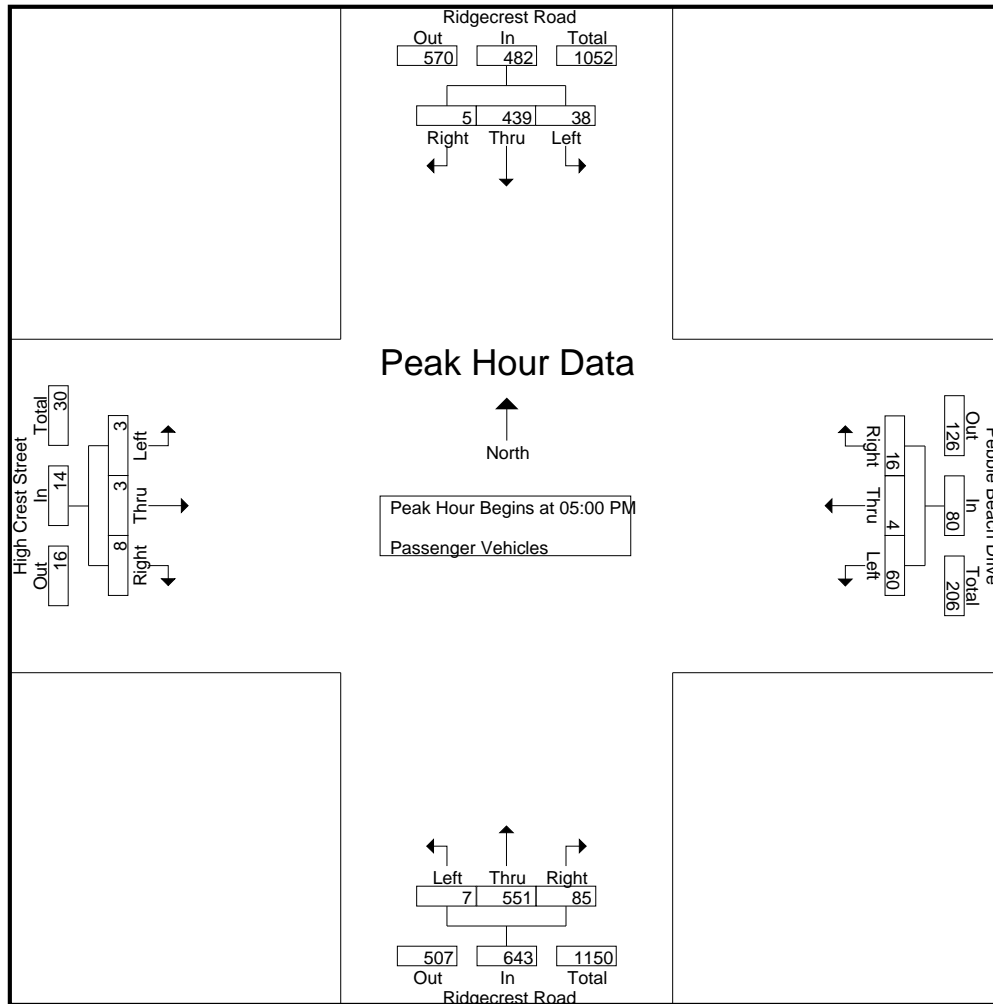
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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	104	0	108	14	2	5	21	3	130	20	153	0	1	5	6	288
04:15 PM	5	105	1	111	11	0	5	16	2	129	20	151	0	2	1	3	281
04:30 PM	6	98	0	104	16	0	4	20	2	135	19	156	1	0	1	2	282
04:45 PM	5	109	0	114	18	0	4	22	2	138	13	153	0	0	0	0	289
Total	20	416	1	437	59	2	18	79	9	532	72	613	1	3	7	11	1140
05:00 PM	8	105	0	113	12	0	4	16	0	136	27	163	0	2	1	3	295
05:15 PM	14	125	3	142	14	1	4	19	3	149	19	171	1	0	1	2	334
05:30 PM	8	97	0	105	13	2	5	20	2	127	18	147	1	0	3	4	276
05:45 PM	8	112	2	122	21	1	3	25	2	139	21	162	1	1	3	5	314
Total	38	439	5	482	60	4	16	80	7	551	85	643	3	3	8	14	1219
Grand Total	58	855	6	919	119	6	34	159	16	1083	157	1256	4	6	15	25	2359
Apprch %	6.3	93	0.7		74.8	3.8	21.4		1.3	86.2	12.5		16	24	60		
Total %	2.5	36.2	0.3	39	5	0.3	1.4	6.7	0.7	45.9	6.7	53.2	0.2	0.3	0.6	1.1	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	8	105	0	113	12	0	4	16	0	136	27	163	0	2	1	3	295
05:15 PM	14	125	3	142	14	1	4	19	3	149	19	171	1	0	1	2	334
05:30 PM	8	97	0	105	13	2	5	20	2	127	18	147	1	0	3	4	276
05:45 PM	8	112	2	122	21	1	3	25	2	139	21	162	1	1	3	5	314
Total Volume	38	439	5	482	60	4	16	80	7	551	85	643	3	3	8	14	1219
% App. Total	7.9	91.1	1		75	5	20		1.1	85.7	13.2		21.4	21.4	57.1		
PHF	.679	.878	.417	.849	.714	.500	.800	.800	.583	.924	.787	.940	.750	.375	.667	.700	.912

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	8	105	0	113	12	0	4	16	0	136	27	163	0	2	1	3
+15 mins.	14	125	3	142	14	1	4	19	3	149	19	171	1	0	1	2
+30 mins.	8	97	0	105	13	2	5	20	2	127	18	147	1	0	3	4
+45 mins.	8	112	2	122	21	1	3	25	2	139	21	162	1	1	3	5
Total Volume	38	439	5	482	60	4	16	80	7	551	85	643	3	3	8	14
% App. Total	7.9	91.1	1		75	5	20		1.1	85.7	13.2		21.4	21.4	57.1	
PHF	.679	.878	.417	.849	.714	.500	.800	.800	.583	.924	.787	.940	.750	.375	.667	.700

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

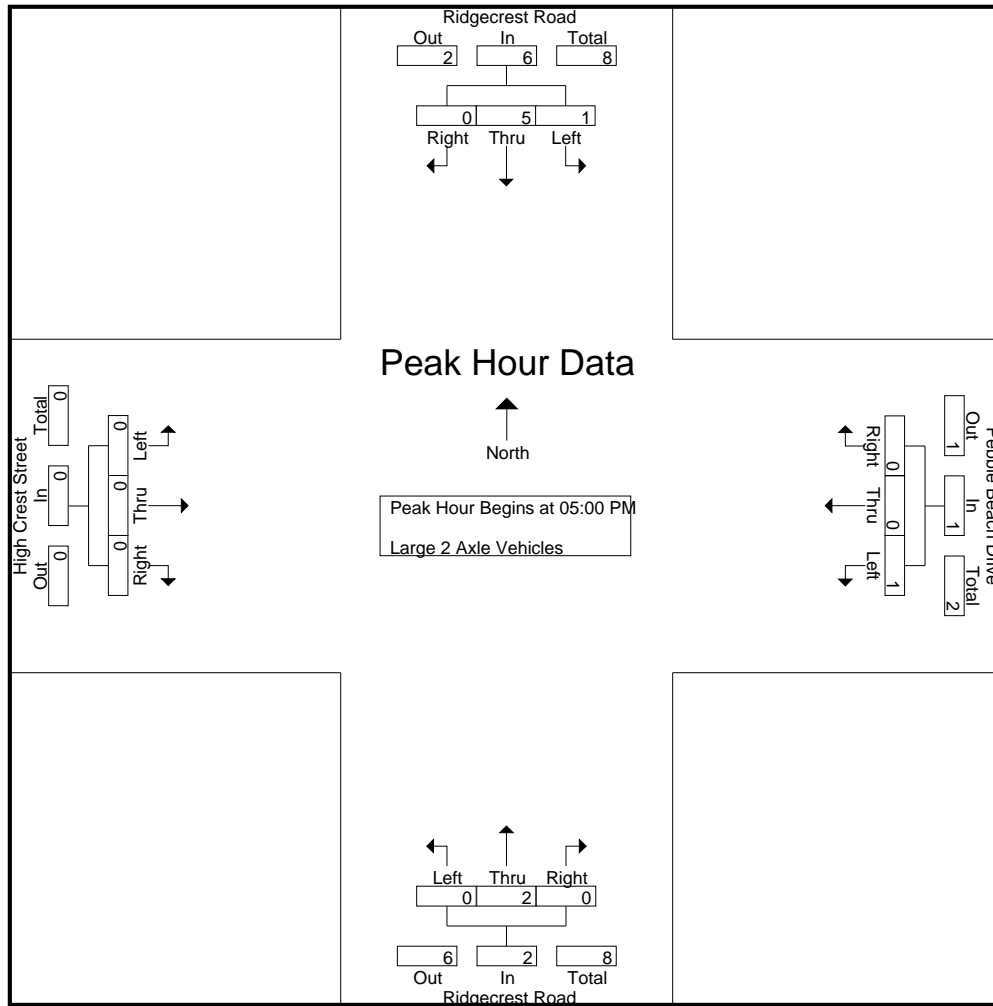
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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	3	0	3	0	1	0	1	0	3	0	3	0	0	0	0	7
04:15 PM	0	1	0	1	2	0	0	2	0	1	0	1	0	0	0	0	4
04:30 PM	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	6	0	6	4	1	0	5	0	5	0	5	0	0	0	0	16
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	1	1	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	1	5	0	6	1	0	0	1	0	2	0	2	0	0	0	0	9
Grand Total	1	11	0	12	5	1	0	6	0	7	0	7	0	0	0	0	25
Apprch %	8.3	91.7	0		83.3	16.7	0		0	100	0		0	0	0		
Total %	4	44	0	48	20	4	0	24	0	28	0	28	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	1	1	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	1	5	0	6	1	0	0	1	0	2	0	2	0	0	0	0	9
% App. Total	16.7	83.3	0		100	0	0		0	100	0		0	0	0		
PHF	.250	.625	.000	.750	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.750

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	1	1	0	2	1	0	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	1	5	0	6	1	0	0	1	0	2	0	2	0	0	0	0
% App. Total	16.7	83.3	0		100	0	0		0	100	0		0	0	0	
PHF	.250	.625	.000	.750	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

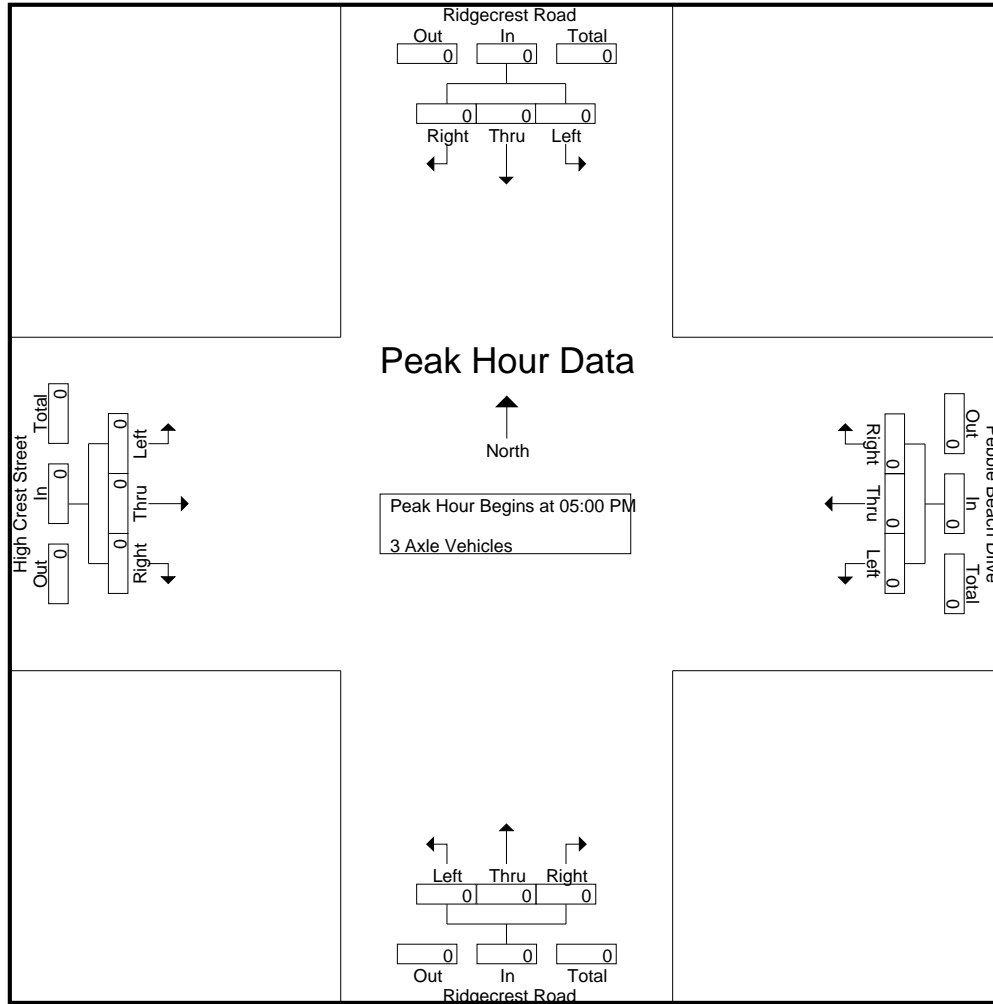
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

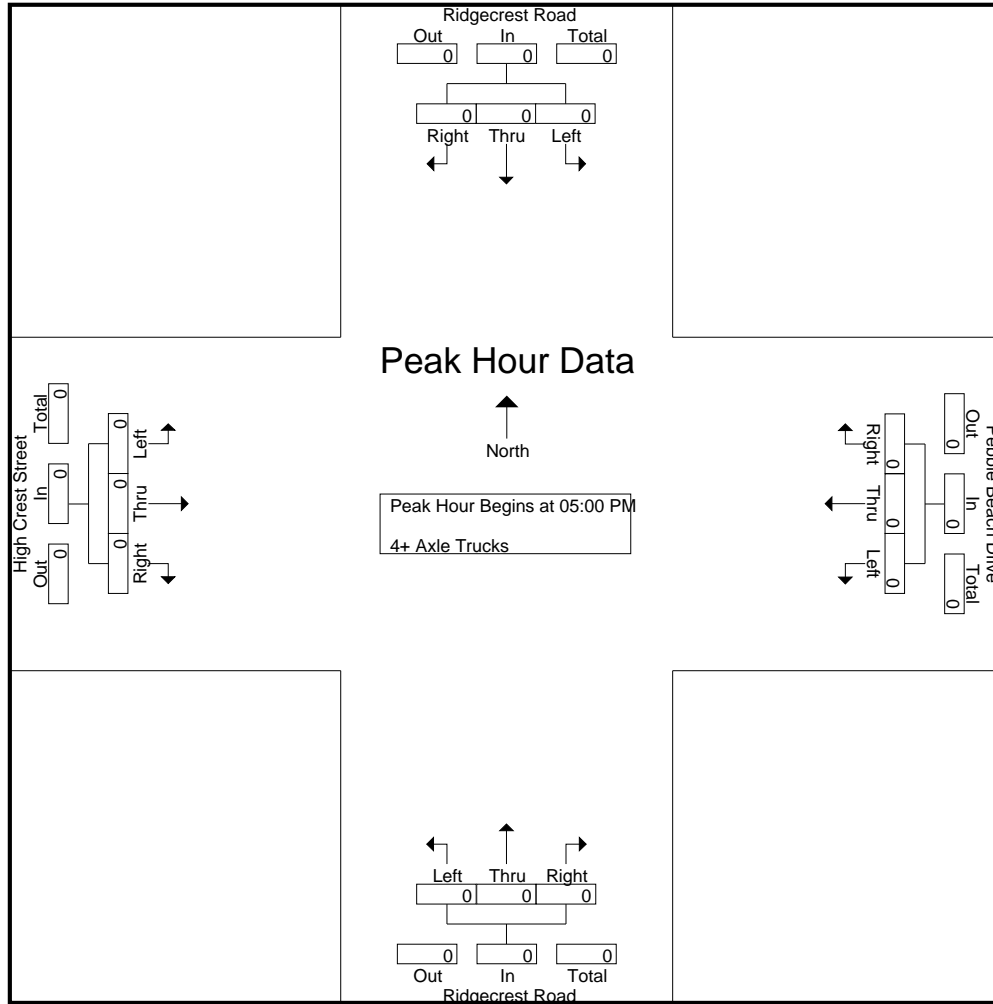
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Ridgecrest Road Southbound				Pebble Beach Drive Westbound				Ridgecrest Road Northbound				High Crest Street 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: High Crest St/Pebble Beach Drive
 Weather: Clear

File Name : 02_VIC_Ridgecrest_High Crest_Pebble Beach PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

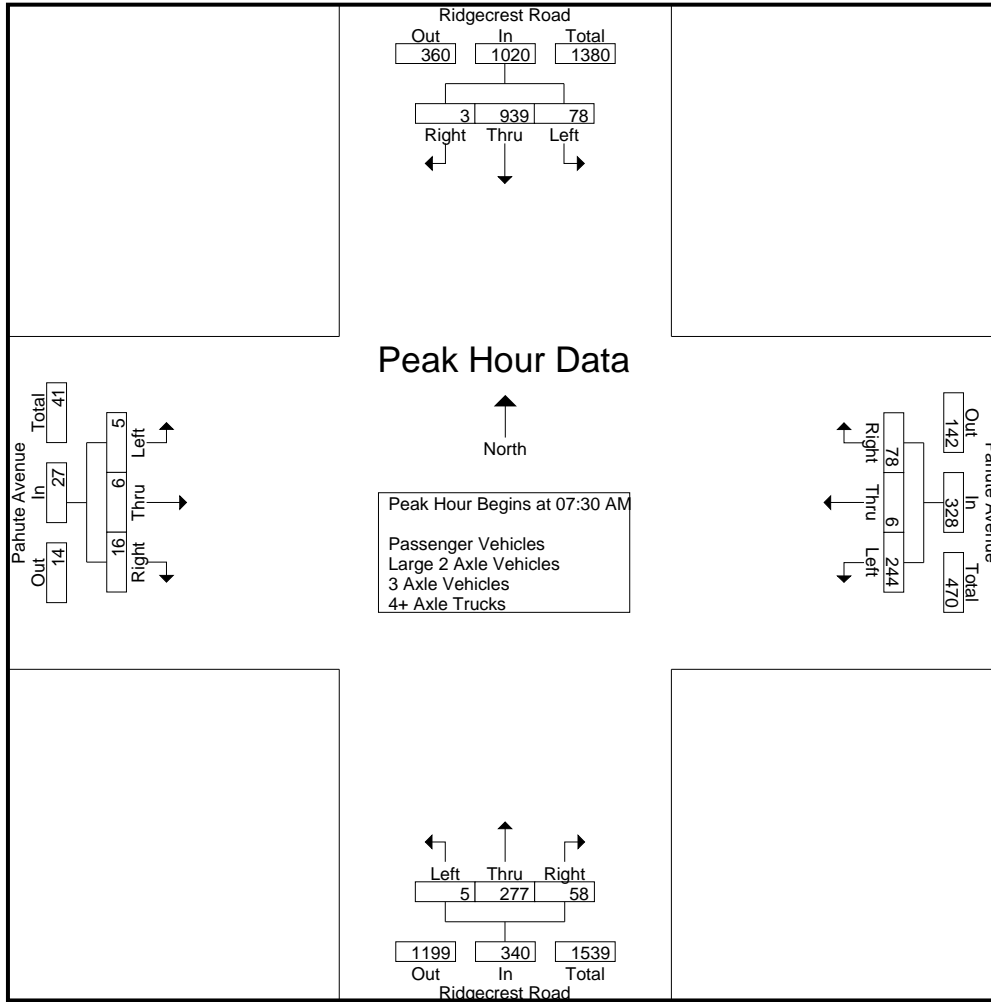
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	177	0	177	18	1	6	25	2	45	7	54	0	1	3	4	260
07:15 AM	5	215	0	220	31	0	4	35	1	58	2	61	2	0	7	9	325
07:30 AM	5	256	0	261	29	1	3	33	1	78	6	85	2	1	8	11	390
07:45 AM	17	260	0	277	65	2	13	80	1	56	15	72	2	1	5	8	437
Total	27	908	0	935	143	4	26	173	5	237	30	272	6	3	23	32	1412
08:00 AM	33	203	2	238	76	2	23	101	2	67	14	83	0	3	0	3	425
08:15 AM	23	220	1	244	74	1	39	114	1	76	23	100	1	1	3	5	463
08:30 AM	11	140	0	151	46	1	8	55	3	81	12	96	0	1	0	1	303
08:45 AM	21	178	0	199	61	0	13	74	2	59	16	77	1	0	2	3	353
Total	88	741	3	832	257	4	83	344	8	283	65	356	2	5	5	12	1544
Grand Total	115	1649	3	1767	400	8	109	517	13	520	95	628	8	8	28	44	2956
Apprch %	6.5	93.3	0.2		77.4	1.5	21.1		2.1	82.8	15.1		18.2	18.2	63.6		
Total %	3.9	55.8	0.1	59.8	13.5	0.3	3.7	17.5	0.4	17.6	3.2	21.2	0.3	0.3	0.9	1.5	
Passenger Vehicles	112	1629	3	1744	392	8	107	507	11	502	88	601	8	8	28	44	2896
% Passenger Vehicles	97.4	98.8	100	98.7	98	100	98.2	98.1	84.6	96.5	92.6	95.7	100	100	100	100	98
Large 2 Axle Vehicles	2	15	0	17	7	0	0	7	2	16	7	25	0	0	0	0	49
% Large 2 Axle Vehicles	1.7	0.9	0	1	1.8	0	0	1.4	15.4	3.1	7.4	4	0	0	0	0	1.7
3 Axle Vehicles	0	5	0	5	1	0	1	2	0	2	0	2	0	0	0	0	9
% 3 Axle Vehicles	0	0.3	0	0.3	0.2	0	0.9	0.4	0	0.4	0	0.3	0	0	0	0	0.3
4+ Axle Trucks	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
% 4+ Axle Trucks	0.9	0	0	0.1	0	0	0.9	0.2	0	0	0	0	0	0	0	0	0.1

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	256	0	261	29	1	3	33	1	78	6	85	2	1	8	11	390
07:45 AM	17	260	0	277	65	2	13	80	1	56	15	72	2	1	5	8	437
08:00 AM	33	203	2	238	76	2	23	101	2	67	14	83	0	3	0	3	425
08:15 AM	23	220	1	244	74	1	39	114	1	76	23	100	1	1	3	5	463
Total Volume	78	939	3	1020	244	6	78	328	5	277	58	340	5	6	16	27	1715
% App. Total	7.6	92.1	0.3		74.4	1.8	23.8		1.5	81.5	17.1		18.5	22.2	59.3		
PHF	.591	.903	.375	.921	.803	.750	.500	.719	.625	.888	.630	.850	.625	.500	.500	.614	.926

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 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:

	07:30 AM				07:45 AM				08:00 AM				07:00 AM			
+0 mins.	5	256	0	261	65	2	13	80	2	67	14	83	0	1	3	4
+15 mins.	17	260	0	277	76	2	23	101	1	76	23	100	2	0	7	9
+30 mins.	33	203	2	238	74	1	39	114	3	81	12	96	2	1	8	11
+45 mins.	23	220	1	244	46	1	8	55	2	59	16	77	2	1	5	8
Total Volume	78	939	3	1020	261	6	83	350	8	283	65	356	6	3	23	32
% App. Total	7.6	92.1	0.3		74.6	1.7	23.7		2.2	79.5	18.3		18.8	9.4	71.9	
PHF	.591	.903	.375	.921	.859	.750	.532	.768	.667	.873	.707	.890	.750	.750	.719	.727

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

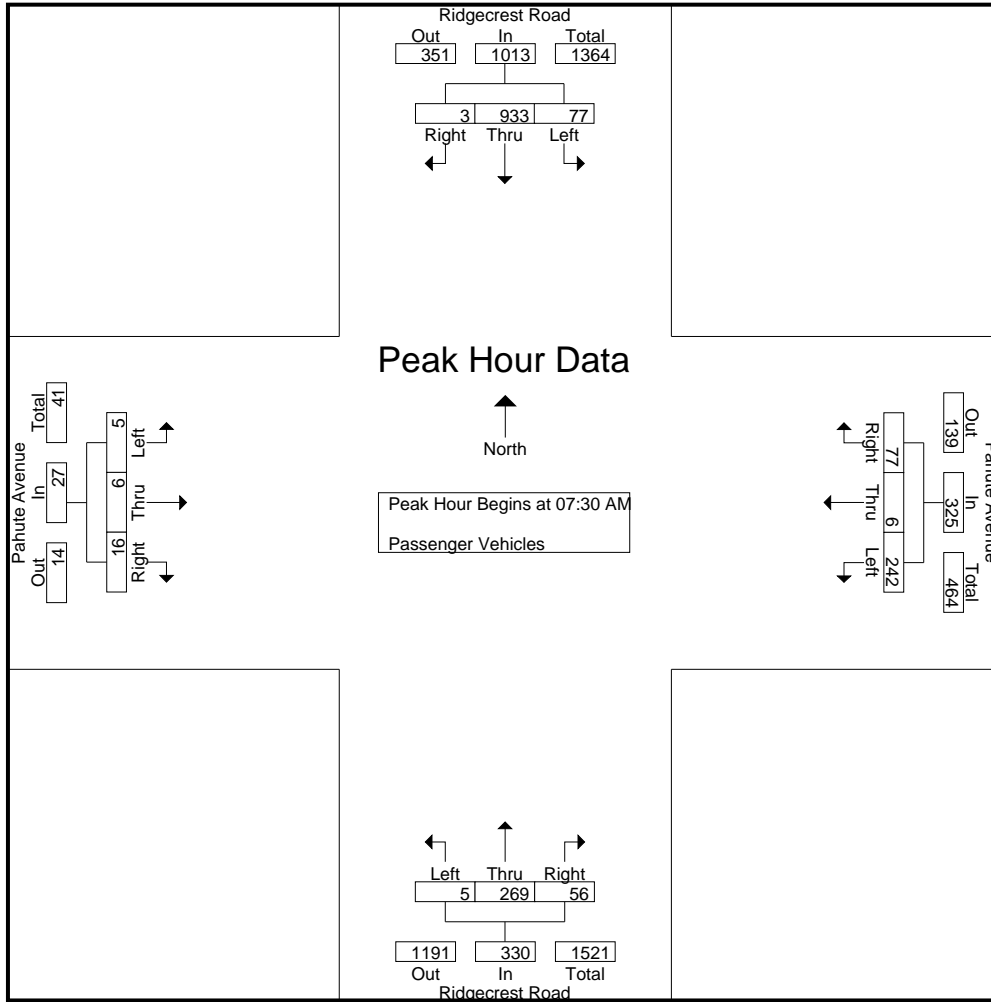
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	175	0	175	16	1	6	23	1	43	7	51	0	1	3	4	253
07:15 AM	5	211	0	216	31	0	4	35	1	55	2	58	2	0	7	9	318
07:30 AM	5	253	0	258	29	1	3	33	1	75	6	82	2	1	8	11	384
07:45 AM	17	259	0	276	64	2	12	78	1	55	15	71	2	1	5	8	433
Total	27	898	0	925	140	4	25	169	4	228	30	262	6	3	23	32	1388
08:00 AM	33	202	2	237	75	2	23	100	2	67	12	81	0	3	0	3	421
08:15 AM	22	219	1	242	74	1	39	114	1	72	23	96	1	1	3	5	457
08:30 AM	10	139	0	149	45	1	8	54	3	79	8	90	0	1	0	1	294
08:45 AM	20	171	0	191	58	0	12	70	1	56	15	72	1	0	2	3	336
Total	85	731	3	819	252	4	82	338	7	274	58	339	2	5	5	12	1508
Grand Total	112	1629	3	1744	392	8	107	507	11	502	88	601	8	8	28	44	2896
Apprch %	6.4	93.4	0.2		77.3	1.6	21.1		1.8	83.5	14.6		18.2	18.2	63.6		
Total %	3.9	56.2	0.1	60.2	13.5	0.3	3.7	17.5	0.4	17.3	3	20.8	0.3	0.3	1	1.5	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	253	0	258	29	1	3	33	1	75	6	82	2	1	8	11	384
07:45 AM	17	259	0	276	64	2	12	78	1	55	15	71	2	1	5	8	433
08:00 AM	33	202	2	237	75	2	23	100	2	67	12	81	0	3	0	3	421
08:15 AM	22	219	1	242	74	1	39	114	1	72	23	96	1	1	3	5	457
Total Volume	77	933	3	1013	242	6	77	325	5	269	56	330	5	6	16	27	1695
% App. Total	7.6	92.1	0.3		74.5	1.8	23.7		1.5	81.5	17		18.5	22.2	59.3		
PHF	.583	.901	.375	.918	.807	.750	.494	.713	.625	.897	.609	.859	.625	.500	.500	.614	.927

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	5	253	0	258	29	1	3	33	1	75	6	82	2	1	8	11
+15 mins.	17	259	0	276	64	2	12	78	1	55	15	71	2	1	5	8
+30 mins.	33	202	2	237	75	2	23	100	2	67	12	81	0	3	0	3
+45 mins.	22	219	1	242	74	1	39	114	1	72	23	96	1	1	3	5
Total Volume	77	933	3	1013	242	6	77	325	5	269	56	330	5	6	16	27
% App. Total	7.6	92.1	0.3		74.5	1.8	23.7		1.5	81.5	17		18.5	22.2	59.3	
PHF	.583	.901	.375	.918	.807	.750	.494	.713	.625	.897	.609	.859	.625	.500	.500	.614

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

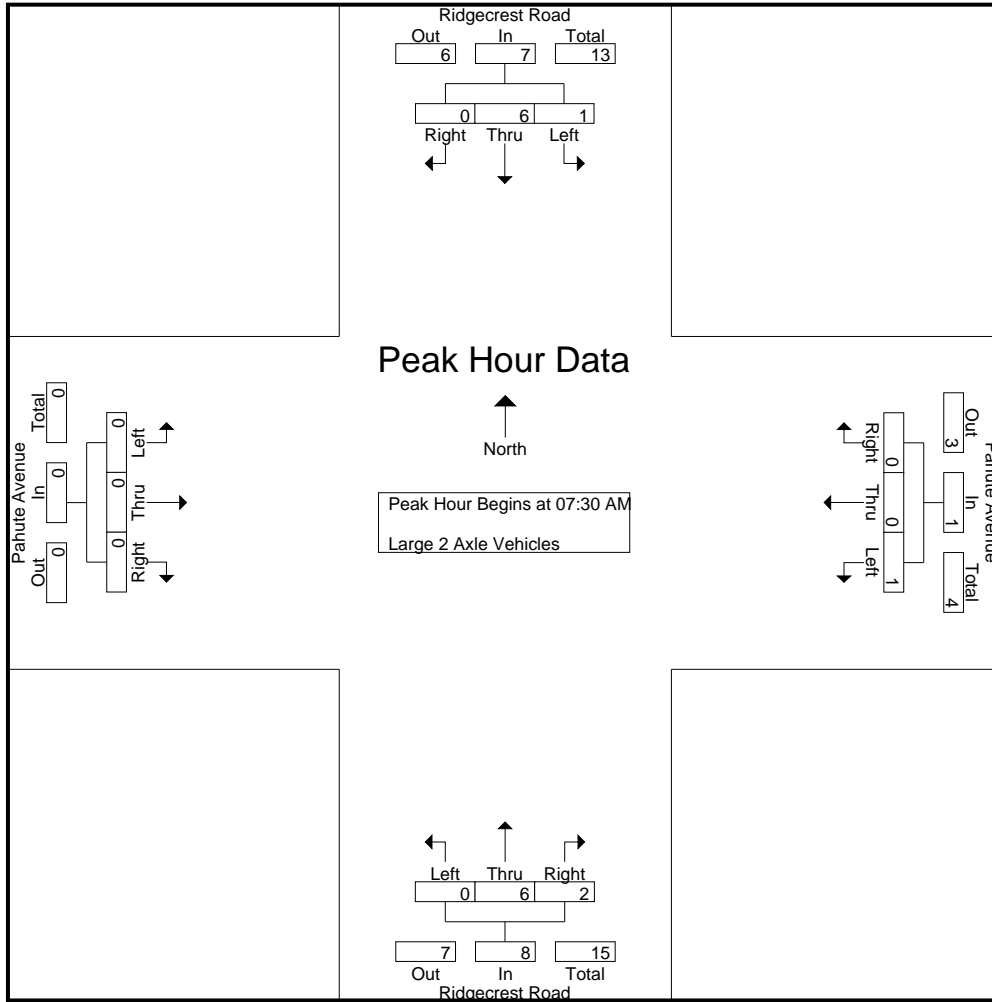
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	2	0	2	2	0	0	2	1	2	0	3	0	0	0	0	7
07:15 AM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
07:30 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
07:45 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
Total	0	9	0	9	3	0	0	3	1	7	0	8	0	0	0	0	20
08:00 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
08:15 AM	1	1	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
08:30 AM	0	0	0	0	1	0	0	1	0	2	4	6	0	0	0	0	7
08:45 AM	1	4	0	5	3	0	0	3	1	3	1	5	0	0	0	0	13
Total	2	6	0	8	4	0	0	4	1	9	7	17	0	0	0	0	29
Grand Total	2	15	0	17	7	0	0	7	2	16	7	25	0	0	0	0	49
Apprch %	11.8	88.2	0		100	0	0		8	64	28		0	0	0		
Total %	4.1	30.6	0	34.7	14.3	0	0	14.3	4.1	32.7	14.3	51	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
07:45 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
08:00 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
08:15 AM	1	1	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
Total Volume	1	6	0	7	1	0	0	1	0	6	2	8	0	0	0	0	16
% App. Total	14.3	85.7	0		100	0	0		0	75	25		0	0	0		
PHF	.250	.500	.000	.583	.250	.000	.000	.250	.000	.375	.250	.500	.000	.000	.000	.000	.667

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	2	2	0	0	0	0
+45 mins.	1	1	0	2	0	0	0	0	0	4	0	4	0	0	0	0
Total Volume	1	6	0	7	1	0	0	1	0	6	2	8	0	0	0	0
% App. Total	14.3	85.7	0	100	100	0	0	100	0	75	25	100	0	0	0	0
PHF	.250	.500	.000	.583	.250	.000	.000	.250	.000	.375	.250	.500	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

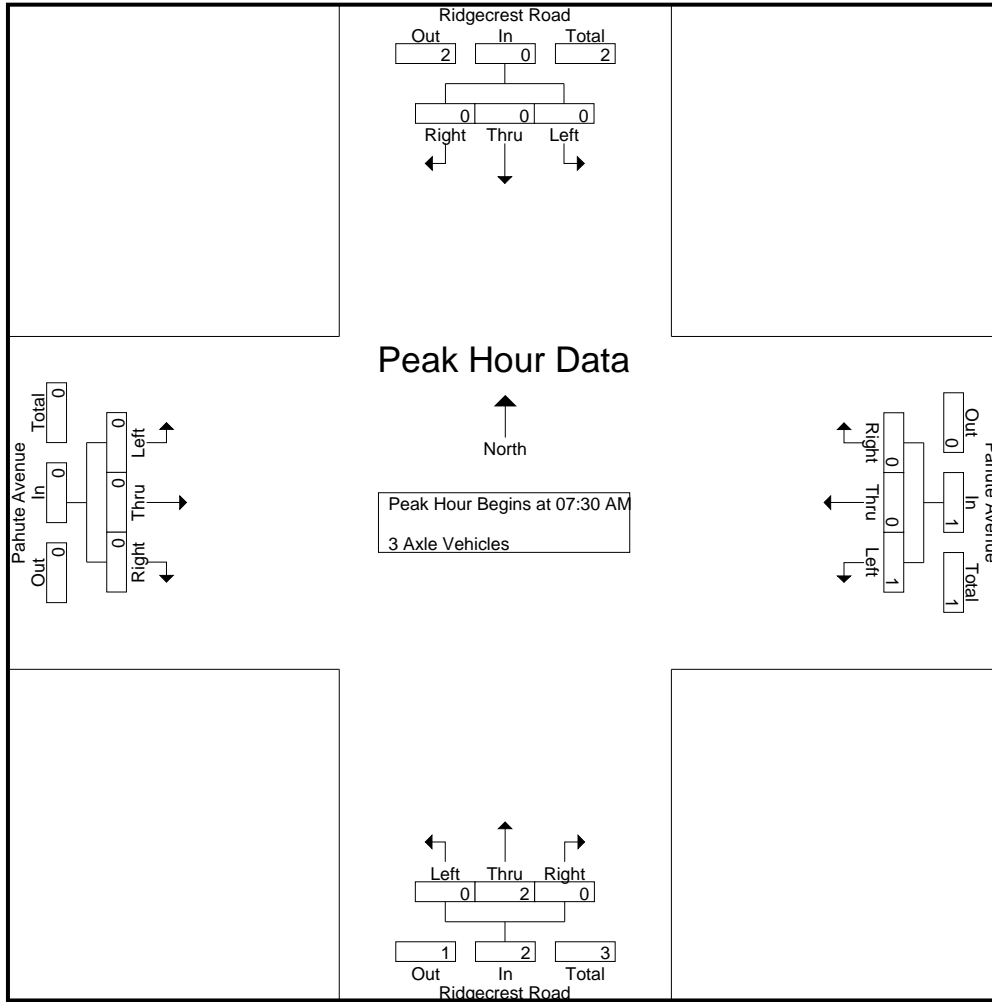
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	3	0	3	0	0	1	1	0	0	0	0	0	0	0	0	4
Total	0	4	0	4	1	0	1	2	0	0	0	0	0	0	0	0	6
Grand Total	0	5	0	5	1	0	1	2	0	2	0	2	0	0	0	0	9
Apprch %	0	100	0		50	0	50		0	100	0		0	0	0		
Total %	0	55.6	0	55.6	11.1	0	11.1	22.2	0	22.2	0	22.2	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	2	0	2	0	0	0	0	3
% App. Total	0	0	0		100	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.750

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	2	0	2	0	0	0	0
% App. Total	0	0	0	0	100	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

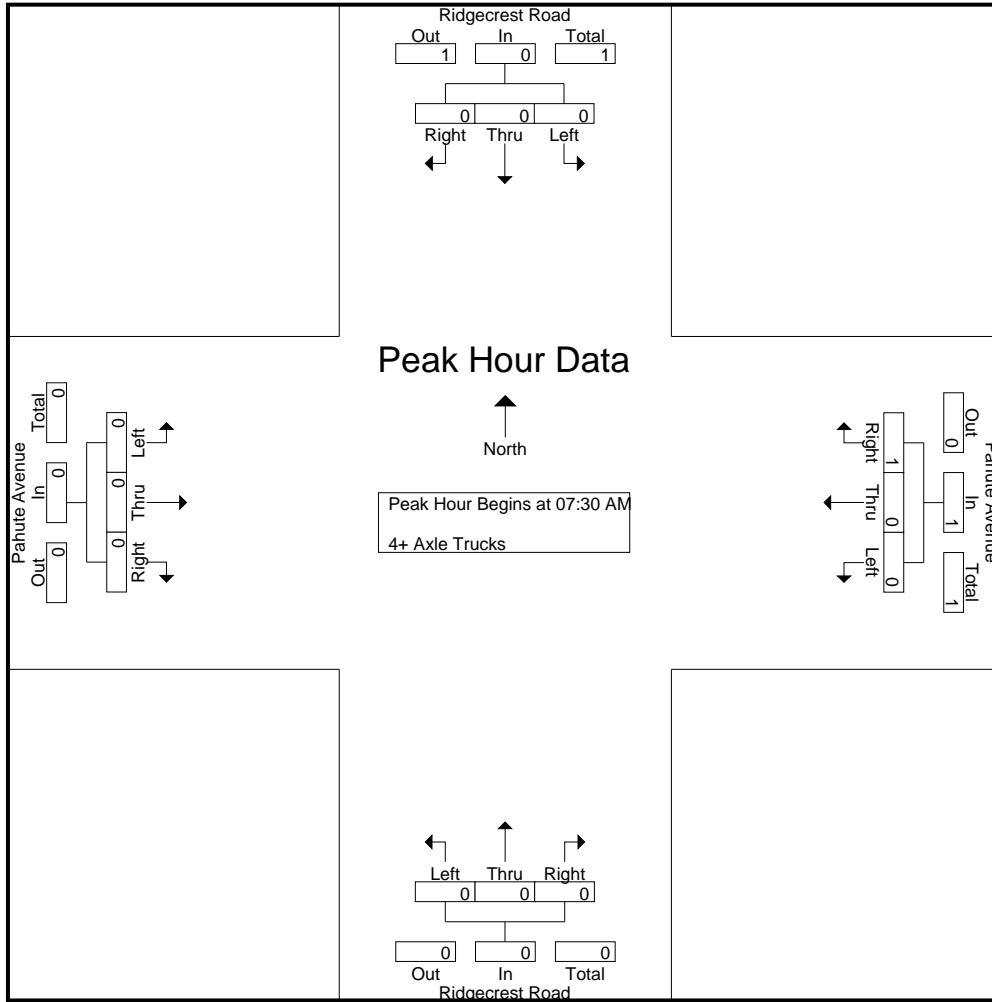
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
Apprch %	100	0	0		0	0	100		0	0	0		0	0	0		
Total %	50	0	0	50	0	0	50	50	0	0	0	0	0	0	0	0	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0		0	0	100		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute AM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

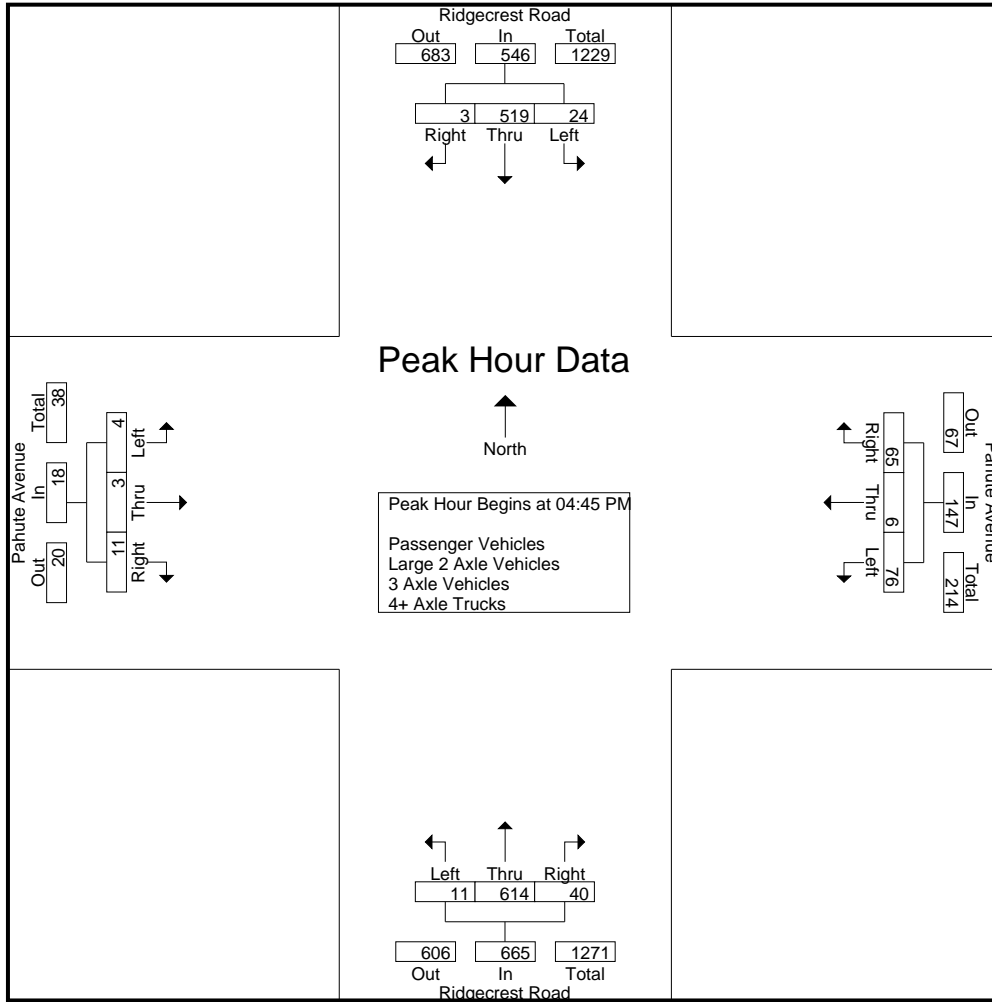
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	6	115	0	121	11	0	18	29	3	142	9	154	1	1	4	6	310
04:15 PM	5	136	0	141	16	0	10	26	4	144	10	158	2	0	4	6	331
04:30 PM	2	120	0	122	15	2	16	33	4	155	8	167	0	0	3	3	325
04:45 PM	3	145	1	149	18	0	14	32	2	152	10	164	0	2	1	3	348
Total	16	516	1	533	60	2	58	120	13	593	37	643	3	3	12	18	1314
05:00 PM	4	107	1	112	10	3	17	30	4	151	9	164	1	0	1	2	308
05:15 PM	9	154	0	163	20	2	21	43	2	150	9	161	1	0	6	7	374
05:30 PM	8	113	1	122	28	1	13	42	3	161	12	176	2	1	3	6	346
05:45 PM	4	128	0	132	38	1	13	52	2	141	12	155	0	1	2	3	342
Total	25	502	2	529	96	7	64	167	11	603	42	656	4	2	12	18	1370
Grand Total	41	1018	3	1062	156	9	122	287	24	1196	79	1299	7	5	24	36	2684
Apprch %	3.9	95.9	0.3		54.4	3.1	42.5		1.8	92.1	6.1		19.4	13.9	66.7		
Total %	1.5	37.9	0.1	39.6	5.8	0.3	4.5	10.7	0.9	44.6	2.9	48.4	0.3	0.2	0.9	1.3	
Passenger Vehicles	41	1013	3	1057	153	9	122	284	23	1194	78	1295	7	5	23	35	2671
% Passenger Vehicles	100	99.5	100	99.5	98.1	100	100	99	95.8	99.8	98.7	99.7	100	100	95.8	97.2	99.5
Large 2 Axle Vehicles	0	5	0	5	3	0	0	3	1	2	1	4	0	0	1	1	13
% Large 2 Axle Vehicles	0	0.5	0	0.5	1.9	0	0	1	4.2	0.2	1.3	0.3	0	0	4.2	2.8	0.5
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	3	145	1	149	18	0	14	32	2	152	10	164	0	2	1	3	348
05:00 PM	4	107	1	112	10	3	17	30	4	151	9	164	1	0	1	2	308
05:15 PM	9	154	0	163	20	2	21	43	2	150	9	161	1	0	6	7	374
05:30 PM	8	113	1	122	28	1	13	42	3	161	12	176	2	1	3	6	346
Total Volume	24	519	3	546	76	6	65	147	11	614	40	665	4	3	11	18	1376
% App. Total	4.4	95.1	0.5		51.7	4.1	44.2		1.7	92.3	6		22.2	16.7	61.1		
PHF	.667	.843	.750	.837	.679	.500	.774	.855	.688	.953	.833	.945	.500	.375	.458	.643	.920

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 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				05:00 PM				04:45 PM				04:00 PM			
+0 mins.	2	120	0	122	10	3	17	30	2	152	10	164	1	1	4	6
+15 mins.	3	145	1	149	20	2	21	43	4	151	9	164	2	0	4	6
+30 mins.	4	107	1	112	28	1	13	42	2	150	9	161	0	0	3	3
+45 mins.	9	154	0	163	38	1	13	52	3	161	12	176	0	2	1	3
Total Volume	18	526	2	546	96	7	64	167	11	614	40	665	3	3	12	18
% App. Total	3.3	96.3	0.4		57.5	4.2	38.3		1.7	92.3	6		16.7	16.7	66.7	
PHF	.500	.854	.500	.837	.632	.583	.762	.803	.688	.953	.833	.945	.375	.375	.750	.750

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

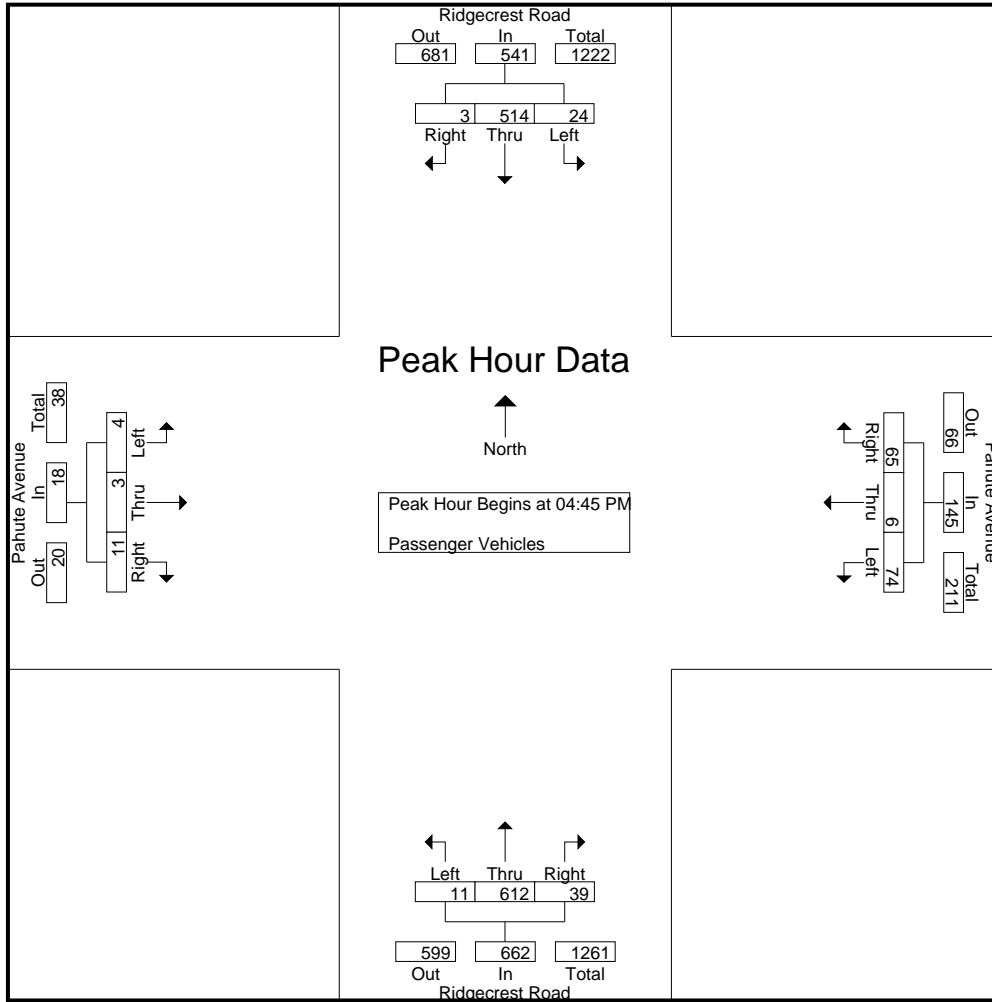
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	6	115	0	121	10	0	18	28	2	142	9	153	1	1	3	5	307
04:15 PM	5	136	0	141	16	0	10	26	4	144	10	158	2	0	4	6	331
04:30 PM	2	120	0	122	15	2	16	33	4	155	8	167	0	0	3	3	325
04:45 PM	3	143	1	147	18	0	14	32	2	152	10	164	0	2	1	3	346
Total	16	514	1	531	59	2	58	119	12	593	37	642	3	3	11	17	1309
05:00 PM	4	107	1	112	10	3	17	30	4	149	8	161	1	0	1	2	305
05:15 PM	9	151	0	160	18	2	21	41	2	150	9	161	1	0	6	7	369
05:30 PM	8	113	1	122	28	1	13	42	3	161	12	176	2	1	3	6	346
05:45 PM	4	128	0	132	38	1	13	52	2	141	12	155	0	1	2	3	342
Total	25	499	2	526	94	7	64	165	11	601	41	653	4	2	12	18	1362
Grand Total	41	1013	3	1057	153	9	122	284	23	1194	78	1295	7	5	23	35	2671
Apprch %	3.9	95.8	0.3		53.9	3.2	43		1.8	92.2	6		20	14.3	65.7		
Total %	1.5	37.9	0.1	39.6	5.7	0.3	4.6	10.6	0.9	44.7	2.9	48.5	0.3	0.2	0.9	1.3	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	3	143	1	147	18	0	14	32	2	152	10	164	0	2	1	3	346
05:00 PM	4	107	1	112	10	3	17	30	4	149	8	161	1	0	1	2	305
05:15 PM	9	151	0	160	18	2	21	41	2	150	9	161	1	0	6	7	369
05:30 PM	8	113	1	122	28	1	13	42	3	161	12	176	2	1	3	6	346
Total Volume	24	514	3	541	74	6	65	145	11	612	39	662	4	3	11	18	1366
% App. Total	4.4	95	0.6		51	4.1	44.8		1.7	92.4	5.9		22.2	16.7	61.1		
PHF	.667	.851	.750	.845	.661	.500	.774	.863	.688	.950	.813	.940	.500	.375	.458	.643	.925

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	3	143	1	147	18	0	14	32	2	152	10	164	0	2	1	3
+15 mins.	4	107	1	112	10	3	17	30	4	149	8	161	1	0	1	2
+30 mins.	9	151	0	160	18	2	21	41	2	150	9	161	1	0	6	7
+45 mins.	8	113	1	122	28	1	13	42	3	161	12	176	2	1	3	6
Total Volume	24	514	3	541	74	6	65	145	11	612	39	662	4	3	11	18
% App. Total	4.4	95	0.6		51	4.1	44.8		1.7	92.4	5.9		22.2	16.7	61.1	
PHF	.667	.851	.750	.845	.661	.500	.774	.863	.688	.950	.813	.940	.500	.375	.458	.643

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

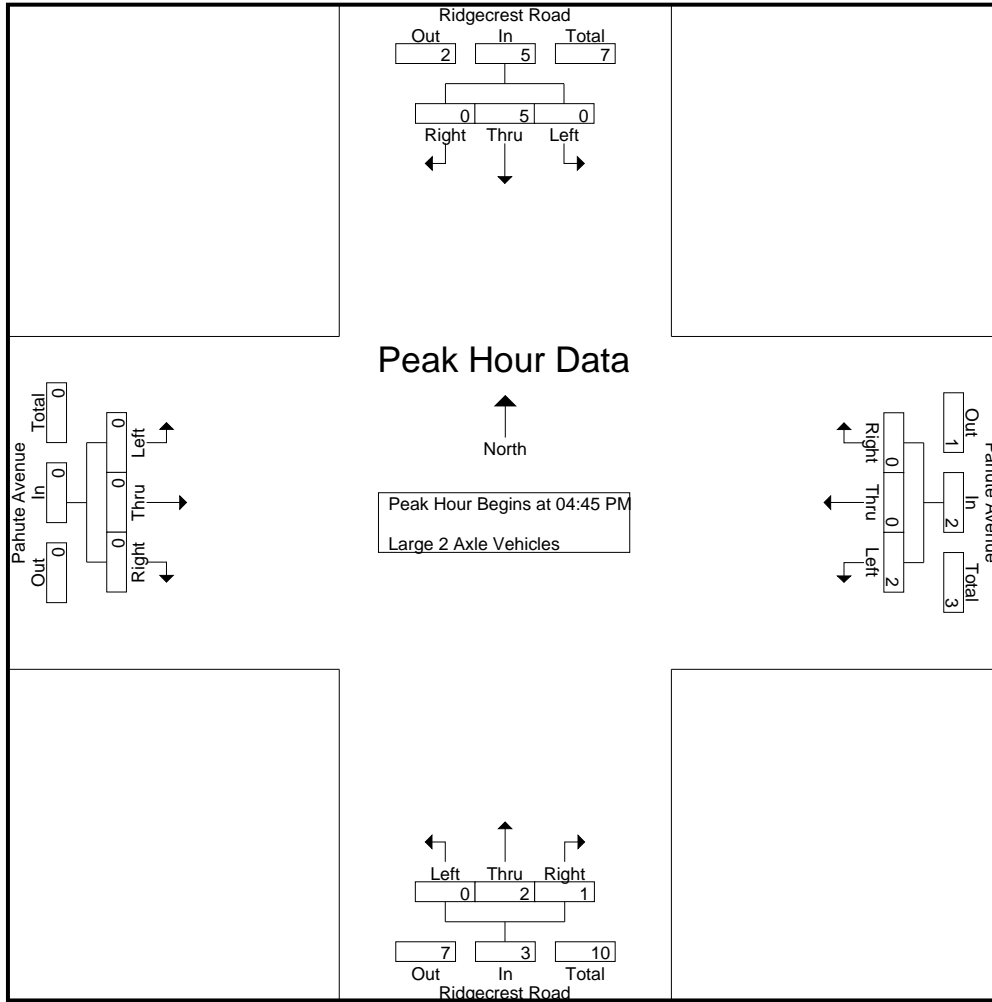
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	0	0	1	1	0	0	1	0	0	1	1	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	0	2	1	0	0	1	1	0	0	1	0	0	1	1	5
05:00 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
05:15 PM	0	3	0	3	2	0	0	2	0	0	0	0	0	0	0	0	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	2	0	0	2	0	2	1	3	0	0	0	0	8
Grand Total	0	5	0	5	3	0	0	3	1	2	1	4	0	0	1	1	13
Apprch %	0	100	0		100	0	0		25	50	25		0	0	100		
Total %	0	38.5	0	38.5	23.1	0	0	23.1	7.7	15.4	7.7	30.8	0	0	7.7	7.7	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
05:15 PM	0	3	0	3	2	0	0	2	0	0	0	0	0	0	0	0	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	5	0	5	2	0	0	2	0	2	1	3	0	0	0	0	10
% App. Total	0	100	0		100	0	0		0	66.7	33.3		0	0	0		
PHF	.000	.417	.000	.417	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000	.500

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0
+30 mins.	0	3	0	3	2	0	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	5	0	5	2	0	0	2	0	2	1	3	0	0	0	0
% App. Total	0	100	0		100	0	0		0	66.7	33.3		0	0	0	
PHF	.000	.417	.000	.417	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
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 Page No : 1

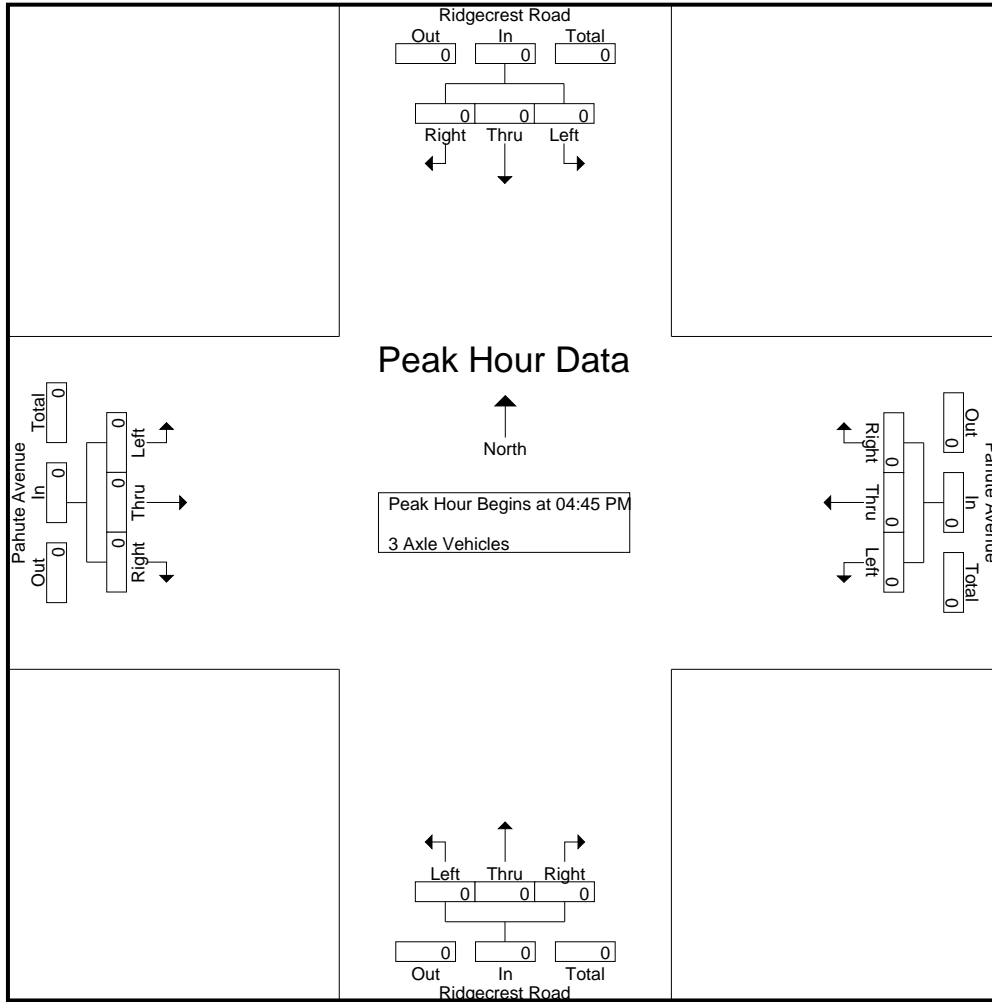
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 1

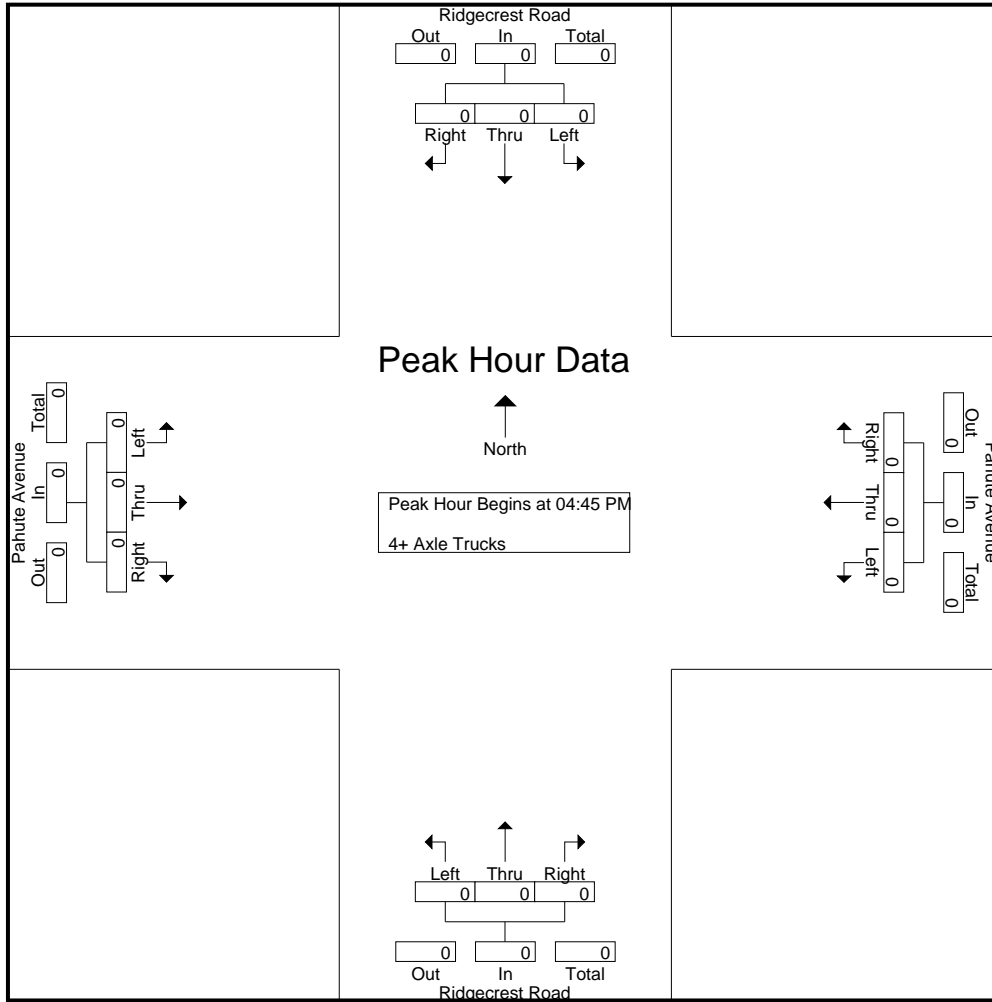
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Ridgecrest Road Southbound				Pahute Avenue Westbound				Ridgecrest Road Northbound				Pahute Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Ridgecrest Road
 E/W: Pahute Avenue
 Weather: Clear

File Name : 05_VIC_Ridgecrest_Pahute PM
 Site Code : 07518372
 Start Date : 5/10/2018
 Page No : 2



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

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

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

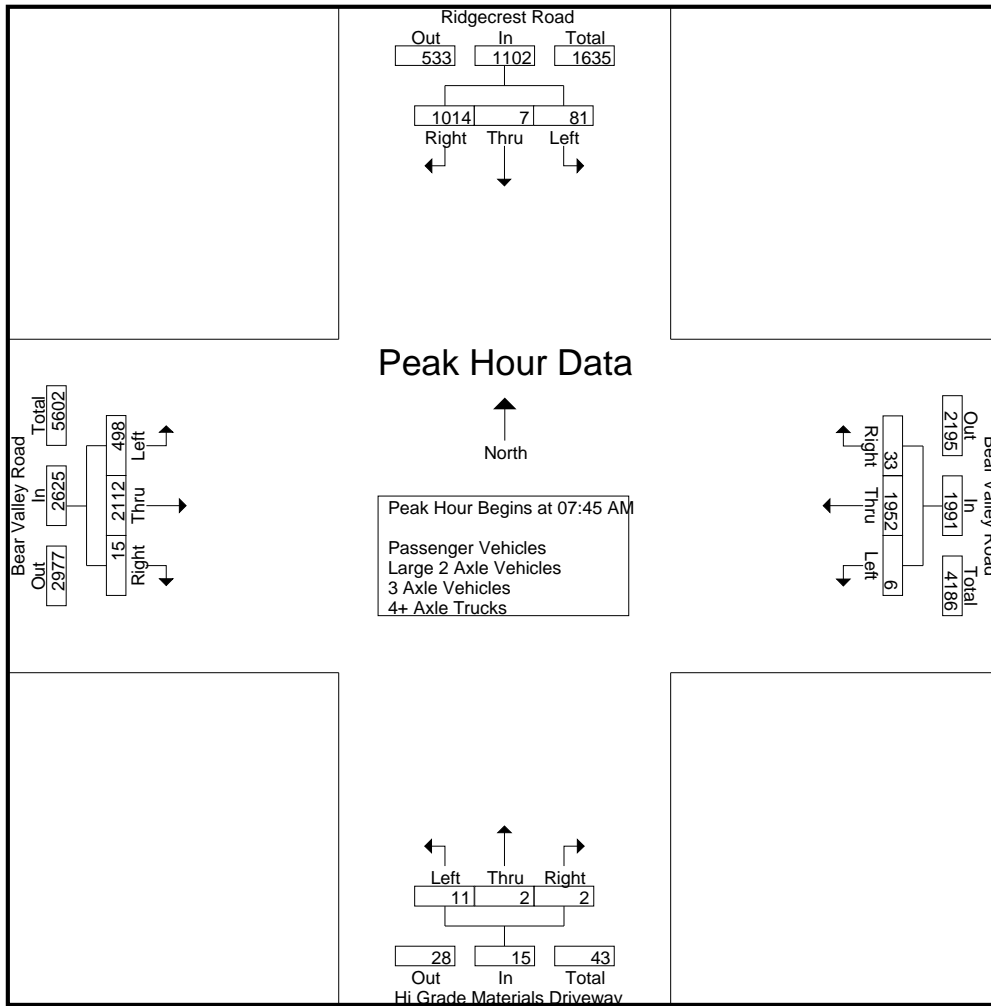
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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	17	1	192	210	7	338	3	348	1	1	0	2	62	332	3	397	957
07:15 AM	21	2	194	217	1	404	6	411	2	0	4	6	57	377	1	435	1069
07:30 AM	12	0	225	237	0	435	7	442	2	0	0	2	89	465	4	558	1239
07:45 AM	25	2	270	297	2	524	3	529	3	0	0	3	137	662	3	802	1631
Total	75	5	881	961	10	1701	19	1730	8	1	4	13	345	1836	11	2192	4896
08:00 AM	19	4	256	279	2	493	11	506	3	2	0	5	129	467	6	602	1392
08:15 AM	16	0	265	281	1	479	10	490	3	0	0	3	115	511	4	630	1404
08:30 AM	21	1	223	245	1	456	9	466	2	0	2	4	117	472	2	591	1306
08:45 AM	16	0	260	276	1	511	15	527	4	0	2	6	113	419	7	539	1348
Total	72	5	1004	1081	5	1939	45	1989	12	2	4	18	474	1869	19	2362	5450
Grand Total	147	10	1885	2042	15	3640	64	3719	20	3	8	31	819	3705	30	4554	10346
Apprch %	7.2	0.5	92.3		0.4	97.9	1.7		64.5	9.7	25.8		18	81.4	0.7		
Total %	1.4	0.1	18.2	19.7	0.1	35.2	0.6	35.9	0.2	0	0.1	0.3	7.9	35.8	0.3	44	
Passenger Vehicles	139	8	1845	1992	9	3461	63	3533	10	2	2	14	762	3509	26	4297	9836
% Passenger Vehicles	94.6	80	97.9	97.6	60	95.1	98.4	95	50	66.7	25	45.2	93	94.7	86.7	94.4	95.1
Large 2 Axle Vehicles	5	2	37	44	2	113	1	116	4	1	2	7	53	134	0	187	354
% Large 2 Axle Vehicles	3.4	20	2	2.2	13.3	3.1	1.6	3.1	20	33.3	25	22.6	6.5	3.6	0	4.1	3.4
3 Axle Vehicles	3	0	1	4	2	20	0	22	6	0	2	8	3	24	4	31	65
% 3 Axle Vehicles	2	0	0.1	0.2	13.3	0.5	0	0.6	30	0	25	25.8	0.4	0.6	13.3	0.7	0.6
4+ Axle Trucks	0	0	2	2	2	46	0	48	0	0	2	2	1	38	0	39	91
% 4+ Axle Trucks	0	0	0.1	0.1	13.3	1.3	0	1.3	0	0	25	6.5	0.1	1	0	0.9	0.9

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 07:45 AM																	
07:45 AM	25	2	270	297	2	524	3	529	3	0	0	3	137	662	3	802	1631
08:00 AM	19	4	256	279	2	493	11	506	3	2	0	5	129	467	6	602	1392
08:15 AM	16	0	265	281	1	479	10	490	3	0	0	3	115	511	4	630	1404
08:30 AM	21	1	223	245	1	456	9	466	2	0	2	4	117	472	2	591	1306
Total Volume	81	7	1014	1102	6	1952	33	1991	11	2	2	15	498	2112	15	2625	5733
% App. Total	7.4	0.6	92		0.3	98	1.7		73.3	13.3	13.3		19	80.5	0.6		
PHF	.810	.438	.939	.928	.750	.931	.750	.941	.917	.250	.250	.750	.909	.798	.625	.818	.879

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 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:

	07:45 AM				07:45 AM				08:00 AM				07:45 AM			
+0 mins.	25	2	270	297	2	524	3	529	3	2	0	5	137	662	3	802
+15 mins.	19	4	256	279	2	493	11	506	3	0	0	3	129	467	6	602
+30 mins.	16	0	265	281	1	479	10	490	2	0	2	4	115	511	4	630
+45 mins.	21	1	223	245	1	456	9	466	4	0	2	6	117	472	2	591
Total Volume	81	7	1014	1102	6	1952	33	1991	12	2	4	18	498	2112	15	2625
% App. Total	7.4	0.6	92		0.3	98	1.7		66.7	11.1	22.2		19	80.5	0.6	
PHF	.810	.438	.939	.928	.750	.931	.750	.941	.750	.250	.500	.750	.909	.798	.625	.818

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

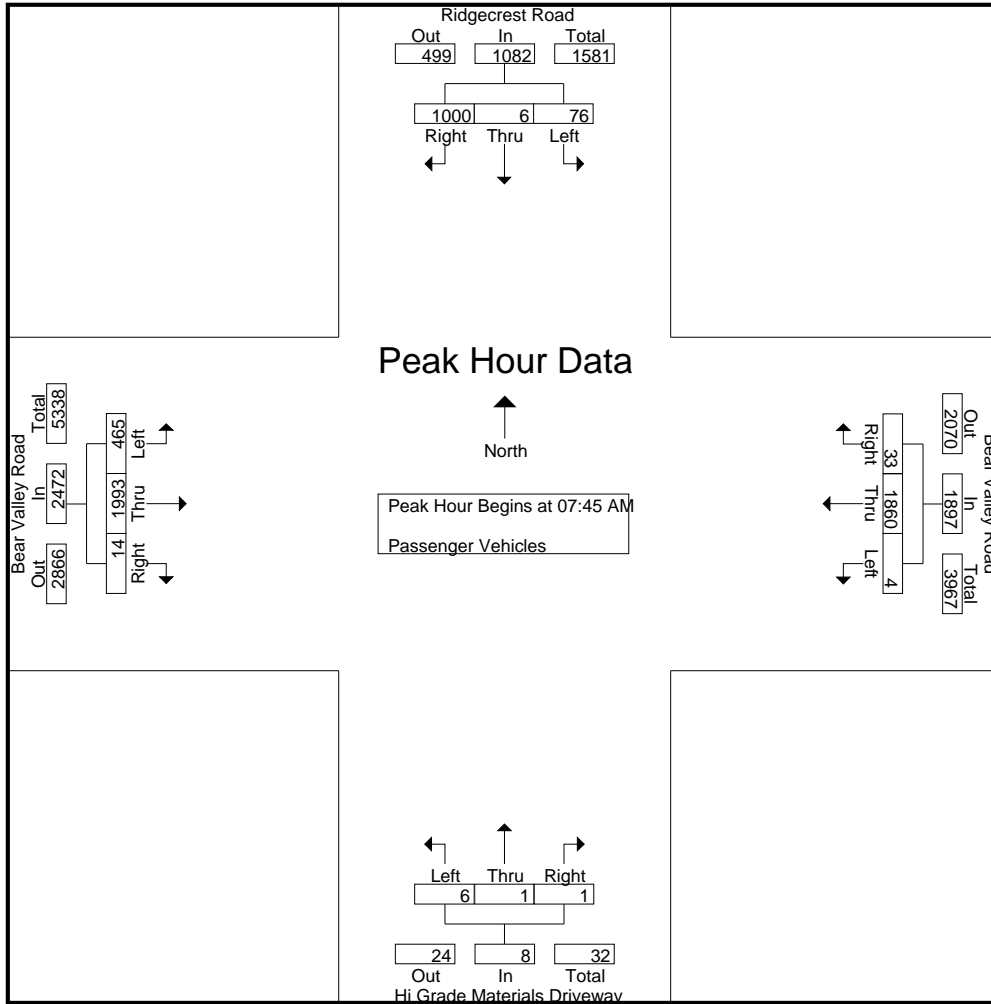
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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	17	1	189	207	4	318	2	324	1	1	0	2	55	306	3	364	897
07:15 AM	21	1	190	212	1	385	6	392	0	0	1	1	52	366	1	419	1024
07:30 AM	9	0	221	230	0	406	7	413	1	0	0	1	86	446	2	534	1178
07:45 AM	23	2	268	293	2	504	3	509	2	0	0	2	131	631	3	765	1569
Total	70	4	868	942	7	1613	18	1638	4	1	1	6	324	1749	9	2082	4668
08:00 AM	18	4	250	272	1	471	11	483	1	1	0	2	124	440	6	570	1327
08:15 AM	16	0	260	276	0	448	10	458	2	0	0	2	109	476	3	588	1324
08:30 AM	19	0	222	241	1	437	9	447	1	0	1	2	101	446	2	549	1239
08:45 AM	16	0	245	261	0	492	15	507	2	0	0	2	104	398	6	508	1278
Total	69	4	977	1050	2	1848	45	1895	6	1	1	8	438	1760	17	2215	5168
Grand Total	139	8	1845	1992	9	3461	63	3533	10	2	2	14	762	3509	26	4297	9836
Apprch %	7	0.4	92.6		0.3	98	1.8		71.4	14.3	14.3		17.7	81.7	0.6		
Total %	1.4	0.1	18.8	20.3	0.1	35.2	0.6	35.9	0.1	0	0	0.1	7.7	35.7	0.3	43.7	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	23	2	268	293	2	504	3	509	2	0	0	2	131	631	3	765	1569
08:00 AM	18	4	250	272	1	471	11	483	1	1	0	2	124	440	6	570	1327
08:15 AM	16	0	260	276	0	448	10	458	2	0	0	2	109	476	3	588	1324
08:30 AM	19	0	222	241	1	437	9	447	1	0	1	2	101	446	2	549	1239
Total Volume	76	6	1000	1082	4	1860	33	1897	6	1	1	8	465	1993	14	2472	5459
% App. Total	7	0.6	92.4		0.2	98	1.7		75	12.5	12.5		18.8	80.6	0.6		
PHF	.826	.375	.933	.923	.500	.923	.750	.932	.750	.250	.250	1.00	.887	.790	.583	.808	.870

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	23	2	268	293	2	504	3	509	2	0	0	2	131	631	3	765
+15 mins.	18	4	250	272	1	471	11	483	1	1	0	2	124	440	6	570
+30 mins.	16	0	260	276	0	448	10	458	2	0	0	2	109	476	3	588
+45 mins.	19	0	222	241	1	437	9	447	1	0	1	2	101	446	2	549
Total Volume	76	6	1000	1082	4	1860	33	1897	6	1	1	8	465	1993	14	2472
% App. Total	7	0.6	92.4		0.2	98	1.7		75	12.5	12.5		18.8	80.6	0.6	
PHF	.826	.375	.933	.923	.500	.923	.750	.932	.750	.250	.250	1.000	.887	.790	.583	.808

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

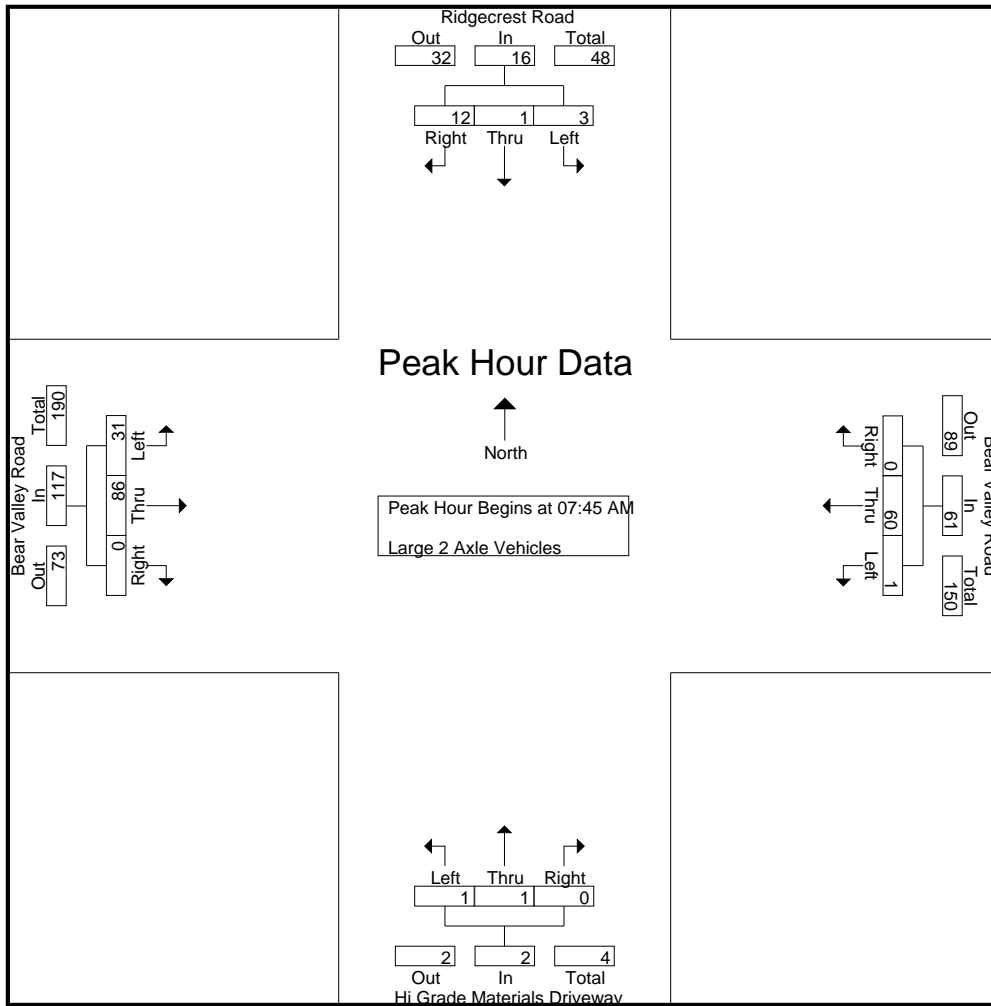
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	3	3	1	13	1	15	0	0	0	0	5	16	0	21	39
07:15 AM	0	1	4	5	0	10	0	10	1	0	2	3	5	7	0	12	30
07:30 AM	2	0	3	5	0	20	0	20	0	0	0	0	3	11	0	14	39
07:45 AM	2	0	2	4	0	13	0	13	0	0	0	0	4	22	0	26	43
Total	4	1	12	17	1	56	1	58	1	0	2	3	17	56	0	73	151
08:00 AM	1	0	5	6	1	14	0	15	1	1	0	2	5	19	0	24	47
08:15 AM	0	0	4	4	0	18	0	18	0	0	0	0	6	28	0	34	56
08:30 AM	0	1	1	2	0	15	0	15	0	0	0	0	16	17	0	33	50
08:45 AM	0	0	15	15	0	10	0	10	2	0	0	2	9	14	0	23	50
Total	1	1	25	27	1	57	0	58	3	1	0	4	36	78	0	114	203
Grand Total	5	2	37	44	2	113	1	116	4	1	2	7	53	134	0	187	354
Apprch %	11.4	4.5	84.1		1.7	97.4	0.9		57.1	14.3	28.6		28.3	71.7	0		
Total %	1.4	0.6	10.5	12.4	0.6	31.9	0.3	32.8	1.1	0.3	0.6	2	15	37.9	0	52.8	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	2	0	2	4	0	13	0	13	0	0	0	0	4	22	0	26	43
08:00 AM	1	0	5	6	1	14	0	15	1	1	0	2	5	19	0	24	47
08:15 AM	0	0	4	4	0	18	0	18	0	0	0	0	6	28	0	34	56
08:30 AM	0	1	1	2	0	15	0	15	0	0	0	0	16	17	0	33	50
Total Volume	3	1	12	16	1	60	0	61	1	1	0	2	31	86	0	117	196
% App. Total	18.8	6.2	75		1.6	98.4	0		50	50	0		26.5	73.5	0		
PHF	.375	.250	.600	.667	.250	.833	.000	.847	.250	.250	.000	.250	.484	.768	.000	.860	.875

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	2	0	2	4	0	13	0	13	0	0	0	0	4	22	0	26
+15 mins.	1	0	5	6	1	14	0	15	1	1	0	2	5	19	0	24
+30 mins.	0	0	4	4	0	18	0	18	0	0	0	0	6	28	0	34
+45 mins.	0	1	1	2	0	15	0	15	0	0	0	0	16	17	0	33
Total Volume	3	1	12	16	1	60	0	61	1	1	0	2	31	86	0	117
% App. Total	18.8	6.2	75		1.6	98.4	0		50	50	0		26.5	73.5	0	
PHF	.375	.250	.600	.667	.250	.833	.000	.847	.250	.250	.000	.250	.484	.768	.000	.860

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

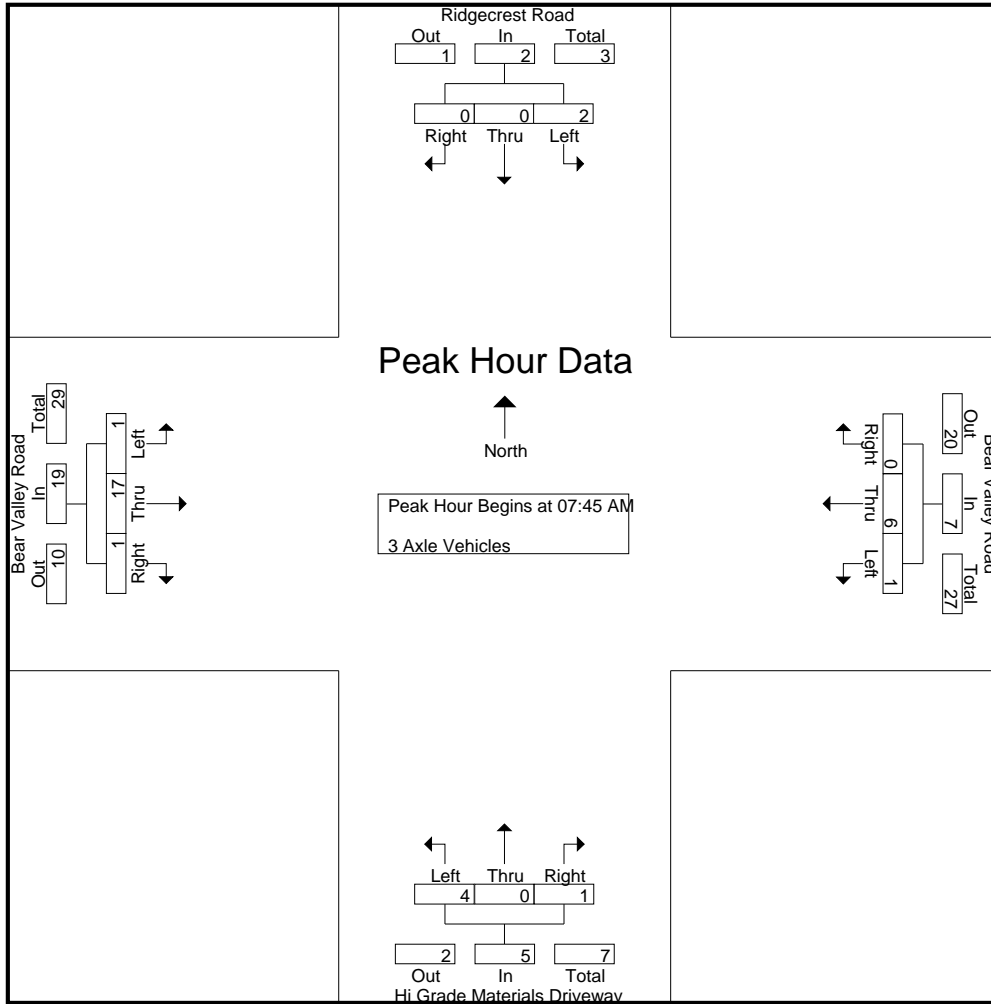
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	2	0	3	0	0	0	0	2	1	0	3	6
07:15 AM	0	0	0	0	0	6	0	6	1	0	0	1	0	0	0	0	7
07:30 AM	1	0	1	2	0	3	0	3	1	0	0	1	0	1	2	3	9
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1	3	0	4	5
Total	1	0	1	2	1	11	0	12	3	0	0	3	3	5	2	10	27
08:00 AM	0	0	0	0	0	3	0	3	1	0	0	1	0	4	0	4	8
08:15 AM	0	0	0	0	1	3	0	4	1	0	0	1	0	5	1	6	11
08:30 AM	2	0	0	2	0	0	0	0	1	0	1	2	0	5	0	5	9
08:45 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	5	1	6	10
Total	2	0	0	2	1	9	0	10	3	0	2	5	0	19	2	21	38
Grand Total	3	0	1	4	2	20	0	22	6	0	2	8	3	24	4	31	65
Apprch %	75	0	25		9.1	90.9	0		75	0	25		9.7	77.4	12.9		
Total %	4.6	0	1.5	6.2	3.1	30.8	0	33.8	9.2	0	3.1	12.3	4.6	36.9	6.2	47.7	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1	3	0	4	5
08:00 AM	0	0	0	0	0	3	0	3	1	0	0	1	0	4	0	4	8
08:15 AM	0	0	0	0	1	3	0	4	1	0	0	1	0	5	1	6	11
08:30 AM	2	0	0	2	0	0	0	0	1	0	1	2	0	5	0	5	9
Total Volume	2	0	0	2	1	6	0	7	4	0	1	5	1	17	1	19	33
% App. Total	100	0	0		14.3	85.7	0		80	0	20		5.3	89.5	5.3		
PHF	.250	.000	.000	.250	.250	.500	.000	.438	1.00	.000	.250	.625	.250	.850	.250	.792	.750

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	1	1	3	0	4
+15 mins.	0	0	0	0	0	3	0	3	1	0	0	1	0	4	0	4
+30 mins.	0	0	0	0	1	3	0	4	1	0	0	1	0	5	1	6
+45 mins.	2	0	0	2	0	0	0	0	1	0	1	2	0	5	0	5
Total Volume	2	0	0	2	1	6	0	7	4	0	1	5	1	17	1	19
% App. Total	100	0	0		14.3	85.7	0		80	0	20		5.3	89.5	5.3	
PHF	.250	.000	.000	.250	.250	.500	.000	.438	1.000	.000	.250	.625	.250	.850	.250	.792

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

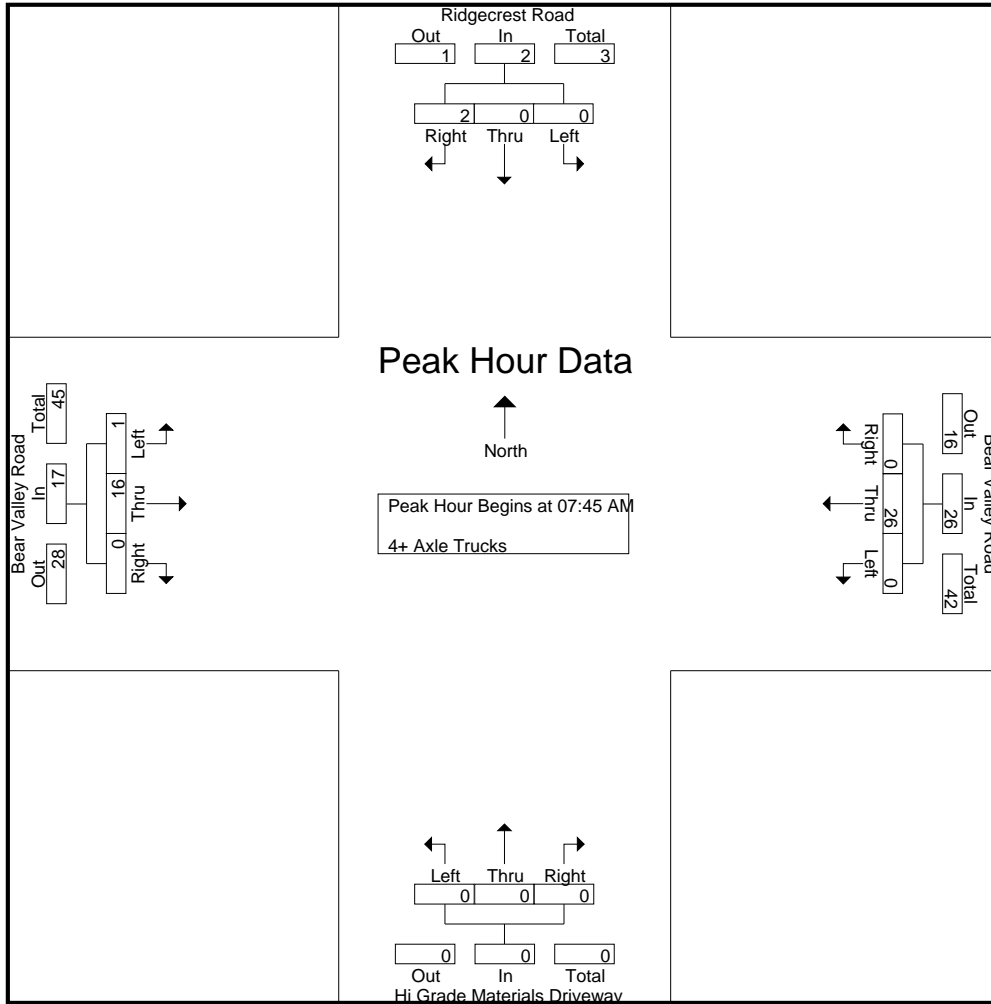
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	5	0	6	0	0	0	0	0	9	0	9	15
07:15 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	4	0	4	8
07:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
07:45 AM	0	0	0	0	0	7	0	7	0	0	0	0	1	6	0	7	14
Total	0	0	0	0	1	21	0	22	0	0	1	1	1	26	0	27	50
08:00 AM	0	0	1	1	0	5	0	5	0	0	0	0	0	4	0	4	10
08:15 AM	0	0	1	1	0	10	0	10	0	0	0	0	0	2	0	2	13
08:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
08:45 AM	0	0	0	0	1	6	0	7	0	0	1	1	0	2	0	2	10
Total	0	0	2	2	1	25	0	26	0	0	1	1	0	12	0	12	41
Grand Total	0	0	2	2	2	46	0	48	0	0	2	2	1	38	0	39	91
Apprch %	0	0	100		4.2	95.8	0		0	0	100		2.6	97.4	0		
Total %	0	0	2.2	2.2	2.2	50.5	0	52.7	0	0	2.2	2.2	1.1	41.8	0	42.9	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	7	0	7	0	0	0	0	1	6	0	7	14
08:00 AM	0	0	1	1	0	5	0	5	0	0	0	0	0	4	0	4	10
08:15 AM	0	0	1	1	0	10	0	10	0	0	0	0	0	2	0	2	13
08:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
Total Volume	0	0	2	2	0	26	0	26	0	0	0	0	1	16	0	17	45
% App. Total	0	0	100		0	100	0		0	0	0		5.9	94.1	0		
PHF	.000	.000	.500	.500	.000	.650	.000	.650	.000	.000	.000	.000	.250	.667	.000	.607	.804

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	7	0	7	0	0	0	0	1	6	0	7
+15 mins.	0	0	1	1	0	5	0	5	0	0	0	0	0	4	0	4
+30 mins.	0	0	1	1	0	10	0	10	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4
Total Volume	0	0	2	2	0	26	0	26	0	0	0	0	1	16	0	17
% App. Total	0	0	100		0	100	0		0	0	0		5.9	94.1	0	
PHF	.000	.000	.500	.500	.000	.650	.000	.650	.000	.000	.000	.000	.250	.667	.000	.607

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

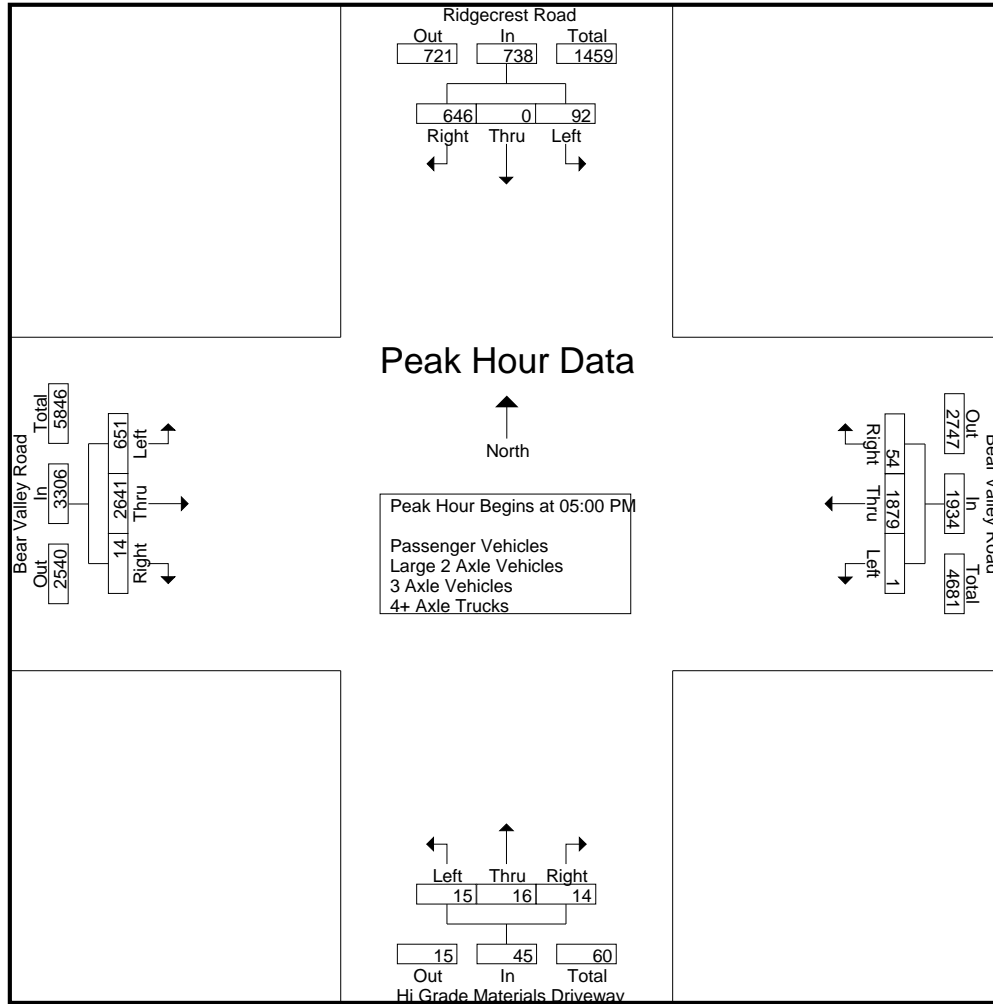
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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	22	1	195	218	5	501	18	524	9	3	1	13	148	605	2	755	1510
04:15 PM	19	0	172	191	3	470	18	491	2	3	3	8	152	564	3	719	1409
04:30 PM	25	0	170	195	1	468	7	476	3	5	0	8	156	649	7	812	1491
04:45 PM	23	0	160	183	0	455	22	477	2	1	0	3	157	579	2	738	1401
Total	89	1	697	787	9	1894	65	1968	16	12	4	32	613	2397	14	3024	5811
05:00 PM	20	0	153	173	0	464	11	475	9	3	7	19	160	618	2	780	1447
05:15 PM	22	0	164	186	1	468	18	487	2	4	5	11	162	683	5	850	1534
05:30 PM	28	0	155	183	0	487	9	496	2	5	2	9	166	644	4	814	1502
05:45 PM	22	0	174	196	0	460	16	476	2	4	0	6	163	696	3	862	1540
Total	92	0	646	738	1	1879	54	1934	15	16	14	45	651	2641	14	3306	6023
Grand Total	181	1	1343	1525	10	3773	119	3902	31	28	18	77	1264	5038	28	6330	11834
Apprch %	11.9	0.1	88.1		0.3	96.7	3		40.3	36.4	23.4		20	79.6	0.4		
Total %	1.5	0	11.3	12.9	0.1	31.9	1	33	0.3	0.2	0.2	0.7	10.7	42.6	0.2	53.5	
Passenger Vehicles	179	1	1312	1492	8	3663	119	3790	31	28	17	76	1256	4902	24	6182	11540
% Passenger Vehicles	98.9	100	97.7	97.8	80	97.1	100	97.1	100	100	94.4	98.7	99.4	97.3	85.7	97.7	97.5
Large 2 Axle Vehicles	2	0	31	33	0	86	0	86	0	0	1	1	8	95	1	104	224
% Large 2 Axle Vehicles	1.1	0	2.3	2.2	0	2.3	0	2.2	0	0	5.6	1.3	0.6	1.9	3.6	1.6	1.9
3 Axle Vehicles	0	0	0	0	2	5	0	7	0	0	0	0	0	13	2	15	22
% 3 Axle Vehicles	0	0	0	0	20	0.1	0	0.2	0	0	0	0	0	0.3	7.1	0.2	0.2
4+ Axle Trucks	0	0	0	0	0	19	0	19	0	0	0	0	0	28	1	29	48
% 4+ Axle Trucks	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0	0.6	3.6	0.5	0.4

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 05:00 PM																	
05:00 PM	20	0	153	173	0	464	11	475	9	3	7	19	160	618	2	780	1447
05:15 PM	22	0	164	186	1	468	18	487	2	4	5	11	162	683	5	850	1534
05:30 PM	28	0	155	183	0	487	9	496	2	5	2	9	166	644	4	814	1502
05:45 PM	22	0	174	196	0	460	16	476	2	4	0	6	163	696	3	862	1540
Total Volume	92	0	646	738	1	1879	54	1934	15	16	14	45	651	2641	14	3306	6023
% App. Total	12.5	0	87.5		0.1	97.2	2.8		33.3	35.6	31.1		19.7	79.9	0.4		
PHF	.821	.000	.928	.941	.250	.965	.750	.975	.417	.800	.500	.592	.980	.949	.700	.959	.978

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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				04:00 PM				05:00 PM				05:00 PM			
+0 mins.	22	1	195	218	5	501	18	524	9	3	7	19	160	618	2	780
+15 mins.	19	0	172	191	3	470	18	491	2	4	5	11	162	683	5	850
+30 mins.	25	0	170	195	1	468	7	476	2	5	2	9	166	644	4	814
+45 mins.	23	0	160	183	0	455	22	477	2	4	0	6	163	696	3	862
Total Volume	89	1	697	787	9	1894	65	1968	15	16	14	45	651	2641	14	3306
% App. Total	11.3	0.1	88.6		0.5	96.2	3.3		33.3	35.6	31.1		19.7	79.9	0.4	
PHF	.890	.250	.894	.903	.450	.945	.739	.939	.417	.800	.500	.592	.980	.949	.700	.959

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

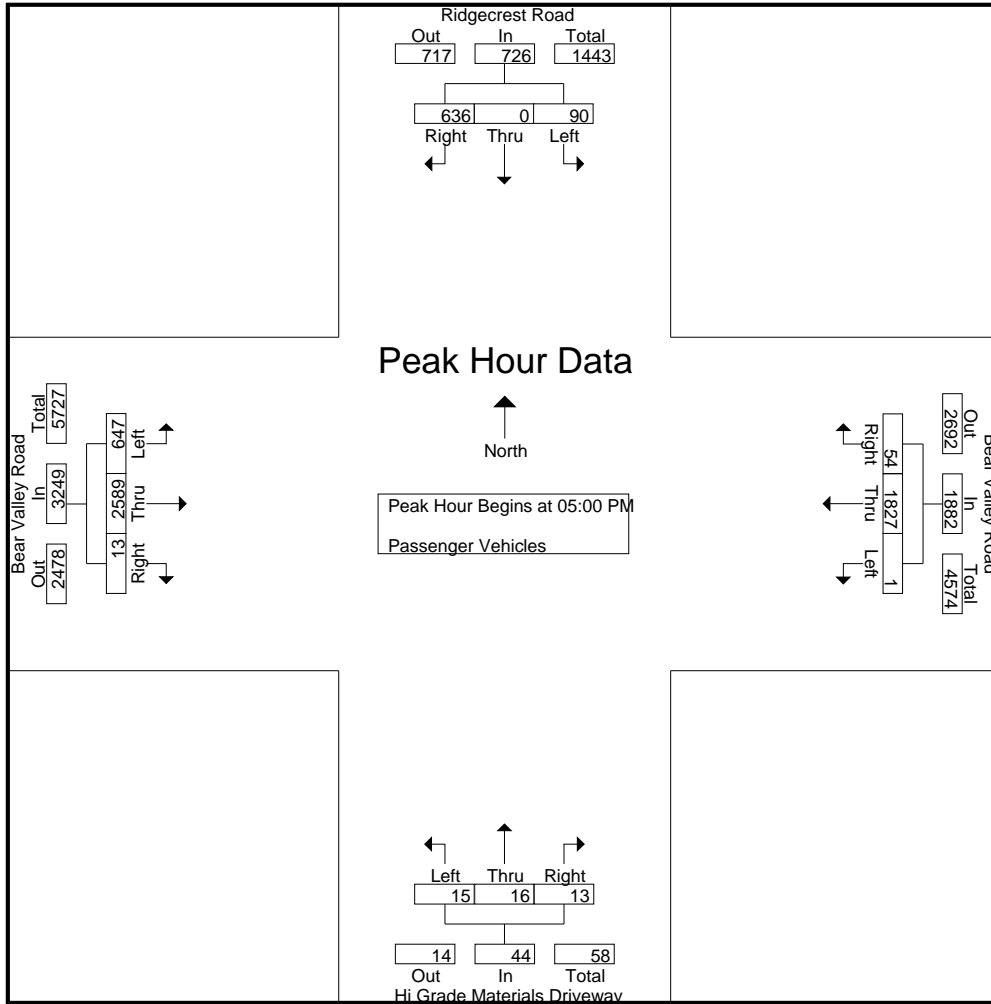
Groups Printed- Passenger Vehicles

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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	22	1	185	208	5	477	18	500	9	3	1	13	147	573	2	722	1443
04:15 PM	19	0	168	187	2	457	18	477	2	3	3	8	151	550	3	704	1376
04:30 PM	25	0	165	190	0	455	7	462	3	5	0	8	155	630	5	790	1450
04:45 PM	23	0	158	181	0	447	22	469	2	1	0	3	156	560	1	717	1370
Total	89	1	676	766	7	1836	65	1908	16	12	4	32	609	2313	11	2933	5639
05:00 PM	19	0	152	171	0	449	11	460	9	3	7	19	159	604	2	765	1415
05:15 PM	22	0	163	185	1	455	18	474	2	4	5	11	160	672	4	836	1506
05:30 PM	27	0	153	180	0	476	9	485	2	5	1	8	166	628	4	798	1471
05:45 PM	22	0	168	190	0	447	16	463	2	4	0	6	162	685	3	850	1509
Total	90	0	636	726	1	1827	54	1882	15	16	13	44	647	2589	13	3249	5901
Grand Total	179	1	1312	1492	8	3663	119	3790	31	28	17	76	1256	4902	24	6182	11540
Apprch %	12	0.1	87.9		0.2	96.6	3.1		40.8	36.8	22.4		20.3	79.3	0.4		
Total %	1.6	0	11.4	12.9	0.1	31.7	1	32.8	0.3	0.2	0.1	0.7	10.9	42.5	0.2	53.6	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	19	0	152	171	0	449	11	460	9	3	7	19	159	604	2	765	1415
05:15 PM	22	0	163	185	1	455	18	474	2	4	5	11	160	672	4	836	1506
05:30 PM	27	0	153	180	0	476	9	485	2	5	1	8	166	628	4	798	1471
05:45 PM	22	0	168	190	0	447	16	463	2	4	0	6	162	685	3	850	1509
Total Volume	90	0	636	726	1	1827	54	1882	15	16	13	44	647	2589	13	3249	5901
% App. Total	12.4	0	87.6		0.1	97.1	2.9		34.1	36.4	29.5		19.9	79.7	0.4		
PHF	.833	.000	.946	.955	.250	.960	.750	.970	.417	.800	.464	.579	.974	.945	.813	.956	.978

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	19	0	152	171	0	449	11	460	9	3	7	19	159	604	2	765
+15 mins.	22	0	163	185	1	455	18	474	2	4	5	11	160	672	4	836
+30 mins.	27	0	153	180	0	476	9	485	2	5	1	8	166	628	4	798
+45 mins.	22	0	168	190	0	447	16	463	2	4	0	6	162	685	3	850
Total Volume	90	0	636	726	1	1827	54	1882	15	16	13	44	647	2589	13	3249
% App. Total	12.4	0	87.6		0.1	97.1	2.9		34.1	36.4	29.5		19.9	79.7	0.4	
PHF	.833	.000	.946	.955	.250	.960	.750	.970	.417	.800	.464	.579	.974	.945	.813	.956

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

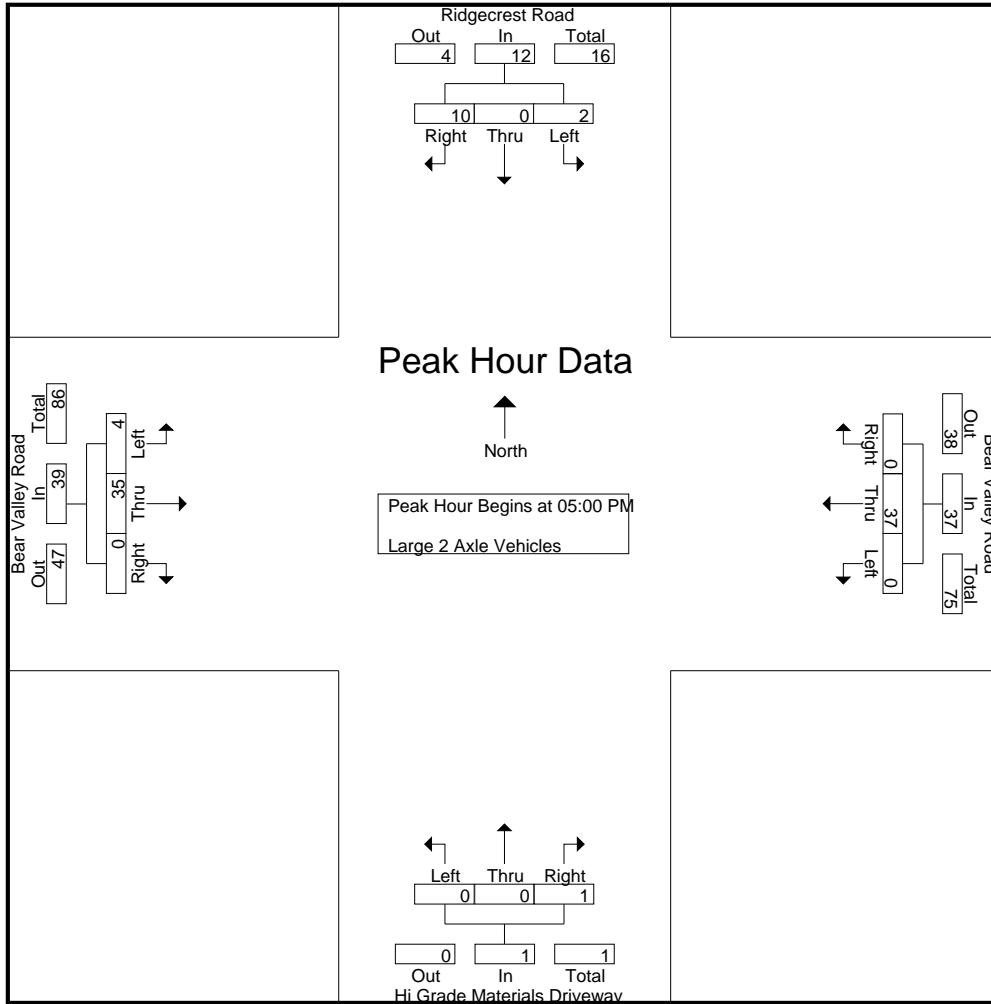
Groups Printed- Large 2 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	10	10	0	22	0	22	0	0	0	0	1	22	0	23	55
04:15 PM	0	0	4	4	0	11	0	11	0	0	0	0	1	11	0	12	27
04:30 PM	0	0	5	5	0	11	0	11	0	0	0	0	1	16	0	17	33
04:45 PM	0	0	2	2	0	5	0	5	0	0	0	0	1	11	1	13	20
Total	0	0	21	21	0	49	0	49	0	0	0	0	4	60	1	65	135
05:00 PM	1	0	1	2	0	11	0	11	0	0	0	0	1	12	0	13	26
05:15 PM	0	0	1	1	0	10	0	10	0	0	0	0	2	3	0	5	16
05:30 PM	1	0	2	3	0	9	0	9	0	0	1	1	0	12	0	12	25
05:45 PM	0	0	6	6	0	7	0	7	0	0	0	0	1	8	0	9	22
Total	2	0	10	12	0	37	0	37	0	0	1	1	4	35	0	39	89
Grand Total	2	0	31	33	0	86	0	86	0	0	1	1	8	95	1	104	224
Apprch %	6.1	0	93.9		0	100	0		0	0	100		7.7	91.3	1		
Total %	0.9	0	13.8	14.7	0	38.4	0	38.4	0	0	0.4	0.4	3.6	42.4	0.4	46.4	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	0	1	2	0	11	0	11	0	0	0	0	1	12	0	13	26
05:15 PM	0	0	1	1	0	10	0	10	0	0	0	0	2	3	0	5	16
05:30 PM	1	0	2	3	0	9	0	9	0	0	1	1	0	12	0	12	25
05:45 PM	0	0	6	6	0	7	0	7	0	0	0	0	1	8	0	9	22
Total Volume	2	0	10	12	0	37	0	37	0	0	1	1	4	35	0	39	89
% App. Total	16.7	0	83.3		0	100	0		0	0	100		10.3	89.7	0		
PHF	.500	.000	.417	.500	.000	.841	.000	.841	.000	.000	.250	.250	.500	.729	.000	.750	.856

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	1	0	1	2	0	11	0	11	0	0	0	0	1	12	0	13
+15 mins.	0	0	1	1	0	10	0	10	0	0	0	0	2	3	0	5
+30 mins.	1	0	2	3	0	9	0	9	0	0	1	1	0	12	0	12
+45 mins.	0	0	6	6	0	7	0	7	0	0	0	0	1	8	0	9
Total Volume	2	0	10	12	0	37	0	37	0	0	1	1	4	35	0	39
% App. Total	16.7	0	83.3		0	100	0		0	0	100		10.3	89.7	0	
PHF	.500	.000	.417	.500	.000	.841	.000	.841	.000	.000	.250	.250	.500	.729	.000	.750

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

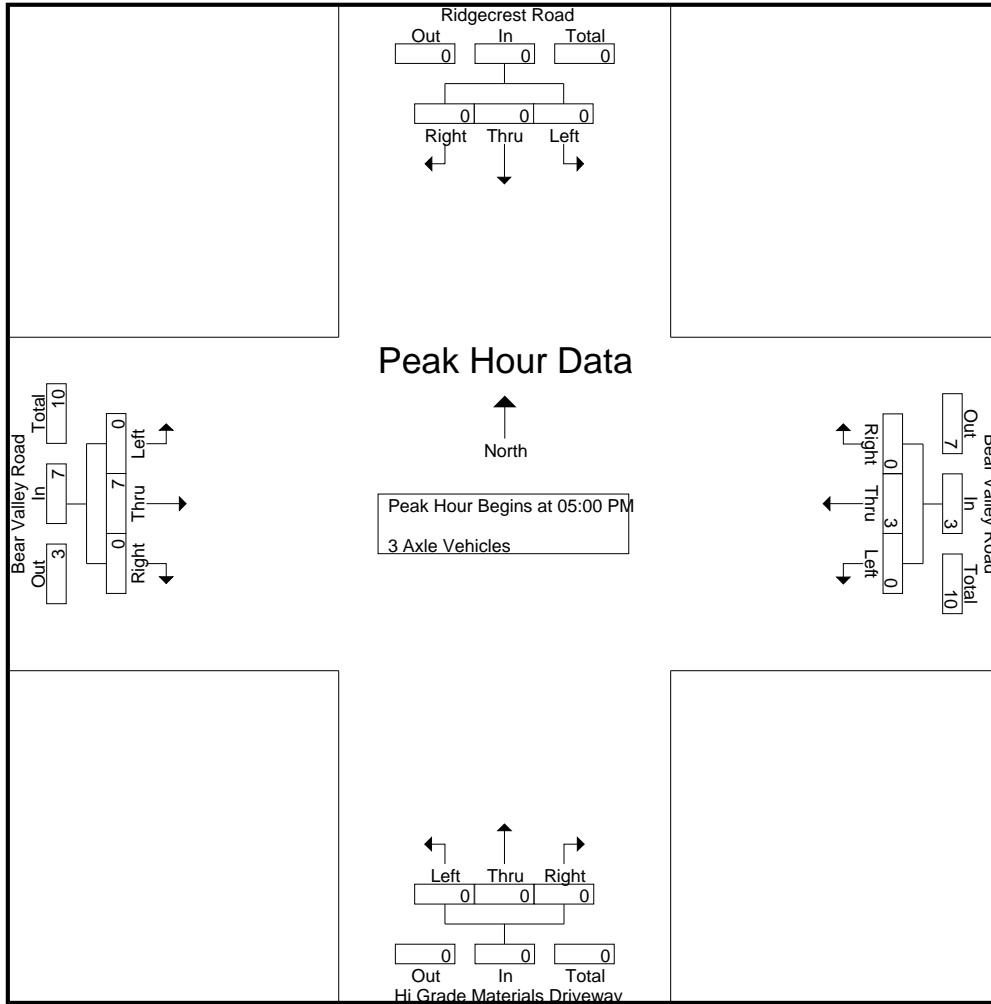
Groups Printed- 3 Axle Vehicles

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	2	3	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	2	2	0	4	0	0	0	0	0	6	2	8	12
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	7	0	7	10
Grand Total	0	0	0	0	2	5	0	7	0	0	0	0	0	13	2	15	22
Apprch %	0	0	0		28.6	71.4	0		0	0	0		0	86.7	13.3		
Total %	0	0	0		9.1	22.7	0	31.8	0	0	0		0	59.1	9.1	68.2	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	7	0	7	10
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.583	.000	.583	.625

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	7	0	7	7
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.583	.000	.583	

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

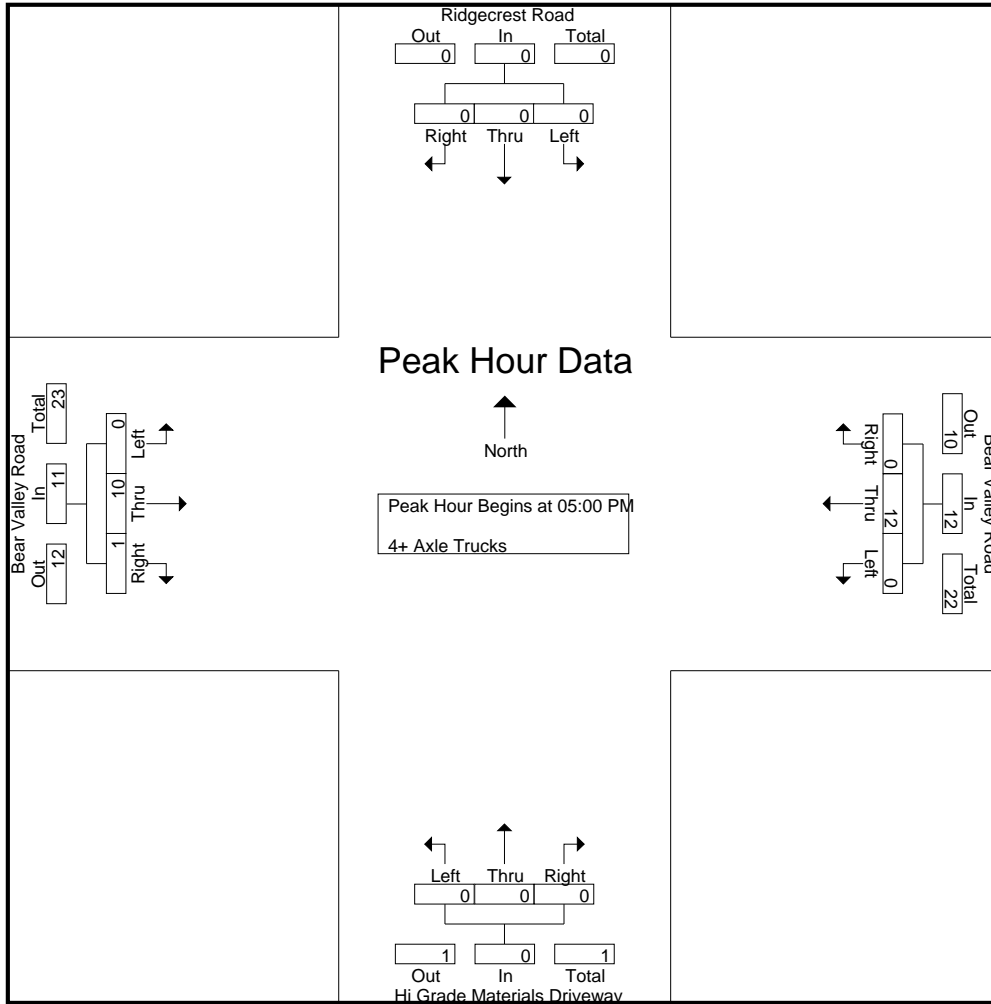
Groups Printed- 4+ Axle Trucks

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	7
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	18	0	18	25
05:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	1	6	8
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:45 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
Total	0	0	0	0	0	12	0	12	0	0	0	0	0	10	1	11	23
Grand Total	0	0	0	0	0	19	0	19	0	0	0	0	0	28	1	29	48
Apprch %	0	0	0		0	100	0		0	0	0		0	96.6	3.4		
Total %	0	0	0		0	39.6	0	39.6	0	0	0		0	58.3	2.1	60.4	

Start Time	Ridgecrest Road Southbound				Bear Valley Road Westbound				Hi Grade Materials Driveway Northbound				Bear Valley 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	1	6	8
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:45 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	0	10	1	11	23
% App. Total	0	0	0		0	100	0		0	0	0		0	90.9	9.1		
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.000	.000	.000	.000	.500	.250	.458	.719

City of Victorville
 N/S: Ridgecrest Road
 E/W: Bear Valley Road
 Weather: Clear

File Name : 03_VIC_Ridgecrest_Bear Valley PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 05:00 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				05:00 PM			
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	5	1	6
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	0	10	1	11
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	90.9	9.1	
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.000	.000	.000	.000	.500	.250	.458

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

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

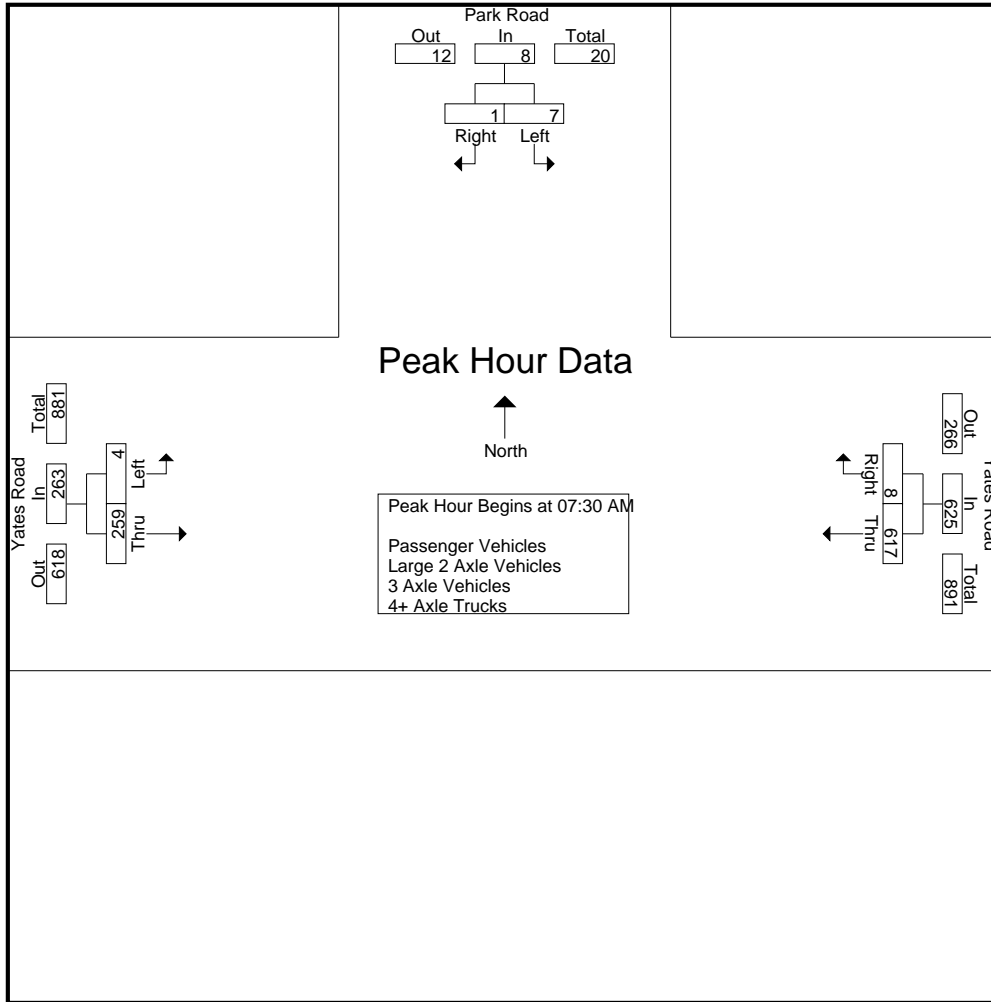
Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	1	0	1	91	1	92	0	39	39	132
07:15 AM	0	0	0	102	1	103	2	36	38	141
07:30 AM	3	0	3	135	3	138	1	68	69	210
07:45 AM	0	0	0	176	0	176	1	91	92	268
Total	4	0	4	504	5	509	4	234	238	751
08:00 AM	2	1	3	156	2	158	0	44	44	205
08:15 AM	2	0	2	150	3	153	2	56	58	213
08:30 AM	0	0	0	97	2	99	1	55	56	155
08:45 AM	1	1	2	121	1	122	0	39	39	163
Total	5	2	7	524	8	532	3	194	197	736
Grand Total	9	2	11	1028	13	1041	7	428	435	1487
Apprch %	81.8	18.2		98.8	1.2		1.6	98.4		
Total %	0.6	0.1	0.7	69.1	0.9	70	0.5	28.8	29.3	
Passenger Vehicles	9	2	11	1012	12	1024	7	415	422	1457
% Passenger Vehicles	100	100	100	98.4	92.3	98.4	100	97	97	98
Large 2 Axle Vehicles	0	0	0	14	1	15	0	13	13	28
% Large 2 Axle Vehicles	0	0	0	1.4	7.7	1.4	0	3	3	1.9
3 Axle Vehicles	0	0	0	1	0	1	0	0	0	1
% 3 Axle Vehicles	0	0	0	0.1	0	0.1	0	0	0	0.1
4+ Axle Trucks	0	0	0	1	0	1	0	0	0	1
% 4+ Axle Trucks	0	0	0	0.1	0	0.1	0	0	0	0.1

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:30 AM	3	0	3	135	3	138	1	68	69	210
07:45 AM	0	0	0	176	0	176	1	91	92	268
08:00 AM	2	1	3	156	2	158	0	44	44	205
08:15 AM	2	0	2	150	3	153	2	56	58	213
Total Volume	7	1	8	617	8	625	4	259	263	896
% App. Total	87.5	12.5		98.7	1.3		1.5	98.5		
PHF	.583	.250	.667	.876	.667	.888	.500	.712	.715	.836

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 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:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	3	0	3	135	3	138	1	68	69
+15 mins.	0	0	0	176	0	176	1	91	92
+30 mins.	2	1	3	156	2	158	0	44	44
+45 mins.	2	0	2	150	3	153	2	56	58
Total Volume	7	1	8	617	8	625	4	259	263
% App. Total	87.5	12.5		98.7	1.3		1.5	98.5	
PHF	.583	.250	.667	.876	.667	.888	.500	.712	.715

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

Groups Printed- Passenger Vehicles

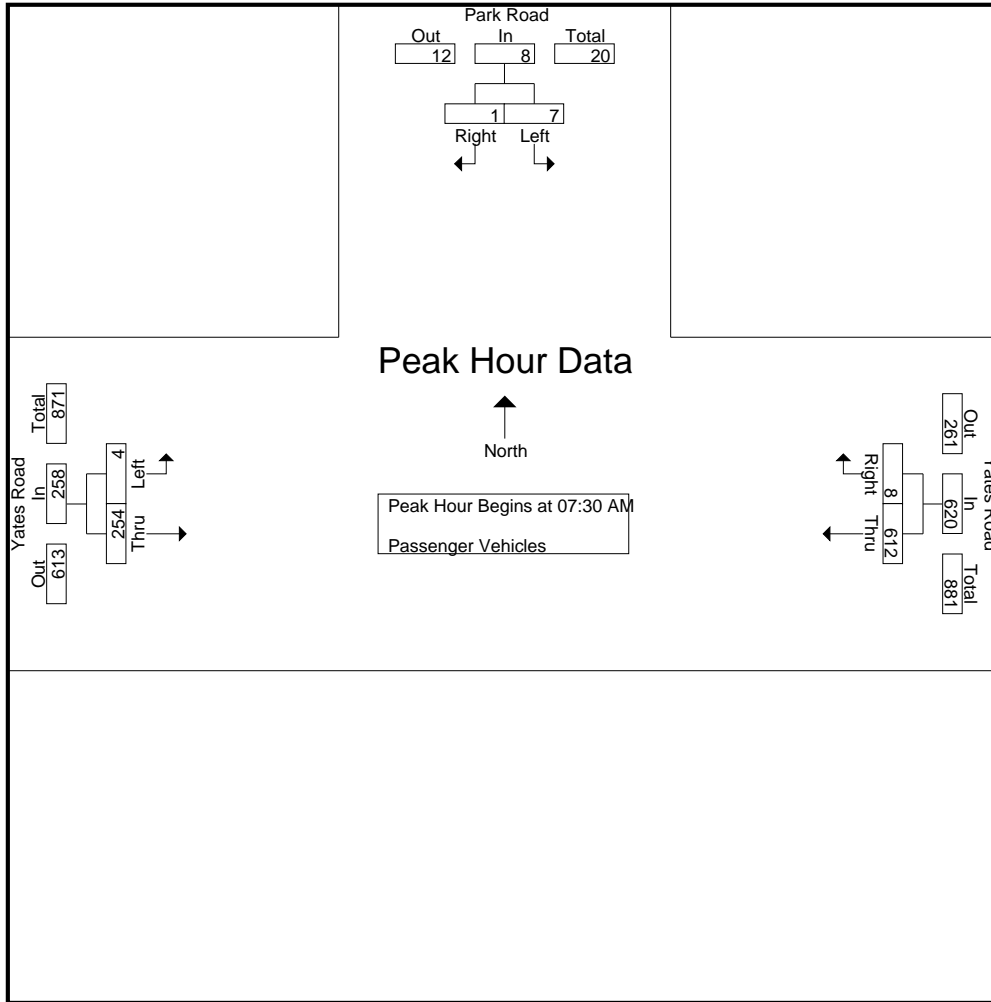
Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	1	0	1	90	1	91	0	37	37	129
07:15 AM	0	0	0	101	0	101	2	36	38	139
07:30 AM	3	0	3	132	3	135	1	68	69	207
07:45 AM	0	0	0	175	0	175	1	90	91	266
Total	4	0	4	498	4	502	4	231	235	741
08:00 AM	2	1	3	156	2	158	0	42	42	203
08:15 AM	2	0	2	149	3	152	2	54	56	210
08:30 AM	0	0	0	94	2	96	1	53	54	150
08:45 AM	1	1	2	115	1	116	0	35	35	153
Total	5	2	7	514	8	522	3	184	187	716
Grand Total	9	2	11	1012	12	1024	7	415	422	1457
Apprch %	81.8	18.2		98.8	1.2		1.7	98.3		
Total %	0.6	0.1	0.8	69.5	0.8	70.3	0.5	28.5	29	

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:30 AM	3	0	3	132	3	135	1	68	69	207
07:45 AM	0	0	0	175	0	175	1	90	91	266
08:00 AM	2	1	3	156	2	158	0	42	42	203
08:15 AM	2	0	2	149	3	152	2	54	56	210
Total Volume	7	1	8	612	8	620	4	254	258	886
% App. Total	87.5	12.5		98.7	1.3		1.6	98.4		
PHF	.583	.250	.667	.874	.667	.886	.500	.706	.709	.833

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	3	0	3	132	3	135	1	68	69
+15 mins.	0	0	0	175	0	175	1	90	91
+30 mins.	2	1	3	156	2	158	0	42	42
+45 mins.	2	0	2	149	3	152	2	54	56
Total Volume	7	1	8	612	8	620	4	254	258
% App. Total	87.5	12.5		98.7	1.3		1.6	98.4	
PHF	.583	.250	.667	.874	.667	.886	.500	.706	.709

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

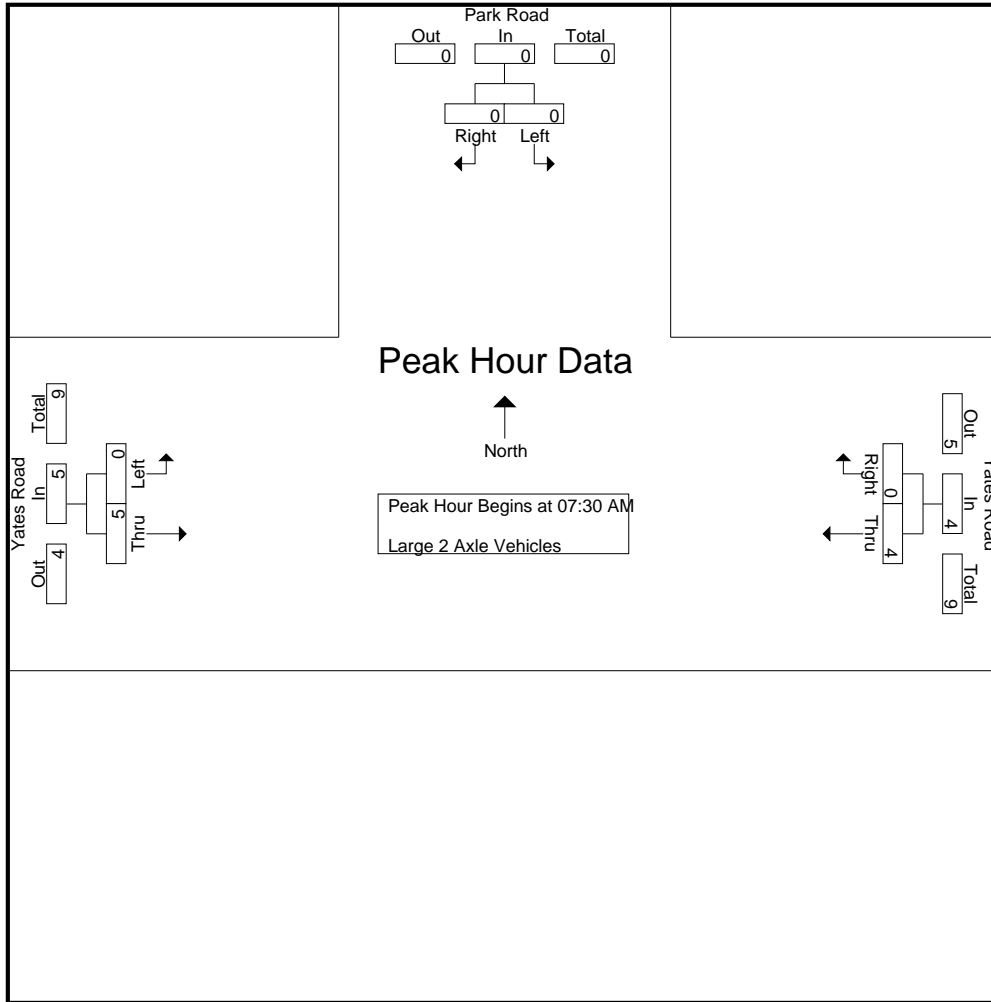
Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	1	0	1	0	2	2	3
07:15 AM	0	0	0	1	1	2	0	0	0	2
07:30 AM	0	0	0	2	0	2	0	0	0	2
07:45 AM	0	0	0	1	0	1	0	1	1	2
Total	0	0	0	5	1	6	0	3	3	9
08:00 AM	0	0	0	0	0	0	0	2	2	2
08:15 AM	0	0	0	1	0	1	0	2	2	3
08:30 AM	0	0	0	2	0	2	0	2	2	4
08:45 AM	0	0	0	6	0	6	0	4	4	10
Total	0	0	0	9	0	9	0	10	10	19
Grand Total	0	0	0	14	1	15	0	13	13	28
Apprch %	0	0		93.3	6.7		0	100		
Total %	0	0		50	3.6	53.6	0	46.4	46.4	

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:30 AM	0	0	0	2	0	2	0	0	0	2
07:45 AM	0	0	0	1	0	1	0	1	1	2
08:00 AM	0	0	0	0	0	0	0	2	2	2
08:15 AM	0	0	0	1	0	1	0	2	2	3
Total Volume	0	0	0	4	0	4	0	5	5	9
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.625	.625	.750

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	0	0	2	0	2	0	0	0
+15 mins.	0	0	0	1	0	1	0	1	1
+30 mins.	0	0	0	0	0	0	0	2	2
+45 mins.	0	0	0	1	0	1	0	2	2
Total Volume	0	0	0	4	0	4	0	5	5
% App. Total	0	0	0	100	0	100	0	100	100
PHF	.000	.000	.000	.500	.000	.500	.000	.625	.625

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

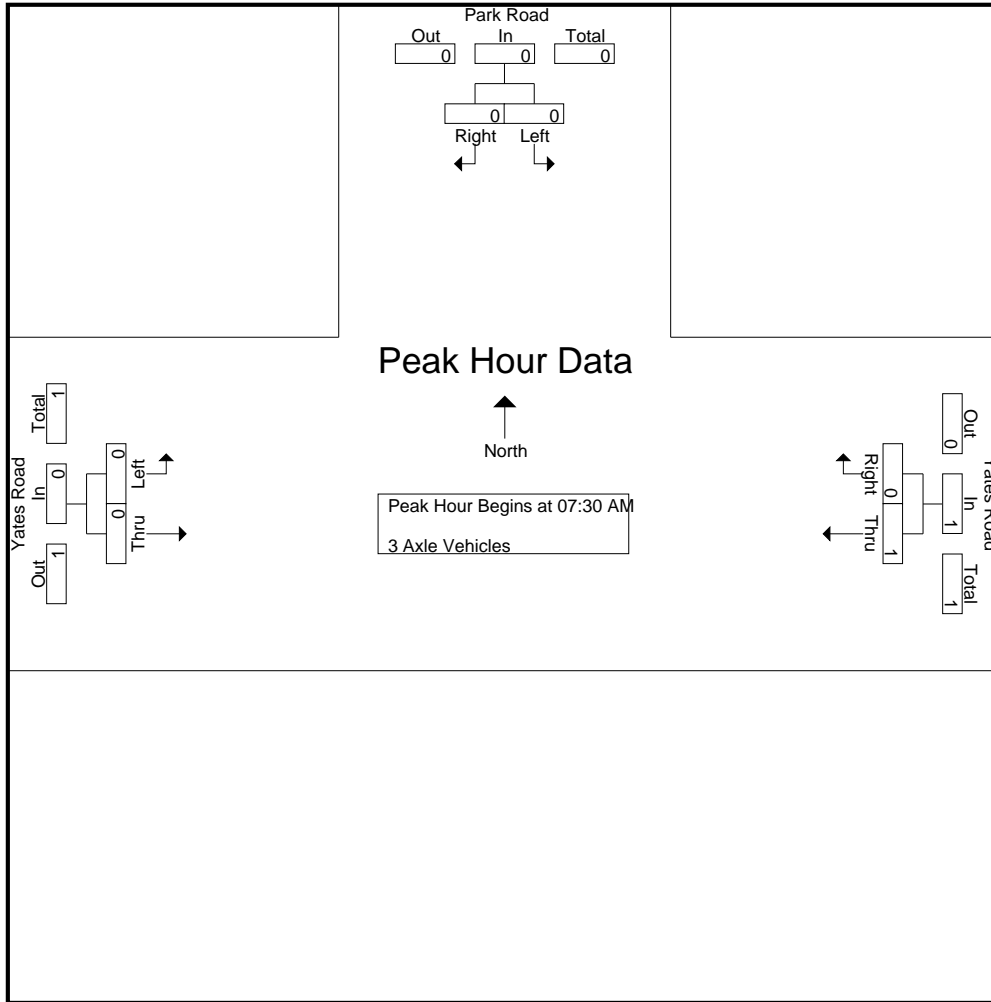
Groups Printed- 3 Axle Vehicles

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	0	1	0	0	0	1
Apprch %	0	0		100	0		0	0		
Total %	0	0		100	0	100	0	0		

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0	1
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

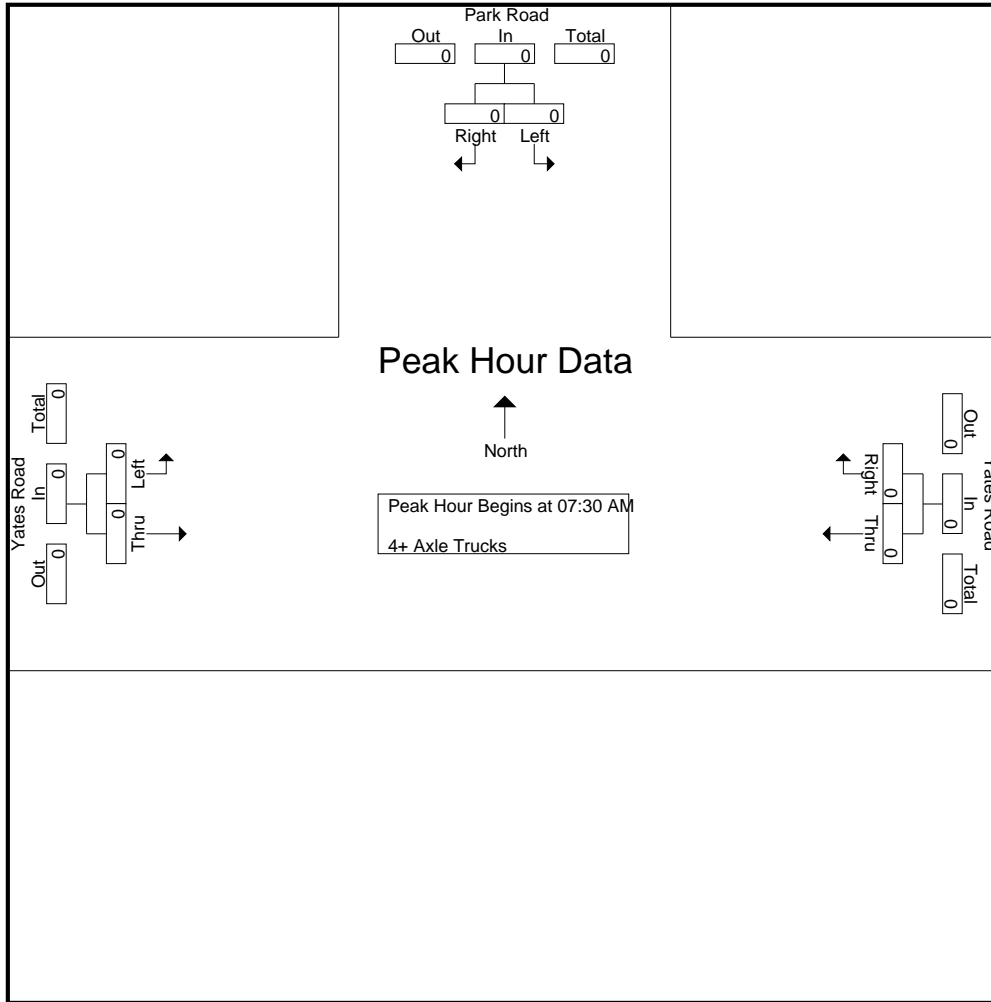
Groups Printed- 4+ Axle Trucks

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1
Grand Total	0	0	0	1	0	1	0	0	0	1
Apprch %	0	0		100	0		0	0		
Total %	0	0		100	0	100	0	0		

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

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

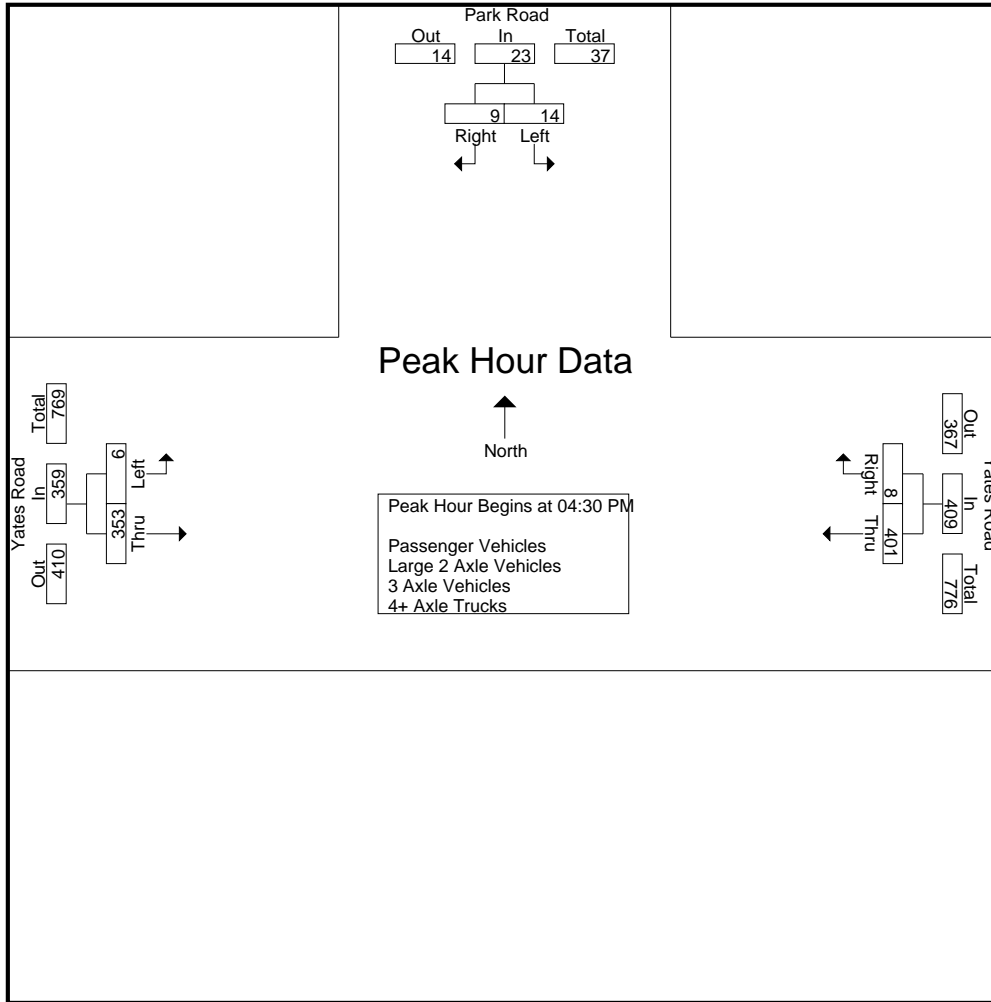
Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	1	1	2	96	1	97	0	85	85	184
04:15 PM	2	2	4	111	2	113	3	84	87	204
04:30 PM	7	4	11	95	4	99	1	89	90	200
04:45 PM	3	0	3	88	0	88	2	84	86	177
Total	13	7	20	390	7	397	6	342	348	765
05:00 PM	1	2	3	113	2	115	2	88	90	208
05:15 PM	3	3	6	105	2	107	1	92	93	206
05:30 PM	0	0	0	95	0	95	0	83	83	178
05:45 PM	1	2	3	116	1	117	0	69	69	189
Total	5	7	12	429	5	434	3	332	335	781
Grand Total	18	14	32	819	12	831	9	674	683	1546
Apprch %	56.2	43.8		98.6	1.4		1.3	98.7		
Total %	1.2	0.9	2.1	53	0.8	53.8	0.6	43.6	44.2	
Passenger Vehicles	17	14	31	808	12	820	8	672	680	1531
% Passenger Vehicles	94.4	100	96.9	98.7	100	98.7	88.9	99.7	99.6	99
Large 2 Axle Vehicles	1	0	1	11	0	11	1	2	3	15
% Large 2 Axle Vehicles	5.6	0	3.1	1.3	0	1.3	11.1	0.3	0.4	1
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	7	4	11	95	4	99	1	89	90	200
04:45 PM	3	0	3	88	0	88	2	84	86	177
05:00 PM	1	2	3	113	2	115	2	88	90	208
05:15 PM	3	3	6	105	2	107	1	92	93	206
Total Volume	14	9	23	401	8	409	6	353	359	791
% App. Total	60.9	39.1		98	2		1.7	98.3		
PHF	.500	.563	.523	.887	.500	.889	.750	.959	.965	.951

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 Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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			05:00 PM			04:30 PM		
+0 mins.	7	4	11	113	2	115	1	89	90
+15 mins.	3	0	3	105	2	107	2	84	86
+30 mins.	1	2	3	95	0	95	2	88	90
+45 mins.	3	3	6	116	1	117	1	92	93
Total Volume	14	9	23	429	5	434	6	353	359
% App. Total	60.9	39.1		98.8	1.2		1.7	98.3	
PHF	.500	.563	.523	.925	.625	.927	.750	.959	.965

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

Groups Printed- Passenger Vehicles

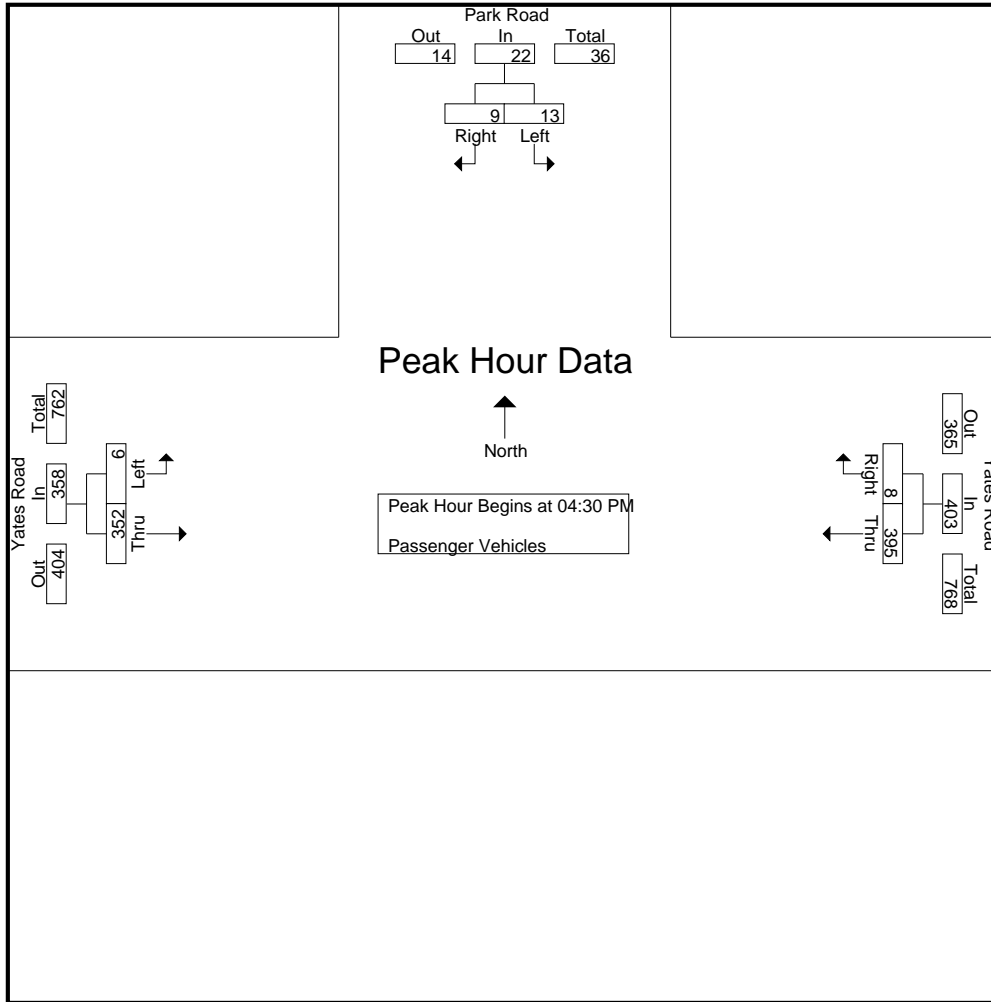
Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	1	1	2	95	1	96	0	84	84	182
04:15 PM	2	2	4	109	2	111	2	84	86	201
04:30 PM	6	4	10	95	4	99	1	89	90	199
04:45 PM	3	0	3	87	0	87	2	83	85	175
Total	12	7	19	386	7	393	5	340	345	757
05:00 PM	1	2	3	111	2	113	2	88	90	206
05:15 PM	3	3	6	102	2	104	1	92	93	203
05:30 PM	0	0	0	94	0	94	0	83	83	177
05:45 PM	1	2	3	115	1	116	0	69	69	188
Total	5	7	12	422	5	427	3	332	335	774
Grand Total	17	14	31	808	12	820	8	672	680	1531
Apprch %	54.8	45.2		98.5	1.5		1.2	98.8		
Total %	1.1	0.9	2	52.8	0.8	53.6	0.5	43.9	44.4	

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	6	4	10	95	4	99	1	89	90	199
04:45 PM	3	0	3	87	0	87	2	83	85	175
05:00 PM	1	2	3	111	2	113	2	88	90	206
05:15 PM	3	3	6	102	2	104	1	92	93	203
Total Volume	13	9	22	395	8	403	6	352	358	783
% App. Total	59.1	40.9		98	2		1.7	98.3		
PHF	.542	.563	.550	.890	.500	.892	.750	.957	.962	.950

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

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	6	4	10	95	4	99	1	89	90
+15 mins.	3	0	3	87	0	87	2	83	85
+30 mins.	1	2	3	111	2	113	2	88	90
+45 mins.	3	3	6	102	2	104	1	92	93
Total Volume	13	9	22	395	8	403	6	352	358
% App. Total	59.1	40.9		98	2		1.7	98.3	
PHF	.542	.563	.550	.890	.500	.892	.750	.957	.962

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

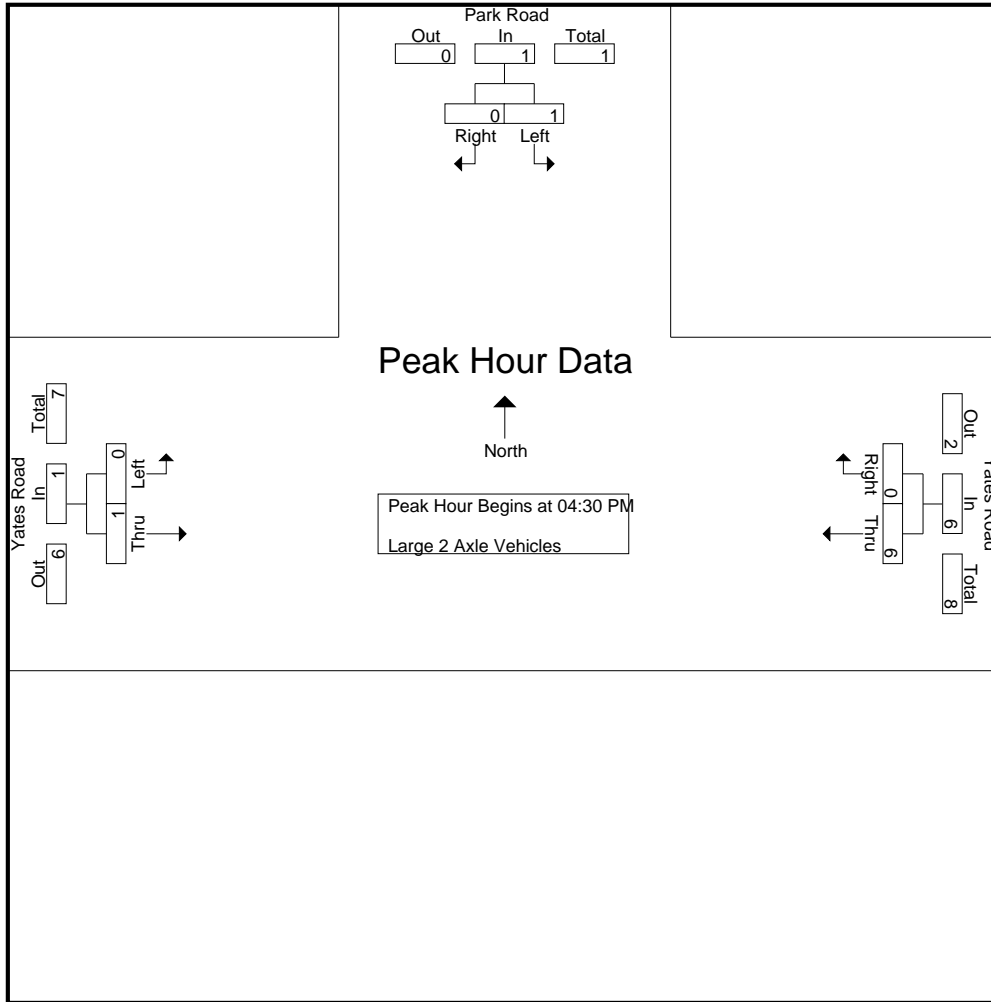
Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	1	0	1	0	1	1	2
04:15 PM	0	0	0	2	0	2	1	0	1	3
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	1	0	1	0	1	1	2
Total	1	0	1	4	0	4	1	2	3	8
05:00 PM	0	0	0	2	0	2	0	0	0	2
05:15 PM	0	0	0	3	0	3	0	0	0	3
05:30 PM	0	0	0	1	0	1	0	0	0	1
05:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	7	0	7	0	0	0	7
Grand Total	1	0	1	11	0	11	1	2	3	15
Apprch %	100	0		100	0		33.3	66.7		
Total %	6.7	0	6.7	73.3	0	73.3	6.7	13.3	20	

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	1	0	1	0	1	1	2
05:00 PM	0	0	0	2	0	2	0	0	0	2
05:15 PM	0	0	0	3	0	3	0	0	0	3
Total Volume	1	0	1	6	0	6	0	1	1	8
% App. Total	100	0		100	0		0	100		
PHF	.250	.000	.250	.500	.000	.500	.000	.250	.250	.667

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

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	1	0	1	0	0	0	0	0	0
+15 mins.	0	0	0	1	0	1	0	1	1
+30 mins.	0	0	0	2	0	2	0	0	0
+45 mins.	0	0	0	3	0	3	0	0	0
Total Volume	1	0	1	6	0	6	0	1	1
% App. Total	100	0		100	0		0	100	
PHF	.250	.000	.250	.500	.000	.500	.000	.250	.250

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

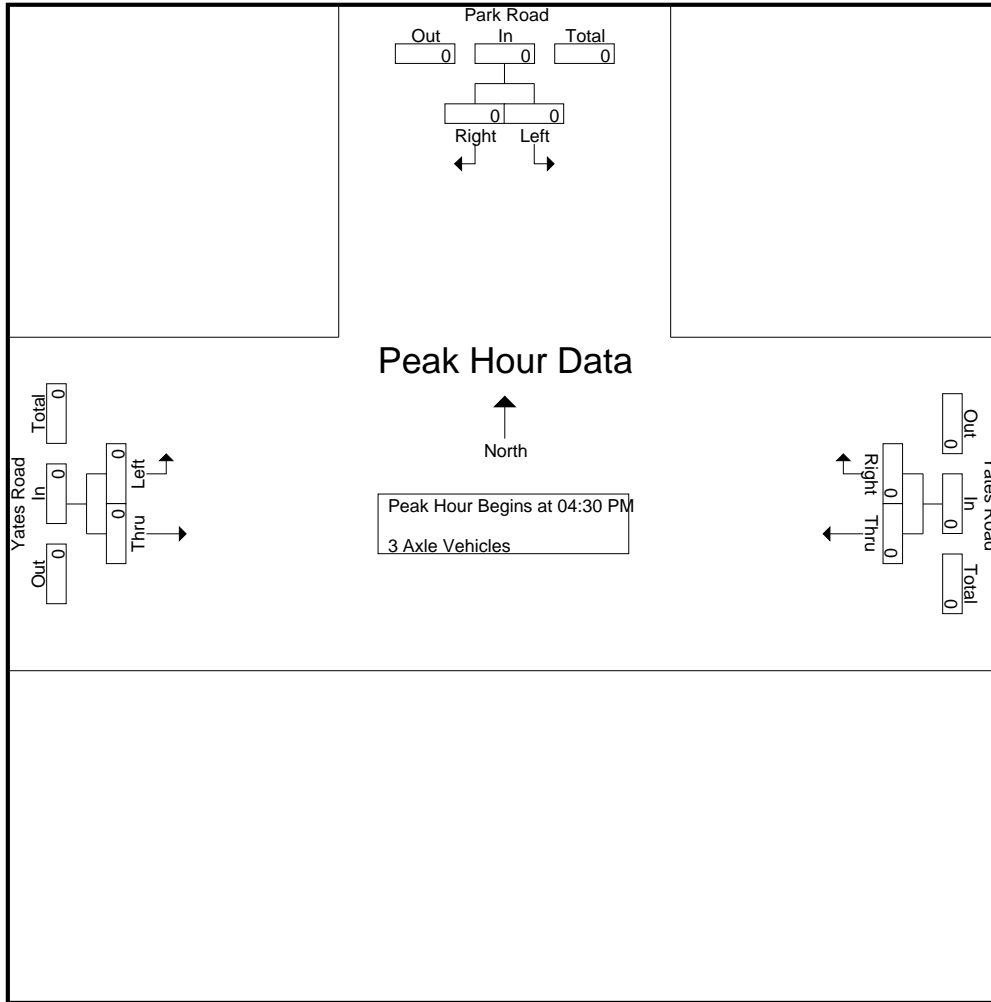
Groups Printed- 3 Axle Vehicles

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



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

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

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

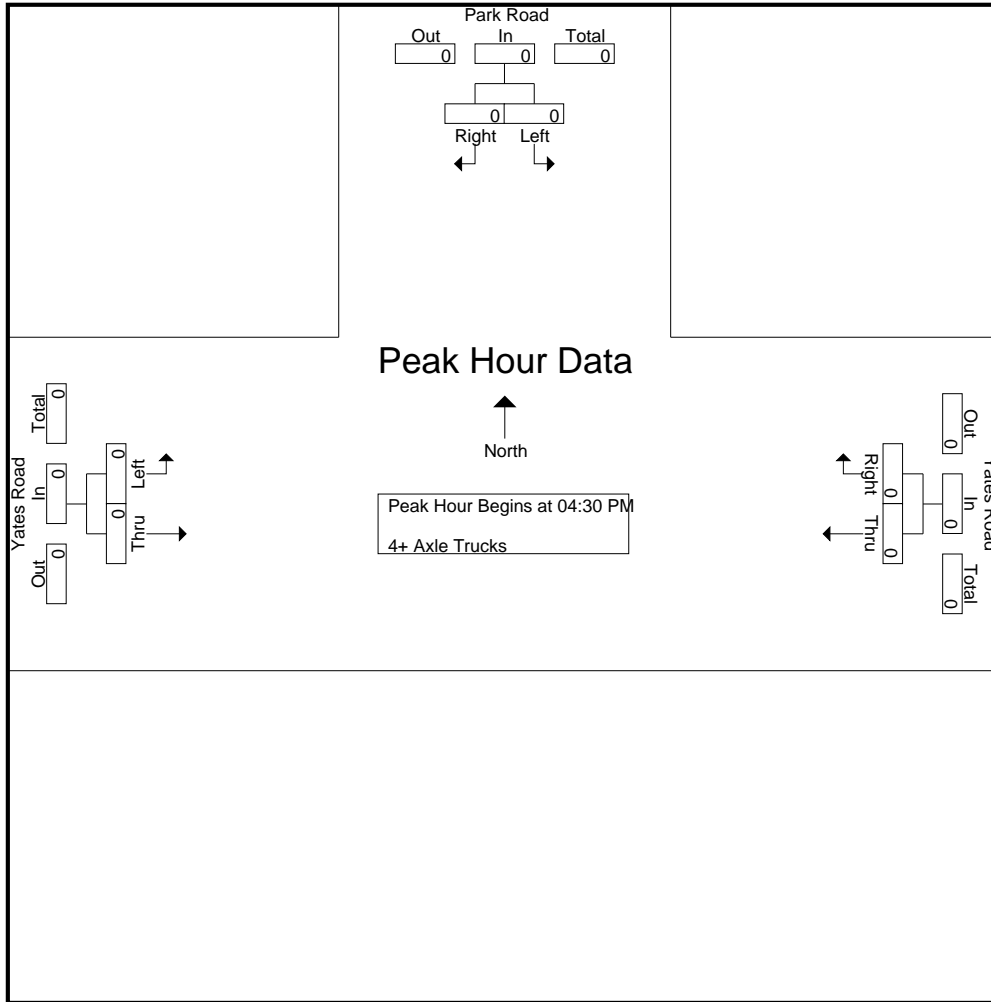
Groups Printed- 4+ Axle Trucks

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Park Road Southbound			Yates Road Westbound			Yates Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Victorville
 N/S: Park Road
 E/W: Yates Road
 Weather: Clear

File Name : 04_VIC_Park_Yates PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



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

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

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

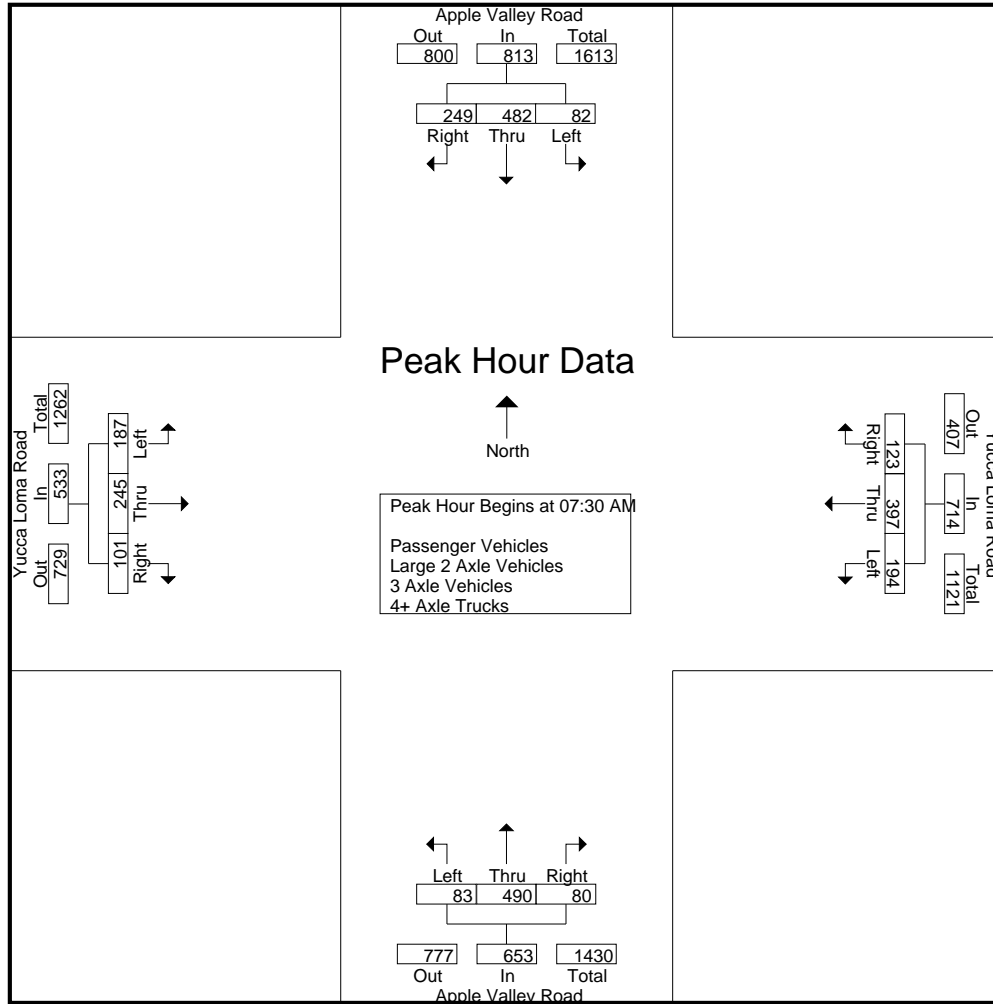
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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	7	51	32	90	25	62	27	114	7	89	6	102	43	32	8	83	389
07:15 AM	14	68	29	111	16	47	31	94	13	102	18	133	27	28	10	65	403
07:30 AM	21	158	66	245	50	103	32	185	9	137	15	161	31	51	22	104	695
07:45 AM	21	147	76	244	63	117	39	219	24	127	20	171	68	71	46	185	819
Total	63	424	203	690	154	329	129	612	53	455	59	567	169	182	86	437	2306
08:00 AM	25	90	59	174	41	105	24	170	36	114	25	175	51	85	21	157	676
08:15 AM	15	87	48	150	40	72	28	140	14	112	20	146	37	38	12	87	523
08:30 AM	20	126	41	187	38	63	29	130	12	125	28	165	34	37	11	82	564
08:45 AM	16	106	30	152	36	60	26	122	19	105	19	143	22	17	9	48	465
Total	76	409	178	663	155	300	107	562	81	456	92	629	144	177	53	374	2228
Grand Total	139	833	381	1353	309	629	236	1174	134	911	151	1196	313	359	139	811	4534
Apprch %	10.3	61.6	28.2		26.3	53.6	20.1		11.2	76.2	12.6		38.6	44.3	17.1		
Total %	3.1	18.4	8.4	29.8	6.8	13.9	5.2	25.9	3	20.1	3.3	26.4	6.9	7.9	3.1	17.9	
Passenger Vehicles	134	811	370	1315	301	620	231	1152	131	872	144	1147	305	348	136	789	4403
% Passenger Vehicles	96.4	97.4	97.1	97.2	97.4	98.6	97.9	98.1	97.8	95.7	95.4	95.9	97.4	96.9	97.8	97.3	97.1
Large 2 Axle Vehicles	5	15	11	31	8	8	5	21	3	34	6	43	8	11	3	22	117
% Large 2 Axle Vehicles	3.6	1.8	2.9	2.3	2.6	1.3	2.1	1.8	2.2	3.7	4	3.6	2.6	3.1	2.2	2.7	2.6
3 Axle Vehicles	0	6	0	6	0	1	0	1	0	5	1	6	0	0	0	0	13
% 3 Axle Vehicles	0	0.7	0	0.4	0	0.2	0	0.1	0	0.5	0.7	0.5	0	0	0	0	0.3
4+ Axle Trucks	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% 4+ Axle Trucks	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 07:30 AM																	
07:30 AM	21	158	66	245	50	103	32	185	9	137	15	161	31	51	22	104	695
07:45 AM	21	147	76	244	63	117	39	219	24	127	20	171	68	71	46	185	819
08:00 AM	25	90	59	174	41	105	24	170	36	114	25	175	51	85	21	157	676
08:15 AM	15	87	48	150	40	72	28	140	14	112	20	146	37	38	12	87	523
Total Volume	82	482	249	813	194	397	123	714	83	490	80	653	187	245	101	533	2713
% App. Total	10.1	59.3	30.6		27.2	55.6	17.2		12.7	75	12.3		35.1	46	18.9		
PHF	.820	.763	.819	.830	.770	.848	.788	.815	.576	.894	.800	.933	.688	.721	.549	.720	.828

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
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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:

	07:30 AM				07:30 AM				07:45 AM				07:30 AM			
+0 mins.	21	158	66	245	50	103	32	185	24	127	20	171	31	51	22	104
+15 mins.	21	147	76	244	63	117	39	219	36	114	25	175	68	71	46	185
+30 mins.	25	90	59	174	41	105	24	170	14	112	20	146	51	85	21	157
+45 mins.	15	87	48	150	40	72	28	140	12	125	28	165	37	38	12	87
Total Volume	82	482	249	813	194	397	123	714	86	478	93	657	187	245	101	533
% App. Total	10.1	59.3	30.6		27.2	55.6	17.2		13.1	72.8	14.2		35.1	46	18.9	
PHF	.820	.763	.819	.830	.770	.848	.788	.815	.597	.941	.830	.939	.688	.721	.549	.720

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

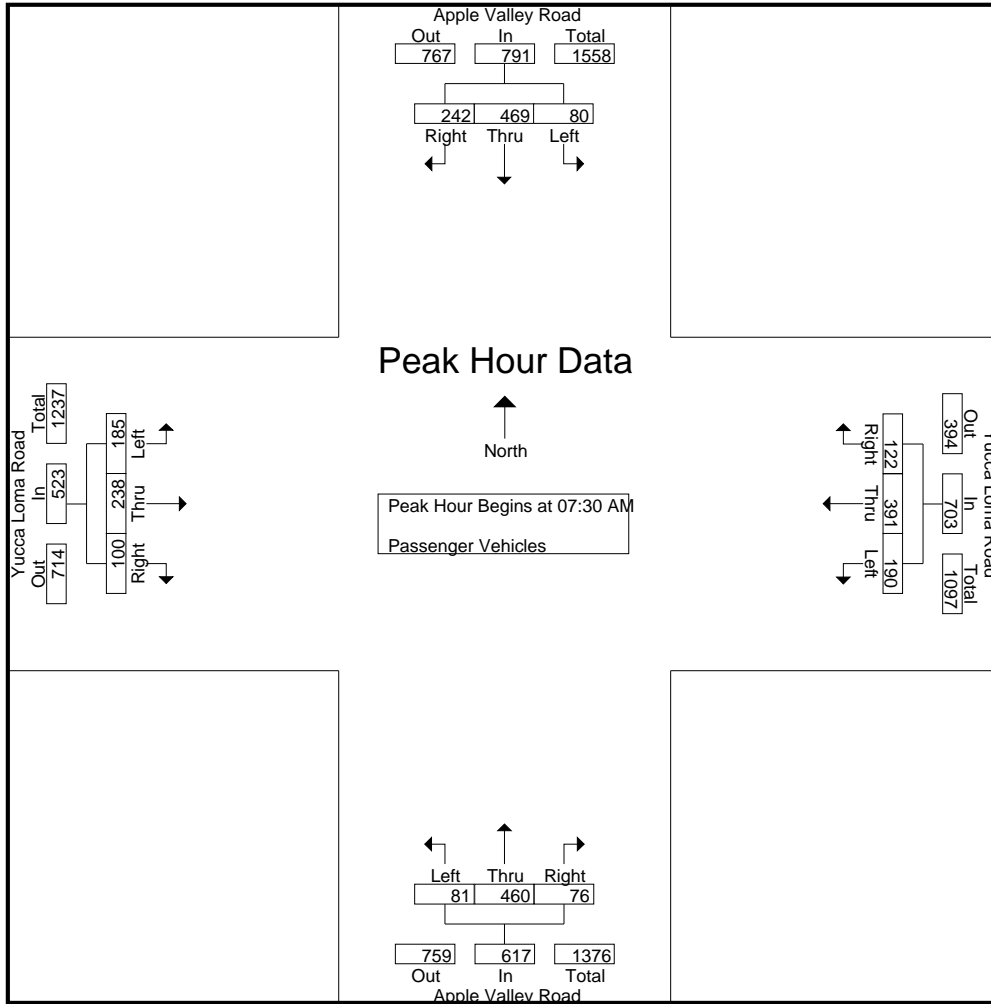
Groups Printed- Passenger Vehicles

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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	6	49	32	87	24	62	26	112	7	88	5	100	40	32	7	79	378
07:15 AM	12	66	29	107	15	46	31	92	12	100	18	130	26	27	10	63	392
07:30 AM	20	154	63	237	49	101	31	181	9	127	15	151	31	50	22	103	672
07:45 AM	20	140	74	234	60	114	39	213	23	123	20	166	67	70	45	182	795
Total	58	409	198	665	148	323	127	598	51	438	58	547	164	179	84	427	2237
08:00 AM	25	88	59	172	41	104	24	169	35	108	25	168	51	82	21	154	663
08:15 AM	15	87	46	148	40	72	28	140	14	102	16	132	36	36	12	84	504
08:30 AM	20	125	40	185	38	62	28	128	12	121	28	161	33	35	11	79	553
08:45 AM	16	102	27	145	34	59	24	117	19	103	17	139	21	16	8	45	446
Total	76	402	172	650	153	297	104	554	80	434	86	600	141	169	52	362	2166
Grand Total	134	811	370	1315	301	620	231	1152	131	872	144	1147	305	348	136	789	4403
Apprch %	10.2	61.7	28.1		26.1	53.8	20.1		11.4	76	12.6		38.7	44.1	17.2		
Total %	3	18.4	8.4	29.9	6.8	14.1	5.2	26.2	3	19.8	3.3	26.1	6.9	7.9	3.1	17.9	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	20	154	63	237	49	101	31	181	9	127	15	151	31	50	22	103	672
07:45 AM	20	140	74	234	60	114	39	213	23	123	20	166	67	70	45	182	795
08:00 AM	25	88	59	172	41	104	24	169	35	108	25	168	51	82	21	154	663
08:15 AM	15	87	46	148	40	72	28	140	14	102	16	132	36	36	12	84	504
Total Volume	80	469	242	791	190	391	122	703	81	460	76	617	185	238	100	523	2634
% App. Total	10.1	59.3	30.6		27	55.6	17.4		13.1	74.6	12.3		35.4	45.5	19.1		
PHF	.800	.761	.818	.834	.792	.857	.782	.825	.579	.906	.760	.918	.690	.726	.556	.718	.828

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	20	154	63	237	49	101	31	181	9	127	15	151	31	50	22	103
+15 mins.	20	140	74	234	60	114	39	213	23	123	20	166	67	70	45	182
+30 mins.	25	88	59	172	41	104	24	169	35	108	25	168	51	82	21	154
+45 mins.	15	87	46	148	40	72	28	140	14	102	16	132	36	36	12	84
Total Volume	80	469	242	791	190	391	122	703	81	460	76	617	185	238	100	523
% App. Total	10.1	59.3	30.6		27	55.6	17.4		13.1	74.6	12.3		35.4	45.5	19.1	
PHF	.800	.761	.818	.834	.792	.857	.782	.825	.579	.906	.760	.918	.690	.726	.556	.718

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

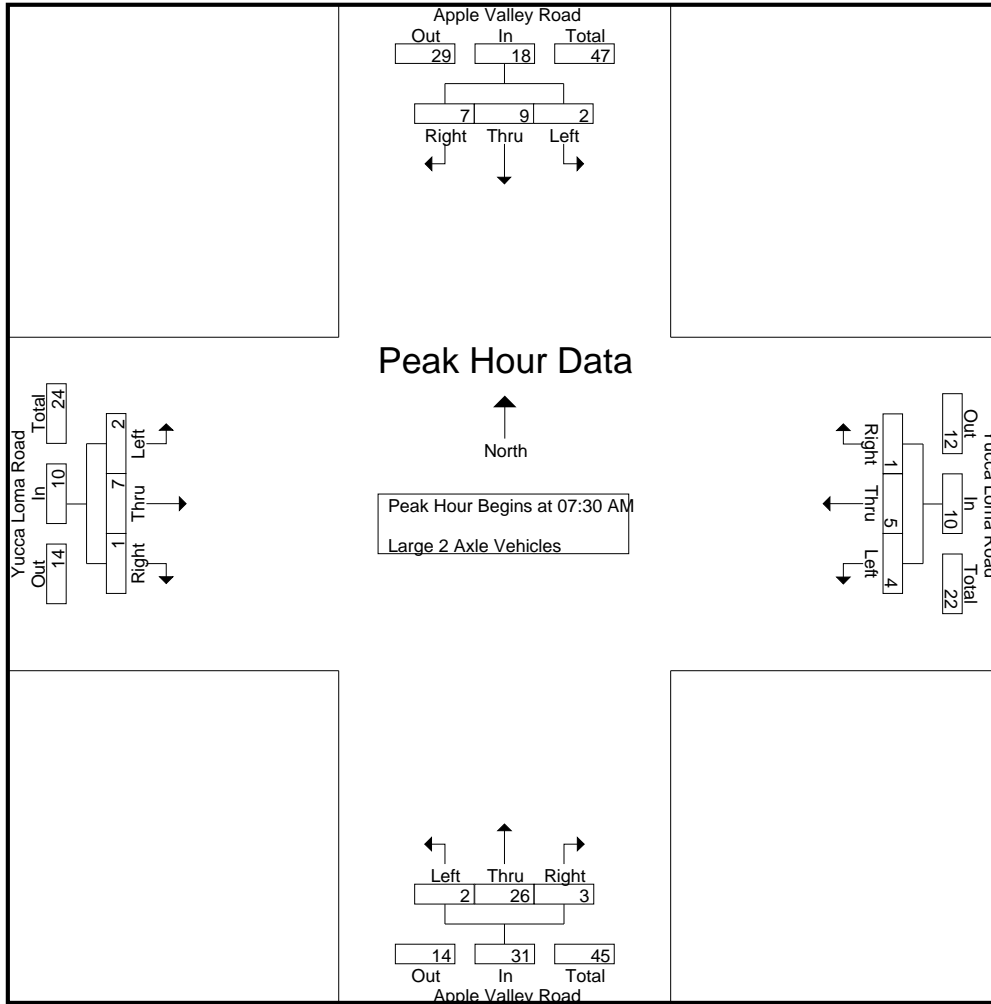
Groups Printed- Large 2 Axle Vehicles

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	0	1	1	0	1	2	0	1	1	2	3	0	1	4	9
07:15 AM	2	1	0	3	1	1	0	2	1	2	0	3	1	1	0	2	10
07:30 AM	1	2	3	6	1	1	1	3	0	8	0	8	0	1	0	1	18
07:45 AM	1	5	2	8	3	3	0	6	1	4	0	5	1	1	1	3	22
Total	5	8	5	18	6	5	2	13	2	15	1	18	5	3	2	10	59
08:00 AM	0	2	0	2	0	1	0	1	1	6	0	7	0	3	0	3	13
08:15 AM	0	0	2	2	0	0	0	0	0	8	3	11	1	2	0	3	16
08:30 AM	0	1	1	2	0	1	1	2	0	3	0	3	1	2	0	3	10
08:45 AM	0	4	3	7	2	1	2	5	0	2	2	4	1	1	1	3	19
Total	0	7	6	13	2	3	3	8	1	19	5	25	3	8	1	12	58
Grand Total	5	15	11	31	8	8	5	21	3	34	6	43	8	11	3	22	117
Apprch %	16.1	48.4	35.5		38.1	38.1	23.8		7	79.1	14		36.4	50	13.6		
Total %	4.3	12.8	9.4	26.5	6.8	6.8	4.3	17.9	2.6	29.1	5.1	36.8	6.8	9.4	2.6	18.8	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	2	3	6	1	1	1	3	0	8	0	8	0	1	0	1	18
07:45 AM	1	5	2	8	3	3	0	6	1	4	0	5	1	1	1	3	22
08:00 AM	0	2	0	2	0	1	0	1	1	6	0	7	0	3	0	3	13
08:15 AM	0	0	2	2	0	0	0	0	0	8	3	11	1	2	0	3	16
Total Volume	2	9	7	18	4	5	1	10	2	26	3	31	2	7	1	10	69
% App. Total	11.1	50	38.9		40	50	10		6.5	83.9	9.7		20	70	10		
PHF	.500	.450	.583	.563	.333	.417	.250	.417	.500	.813	.250	.705	.500	.583	.250	.833	.784

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	2	3	6	1	1	1	3	0	8	0	8	0	1	0	1
+15 mins.	1	5	2	8	3	3	0	6	1	4	0	5	1	1	1	3
+30 mins.	0	2	0	2	0	1	0	1	1	6	0	7	0	3	0	3
+45 mins.	0	0	2	2	0	0	0	0	0	8	3	11	1	2	0	3
Total Volume	2	9	7	18	4	5	1	10	2	26	3	31	2	7	1	10
% App. Total	11.1	50	38.9		40	50	10		6.5	83.9	9.7		20	70	10	
PHF	.500	.450	.583	.563	.333	.417	.250	.417	.500	.813	.250	.705	.500	.583	.250	.833

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

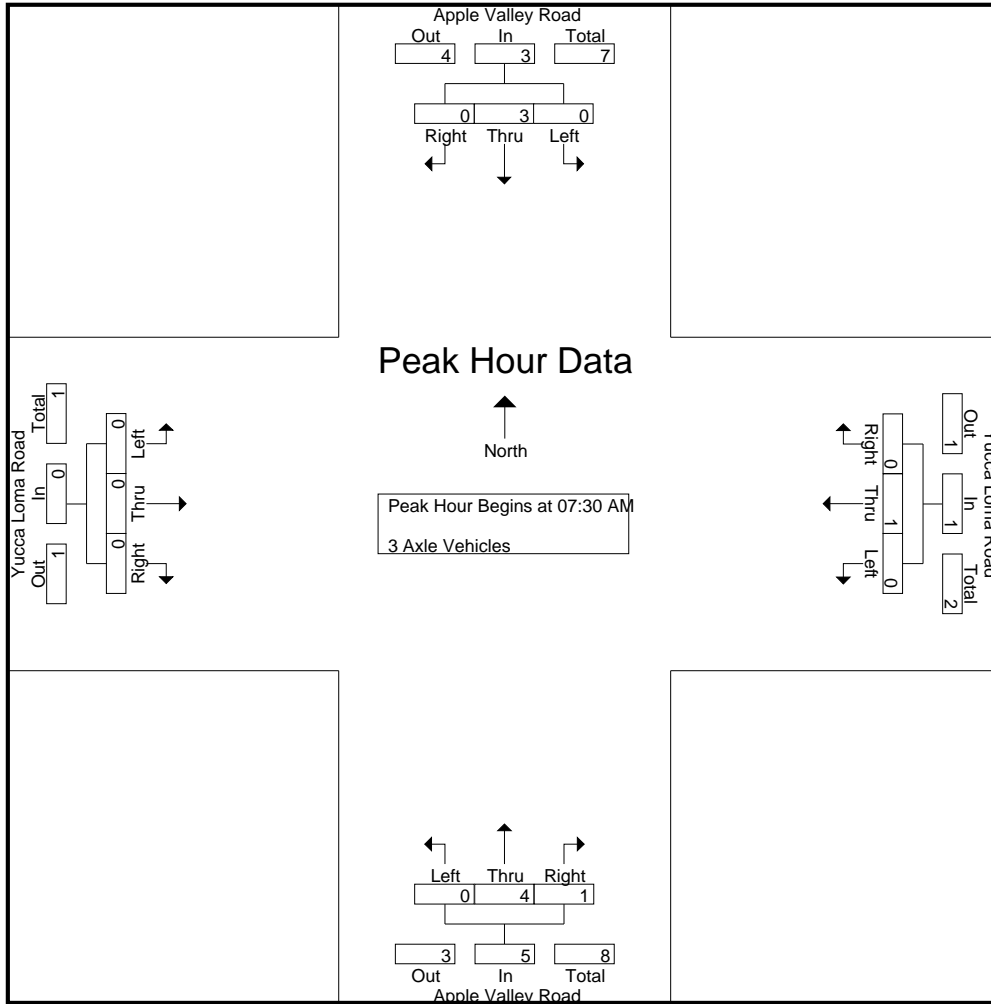
Groups Printed- 3 Axle Vehicles

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	2	0	2	0	1	0	1	0	2	0	2	0	0	0	0	0	5
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	6	0	6	0	1	0	1	0	2	0	2	0	0	0	0	0	9
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	4
Grand Total	0	6	0	6	0	1	0	1	0	5	1	6	0	0	0	0	0	13
Apprch %	0	100	0		0	100	0		0	83.3	16.7		0	0	0			
Total %	0	46.2	0	46.2	0	7.7	0	7.7	0	38.5	7.7	46.2	0	0	0	0	0	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 07:30 AM to 08:15 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	0	2	0	2	0	1	0	1	0	2	0	2	0	0	0	0	0	5
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	3
Total Volume	0	3	0	3	0	1	0	1	0	4	1	5	0	0	0	0	0	9
% App. Total	0	100	0		0	100	0		0	80	20		0	0	0			
PHF	.000	.375	.000	.375	.000	.250	.000	.250	.000	.500	.250	.417	.000	.000	.000	.000	.000	.450

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	2	0	2	0	1	0	1	0	2	0	2	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0
Total Volume	0	3	0	3	0	1	0	1	0	4	1	5	0	0	0	0
% App. Total	0	100	0	0	0	100	0	0	0	80	20	0	0	0	0	0
PHF	.000	.375	.000	.375	.000	.250	.000	.250	.000	.500	.250	.417	.000	.000	.000	.000

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

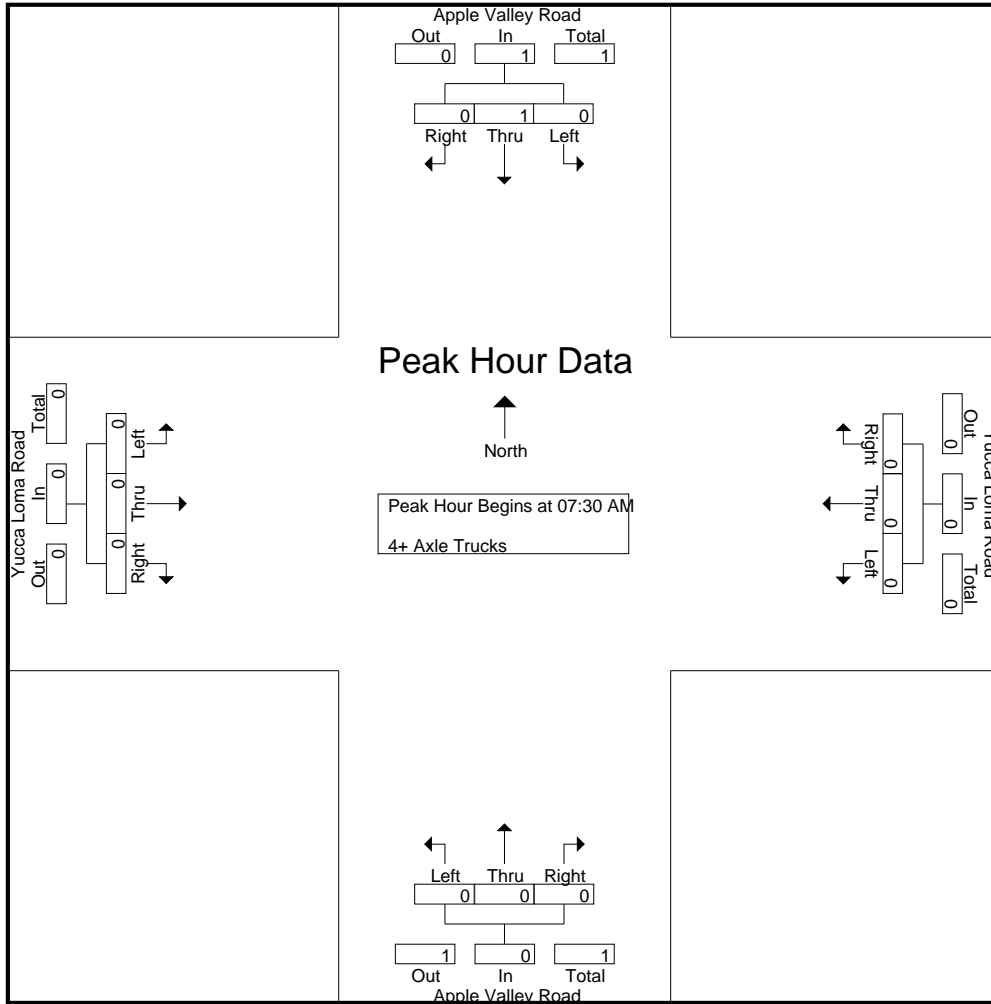
Groups Printed- 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma AM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

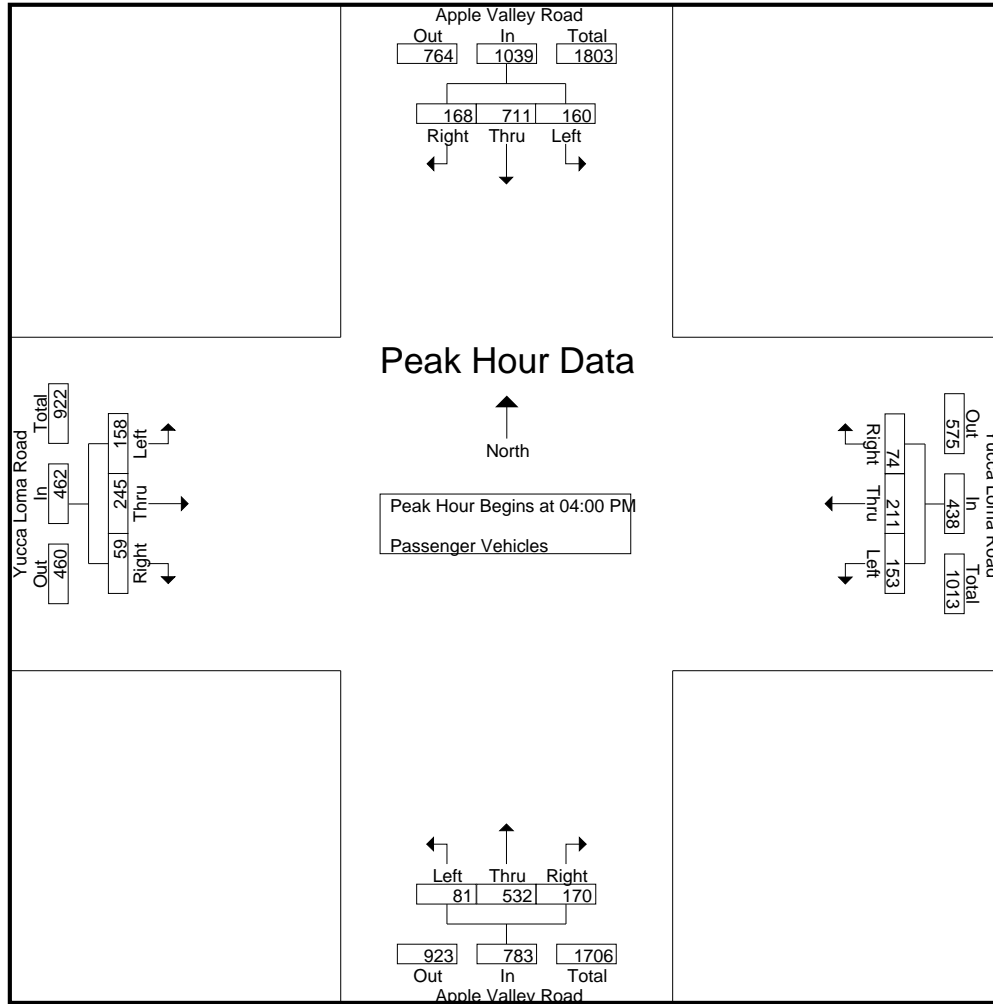
Groups Printed- Passenger Vehicles

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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	36	189	38	263	37	53	19	109	27	152	43	222	48	65	17	130	724
04:15 PM	41	187	42	270	44	61	19	124	17	155	41	213	36	67	19	122	729
04:30 PM	43	151	45	239	44	48	20	112	20	100	43	163	39	49	12	100	614
04:45 PM	40	184	43	267	28	49	16	93	17	125	43	185	35	64	11	110	655
Total	160	711	168	1039	153	211	74	438	81	532	170	783	158	245	59	462	2722
05:00 PM	32	152	59	243	45	45	17	107	13	106	48	167	27	59	14	100	617
05:15 PM	39	177	59	275	43	37	20	100	19	137	50	206	33	51	13	97	678
05:30 PM	31	154	40	225	34	36	15	85	22	106	45	173	44	52	14	110	593
05:45 PM	42	159	43	244	55	51	21	127	30	130	61	221	34	64	12	110	702
Total	144	642	201	987	177	169	73	419	84	479	204	767	138	226	53	417	2590
Grand Total	304	1353	369	2026	330	380	147	857	165	1011	374	1550	296	471	112	879	5312
Apprch %	15	66.8	18.2		38.5	44.3	17.2		10.6	65.2	24.1		33.7	53.6	12.7		
Total %	5.7	25.5	6.9	38.1	6.2	7.2	2.8	16.1	3.1	19	7	29.2	5.6	8.9	2.1	16.5	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	36	189	38	263	37	53	19	109	27	152	43	222	48	65	17	130	724
04:15 PM	41	187	42	270	44	61	19	124	17	155	41	213	36	67	19	122	729
04:30 PM	43	151	45	239	44	48	20	112	20	100	43	163	39	49	12	100	614
04:45 PM	40	184	43	267	28	49	16	93	17	125	43	185	35	64	11	110	655
Total Volume	160	711	168	1039	153	211	74	438	81	532	170	783	158	245	59	462	2722
% App. Total	15.4	68.4	16.2		34.9	48.2	16.9		10.3	67.9	21.7		34.2	53	12.8		
PHF	.930	.940	.933	.962	.869	.865	.925	.883	.750	.858	.988	.882	.823	.914	.776	.888	.933

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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.	36	189	38	263	37	53	19	109	27	152	43	222	48	65	17	130
+15 mins.	41	187	42	270	44	61	19	124	17	155	41	213	36	67	19	122
+30 mins.	43	151	45	239	44	48	20	112	20	100	43	163	39	49	12	100
+45 mins.	40	184	43	267	28	49	16	93	17	125	43	185	35	64	11	110
Total Volume	160	711	168	1039	153	211	74	438	81	532	170	783	158	245	59	462
% App. Total	15.4	68.4	16.2		34.9	48.2	16.9		10.3	67.9	21.7		34.2	53	12.8	
PHF	.930	.940	.933	.962	.869	.865	.925	.883	.750	.858	.988	.882	.823	.914	.776	.888

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

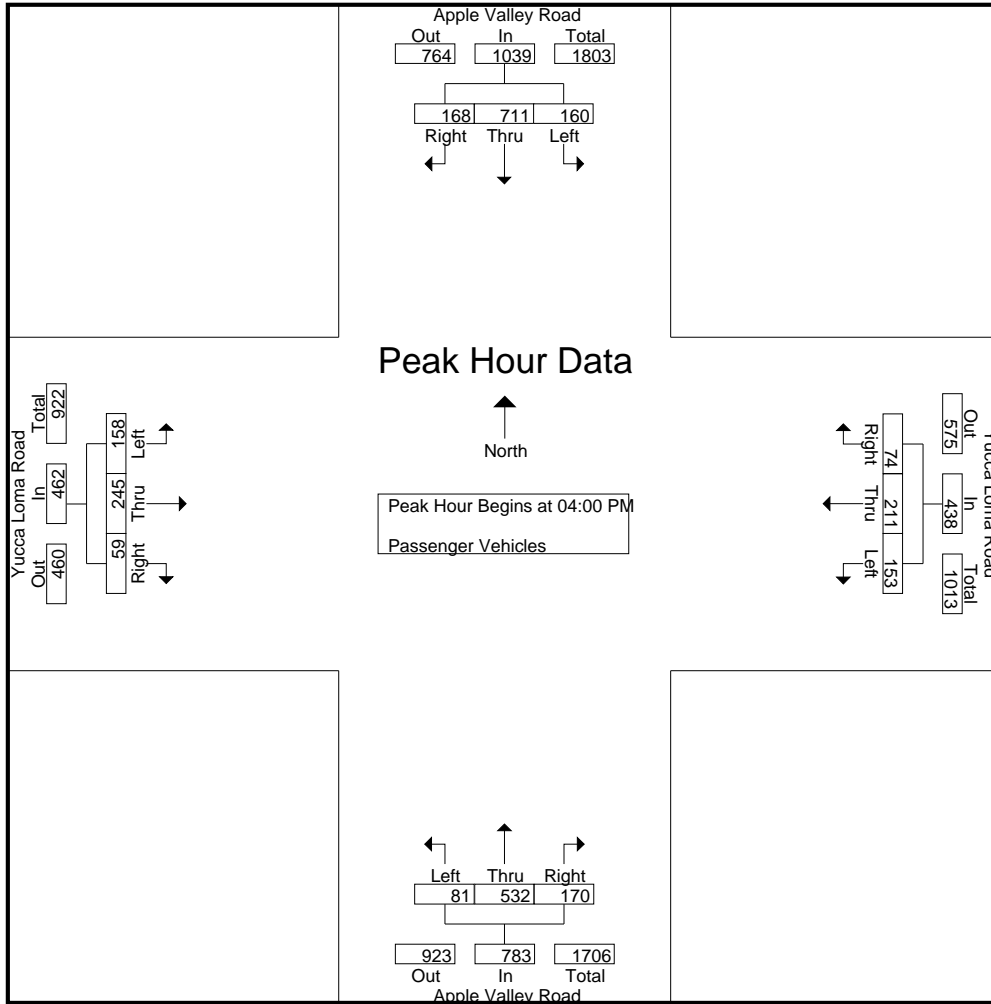
Groups Printed- Passenger Vehicles

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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	36	189	38	263	37	53	19	109	27	152	43	222	48	65	17	130	724
04:15 PM	41	187	42	270	44	61	19	124	17	155	41	213	36	67	19	122	729
04:30 PM	43	151	45	239	44	48	20	112	20	100	43	163	39	49	12	100	614
04:45 PM	40	184	43	267	28	49	16	93	17	125	43	185	35	64	11	110	655
Total	160	711	168	1039	153	211	74	438	81	532	170	783	158	245	59	462	2722
05:00 PM	32	152	59	243	45	45	17	107	13	106	48	167	27	59	14	100	617
05:15 PM	39	177	59	275	43	37	20	100	19	137	50	206	33	51	13	97	678
05:30 PM	31	154	40	225	34	36	15	85	22	106	45	173	44	52	14	110	593
05:45 PM	42	159	43	244	55	51	21	127	30	130	61	221	34	64	12	110	702
Total	144	642	201	987	177	169	73	419	84	479	204	767	138	226	53	417	2590
Grand Total	304	1353	369	2026	330	380	147	857	165	1011	374	1550	296	471	112	879	5312
Apprch %	15	66.8	18.2		38.5	44.3	17.2		10.6	65.2	24.1		33.7	53.6	12.7		
Total %	5.7	25.5	6.9	38.1	6.2	7.2	2.8	16.1	3.1	19	7	29.2	5.6	8.9	2.1	16.5	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	36	189	38	263	37	53	19	109	27	152	43	222	48	65	17	130	724
04:15 PM	41	187	42	270	44	61	19	124	17	155	41	213	36	67	19	122	729
04:30 PM	43	151	45	239	44	48	20	112	20	100	43	163	39	49	12	100	614
04:45 PM	40	184	43	267	28	49	16	93	17	125	43	185	35	64	11	110	655
Total Volume	160	711	168	1039	153	211	74	438	81	532	170	783	158	245	59	462	2722
% App. Total	15.4	68.4	16.2		34.9	48.2	16.9		10.3	67.9	21.7		34.2	53	12.8		
PHF	.930	.940	.933	.962	.869	.865	.925	.883	.750	.858	.988	.882	.823	.914	.776	.888	.933

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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.	36	189	38	263	37	53	19	109	27	152	43	222	48	65	17	130
+15 mins.	41	187	42	270	44	61	19	124	17	155	41	213	36	67	19	122
+30 mins.	43	151	45	239	44	48	20	112	20	100	43	163	39	49	12	100
+45 mins.	40	184	43	267	28	49	16	93	17	125	43	185	35	64	11	110
Total Volume	160	711	168	1039	153	211	74	438	81	532	170	783	158	245	59	462
% App. Total	15.4	68.4	16.2		34.9	48.2	16.9		10.3	67.9	21.7		34.2	53	12.8	
PHF	.930	.940	.933	.962	.869	.865	.925	.883	.750	.858	.988	.882	.823	.914	.776	.888

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

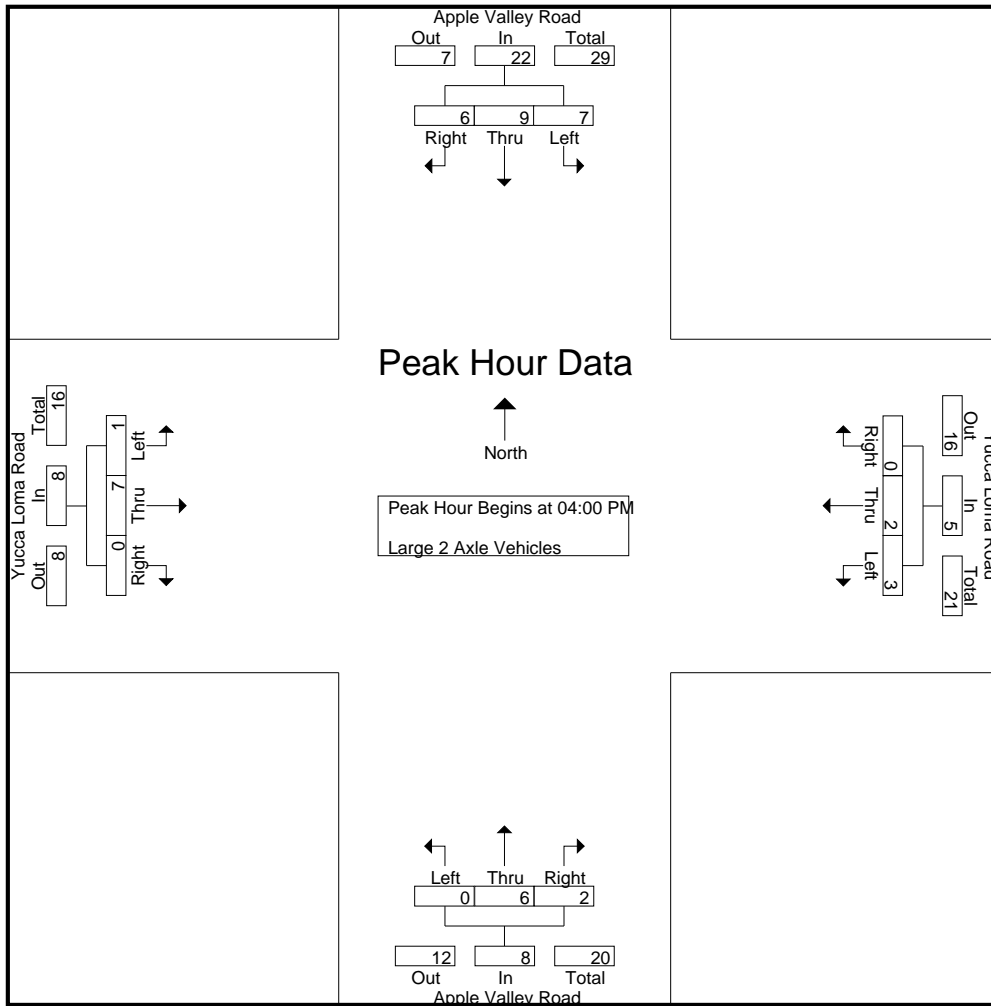
Groups Printed- Large 2 Axle Vehicles

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	4	3	8	0	0	0	0	0	2	0	2	0	4	0	4	14
04:15 PM	2	1	0	3	3	2	0	5	0	3	1	4	1	0	0	1	13
04:30 PM	2	1	1	4	0	0	0	0	0	0	1	1	0	2	0	2	7
04:45 PM	2	3	2	7	0	0	0	0	0	1	0	1	0	1	0	1	9
Total	7	9	6	22	3	2	0	5	0	6	2	8	1	7	0	8	43
05:00 PM	1	2	1	4	2	1	0	3	1	0	2	3	0	0	0	0	10
05:15 PM	0	2	2	4	0	1	0	1	0	1	0	1	4	0	0	4	10
05:30 PM	0	1	1	2	0	0	0	0	0	4	0	4	1	0	0	1	7
05:45 PM	0	3	1	4	0	1	0	1	0	2	0	2	0	0	0	0	7
Total	1	8	5	14	2	3	0	5	1	7	2	10	5	0	0	5	34
Grand Total	8	17	11	36	5	5	0	10	1	13	4	18	6	7	0	13	77
Apprch %	22.2	47.2	30.6		50	50	0		5.6	72.2	22.2		46.2	53.8	0		
Total %	10.4	22.1	14.3	46.8	6.5	6.5	0	13	1.3	16.9	5.2	23.4	7.8	9.1	0	16.9	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	4	3	8	0	0	0	0	0	2	0	2	0	4	0	4	14
04:15 PM	2	1	0	3	3	2	0	5	0	3	1	4	1	0	0	1	13
04:30 PM	2	1	1	4	0	0	0	0	0	0	1	1	0	2	0	2	7
04:45 PM	2	3	2	7	0	0	0	0	0	1	0	1	0	1	0	1	9
Total Volume	7	9	6	22	3	2	0	5	0	6	2	8	1	7	0	8	43
% App. Total	31.8	40.9	27.3		60	40	0		0	75	25		12.5	87.5	0		
PHF	.875	.563	.500	.688	.250	.250	.000	.250	.000	.500	.500	.500	.250	.438	.000	.500	.768

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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	4	3	8	0	0	0	0	0	2	0	2	0	4	0	4
+15 mins.	2	1	0	3	3	2	0	5	0	3	1	4	1	0	0	1
+30 mins.	2	1	1	4	0	0	0	0	0	0	1	1	0	2	0	2
+45 mins.	2	3	2	7	0	0	0	0	0	1	0	1	0	1	0	1
Total Volume	7	9	6	22	3	2	0	5	0	6	2	8	1	7	0	8
% App. Total	31.8	40.9	27.3		60	40	0		0	75	25		12.5	87.5	0	
PHF	.875	.563	.500	.688	.250	.250	.000	.250	.000	.500	.500	.500	.250	.438	.000	.500

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

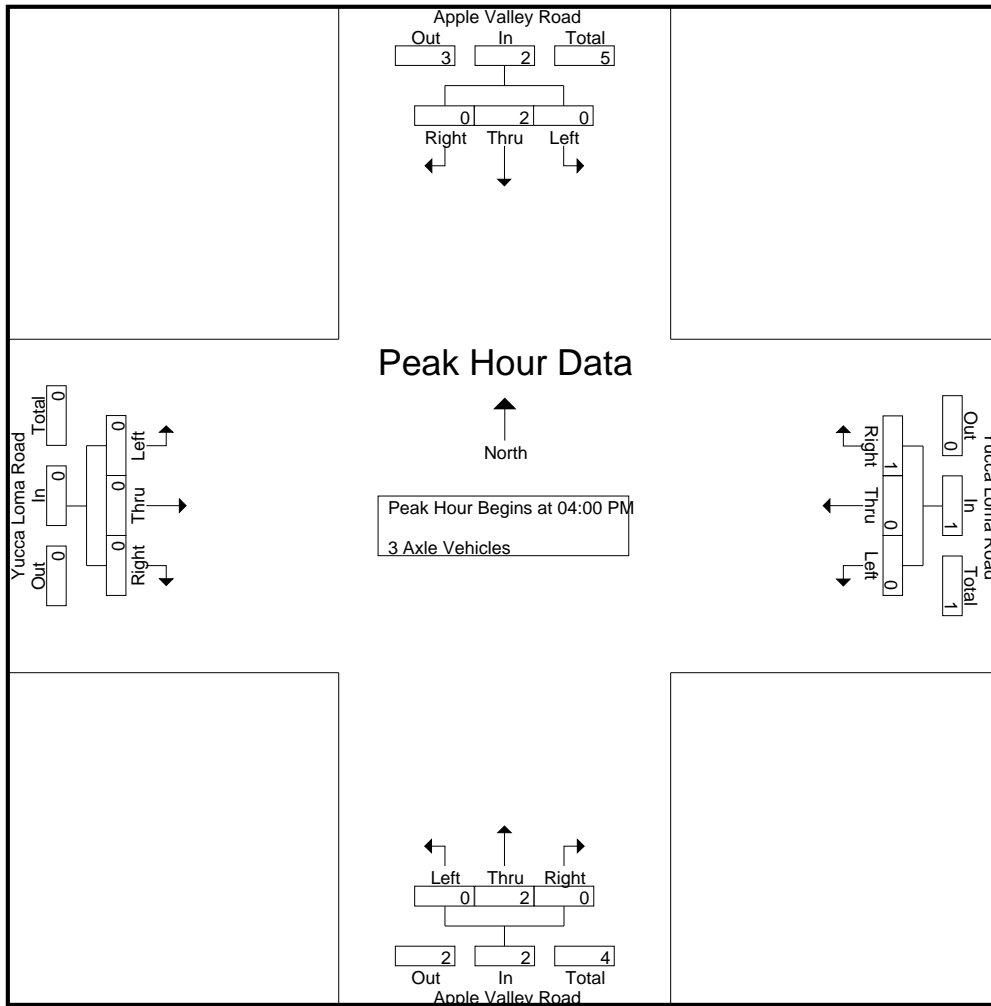
Groups Printed- 3 Axle Vehicles

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:15 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	0	1	1	0	2	0	2	0	0	0	0	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	3	0	3	0	0	1	1	0	2	0	2	0	0	0	0	6
Apprch %	0	100	0		0	0	100		0	100	0		0	0	0		
Total %	0	50	0	50	0	0	16.7	16.7	0	33.3	0	33.3	0	0	0	0	

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:15 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	1	1	0	2	0	2	0	0	0	0	5
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.250	.250	.000	.500	.000	.500	.000	.000	.000	.000	.417

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	1	1	0	2	0	2	0	0	0	0
% App. Total	0	100	0	0	0	0	100	0	0	100	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.000	.250	.250	.000	.500	.000	.500	.000	.000	.000	.000

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 Page No : 1

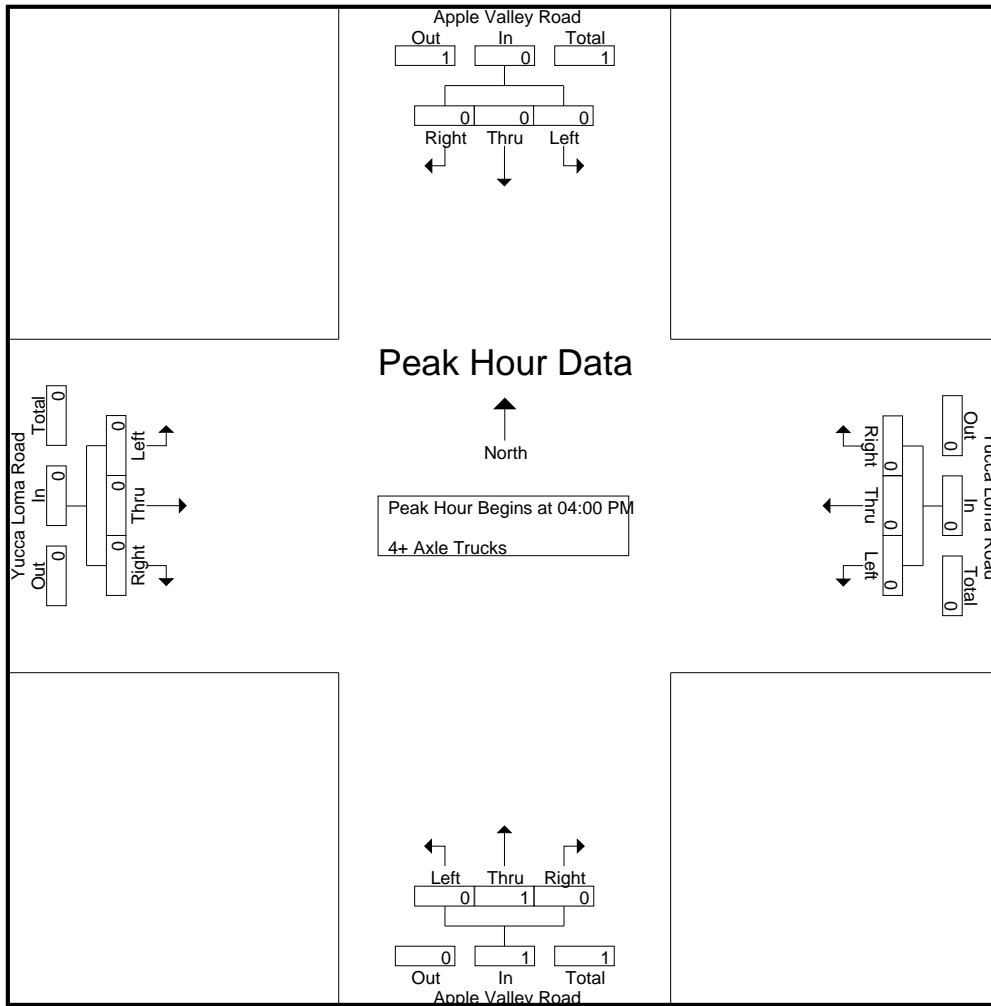
Groups Printed- 4+ Axle Trucks

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0		0	0	0		0	100	0	100	0	0	0		

Start Time	Apple Valley Road Southbound				Yucca Loma Road Westbound				Apple Valley Road Northbound				Yucca Loma 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 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	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

City of Apple Valley
 N/S: Apple Valley Road
 E/W: Yucca Loma Road
 Weather: Clear

File Name : 05_APV_Apple Valley Rd_Yucca Loma PM
 Site Code : 07518180
 Start Date : 3/8/2018
 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	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
 Site Code : 07518372
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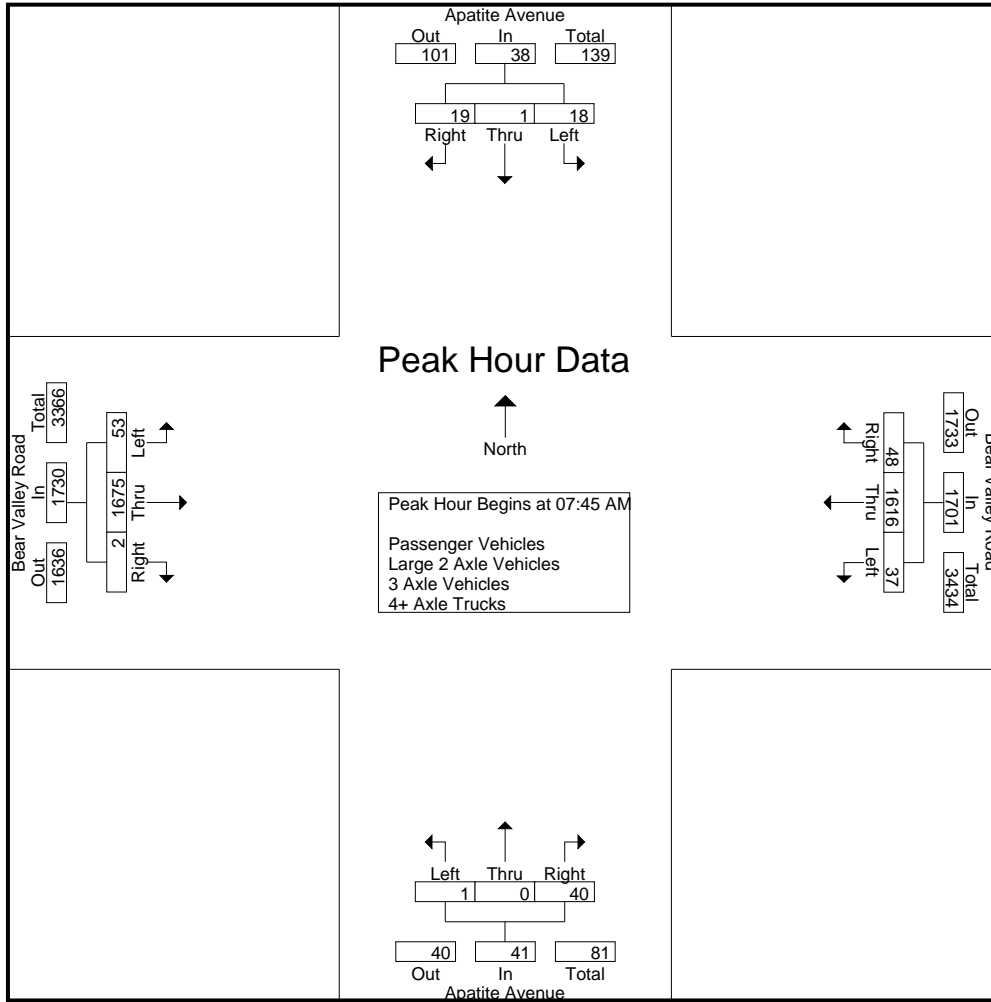
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	0	1	3	5	364	9	378	1	0	7	8	17	230	1	248	637
07:15 AM	4	0	4	8	5	376	8	389	0	0	7	7	9	297	0	306	710
07:30 AM	3	0	5	8	7	364	6	377	0	1	17	18	12	323	2	337	740
07:45 AM	4	0	1	5	9	390	11	410	0	0	13	13	9	506	1	516	944
Total	13	0	11	24	26	1494	34	1554	1	1	44	46	47	1356	4	1407	3031
08:00 AM	4	1	5	10	12	439	14	465	0	0	7	7	18	431	0	449	931
08:15 AM	3	0	5	8	6	409	11	426	0	0	7	7	11	381	1	393	834
08:30 AM	7	0	8	15	10	378	12	400	1	0	13	14	15	357	0	372	801
08:45 AM	9	0	10	19	16	372	9	397	0	0	11	11	23	368	1	392	819
Total	23	1	28	52	44	1598	46	1688	1	0	38	39	67	1537	2	1606	3385
Grand Total	36	1	39	76	70	3092	80	3242	2	1	82	85	114	2893	6	3013	6416
Apprch %	47.4	1.3	51.3		2.2	95.4	2.5		2.4	1.2	96.5		3.8	96	0.2		
Total %	0.6	0	0.6	1.2	1.1	48.2	1.2	50.5	0	0	1.3	1.3	1.8	45.1	0.1	47	
Passenger Vehicles	34	0	38	72	68	2981	77	3126	2	1	79	82	114	2754	5	2873	6153
% Passenger Vehicles	94.4	0	97.4	94.7	97.1	96.4	96.2	96.4	100	100	96.3	96.5	100	95.2	83.3	95.4	95.9
Large 2 Axle Vehicles	2	0	1	3	2	46	2	50	0	0	2	2	0	85	1	86	141
% Large 2 Axle Vehicles	5.6	0	2.6	3.9	2.9	1.5	2.5	1.5	0	0	2.4	2.4	0	2.9	16.7	2.9	2.2
3 Axle Vehicles	0	1	0	1	0	15	0	15	0	0	1	1	0	9	0	9	26
% 3 Axle Vehicles	0	100	0	1.3	0	0.5	0	0.5	0	0	1.2	1.2	0	0.3	0	0.3	0.4
4+ Axle Trucks	0	0	0	0	0	50	1	51	0	0	0	0	0	45	0	45	96
% 4+ Axle Trucks	0	0	0	0	0	1.6	1.2	1.6	0	0	0	0	0	1.6	0	1.5	1.5

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 07:45 AM																	
07:45 AM	4	0	1	5	9	390	11	410	0	0	13	13	9	506	1	516	944
08:00 AM	4	1	5	10	12	439	14	465	0	0	7	7	18	431	0	449	931
08:15 AM	3	0	5	8	6	409	11	426	0	0	7	7	11	381	1	393	834
08:30 AM	7	0	8	15	10	378	12	400	1	0	13	14	15	357	0	372	801
Total Volume	18	1	19	38	37	1616	48	1701	1	0	40	41	53	1675	2	1730	3510
% App. Total	47.4	2.6	50		2.2	95	2.8		2.4	0	97.6		3.1	96.8	0.1		
PHF	.643	.250	.594	.633	.771	.920	.857	.915	.250	.000	.769	.732	.736	.828	.500	.838	.930

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
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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:

	08:00 AM				07:45 AM				07:00 AM				07:45 AM			
+0 mins.	4	1	5	10	9	390	11	410	1	0	7	8	9	506	1	516
+15 mins.	3	0	5	8	12	439	14	465	0	0	7	7	18	431	0	449
+30 mins.	7	0	8	15	6	409	11	426	0	1	17	18	11	381	1	393
+45 mins.	9	0	10	19	10	378	12	400	0	0	13	13	15	357	0	372
Total Volume	23	1	28	52	37	1616	48	1701	1	1	44	46	53	1675	2	1730
% App. Total	44.2	1.9	53.8		2.2	95	2.8		2.2	2.2	95.7		3.1	96.8	0.1	
PHF	.639	.250	.700	.684	.771	.920	.857	.915	.250	.250	.647	.639	.736	.828	.500	.838

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

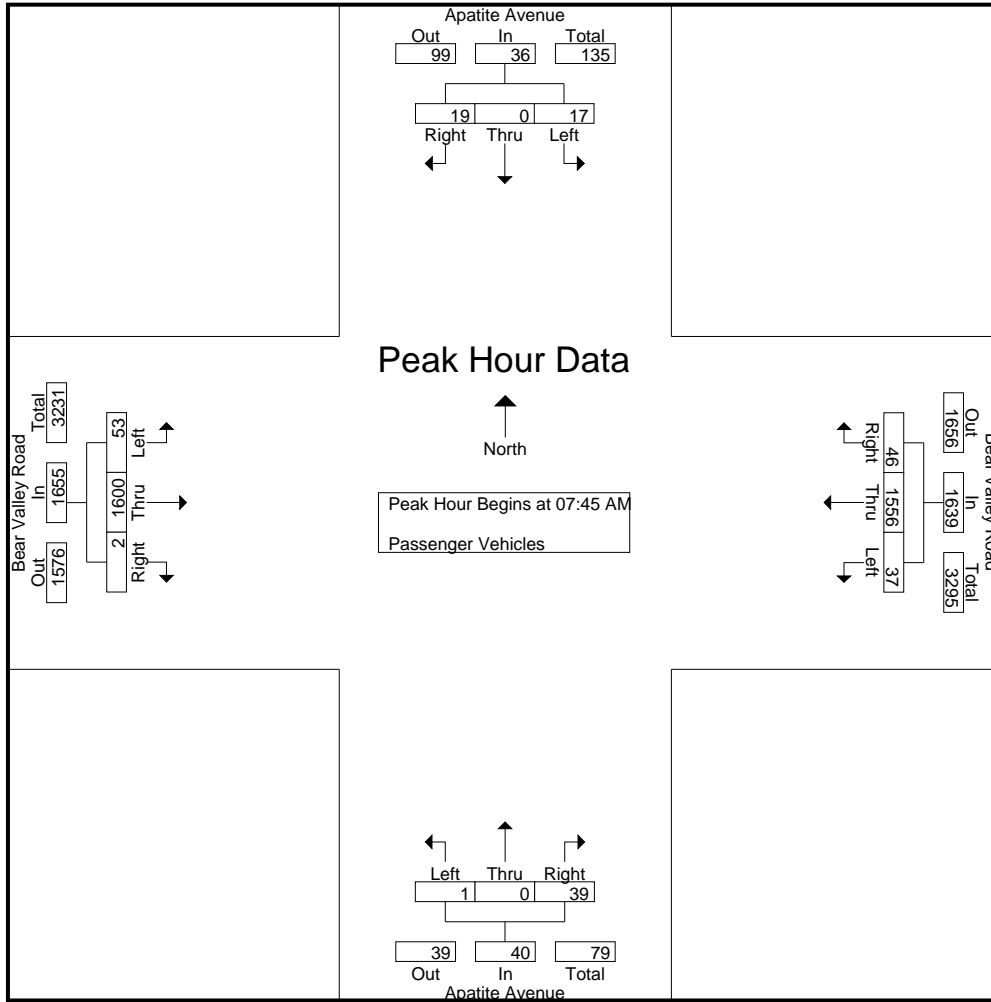
Groups Printed- Passenger Vehicles

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	0	1	3	5	349	8	362	1	0	7	8	17	211	1	229	602
07:15 AM	4	0	3	7	5	362	8	375	0	0	7	7	9	278	0	287	676
07:30 AM	3	0	5	8	5	349	6	360	0	1	16	17	12	308	1	321	706
07:45 AM	4	0	1	5	9	377	11	397	0	0	13	13	9	489	1	499	914
Total	13	0	10	23	24	1437	33	1494	1	1	43	45	47	1286	3	1336	2898
08:00 AM	3	0	5	8	12	424	13	449	0	0	7	7	18	411	0	429	893
08:15 AM	3	0	5	8	6	394	11	411	0	0	7	7	11	364	1	376	802
08:30 AM	7	0	8	15	10	361	11	382	1	0	12	13	15	336	0	351	761
08:45 AM	8	0	10	18	16	365	9	390	0	0	10	10	23	357	1	381	799
Total	21	0	28	49	44	1544	44	1632	1	0	36	37	67	1468	2	1537	3255
Grand Total	34	0	38	72	68	2981	77	3126	2	1	79	82	114	2754	5	2873	6153
Apprch %	47.2	0	52.8		2.2	95.4	2.5		2.4	1.2	96.3		4	95.9	0.2		
Total %	0.6	0	0.6	1.2	1.1	48.4	1.3	50.8	0	0	1.3	1.3	1.9	44.8	0.1	46.7	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	4	0	1	5	9	377	11	397	0	0	13	13	9	489	1	499	914
08:00 AM	3	0	5	8	12	424	13	449	0	0	7	7	18	411	0	429	893
08:15 AM	3	0	5	8	6	394	11	411	0	0	7	7	11	364	1	376	802
08:30 AM	7	0	8	15	10	361	11	382	1	0	12	13	15	336	0	351	761
Total Volume	17	0	19	36	37	1556	46	1639	1	0	39	40	53	1600	2	1655	3370
% App. Total	47.2	0	52.8		2.3	94.9	2.8		2.5	0	97.5		3.2	96.7	0.1		
PHF	.607	.000	.594	.600	.771	.917	.885	.913	.250	.000	.750	.769	.736	.818	.500	.829	.922

City of Victorville
 N/S: Apatite Avenue
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 Weather: Clear

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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	4	0	1	5	9	377	11	397	0	0	13	13	9	489	1	499
+15 mins.	3	0	5	8	12	424	13	449	0	0	7	7	18	411	0	429
+30 mins.	3	0	5	8	6	394	11	411	0	0	7	7	11	364	1	376
+45 mins.	7	0	8	15	10	361	11	382	1	0	12	13	15	336	0	351
Total Volume	17	0	19	36	37	1556	46	1639	1	0	39	40	53	1600	2	1655
% App. Total	47.2	0	52.8		2.3	94.9	2.8		2.5	0	97.5		3.2	96.7	0.1	
PHF	.607	.000	.594	.600	.771	.917	.885	.913	.250	.000	.750	.769	.736	.818	.500	.829

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

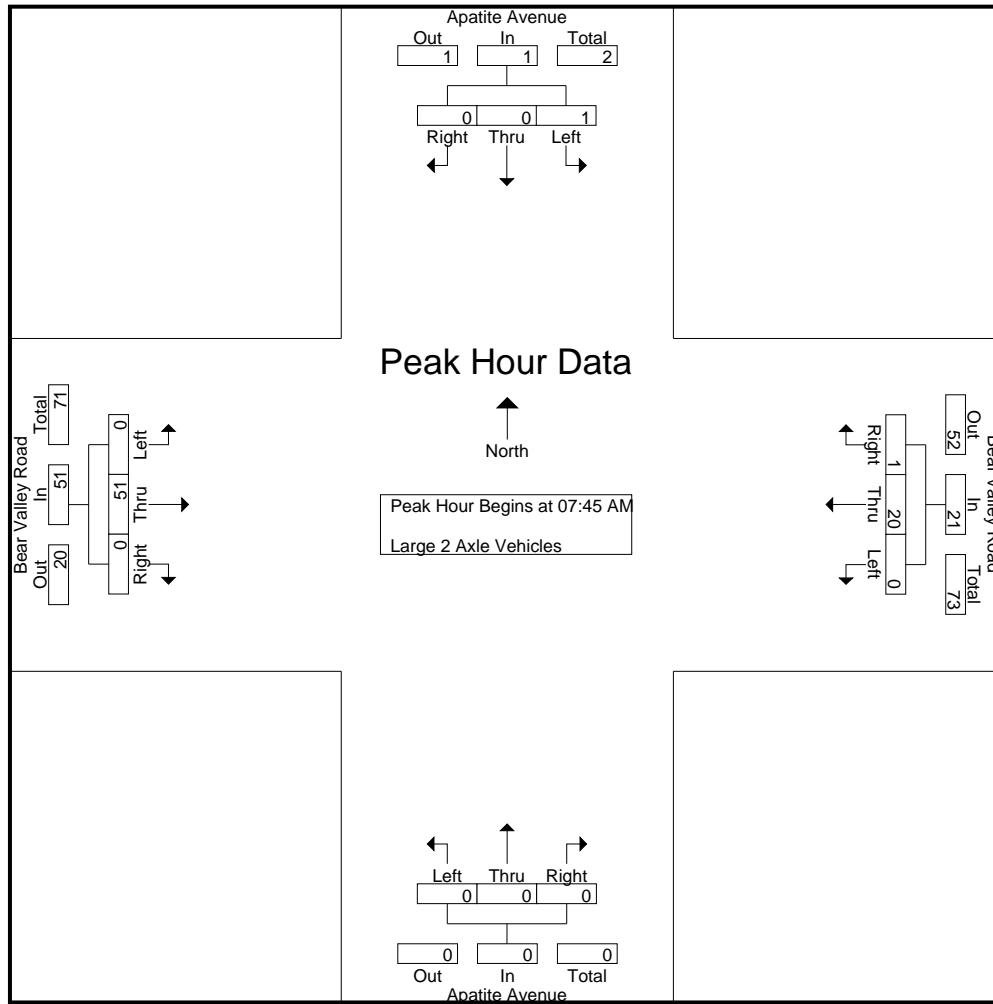
Groups Printed- Large 2 Axle Vehicles

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	6	1	7	0	0	0	0	0	8	0	8	15
07:15 AM	0	0	1	1	0	6	0	6	0	0	0	0	0	13	0	13	20
07:30 AM	0	0	0	0	2	9	0	11	0	0	1	1	0	8	1	9	21
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
Total	0	0	1	1	2	25	1	28	0	0	1	1	0	36	1	37	67
08:00 AM	1	0	0	1	0	3	1	4	0	0	0	0	0	11	0	11	16
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	13	0	13	21
08:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	20	0	20	25
08:45 AM	1	0	0	1	0	5	0	5	0	0	1	1	0	5	0	5	12
Total	2	0	0	2	0	21	1	22	0	0	1	1	0	49	0	49	74
Grand Total	2	0	1	3	2	46	2	50	0	0	2	2	0	85	1	86	141
Apprch %	66.7	0	33.3		4	92	4		0	0	100		0	98.8	1.2		
Total %	1.4	0	0.7	2.1	1.4	32.6	1.4	35.5	0	0	1.4	1.4	0	60.3	0.7	61	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
08:00 AM	1	0	0	1	0	3	1	4	0	0	0	0	0	11	0	11	16
08:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	13	0	13	21
08:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	20	0	20	25
Total Volume	1	0	0	1	0	20	1	21	0	0	0	0	0	51	0	51	73
% App. Total	100	0	0		0	95.2	4.8		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.625	.250	.656	.000	.000	.000	.000	.000	.638	.000	.638	.730

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7
+15 mins.	1	0	0	1	0	3	1	4	0	0	0	0	0	11	0	11
+30 mins.	0	0	0	0	0	8	0	8	0	0	0	0	0	13	0	13
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	20	0	20
Total Volume	1	0	0	1	0	20	1	21	0	0	0	0	0	51	0	51
% App. Total	100	0	0	0	0	95.2	4.8	0	0	0	0	0	0	100	0	0
PHF	.250	.000	.000	.250	.000	.625	.250	.656	.000	.000	.000	.000	.000	.638	.000	.638

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

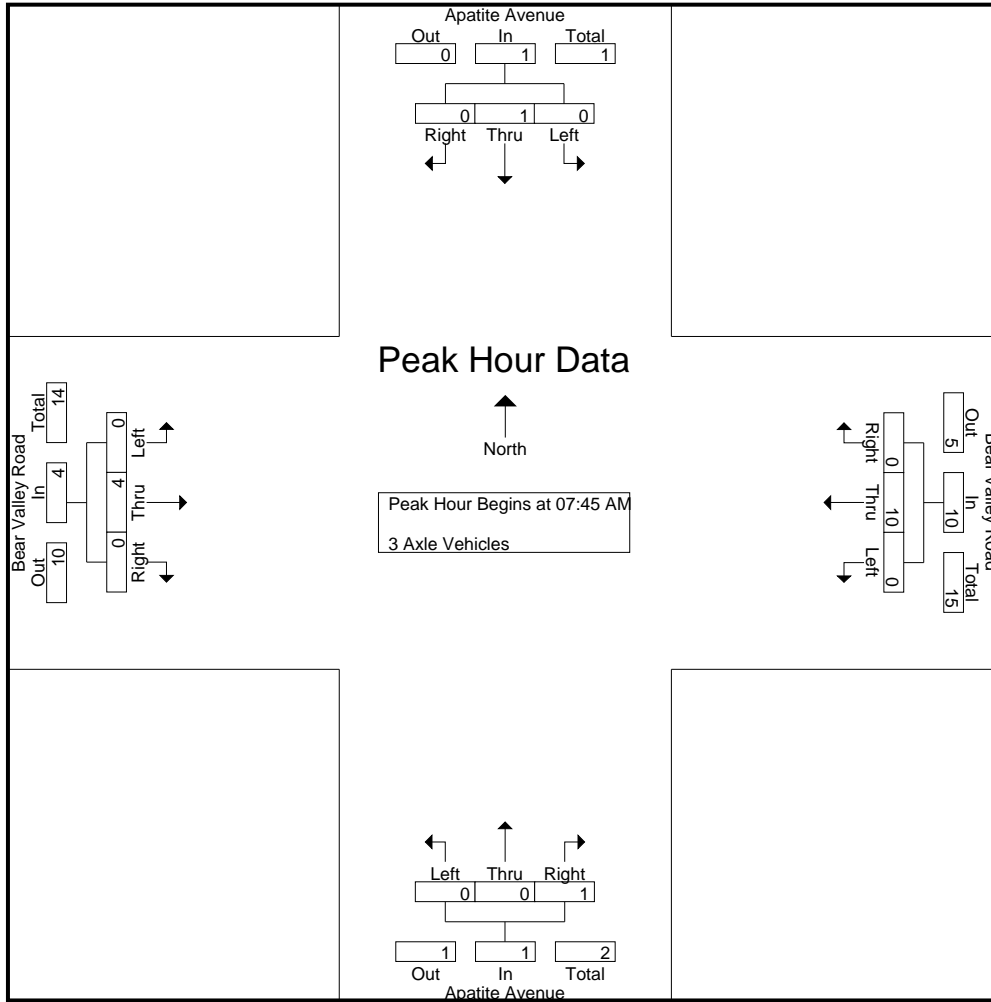
Groups Printed- 3 Axle Vehicles

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
Total	0	0	0	0	0	9	0	9	0	0	0	0	0	6	0	6	15
08:00 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	3	0	3	7
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	6	0	6	0	0	1	1	0	3	0	3	11
Grand Total	0	1	0	1	0	15	0	15	0	0	1	1	0	9	0	9	26
Apprch %	0	100	0		0	100	0		0	0	100		0	100	0		
Total %	0	3.8	0	3.8	0	57.7	0	57.7	0	0	3.8	3.8	0	34.6	0	34.6	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
08:00 AM	0	1	0	1	0	3	0	3	0	0	0	0	0	3	0	3	7
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Volume	0	1	0	1	0	10	0	10	0	0	1	1	0	4	0	4	16
% App. Total	0	100	0		0	100	0		0	0	100		0	100	0		
PHF	.000	.250	.000	.250	.000	.500	.000	.500	.000	.000	.250	.250	.000	.333	.000	.333	.571

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
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 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	0	1	0	1
+15 mins.	0	1	0	1	0	3	0	3	0	0	0	0	0	3	0	3	
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	
Total Volume	0	1	0	1	0	10	0	10	0	0	1	1	0	4	0	4	
% App. Total	0	100	0	0	0	100	0	0	0	0	100	0	0	100	0	0	
PHF	.000	.250	.000	.250	.000	.500	.000	.500	.000	.000	.250	.250	.000	.333	.000	.333	

City of Victorville
 N/S: Apatite Avenue
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File Name : 09_VIC_Apatite_Bear Valley AM
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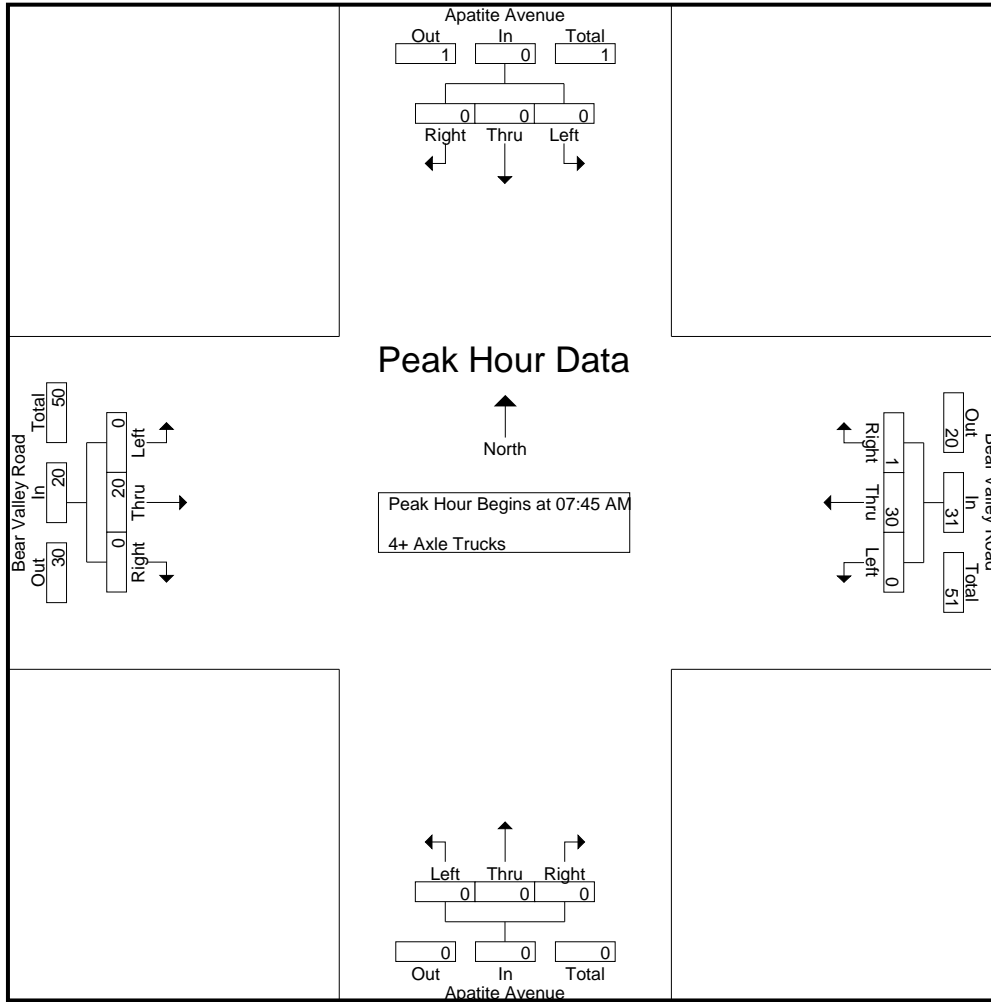
Groups Printed- 4+ Axle Trucks

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	10	0	10	18
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	10
07:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	4	0	4	10
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	9	0	9	13
Total	0	0	0	0	0	23	0	23	0	0	0	0	0	28	0	28	51
08:00 AM	0	0	0	0	0	9	0	9	0	0	0	0	0	6	0	6	15
08:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
08:30 AM	0	0	0	0	0	12	1	13	0	0	0	0	0	1	0	1	14
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	6	0	6	7
Total	0	0	0	0	0	27	1	28	0	0	0	0	0	17	0	17	45
Grand Total	0	0	0	0	0	50	1	51	0	0	0	0	0	45	0	45	96
Apprch %	0	0	0		0	98	2		0	0	0		0	100	0		
Total %	0	0	0		0	52.1	1	53.1	0	0	0		0	46.9	0	46.9	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	9	0	9	13
08:00 AM	0	0	0	0	0	9	0	9	0	0	0	0	0	6	0	6	15
08:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
08:30 AM	0	0	0	0	0	12	1	13	0	0	0	0	0	1	0	1	14
Total Volume	0	0	0	0	0	30	1	31	0	0	0	0	0	20	0	20	51
% App. Total	0	0	0		0	96.8	3.2		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.625	.250	.596	.000	.000	.000	.000	.000	.556	.000	.556	.850

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley AM
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Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	0	9	0	9
+15 mins.	0	0	0	0	0	9	0	9	0	0	0	0	0	0	6	0	6
+30 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	0	4	0	4
+45 mins.	0	0	0	0	0	12	1	13	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	30	1	31	0	0	0	0	0	0	20	0	20
% App. Total	0	0	0	0	0	96.8	3.2		0	0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.625	.250	.596	.000	.000	.000	.000	.000	.556	.000	.556	

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

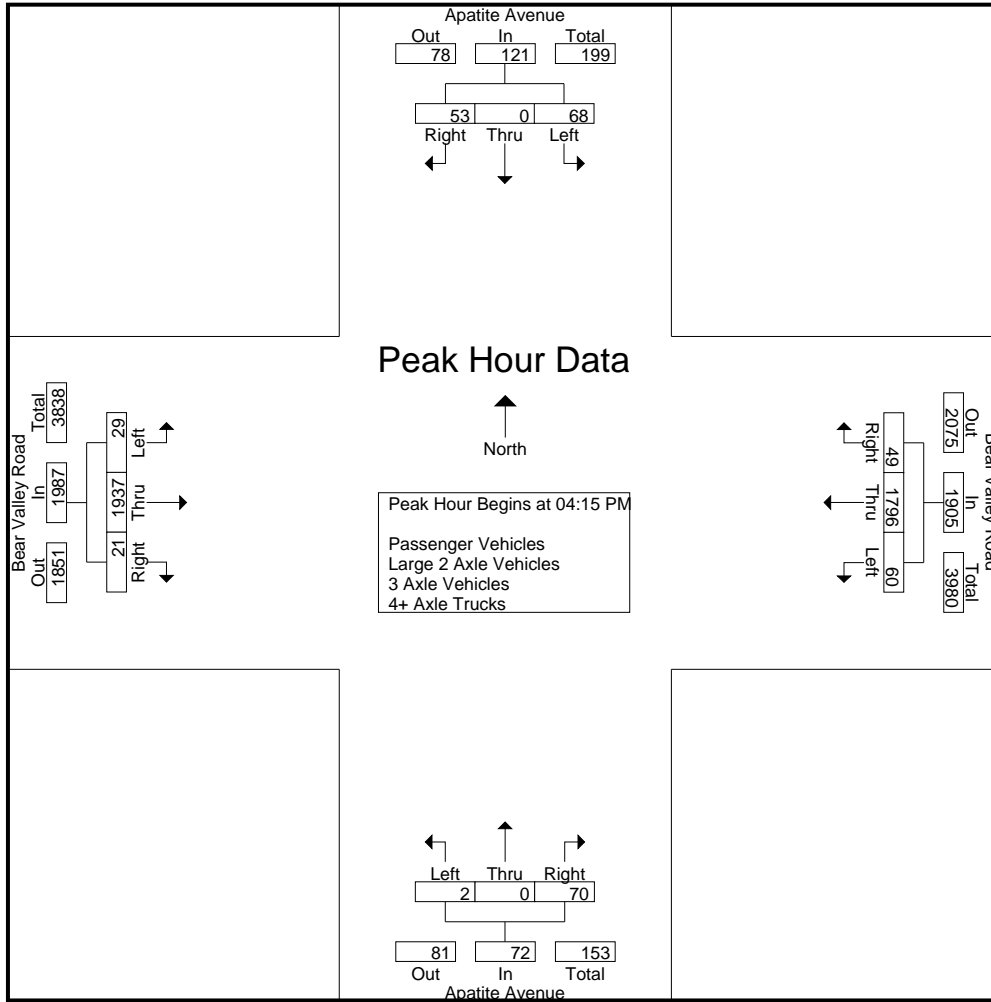
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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	15	0	13	28	14	493	10	517	0	0	23	23	7	473	3	483	1051
04:15 PM	13	0	11	24	25	454	13	492	0	0	16	16	7	505	3	515	1047
04:30 PM	15	0	13	28	6	424	13	443	2	0	21	23	7	451	6	464	958
04:45 PM	22	0	12	34	11	436	11	458	0	0	19	19	9	444	6	459	970
Total	65	0	49	114	56	1807	47	1910	2	0	79	81	30	1873	18	1921	4026
05:00 PM	18	0	17	35	18	482	12	512	0	0	14	14	6	537	6	549	1110
05:15 PM	13	0	12	25	16	394	3	413	0	0	18	18	4	462	4	470	926
05:30 PM	16	0	12	28	15	375	3	393	1	1	17	19	3	471	2	476	916
05:45 PM	14	0	16	30	14	356	6	376	0	0	18	18	4	478	1	483	907
Total	61	0	57	118	63	1607	24	1694	1	1	67	69	17	1948	13	1978	3859
Grand Total	126	0	106	232	119	3414	71	3604	3	1	146	150	47	3821	31	3899	7885
Apprch %	54.3	0	45.7		3.3	94.7	2		2	0.7	97.3		1.2	98	0.8		
Total %	1.6	0	1.3	2.9	1.5	43.3	0.9	45.7	0	0	1.9	1.9	0.6	48.5	0.4	49.4	
Passenger Vehicles	124	0	103	227	118	3354	71	3543	3	1	144	148	46	3750	31	3827	7745
% Passenger Vehicles	98.4	0	97.2	97.8	99.2	98.2	100	98.3	100	100	98.6	98.7	97.9	98.1	100	98.2	98.2
Large 2 Axle Vehicles	2	0	1	3	0	40	0	40	0	0	2	2	1	35	0	36	81
% Large 2 Axle Vehicles	1.6	0	0.9	1.3	0	1.2	0	1.1	0	0	1.4	1.3	2.1	0.9	0	0.9	1
3 Axle Vehicles	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	9
% 3 Axle Vehicles	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.1	0	0.1	0.1
4+ Axle Trucks	0	0	2	2	1	16	0	17	0	0	0	0	0	31	0	31	50
% 4+ Axle Trucks	0	0	1.9	0.9	0.8	0.5	0	0.5	0	0	0	0	0	0.8	0	0.8	0.6

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 04:15 PM																	
04:15 PM	13	0	11	24	25	454	13	492	0	0	16	16	7	505	3	515	1047
04:30 PM	15	0	13	28	6	424	13	443	2	0	21	23	7	451	6	464	958
04:45 PM	22	0	12	34	11	436	11	458	0	0	19	19	9	444	6	459	970
05:00 PM	18	0	17	35	18	482	12	512	0	0	14	14	6	537	6	549	1110
Total Volume	68	0	53	121	60	1796	49	1905	2	0	70	72	29	1937	21	1987	4085
% App. Total	56.2	0	43.8		3.1	94.3	2.6		2.8	0	97.2		1.5	97.5	1.1		
PHF	.773	.000	.779	.864	.600	.932	.942	.930	.250	.000	.833	.783	.806	.902	.875	.905	.920

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:00 PM				04:15 PM			
+0 mins.	15	0	13	28	14	493	10	517	0	0	23	23	7	505	3	515
+15 mins.	22	0	12	34	25	454	13	492	0	0	16	16	7	451	6	464
+30 mins.	18	0	17	35	6	424	13	443	2	0	21	23	9	444	6	459
+45 mins.	13	0	12	25	11	436	11	458	0	0	19	19	6	537	6	549
Total Volume	68	0	54	122	56	1807	47	1910	2	0	79	81	29	1937	21	1987
% App. Total	55.7	0	44.3		2.9	94.6	2.5		2.5	0	97.5		1.5	97.5	1.1	
PHF	.773	.000	.794	.871	.560	.916	.904	.924	.250	.000	.859	.880	.806	.902	.875	.905

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

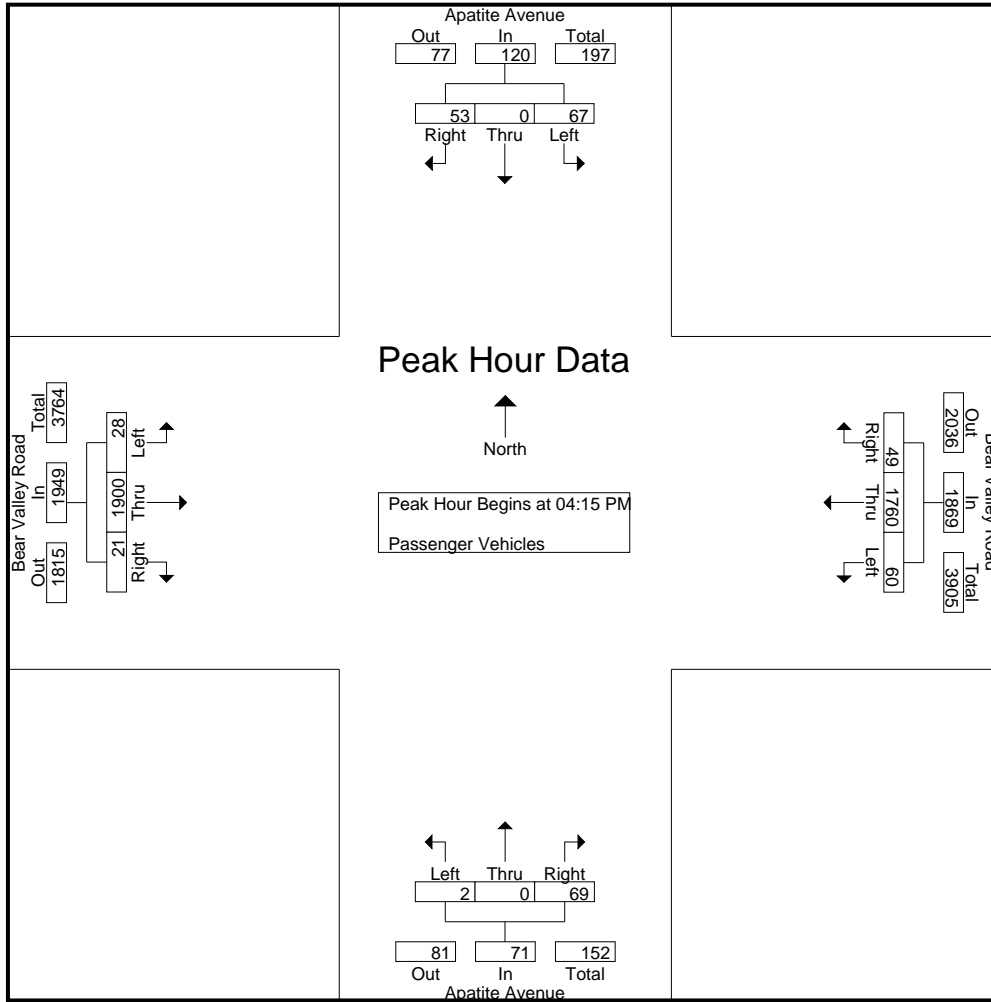
Groups Printed- Passenger Vehicles

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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	15	0	12	27	14	484	10	508	0	0	22	22	7	466	3	476	1033
04:15 PM	13	0	11	24	25	446	13	484	0	0	15	15	7	493	3	503	1026
04:30 PM	15	0	13	28	6	414	13	433	2	0	21	23	7	442	6	455	939
04:45 PM	22	0	12	34	11	424	11	446	0	0	19	19	9	434	6	449	948
Total	65	0	48	113	56	1768	47	1871	2	0	77	79	30	1835	18	1883	3946
05:00 PM	17	0	17	34	18	476	12	506	0	0	14	14	5	531	6	542	1096
05:15 PM	12	0	10	22	15	389	3	407	0	0	18	18	4	455	4	463	910
05:30 PM	16	0	12	28	15	370	3	388	1	1	17	19	3	459	2	464	899
05:45 PM	14	0	16	30	14	351	6	371	0	0	18	18	4	470	1	475	894
Total	59	0	55	114	62	1586	24	1672	1	1	67	69	16	1915	13	1944	3799
Grand Total	124	0	103	227	118	3354	71	3543	3	1	144	148	46	3750	31	3827	7745
Apprch %	54.6	0	45.4		3.3	94.7	2		2	0.7	97.3		1.2	98	0.8		
Total %	1.6	0	1.3	2.9	1.5	43.3	0.9	45.7	0	0	1.9	1.9	0.6	48.4	0.4	49.4	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	13	0	11	24	25	446	13	484	0	0	15	15	7	493	3	503	1026
04:30 PM	15	0	13	28	6	414	13	433	2	0	21	23	7	442	6	455	939
04:45 PM	22	0	12	34	11	424	11	446	0	0	19	19	9	434	6	449	948
05:00 PM	17	0	17	34	18	476	12	506	0	0	14	14	5	531	6	542	1096
Total Volume	67	0	53	120	60	1760	49	1869	2	0	69	71	28	1900	21	1949	4009
% App. Total	55.8	0	44.2		3.2	94.2	2.6		2.8	0	97.2		1.4	97.5	1.1		
PHF	.761	.000	.779	.882	.600	.924	.942	.923	.250	.000	.821	.772	.778	.895	.875	.899	.914

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	13	0	11	24	25	446	13	484	0	0	15	15	7	493	3	503
+15 mins.	15	0	13	28	6	414	13	433	2	0	21	23	7	442	6	455
+30 mins.	22	0	12	34	11	424	11	446	0	0	19	19	9	434	6	449
+45 mins.	17	0	17	34	18	476	12	506	0	0	14	14	5	531	6	542
Total Volume	67	0	53	120	60	1760	49	1869	2	0	69	71	28	1900	21	1949
% App. Total	55.8	0	44.2		3.2	94.2	2.6		2.8	0	97.2		1.4	97.5	1.1	
PHF	.761	.000	.779	.882	.600	.924	.942	.923	.250	.000	.821	.772	.778	.895	.875	.899

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

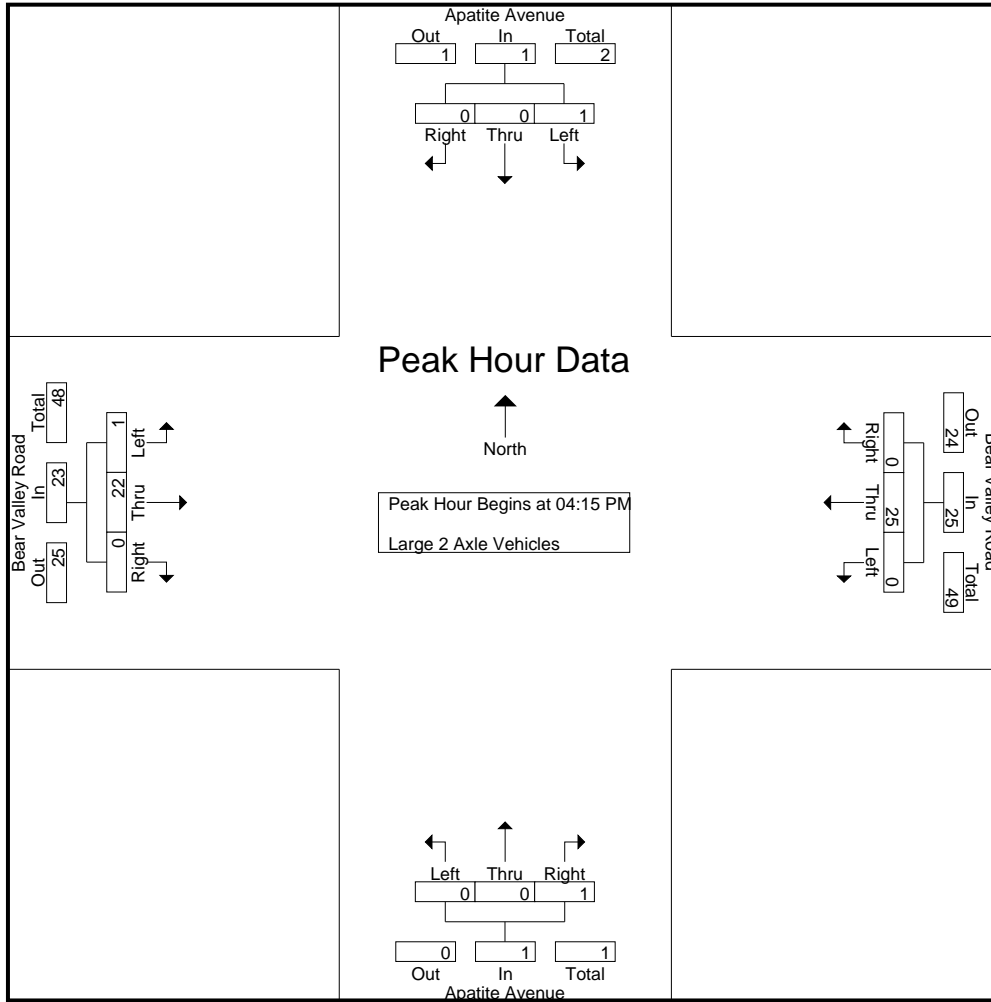
Groups Printed- Large 2 Axle Vehicles

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	1	1	0	7	0	7	0	0	1	1	0	1	0	1	10
04:15 PM	0	0	0	0	0	8	0	8	0	0	1	1	0	10	0	10	19
04:30 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	4	0	4	11
04:45 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	5	0	5	14
Total	0	0	1	1	0	31	0	31	0	0	2	2	0	20	0	20	54
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	1	3	0	4	6
05:15 PM	1	0	0	1	0	3	0	3	0	0	0	0	0	4	0	4	8
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
05:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	2	0	0	2	0	9	0	9	0	0	0	0	1	15	0	16	27
Grand Total	2	0	1	3	0	40	0	40	0	0	2	2	1	35	0	36	81
Apprch %	66.7	0	33.3		0	100	0		0	0	100		2.8	97.2	0		
Total %	2.5	0	1.2	3.7	0	49.4	0	49.4	0	0	2.5	2.5	1.2	43.2	0	44.4	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	8	0	8	0	0	1	1	0	10	0	10	19
04:30 PM	0	0	0	0	0	7	0	7	0	0	0	0	0	4	0	4	11
04:45 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	5	0	5	14
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	1	3	0	4	6
Total Volume	1	0	0	1	0	25	0	25	0	0	1	1	1	22	0	23	50
% App. Total	100	0	0		0	100	0		0	0	100		4.3	95.7	0		
PHF	.250	.000	.000	.250	.000	.694	.000	.694	.000	.000	.250	.250	.250	.550	.000	.575	.658

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	8	0	8	0	0	1	1	0	10	0	10
+15 mins.	0	0	0	0	0	7	0	7	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	9	0	9	0	0	0	0	0	5	0	5
+45 mins.	1	0	0	1	0	1	0	1	0	0	0	0	1	3	0	4
Total Volume	1	0	0	1	0	25	0	25	0	0	1	1	1	22	0	23
% App. Total	100	0	0	0	0	100	0	0	0	0	100	0	4.3	95.7	0	0
PHF	.250	.000	.000	.250	.000	.694	.000	.694	.000	.000	.250	.250	.250	.550	.000	.575

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

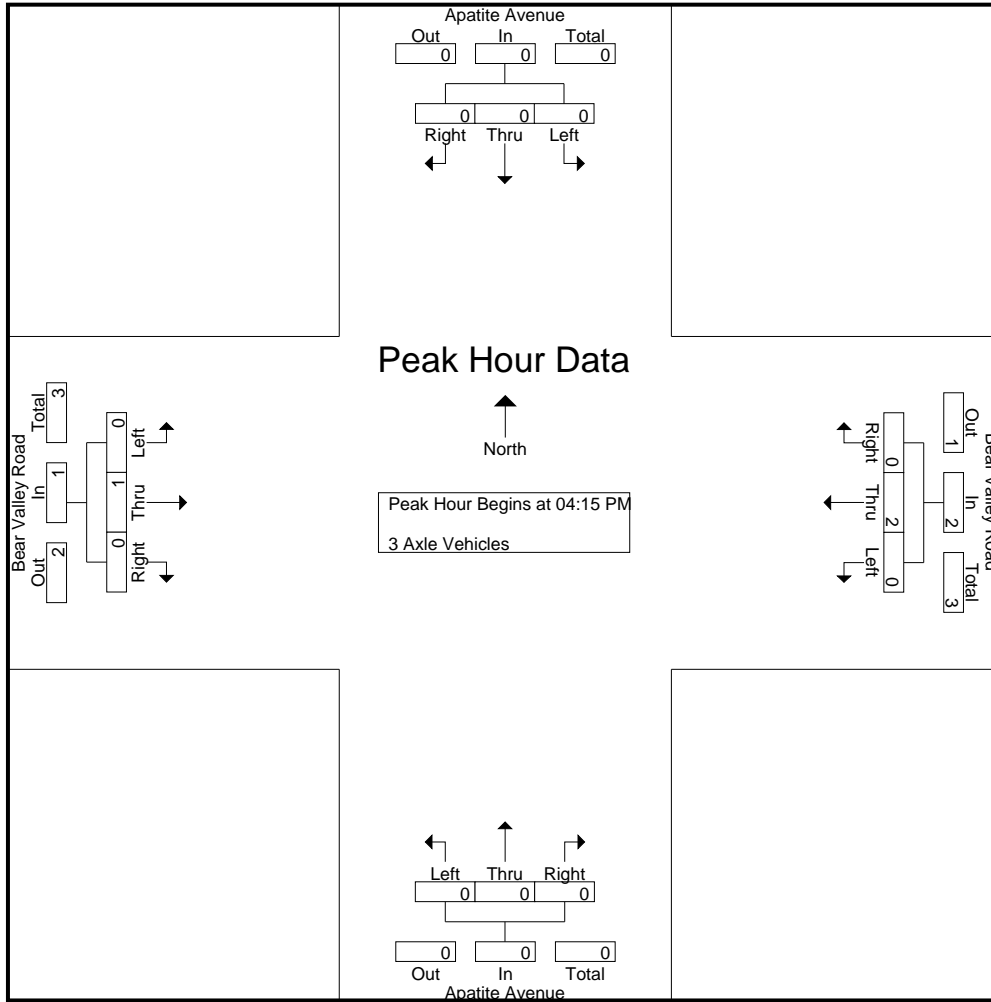
Groups Printed- 3 Axle Vehicles

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
Grand Total	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	9
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	44.4	0	44.4	0	0	0	0	0	55.6	0	55.6	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.375

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

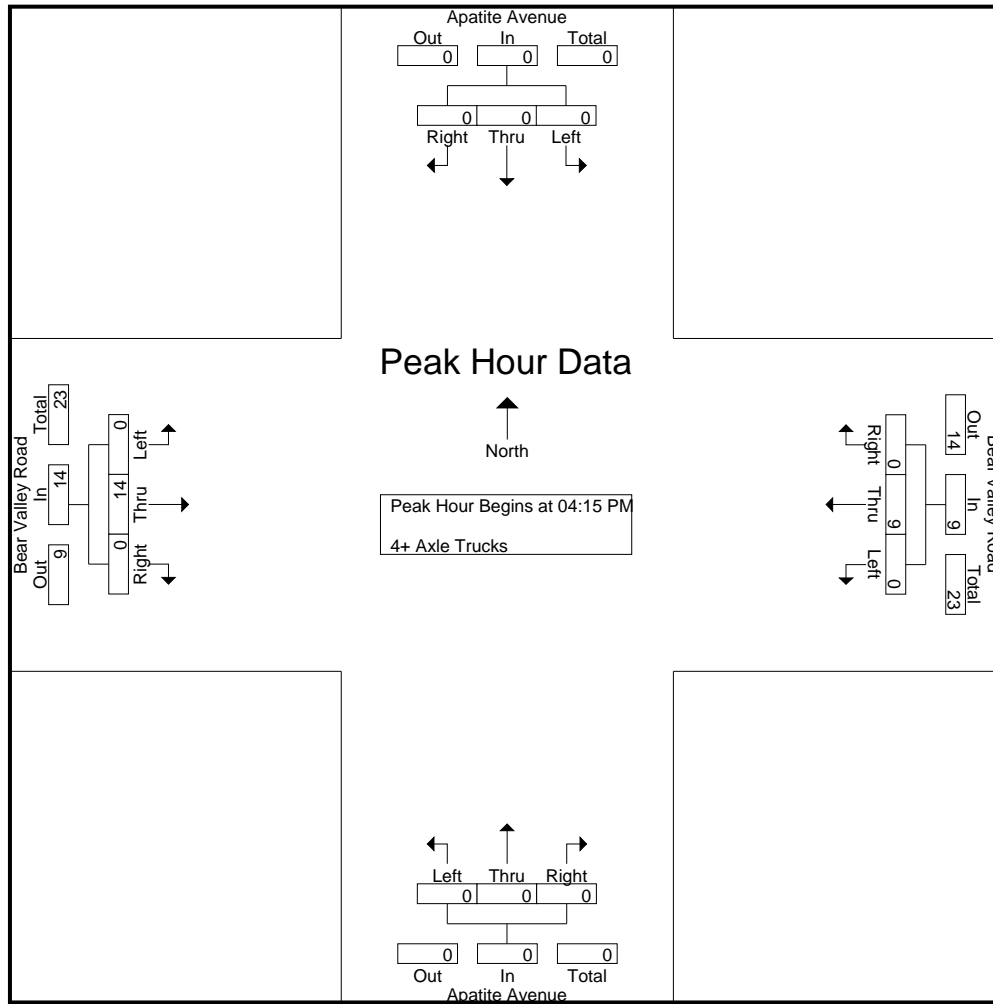
Groups Printed- 4+ Axle Trucks

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	18	0	18	24
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
05:15 PM	0	0	2	2	1	2	0	3	0	0	0	0	0	2	0	2	7
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
Total	0	0	2	2	1	10	0	11	0	0	0	0	0	13	0	13	26
Grand Total	0	0	2	2	1	16	0	17	0	0	0	0	0	31	0	31	50
Apprch %	0	0	100		5.9	94.1	0		0	0	0		0	100	0		
Total %	0	0	4	4	2	32	0	34	0	0	0	0	0	62	0	62	

Start Time	Apatite Avenue Southbound				Bear Valley Road Westbound				Apatite Avenue Northbound				Bear Valley 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
Total Volume	0	0	0	0	0	9	0	9	0	0	0	0	0	14	0	14	23
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.450	.000	.450	.000	.000	.000	.000	.000	.700	.000	.700	.719

City of Victorville
 N/S: Apatite Avenue
 E/W: Bear Valley Road
 Weather: Clear

File Name : 09_VIC_Apatite_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	9	0	9	0	0	0	0	0	14	0	14
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.450	.000	.450	.000	.000	.000	.000	.000	.700	.000	.700

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

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

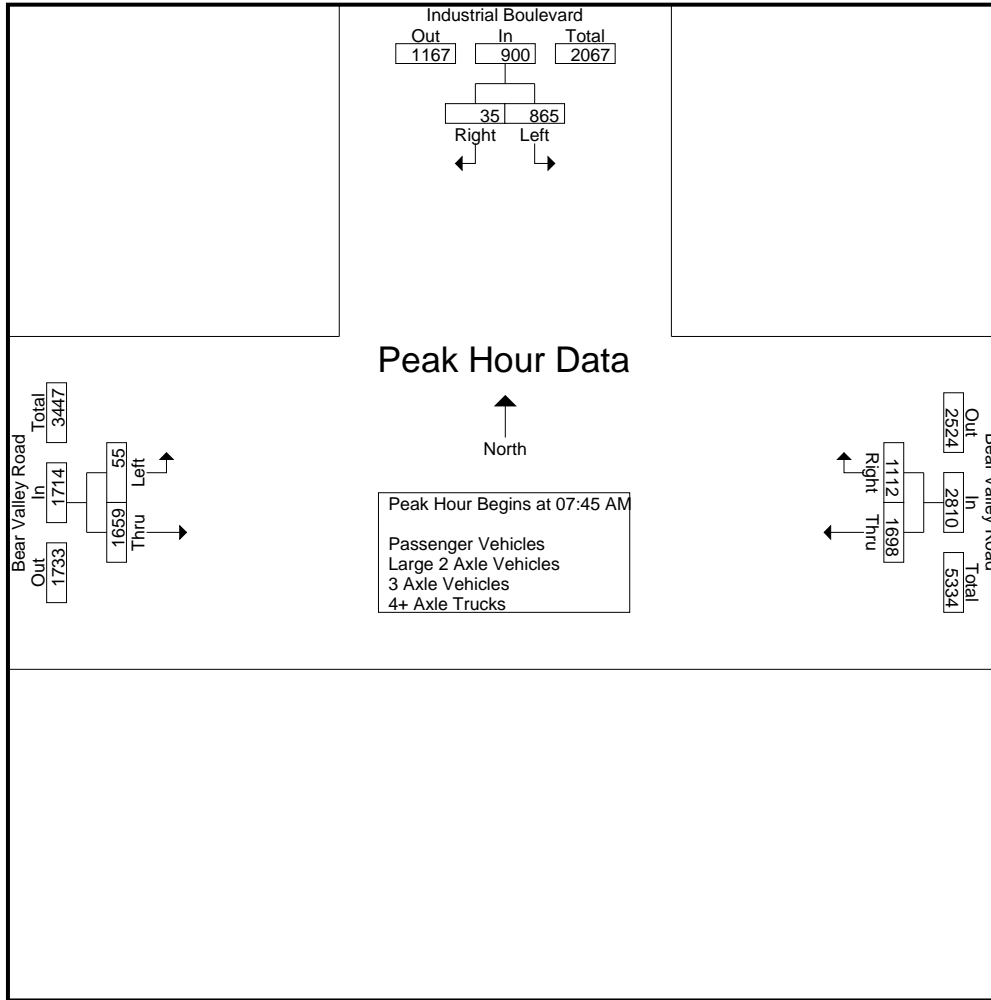
Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	121	1	122	379	196	575	6	231	237	934
07:15 AM	128	3	131	367	259	626	5	323	328	1085
07:30 AM	196	5	201	397	289	686	4	346	350	1237
07:45 AM	230	5	235	458	301	759	19	507	526	1520
Total	675	14	689	1601	1045	2646	34	1407	1441	4776
08:00 AM	213	8	221	450	284	734	12	399	411	1366
08:15 AM	217	12	229	385	282	667	18	368	386	1282
08:30 AM	205	10	215	405	245	650	6	385	391	1256
08:45 AM	211	13	224	414	252	666	25	332	357	1247
Total	846	43	889	1654	1063	2717	61	1484	1545	5151
Grand Total	1521	57	1578	3255	2108	5363	95	2891	2986	9927
Apprch %	96.4	3.6		60.7	39.3		3.2	96.8		
Total %	15.3	0.6	15.9	32.8	21.2	54	1	29.1	30.1	
Passenger Vehicles	1464	54	1518	3115	2074	5189	91	2738	2829	9536
% Passenger Vehicles	96.3	94.7	96.2	95.7	98.4	96.8	95.8	94.7	94.7	96.1
Large 2 Axle Vehicles	48	1	49	65	33	98	0	94	94	241
% Large 2 Axle Vehicles										
3 Axle Vehicles	9	0	9	17	0	17	0	17	17	43
% 3 Axle Vehicles	0.6	0	0.6	0.5	0	0.3	0	0.6	0.6	0.4
4+ Axle Trucks	0	2	2	58	1	59	4	42	46	107
% 4+ Axle Trucks	0	3.5	0.1	1.8	0	1.1	4.2	1.5	1.5	1.1

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45 AM	230	5	235	458	301	759	19	507	526	1520
08:00 AM	213	8	221	450	284	734	12	399	411	1366
08:15 AM	217	12	229	385	282	667	18	368	386	1282
08:30 AM	205	10	215	405	245	650	6	385	391	1256
Total Volume	865	35	900	1698	1112	2810	55	1659	1714	5424
% App. Total	96.1	3.9		60.4	39.6		3.2	96.8		
PHF	.940	.729	.957	.927	.924	.926	.724	.818	.815	.892

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

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
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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:

	07:45 AM			07:30 AM			07:45 AM		
+0 mins.	230	5	235	397	289	686	19	507	526
+15 mins.	213	8	221	458	301	759	12	399	411
+30 mins.	217	12	229	450	284	734	18	368	386
+45 mins.	205	10	215	385	282	667	6	385	391
Total Volume	865	35	900	1690	1156	2846	55	1659	1714
% App. Total	96.1	3.9		59.4	40.6		3.2	96.8	
PHF	.940	.729	.957	.922	.960	.937	.724	.818	.815

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

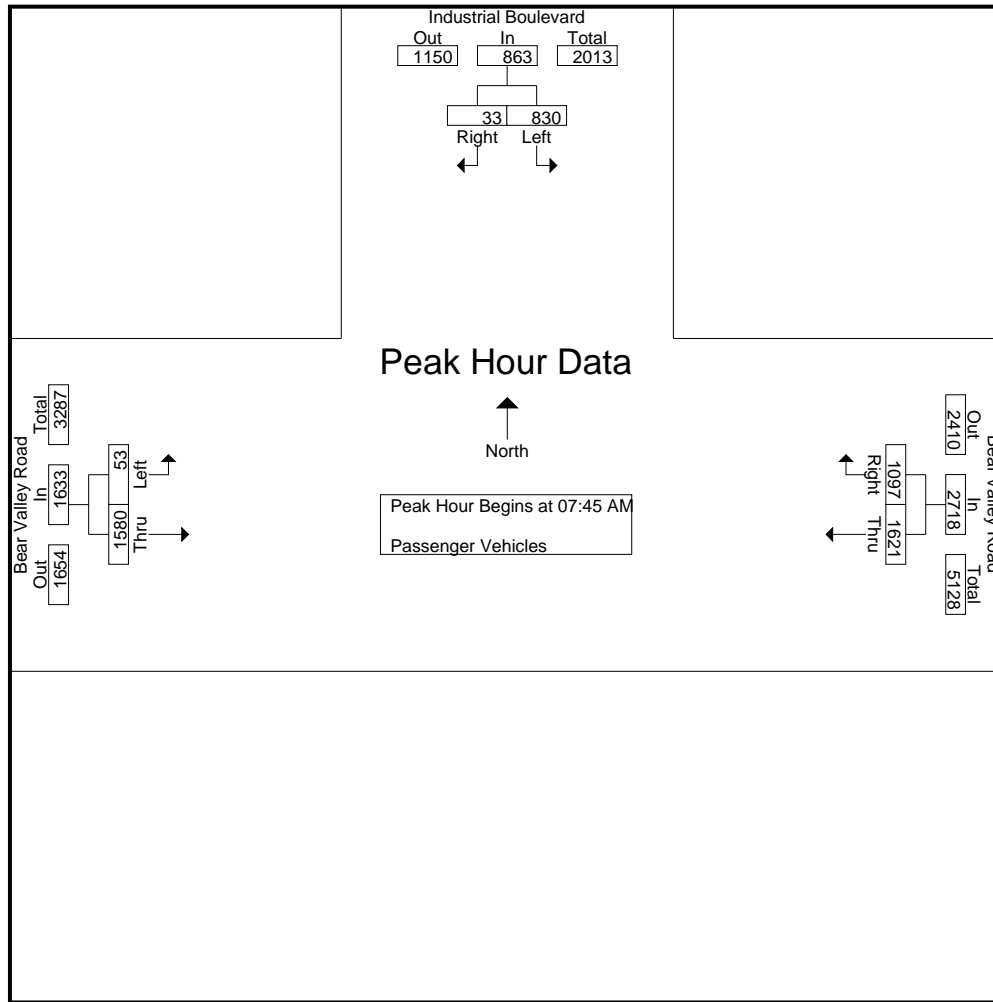
Groups Printed- Passenger Vehicles

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	120	1	121	361	193	554	4	215	219	894
07:15 AM	125	3	128	348	256	604	5	301	306	1038
07:30 AM	196	5	201	382	284	666	4	329	333	1200
07:45 AM	228	5	233	440	301	741	18	493	511	1485
Total	669	14	683	1531	1034	2565	31	1338	1369	4617
08:00 AM	206	8	214	431	282	713	11	377	388	1315
08:15 AM	202	11	213	365	280	645	18	345	363	1221
08:30 AM	194	9	203	385	234	619	6	365	371	1193
08:45 AM	193	12	205	403	244	647	25	313	338	1190
Total	795	40	835	1584	1040	2624	60	1400	1460	4919
Grand Total	1464	54	1518	3115	2074	5189	91	2738	2829	9536
Apprch %	96.4	3.6		60	40		3.2	96.8		
Total %	15.4	0.6	15.9	32.7	21.7	54.4	1	28.7	29.7	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	228	5	233	440	301	741	18	493	511	1485
08:00 AM	206	8	214	431	282	713	11	377	388	1315
08:15 AM	202	11	213	365	280	645	18	345	363	1221
08:30 AM	194	9	203	385	234	619	6	365	371	1193
Total Volume	830	33	863	1621	1097	2718	53	1580	1633	5214
% App. Total	96.2	3.8		59.6	40.4		3.2	96.8		
PHF	.910	.750	.926	.921	.911	.917	.736	.801	.799	.878

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	228	5	233	440	301	741	18	493	511
+15 mins.	206	8	214	431	282	713	11	377	388
+30 mins.	202	11	213	365	280	645	18	345	363
+45 mins.	194	9	203	385	234	619	6	365	371
Total Volume	830	33	863	1621	1097	2718	53	1580	1633
% App. Total	96.2	3.8		59.6	40.4		3.2	96.8	
PHF	.910	.750	.926	.921	.911	.917	.736	.801	.799

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

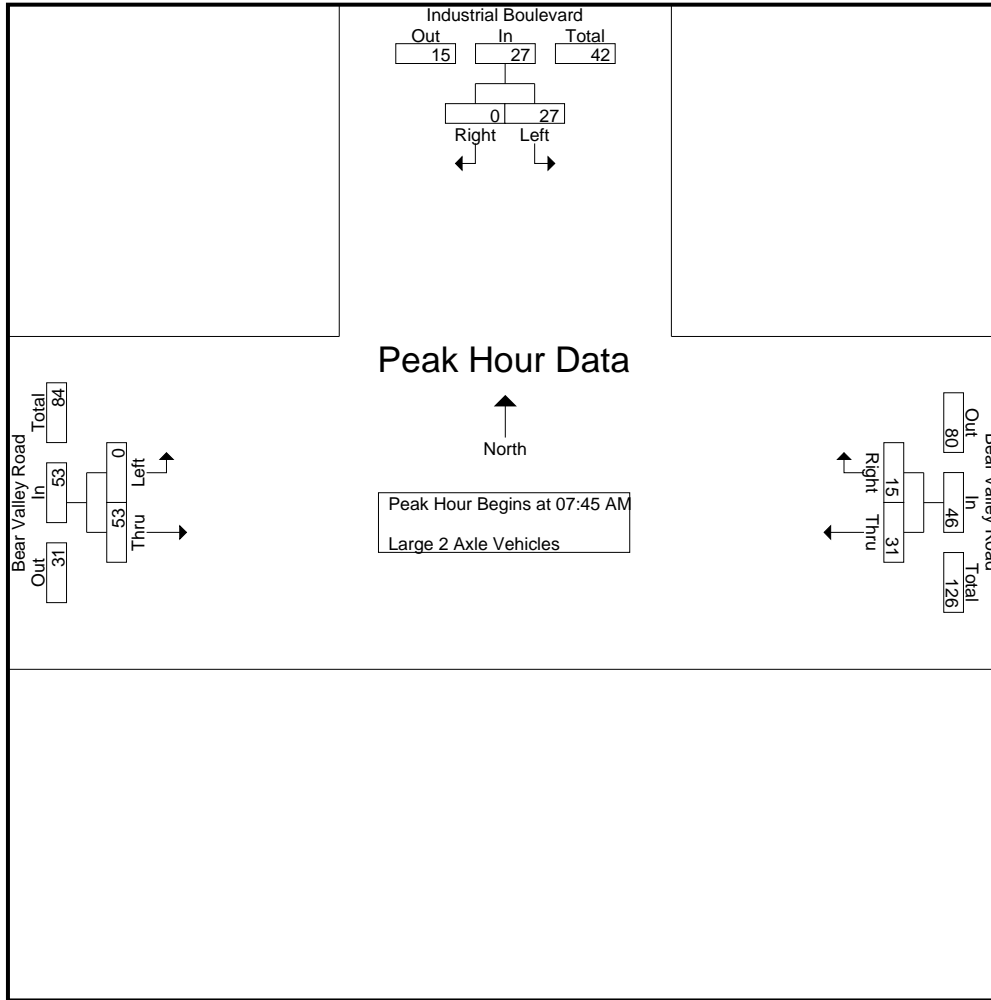
Groups Printed- Large 2 Axle Vehicles

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	8	3	11	0	10	10	21
07:15 AM	3	0	3	9	2	11	0	14	14	28
07:30 AM	0	0	0	12	5	17	0	8	8	25
07:45 AM	1	0	1	5	0	5	0	7	7	13
Total	4	0	4	34	10	44	0	39	39	87
08:00 AM	5	0	5	6	2	8	0	11	11	24
08:15 AM	10	0	10	10	2	12	0	19	19	41
08:30 AM	11	0	11	10	11	21	0	16	16	48
08:45 AM	18	1	19	5	8	13	0	9	9	41
Total	44	1	45	31	23	54	0	55	55	154
Grand Total	48	1	49	65	33	98	0	94	94	241
Apprch %	98	2		66.3	33.7		0	100		
Total %	19.9	0.4	20.3	27	13.7	40.7	0	39	39	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	1	0	1	5	0	5	0	7	7	13
08:00 AM	5	0	5	6	2	8	0	11	11	24
08:15 AM	10	0	10	10	2	12	0	19	19	41
08:30 AM	11	0	11	10	11	21	0	16	16	48
Total Volume	27	0	27	31	15	46	0	53	53	126
% App. Total	100	0		67.4	32.6		0	100		
PHF	.614	.000	.614	.775	.341	.548	.000	.697	.697	.656

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	1	0	1	5	0	5	0	7	7
+15 mins.	5	0	5	6	2	8	0	11	11
+30 mins.	10	0	10	10	2	12	0	19	19
+45 mins.	11	0	11	10	11	21	0	16	16
Total Volume	27	0	27	31	15	46	0	53	53
% App. Total	100	0		67.4	32.6		0	100	
PHF	.614	.000	.614	.775	.341	.548	.000	.697	.697

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

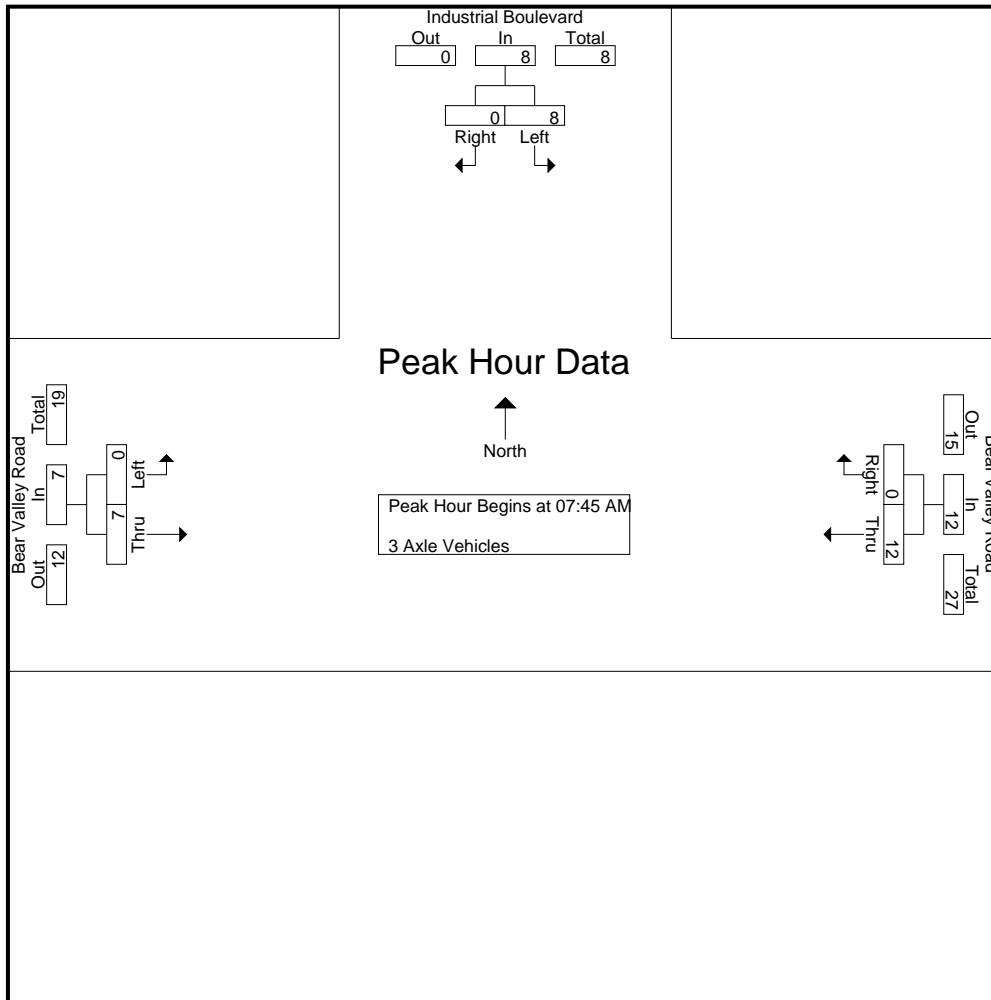
Groups Printed- 3 Axle Vehicles

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	1	0	1	1	0	1	0	2	2	4
07:15 AM	0	0	0	2	0	2	0	2	2	4
07:30 AM	0	0	0	0	0	0	0	3	3	3
07:45 AM	1	0	1	4	0	4	0	2	2	7
Total	2	0	2	7	0	7	0	9	9	18
08:00 AM	2	0	2	4	0	4	0	3	3	9
08:15 AM	5	0	5	1	0	1	0	0	0	6
08:30 AM	0	0	0	3	0	3	0	2	2	5
08:45 AM	0	0	0	2	0	2	0	3	3	5
Total	7	0	7	10	0	10	0	8	8	25
Grand Total	9	0	9	17	0	17	0	17	17	43
Apprch %	100	0		100	0		0	100		
Total %	20.9	0	20.9	39.5	0	39.5	0	39.5	39.5	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	1	0	1	4	0	4	0	2	2	7
08:00 AM	2	0	2	4	0	4	0	3	3	9
08:15 AM	5	0	5	1	0	1	0	0	0	6
08:30 AM	0	0	0	3	0	3	0	2	2	5
Total Volume	8	0	8	12	0	12	0	7	7	27
% App. Total	100	0		100	0		0	100		
PHF	.400	.000	.400	.750	.000	.750	.000	.583	.583	.750

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	1	0	1	4	0	4	0	2	2
+15 mins.	2	0	2	4	0	4	0	3	3
+30 mins.	5	0	5	1	0	1	0	0	0
+45 mins.	0	0	0	3	0	3	0	2	2
Total Volume	8	0	8	12	0	12	0	7	7
% App. Total	100	0		100	0		0	100	
PHF	.400	.000	.400	.750	.000	.750	.000	.583	.583

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

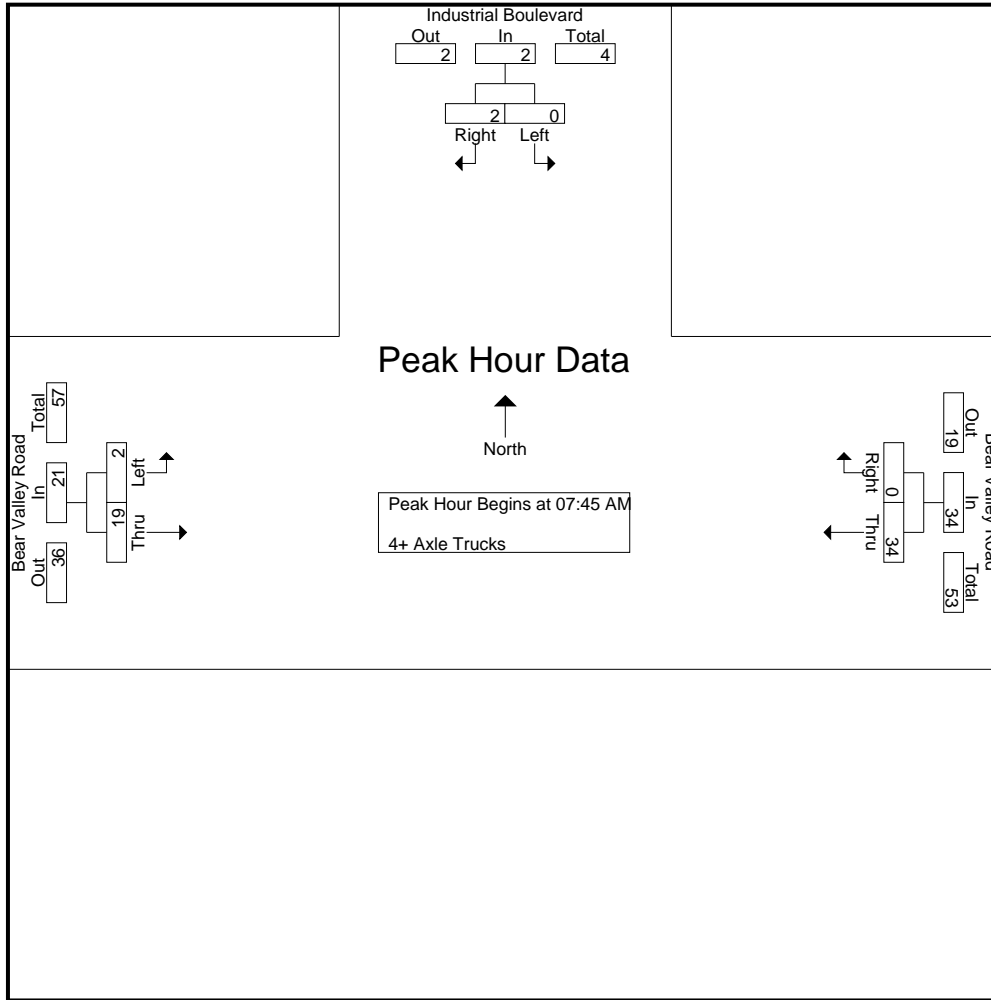
Groups Printed- 4+ Axle Trucks

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	9	0	9	2	4	6	15
07:15 AM	0	0	0	8	1	9	0	6	6	15
07:30 AM	0	0	0	3	0	3	0	6	6	9
07:45 AM	0	0	0	9	0	9	1	5	6	15
Total	0	0	0	29	1	30	3	21	24	54
08:00 AM	0	0	0	9	0	9	1	8	9	18
08:15 AM	0	1	1	9	0	9	0	4	4	14
08:30 AM	0	1	1	7	0	7	0	2	2	10
08:45 AM	0	0	0	4	0	4	0	7	7	11
Total	0	2	2	29	0	29	1	21	22	53
Grand Total	0	2	2	58	1	59	4	42	46	107
Apprch %	0	100		98.3	1.7		8.7	91.3		
Total %	0	1.9	1.9	54.2	0.9	55.1	3.7	39.3	43	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	9	0	9	1	5	6	15
08:00 AM	0	0	0	9	0	9	1	8	9	18
08:15 AM	0	1	1	9	0	9	0	4	4	14
08:30 AM	0	1	1	7	0	7	0	2	2	10
Total Volume	0	2	2	34	0	34	2	19	21	57
% App. Total	0	100		100	0		9.5	90.5		
PHF	.000	.500	.500	.944	.000	.944	.500	.594	.583	.792

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley AM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	9	0	9	1	5	6
+15 mins.	0	0	0	9	0	9	1	8	9
+30 mins.	0	1	1	9	0	9	0	4	4
+45 mins.	0	1	1	7	0	7	0	2	2
Total Volume	0	2	2	34	0	34	2	19	21
% App. Total	0	100		100	0		9.5	90.5	
PHF	.000	.500	.500	.944	.000	.944	.500	.594	.583

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

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

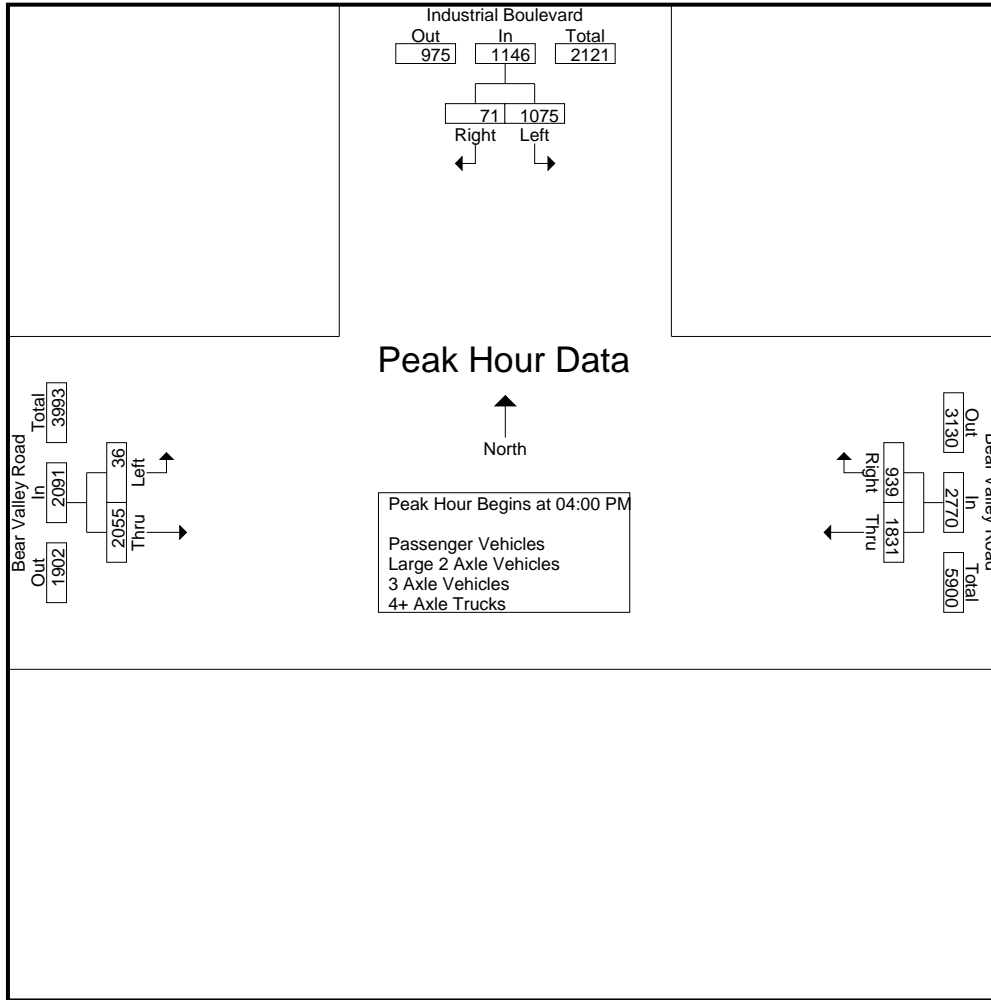
Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	281	18	299	483	254	737	8	511	519	1555
04:15 PM	259	11	270	453	240	693	8	521	529	1492
04:30 PM	257	15	272	426	243	669	15	471	486	1427
04:45 PM	278	27	305	469	202	671	5	552	557	1533
Total	1075	71	1146	1831	939	2770	36	2055	2091	6007
05:00 PM	267	33	300	394	194	588	12	495	507	1395
05:15 PM	307	20	327	396	194	590	6	539	545	1462
05:30 PM	284	19	303	413	202	615	8	528	536	1454
05:45 PM	226	10	236	336	154	490	6	499	505	1231
Total	1084	82	1166	1539	744	2283	32	2061	2093	5542
Grand Total	2159	153	2312	3370	1683	5053	68	4116	4184	11549
Apprch %	93.4	6.6		66.7	33.3		1.6	98.4		
Total %	18.7	1.3	20	29.2	14.6	43.8	0.6	35.6	36.2	
Passenger Vehicles	2136	152	2288	3307	1656	4963	66	4028	4094	11345
% Passenger Vehicles	98.9	99.3	99	98.1	98.4	98.2	97.1	97.9	97.8	98.2
Large 2 Axle Vehicles	23	1	24	34	24	58	1	50	51	133
% Large 2 Axle Vehicles										
3 Axle Vehicles	0	0	0	6	3	9	0	9	9	18
% 3 Axle Vehicles	0	0	0	0.2	0.2	0.2	0	0.2	0.2	0.2
4+ Axle Trucks	0	0	0	23	0	23	1	29	30	53
% 4+ Axle Trucks	0	0	0	0.7	0	0.5	1.5	0.7	0.7	0.5

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	281	18	299	483	254	737	8	511	519	1555
04:15 PM	259	11	270	453	240	693	8	521	529	1492
04:30 PM	257	15	272	426	243	669	15	471	486	1427
04:45 PM	278	27	305	469	202	671	5	552	557	1533
Total Volume	1075	71	1146	1831	939	2770	36	2055	2091	6007
% App. Total	93.8	6.2		66.1	33.9		1.7	98.3		
PHF	.956	.657	.939	.948	.924	.940	.600	.931	.939	.966

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

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 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			04:00 PM			04:45 PM		
+0 mins.	278	27	305	483	254	737	5	552	557
+15 mins.	267	33	300	453	240	693	12	495	507
+30 mins.	307	20	327	426	243	669	6	539	545
+45 mins.	284	19	303	469	202	671	8	528	536
Total Volume	1136	99	1235	1831	939	2770	31	2114	2145
% App. Total	92	8		66.1	33.9		1.4	98.6	
PHF	.925	.750	.944	.948	.924	.940	.646	.957	.963

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

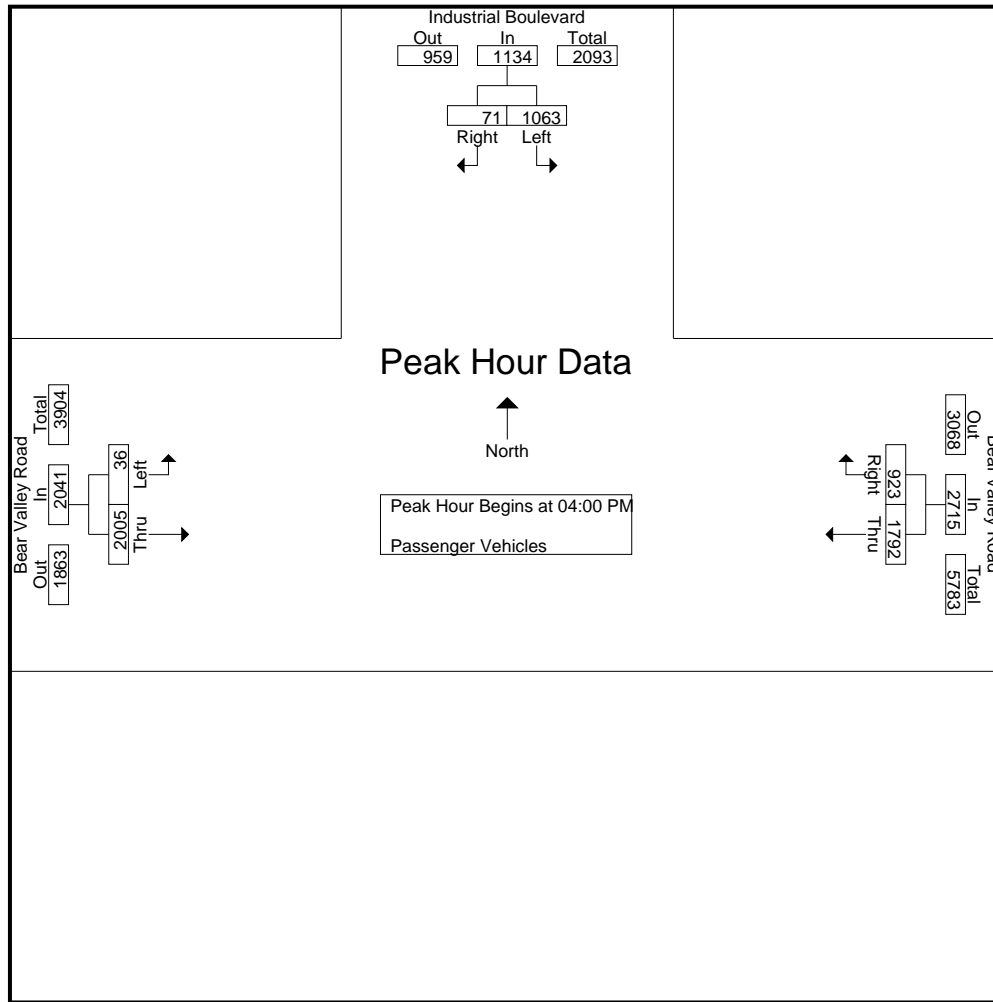
Groups Printed- Passenger Vehicles

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	280	18	298	472	251	723	8	499	507	1528
04:15 PM	256	11	267	442	232	674	8	507	515	1456
04:30 PM	251	15	266	418	239	657	15	459	474	1397
04:45 PM	276	27	303	460	201	661	5	540	545	1509
Total	1063	71	1134	1792	923	2715	36	2005	2041	5890
05:00 PM	265	33	298	386	191	577	10	490	500	1375
05:15 PM	304	20	324	388	191	579	6	529	535	1438
05:30 PM	282	18	300	408	199	607	8	512	520	1427
05:45 PM	222	10	232	333	152	485	6	492	498	1215
Total	1073	81	1154	1515	733	2248	30	2023	2053	5455
Grand Total	2136	152	2288	3307	1656	4963	66	4028	4094	11345
Apprch %	93.4	6.6		66.6	33.4		1.6	98.4		
Total %	18.8	1.3	20.2	29.1	14.6	43.7	0.6	35.5	36.1	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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	280	18	298	472	251	723	8	499	507	1528
04:15 PM	256	11	267	442	232	674	8	507	515	1456
04:30 PM	251	15	266	418	239	657	15	459	474	1397
04:45 PM	276	27	303	460	201	661	5	540	545	1509
Total Volume	1063	71	1134	1792	923	2715	36	2005	2041	5890
% App. Total	93.7	6.3		66	34		1.8	98.2		
PHF	.949	.657	.936	.949	.919	.939	.600	.928	.936	.964

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 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		
+0 mins.	280	18	298	472	251	723	8	499	507
+15 mins.	256	11	267	442	232	674	8	507	515
+30 mins.	251	15	266	418	239	657	15	459	474
+45 mins.	276	27	303	460	201	661	5	540	545
Total Volume	1063	71	1134	1792	923	2715	36	2005	2041
% App. Total	93.7	6.3		66	34		1.8	98.2	
PHF	.949	.657	.936	.949	.919	.939	.600	.928	.936

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

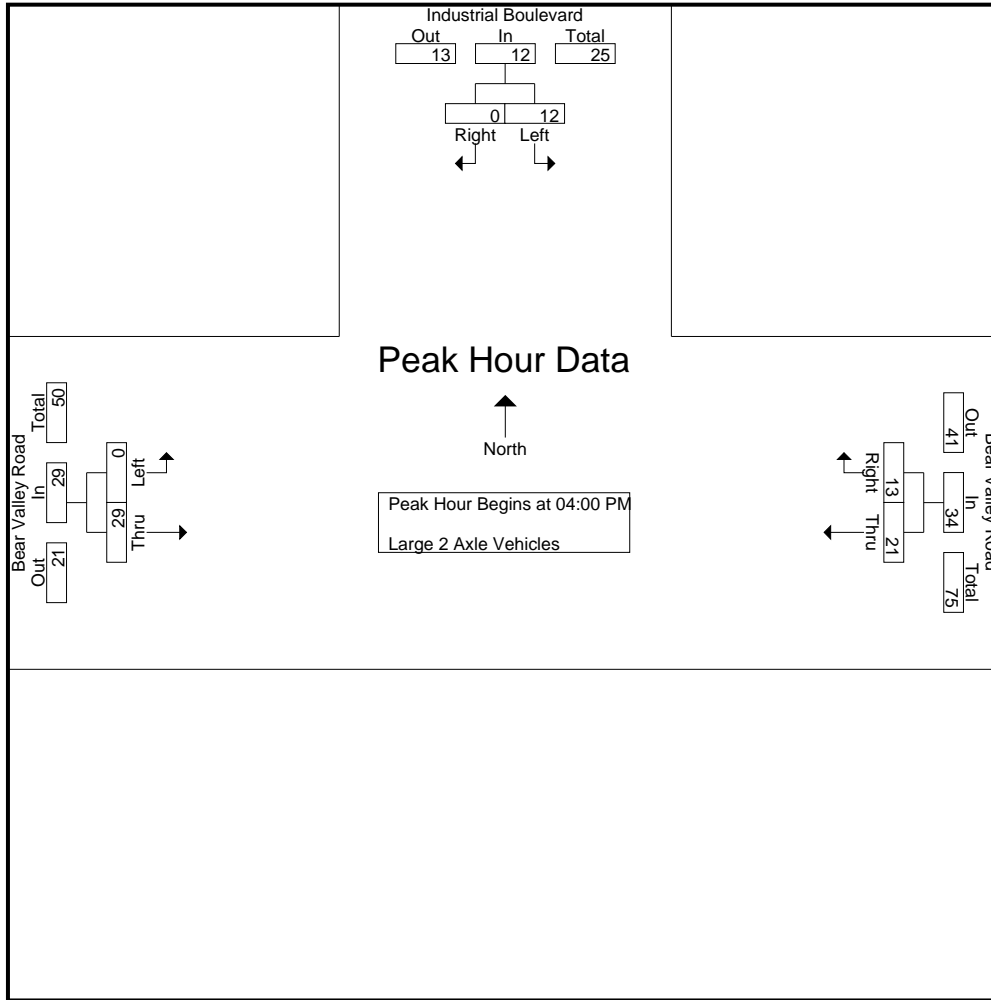
Groups Printed- Large 2 Axle Vehicles

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	1	0	1	8	3	11	0	7	7	19
04:15 PM	3	0	3	7	5	12	0	10	10	25
04:30 PM	6	0	6	4	4	8	0	7	7	21
04:45 PM	2	0	2	2	1	3	0	5	5	10
Total	12	0	12	21	13	34	0	29	29	75
05:00 PM	2	0	2	4	3	7	1	3	4	13
05:15 PM	3	0	3	4	3	7	0	6	6	16
05:30 PM	2	1	3	4	3	7	0	7	7	17
05:45 PM	4	0	4	1	2	3	0	5	5	12
Total	11	1	12	13	11	24	1	21	22	58
Grand Total	23	1	24	34	24	58	1	50	51	133
Apprch %	95.8	4.2		58.6	41.4		2	98		
Total %	17.3	0.8	18	25.6	18	43.6	0.8	37.6	38.3	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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	0	1	8	3	11	0	7	7	19
04:15 PM	3	0	3	7	5	12	0	10	10	25
04:30 PM	6	0	6	4	4	8	0	7	7	21
04:45 PM	2	0	2	2	1	3	0	5	5	10
Total Volume	12	0	12	21	13	34	0	29	29	75
% App. Total	100	0		61.8	38.2		0	100		
PHF	.500	.000	.500	.656	.650	.708	.000	.725	.725	.750

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 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		
+0 mins.	1	0	1	8	3	11	0	7	7
+15 mins.	3	0	3	7	5	12	0	10	10
+30 mins.	6	0	6	4	4	8	0	7	7
+45 mins.	2	0	2	2	1	3	0	5	5
Total Volume	12	0	12	21	13	34	0	29	29
% App. Total	100	0		61.8	38.2		0	100	
PHF	.500	.000	.500	.656	.650	.708	.000	.725	.725

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

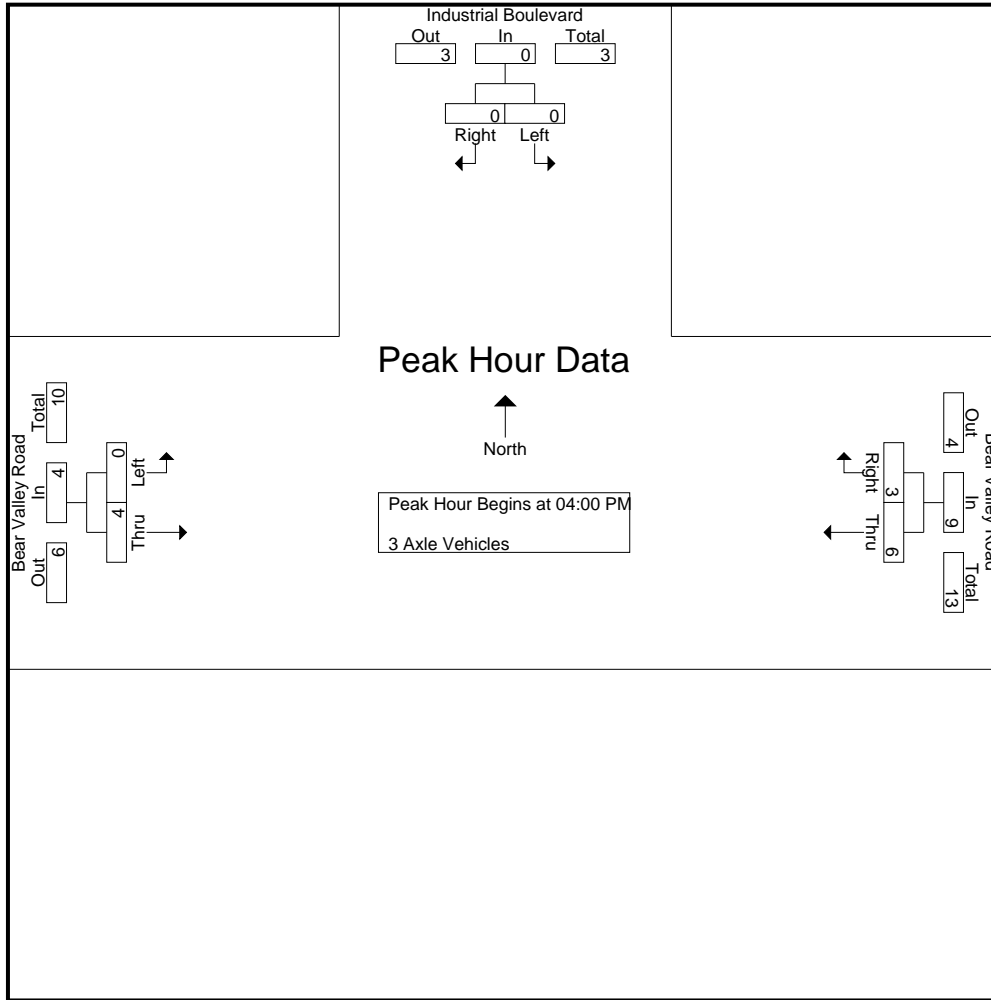
Groups Printed- 3 Axle Vehicles

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	1	3	4	0	1	1	5
04:30 PM	0	0	0	2	0	2	0	1	1	3
04:45 PM	0	0	0	2	0	2	0	2	2	4
Total	0	0	0	6	3	9	0	4	4	13
05:00 PM	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	0	0	0	0	3	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	5	5	5
Grand Total	0	0	0	6	3	9	0	9	9	18
Apprch %	0	0		66.7	33.3		0	100		
Total %	0	0		33.3	16.7	50	0	50	50	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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	1	0	1	0	0	0	1
04:15 PM	0	0	0	1	3	4	0	1	1	5
04:30 PM	0	0	0	2	0	2	0	1	1	3
04:45 PM	0	0	0	2	0	2	0	2	2	4
Total Volume	0	0	0	6	3	9	0	4	4	13
% App. Total	0	0		66.7	33.3		0	100		
PHF	.000	.000	.000	.750	.250	.563	.000	.500	.500	.650

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 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		
+0 mins.	0	0	0	1	0	1	0	0	0
+15 mins.	0	0	0	1	3	4	0	1	1
+30 mins.	0	0	0	2	0	2	0	1	1
+45 mins.	0	0	0	2	0	2	0	2	2
Total Volume	0	0	0	6	3	9	0	4	4
% App. Total	0	0	0	66.7	33.3		0	100	
PHF	.000	.000	.000	.750	.250	.563	.000	.500	.500

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 Page No : 1

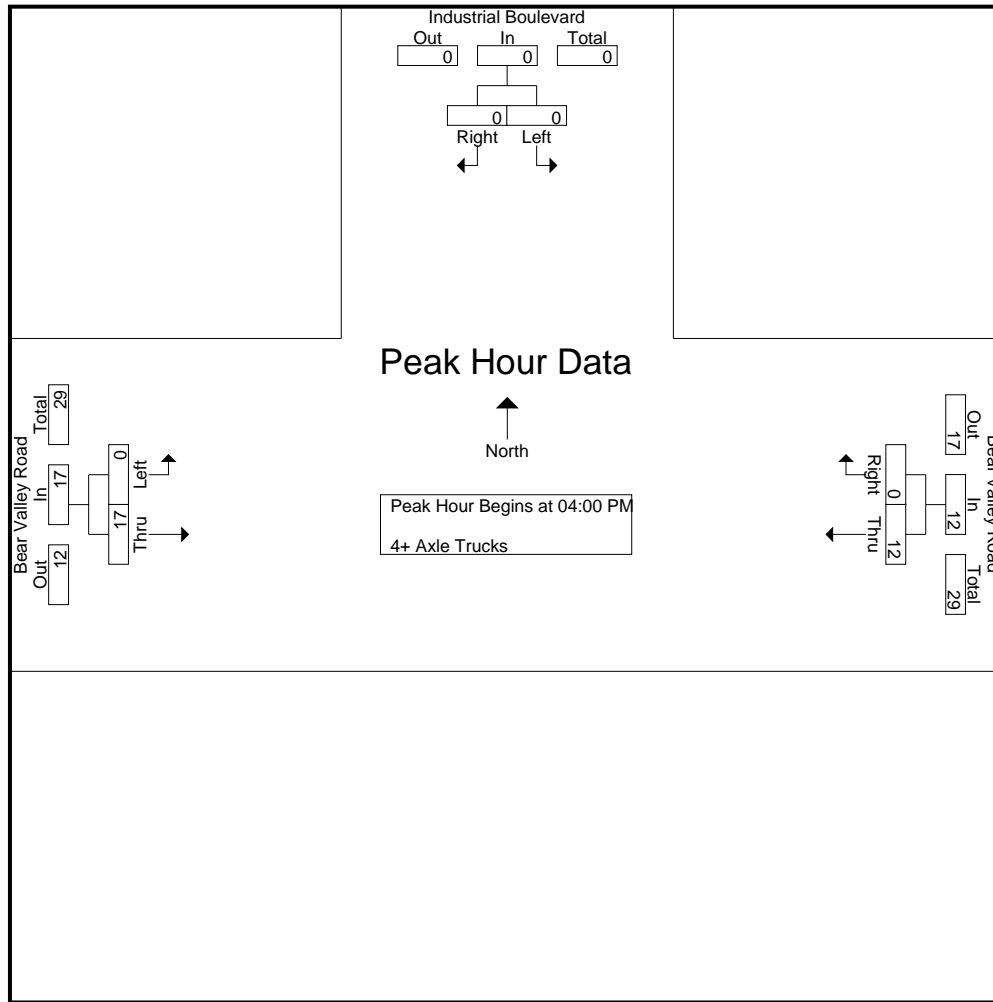
Groups Printed- 4+ Axle Trucks

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	2	0	2	0	5	5	7
04:15 PM	0	0	0	3	0	3	0	3	3	6
04:30 PM	0	0	0	2	0	2	0	4	4	6
04:45 PM	0	0	0	5	0	5	0	5	5	10
Total	0	0	0	12	0	12	0	17	17	29
05:00 PM	0	0	0	4	0	4	1	1	2	6
05:15 PM	0	0	0	4	0	4	0	3	3	7
05:30 PM	0	0	0	1	0	1	0	6	6	7
05:45 PM	0	0	0	2	0	2	0	2	2	4
Total	0	0	0	11	0	11	1	12	13	24
Grand Total	0	0	0	23	0	23	1	29	30	53
Apprch %	0	0		100	0		3.3	96.7		
Total %	0	0		43.4	0	43.4	1.9	54.7	56.6	

Start Time	Industrial Boulevard Southbound			Bear Valley Road Westbound			Bear Valley Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	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	2	0	2	0	5	5	7
04:15 PM	0	0	0	3	0	3	0	3	3	6
04:30 PM	0	0	0	2	0	2	0	4	4	6
04:45 PM	0	0	0	5	0	5	0	5	5	10
Total Volume	0	0	0	12	0	12	0	17	17	29
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.600	.000	.600	.000	.850	.850	.725

City of Victorville
 N/S: Industrial Boulevard
 E/W: Bear Valley Road
 Weather: Clear

File Name : 10_VIC_Industrial_Bear Valley PM
 Site Code : 07518372
 Start Date : 5/22/2018
 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		
+0 mins.	0	0	0	2	0	2	0	5	5
+15 mins.	0	0	0	3	0	3	0	3	3
+30 mins.	0	0	0	2	0	2	0	4	4
+45 mins.	0	0	0	5	0	5	0	5	5
Total Volume	0	0	0	12	0	12	0	17	17
% App. Total	0	0	0	100	0	100	0	100	100
PHF	.000	.000	.000	.600	.000	.600	.000	.850	.850

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

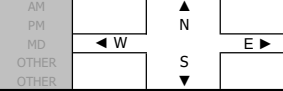
DATE:
Thu, Sep 3, 20

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Hesperia
I
Bear Valley

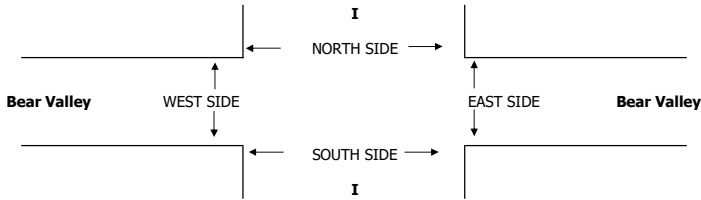
PROJECT #: SC2647
LOCATION #: 1
CONTROL: SIGNAL

NOTES:



Add U-Turns to Left Turns

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL
LANES:	1.5	0.5	1	0.5	0.5	1	1	3	1	2	3	0	0	0	0	0	0	0
7:00 AM	59	5	22	3	7	16	3	151	49	16	237	2	0	0	0	0	0	
7:15 AM	55	7	12	4	5	13	8	188	58	14	246	3	0	0	0	0	0	
7:30 AM	61	12	21	9	12	12	17	203	68	21	303	3	0	0	0	0	0	
7:45 AM	67	11	27	4	12	13	11	248	114	39	288	3	0	0	0	0	0	
8:00 AM	74	5	16	2	12	8	7	230	69	22	272	4	0	0	0	0	0	
8:15 AM	62	4	24	3	5	5	9	232	92	29	264	3	0	0	0	0	0	
8:30 AM	68	8	28	8	11	9	11	256	66	35	239	4	0	0	0	0	0	
8:45 AM	63	15	25	6	8	15	13	274	97	38	306	4	0	0	1	0	1	
VOLUMES	509	67	175	39	72	91	79	1,782	613	214	2,155	26	0	0	1	0	1	
APPROACH %	68%	9%	23%	19%	36%	45%	3%	72%	25%	9%	90%	1%	0	0	0	0	0	
APP/DEPART	751	/	171	202	/	899	2,474	/	1,996	2,395	/	2,756	0	0	0	0	0	
BEGIN PEAK HR	8:00 AM																	
VOLUMES	267	32	93	19	36	37	40	992	324	124	1,081	15	0	0	0	0	0	
APPROACH %	68%	8%	24%	21%	39%	40%	3%	73%	24%	10%	89%	1%	0	0	0	0	0	
PEAK HR FACTOR	0.942			0.793			0.883			0.876			0.885					
APP/DEPART	392	/	86	92	/	484	1,356	/	1,104	1,220	/	1,386	0	0	0	0	0	
4:00 PM	99	14	47	14	8	13	33	456	93	31	332	3	0	0	0	0	0	
4:15 PM	95	22	40	7	8	12	18	404	70	22	309	2	0	0	0	0	0	
4:30 PM	103	17	43	9	5	15	25	452	102	33	318	4	0	0	0	0	0	
4:45 PM	100	12	30	11	6	5	23	391	88	27	298	6	0	0	0	0	0	
5:00 PM	112	27	38	12	5	16	28	482	92	25	305	2	0	0	1	0	1	
5:15 PM	89	17	41	10	5	21	33	494	88	26	358	5	0	0	0	0	0	
5:30 PM	88	11	22	11	7	13	29	403	72	26	258	4	0	0	0	0	0	
5:45 PM	70	8	28	8	3	12	18	385	66	24	279	2	0	0	0	0	0	
VOLUMES	756	128	289	82	47	107	207	3,467	671	214	2,457	28	0	0	1	0	1	
APPROACH %	64%	11%	25%	35%	20%	45%	5%	80%	15%	8%	91%	1%	0	0	0	0	0	
APP/DEPART	1,173	/	362	236	/	932	4,345	/	3,838	2,699	/	3,321	0	0	0	0	0	
BEGIN PEAK HR	4:30 PM																	
VOLUMES	404	73	152	42	21	57	109	1,819	370	111	1,279	17	0	0	0	0	0	
APPROACH %	64%	12%	24%	35%	18%	48%	5%	79%	16%	8%	91%	1%	0	0	0	0	0	
PEAK HR FACTOR	0.888			0.833			0.934			0.904			0.938					
APP/DEPART	629	/	198	120	/	502	2,298	/	2,013	1,407	/	1,741	0	0	0	0	0	



	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	8:00 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	4:30 PM				

PEDESTRIAN + BIKE CROSSINGS					
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	8:00 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	4:30 PM				

PEDESTRIAN CROSSINGS					
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	8:00 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	4:30 PM				

BICYCLE CROSSINGS					
	NS	SS	ES	WS	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	8:00 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	4:30 PM				

APPENDIX D
LEVEL OF SERVICE WORKSHEETS

EXISTING

Chateau Senior Living Facility

Vistro File: G:\...\IAM E.vistro
Report File: G:\...\IAM E.pdf

Scenario 1 Existing
10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.844	34.1	C
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.257	23.9	C
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.003	19.0	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	5.851	28.4	C
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.528	14.5	B
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	1.003	38.5	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.238	2.0	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.579	25.3	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.936	22.8	C
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.688	33.5	C
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	5.008	2,086.3	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	34.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.844

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	110	502	358	263	320	79	196	1267	101	315	1305	218
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	110	502	358	263	320	79	196	1267	101	315	1305	218
Peak Hour Factor	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740
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	144	102	75	92	23	56	362	29	90	373	62
Total Analysis Volume [veh/h]	126	574	410	301	366	90	224	1450	116	360	1493	249
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	83
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	12	28	0	12	28	0	11	29	29	14	32	32
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	83	83	83	83	83	83	83	83	83	83	83	83
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	0.00
g_i, Effective Green Time [s]	7	24	24	8	25	25	7	25	36	10	28	40
g / C, Green / Cycle	0.08	0.29	0.29	0.10	0.31	0.31	0.08	0.30	0.43	0.12	0.34	0.48
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.27	0.09	0.13	0.13	0.07	0.30	0.08	0.11	0.30	0.16
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	266	996	445	321	553	516	281	1469	654	401	1646	735
d1, Uniform Delay [s]	36.53	25.10	28.54	37.26	22.93	22.94	37.31	28.91	14.71	36.00	26.33	13.38
k, delay calibration	0.11	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]	1.31	2.43	27.07	12.51	2.39	2.58	5.14	8.28	0.13	7.29	2.18	0.27
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	0.47	0.58	0.92	0.94	0.43	0.43	0.80	0.99	0.18	0.90	0.91	0.34
d, Delay for Lane Group [s/veh]	37.84	27.52	55.61	49.76	25.32	25.52	42.44	37.19	14.84	43.29	28.52	13.65
Lane Group LOS	D	C	E	D	C	C	D	D	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.19	4.67	10.39	3.45	3.80	3.58	2.28	9.59	1.20	3.78	8.73	2.55
50th-Percentile Queue Length [ft/ln]	29.73	116.83	259.74	86.33	94.92	89.51	57.01	239.86	30.04	94.49	218.24	63.83
95th-Percentile Queue Length [veh/ln]	2.14	8.22	15.68	6.22	6.83	6.44	4.10	14.67	2.16	6.80	13.58	4.60
95th-Percentile Queue Length [ft/ln]	53.52	205.46	391.90	155.39	170.85	161.12	102.61	366.86	54.08	170.09	339.38	114.90

Movement, Approach, & Intersection Results

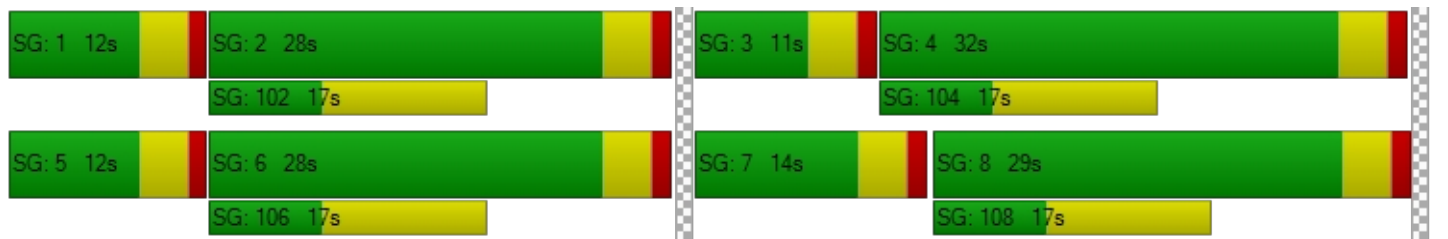
d_M, Delay for Movement [s/veh]	37.84	27.52	55.61	49.76	25.39	25.52	42.44	37.19	14.84	43.29	28.52	13.65
Movement LOS	D	C	E	D	C	C	D	D	B	D	C	B
d_A, Approach Delay [s/veh]	39.07			35.10			36.39			29.29		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	34.15											
Intersection LOS	C											
Intersection V/C	0.844											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	31.23	31.23	31.23	31.23
I_p,int, Pedestrian LOS Score for Intersection	3.042	2.839	3.476	3.537
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	578	578	602	675
d_b, Bicycle Delay [s]	20.97	20.97	20.27	18.22
I_b,int, Bicycle LOS Score for Intersection	2.475	2.184	2.544	2.716
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (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):	0.257

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	241	28	22	629	59	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	241	28	22	629	59	9
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	8	6	175	16	2
Total Analysis Volume [veh/h]	267	31	24	698	65	10
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	0.02	0.01	0.26	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.88	0.00	23.92	14.44
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	1.06	1.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.32	1.32	26.58	26.58
d_A, Approach Delay [s/veh]	0.00		0.26		22.66	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.72					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	1	266	58	35	760	0	1	0	5	95	1	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	266	58	35	760	0	1	0	5	95	1	29
Peak Hour Factor	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150
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	73	16	10	208	0	0	0	1	26	0	8
Total Analysis Volume [veh/h]	1	291	63	38	831	0	1	0	5	104	1	32
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.01	0.24	0.00	0.04
d_M, Delay for Movement [s/veh]	9.45	0.00	0.00	8.06	0.00	0.00	18.23	16.68	11.14	15.68	19.02	9.45
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.10	0.00	0.00	0.01	0.01	0.03	0.92	0.92	0.12
95th-Percentile Queue Length [ft/ln]	0.09	0.00	0.00	2.42	0.00	0.00	0.28	0.28	0.64	22.96	22.96	2.96
d_A, Approach Delay [s/veh]	0.03			0.35			12.32			14.24		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.71											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.851

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	0	0	0	0	0	0
Pocket Length [ft]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	4	307	50	28	788	2	4	1	21	130	6	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	4	307	50	28	788	2	4	1	21	130	6	29
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	85	14	8	219	1	1	0	6	36	2	8
Total Analysis Volume [veh/h]	4	341	56	31	877	2	4	1	23	145	7	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	18	28	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	28	28	3	31	31	17	17	17	17
g / C, Green / Cycle	0.01	0.47	0.47	0.05	0.51	0.51	0.28	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.11	0.11	0.02	0.24	0.24	0.08	0.02	5.02	0.02
s, saturation flow rate [veh/h]	1714	1800	1713	1714	1800	1799	61	1530	30	1530
c, Capacity [veh/h]	16	843	803	85	915	914	125	432	125	432
d1, Uniform Delay [s]	29.58	9.57	9.59	27.69	9.62	9.62	17.77	15.72	29.69	15.81
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.50	0.67	0.72	2.63	1.81	1.81	0.13	0.05	147.98	0.07
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	0.24	0.24	0.24	0.37	0.48	0.48	0.04	0.05	1.21	0.07
d, Delay for Lane Group [s/veh]	37.07	10.24	10.31	30.32	11.43	11.43	17.90	15.77	177.66	15.88
Lane Group LOS	D	B	B	C	B	B	B	B	F	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.08	1.26	1.23	0.44	2.89	2.89	0.05	0.22	6.92	0.31
50th-Percentile Queue Length [ft/ln]	2.11	31.42	30.68	10.91	72.24	72.20	1.28	5.59	172.95	7.82
95th-Percentile Queue Length [veh/ln]	0.15	2.26	2.21	0.79	5.20	5.20	0.09	0.40	12.29	0.56
95th-Percentile Queue Length [ft/ln]	3.80	56.56	55.23	19.64	130.04	129.95	2.30	10.05	307.36	14.08

Movement, Approach, & Intersection Results

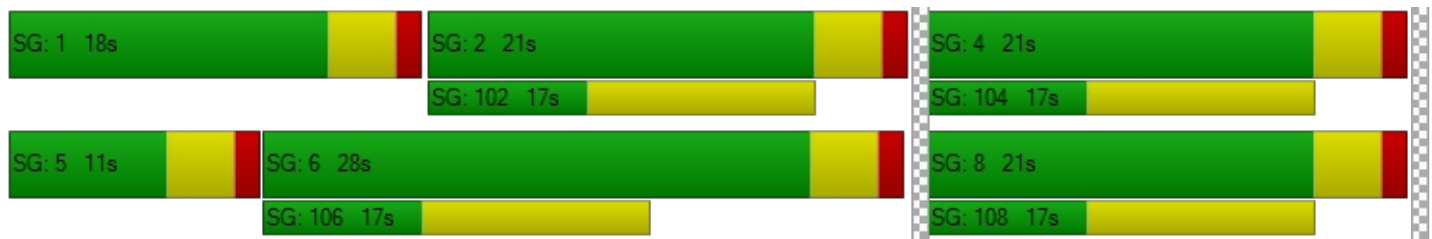
d_M, Delay for Movement [s/veh]	37.07	10.27	10.31	30.32	11.43	11.43	17.90	17.90	15.77	177.66	177.66	15.88
Movement LOS	D	B	B	C	B	B	B	B	B	F	F	B
d_A, Approach Delay [s/veh]	10.54			12.07			16.15			149.53		
Approach LOS	B			B			B			F		
d_I, Intersection Delay [s/veh]	28.35											
Intersection LOS	C											
Intersection V/C	5.851											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	3.001			2.743			1.929			1.991		
Crosswalk LOS	C			B			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			800			567			567		
d_b, Bicycle Delay [s]	15.41			10.80			15.41			15.41		
I_b,int, Bicycle LOS Score for Intersection	1.890			2.310			1.606			1.863		
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 5: Ridgecrest Rd (NS) at Pahute Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	14.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	5	282	59	79	942	3	5	6	16	246	6	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	282	59	79	942	3	5	6	16	246	6	80
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	76	16	21	254	1	1	2	4	66	2	22
Total Analysis Volume [veh/h]	5	305	64	85	1017	3	5	6	17	266	6	86
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	25	0	14	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	27	27	5	32	32	16	16	16	16
g / C, Green / Cycle	0.01	0.45	0.45	0.09	0.53	0.53	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.00	0.10	0.11	0.05	0.28	0.28	0.00	0.01	0.19	0.06
s, saturation flow rate [veh/h]	1714	1800	1694	1714	1800	1798	1325	1592	1410	1545
c, Capacity [veh/h]	16	810	762	152	952	951	358	416	424	404
d1, Uniform Delay [s]	29.52	10.14	10.16	26.22	9.29	9.29	20.28	16.61	22.75	17.41
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	10.01	0.67	0.73	3.19	2.16	2.16	0.02	0.05	1.53	0.28
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	0.30	0.23	0.24	0.56	0.54	0.54	0.01	0.06	0.63	0.23
d, Delay for Lane Group [s/veh]	39.53	10.81	10.90	29.42	11.45	11.45	20.30	16.67	24.28	17.69
Lane Group LOS	D	B	B	C	B	B	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.12	1.52	1.48	1.13	3.31	3.30	0.06	0.23	3.37	0.91
50th-Percentile Queue Length [ft/ln]	2.88	38.00	36.93	28.35	82.68	82.61	1.42	5.78	84.19	22.71
95th-Percentile Queue Length [veh/ln]	0.21	2.74	2.66	2.04	5.95	5.95	0.10	0.42	6.06	1.64
95th-Percentile Queue Length [ft/ln]	5.18	68.41	66.47	51.03	148.82	148.70	2.55	10.41	151.53	40.88

Movement, Approach, & Intersection Results

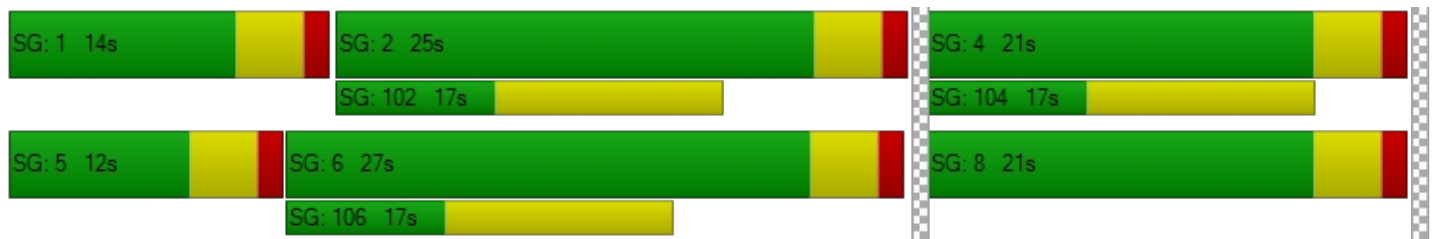
d_M, Delay for Movement [s/veh]	39.53	10.84	10.90	29.42	11.45	11.45	20.30	16.67	16.67	24.28	17.69	17.69
Movement LOS	D	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	11.24			12.83			17.31			22.59		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	14.45											
Intersection LOS	B											
Intersection V/C	0.528											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.821			1.929			2.140		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	700			767			567			567		
d_b, Bicycle Delay [s]	12.68			11.41			15.41			15.41		
I_b,int, Bicycle LOS Score for Intersection	1.868			2.471			1.606			2.150		
Bicycle LOS	A			B			A			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	38.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	3	3	85	8	1024	517	2204	16	8	2040	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	16	3	3	85	8	1024	517	2204	16	8	2040	33
Peak Hour Factor	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790
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]	5	1	1	24	2	291	147	627	5	2	580	9
Total Analysis Volume [veh/h]	18	3	3	97	9	1165	588	2507	18	9	2321	38
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	48	98	0	11	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	65	44	99	99	2	57	57
g / C, Green / Cycle	0.13	0.13	0.50	0.34	0.76	0.76	0.02	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.04	0.08	0.43	0.34	0.48	0.48	0.01	0.45	0.45
s, saturation flow rate [veh/h]	540	1397	2708	1714	3427	1793	1714	3427	1785
c, Capacity [veh/h]	119	234	1351	580	2615	1368	26	1507	785
d1, Uniform Delay [s]	55.90	53.27	28.66	43.00	7.06	7.09	63.37	36.41	36.41
k, delay calibration	0.50	0.50	0.19	0.48	0.11	0.21	0.11	0.11	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]	3.82	6.20	3.07	39.91	0.26	0.94	7.76	18.96	40.41
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	0.20	0.45	0.86	1.01	0.63	0.64	0.35	1.03	1.03
d, Delay for Lane Group [s/veh]	59.72	59.47	31.72	82.91	7.32	8.02	71.13	55.37	76.82
Lane Group LOS	E	E	C	F	A	A	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.90	3.60	15.41	24.25	8.11	8.81	0.35	26.41	32.19
50th-Percentile Queue Length [ft/ln]	22.49	89.95	385.33	606.21	202.83	220.22	8.64	660.15	804.67
95th-Percentile Queue Length [veh/ln]	1.62	6.48	21.85	32.63	12.78	13.68	0.62	35.58	42.50
95th-Percentile Queue Length [ft/ln]	40.48	161.91	546.29	815.84	319.61	341.90	15.54	889.43	1062.50

Movement, Approach, & Intersection Results

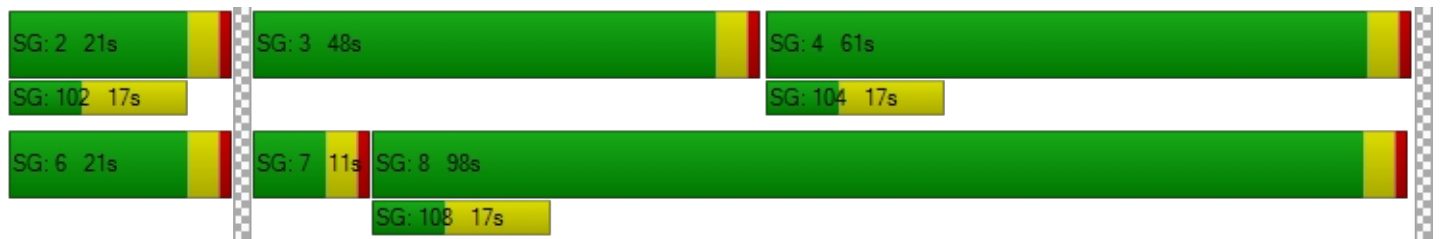
d_M, Delay for Movement [s/veh]	59.72	59.72	59.72	59.47	59.47	31.72	82.91	7.56	8.02	71.13	62.50	76.82
Movement LOS	E	E	E	E	E	C	F	A	A	E	F	E
d_A, Approach Delay [s/veh]	59.72			34.04			21.79			62.76		
Approach LOS	E			C			C			E		
d_I, Intersection Delay [s/veh]	38.54											
Intersection LOS	D											
Intersection V/C	1.003											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	54.47	54.47	0.00	54.47
I_p,int, Pedestrian LOS Score for Intersection	1.757	2.873	0.000	3.789
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	262	262	1446	877
d_b, Bicycle Delay [s]	49.11	49.11	4.98	20.50
I_b,int, Bicycle LOS Score for Intersection	1.599	3.657	3.272	2.862
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	2.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.238

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	7	1	4	262	620	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	7	1	4	262	620	8
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	78	185	2
Total Analysis Volume [veh/h]	8	1	5	313	742	10
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	110
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	18	89	71	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	110	110	110	110	110
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]	2	1	100	95	95
g / C, Green / Cycle	0.02	0.01	0.91	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.09	0.22	0.01
s, saturation flow rate [veh/h]	1692	1714	3427	3427	1530
c, Capacity [veh/h]	27	16	3124	2967	1324
d1, Uniform Delay [s]	53.55	54.11	0.47	1.27	1.00
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.22	10.19	0.06	0.20	0.01
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	0.34	0.31	0.10	0.25	0.01
d, Delay for Lane Group [s/veh]	60.78	64.29	0.54	1.47	1.01
Lane Group LOS	E	E	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.30	0.18	0.03	0.12	0.00
50th-Percentile Queue Length [ft/ln]	7.54	4.45	0.70	2.92	0.11
95th-Percentile Queue Length [veh/ln]	0.54	0.32	0.05	0.21	0.01
95th-Percentile Queue Length [ft/ln]	13.58	8.00	1.25	5.26	0.20

Movement, Approach, & Intersection Results

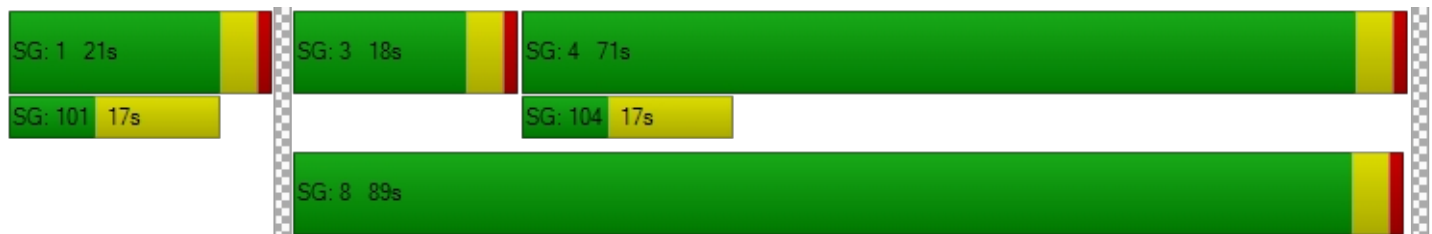
d_M, Delay for Movement [s/veh]	60.78	60.78	64.29	0.54	1.47	1.01
Movement LOS	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	60.78		1.54		1.46	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	1.98					
Intersection LOS	A					
Intersection V/C	0.238					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	44.55	44.55	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.734	2.779	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.147	4.395	4.753
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	25.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	84	507	83	83	492	253	188	249	102	196	401	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	84	507	83	83	492	253	188	249	102	196	401	124
Peak Hour Factor	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280
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	153	25	25	149	76	57	75	31	59	121	37
Total Analysis Volume [veh/h]	101	612	100	100	594	306	227	301	123	237	484	150
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	68
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	11	21	0	11	21	0	15	25	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	68	68	68	68	68	68	68	68	68	68	68	68
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]	6	24	24	6	24	24	7	11	11	11	15	15
g / C, Green / Cycle	0.09	0.35	0.35	0.09	0.35	0.35	0.10	0.16	0.16	0.16	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.06	0.18	0.07	0.06	0.17	0.20	0.07	0.09	0.08	0.14	0.18	0.18
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1656
c, Capacity [veh/h]	153	1209	540	153	1208	539	342	554	247	278	398	366
d1, Uniform Delay [s]	30.07	17.41	15.30	30.07	17.32	17.90	29.50	26.30	26.09	27.80	25.35	25.35
k, delay calibration	0.11	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]	4.75	1.52	0.76	4.68	1.43	4.29	2.22	0.83	1.55	7.27	4.47	4.86
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	0.66	0.51	0.19	0.65	0.49	0.57	0.66	0.54	0.50	0.85	0.83	0.83
d, Delay for Lane Group [s/veh]	34.82	18.93	16.06	34.75	18.75	22.19	31.72	27.13	27.63	35.07	29.82	30.21
Lane Group LOS	C	B	B	C	B	C	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.62	3.31	0.99	1.60	3.19	3.78	1.74	2.10	1.75	3.94	5.02	4.66
50th-Percentile Queue Length [ft/ln]	40.55	82.77	24.78	40.10	79.74	94.56	43.53	52.41	43.84	98.57	125.38	116.44
95th-Percentile Queue Length [veh/ln]	2.92	5.96	1.78	2.89	5.74	6.81	3.13	3.77	3.16	7.10	8.69	8.20
95th-Percentile Queue Length [ft/ln]	72.99	148.98	44.61	72.18	143.54	170.20	78.35	94.34	78.92	177.43	217.20	204.92

Movement, Approach, & Intersection Results

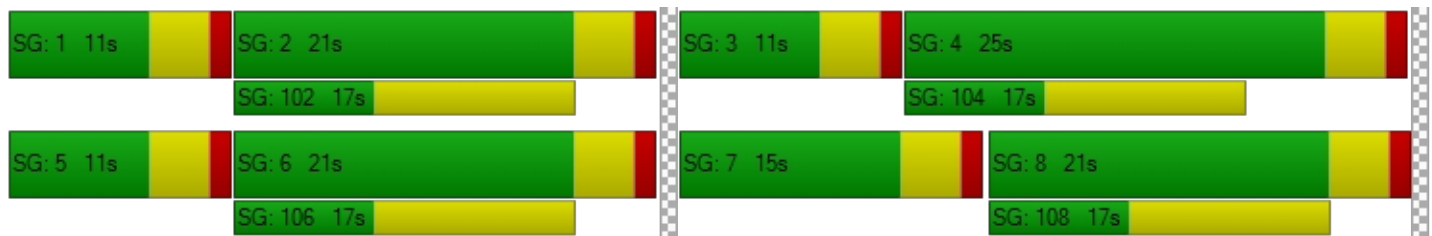
d_M, Delay for Movement [s/veh]	34.82	18.93	16.06	34.75	18.75	22.19	31.72	27.13	27.63	35.07	29.94	30.21
Movement LOS	C	B	B	C	B	C	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	20.55			21.40			28.83			31.38		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	25.25											
Intersection LOS	C											
Intersection V/C	0.579											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	23.89	23.89	23.89	23.89
I_p,int, Pedestrian LOS Score for Intersection	2.964	3.030	2.992	2.686
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	500	500	618
d_b, Bicycle Delay [s]	19.13	19.13	19.13	16.24
I_b,int, Bicycle LOS Score for Intersection	2.230	2.385	2.097	2.278
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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↑ ↑			↔ ↑ ↑↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	41	19	2	19	53	1745	2	37	1696	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	41	19	2	19	53	1745	2	37	1696	51
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]	0	0	11	5	1	5	14	469	1	10	456	14
Total Analysis Volume [veh/h]	1	0	44	20	2	20	57	1876	2	40	1824	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.19	2.06	1.29	0.08	0.39	0.02	0.00	0.27	0.02	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	24.23	1955.45	3899.50	21.32	44.05	0.00	0.00	38.23	0.00	0.00
Movement LOS	F	F	C	F	F	C	E	A	A	E	A	A
95th-Percentile Queue Length [veh/ln]	0.68	0.68	0.69	3.99	3.99	0.27	1.65	0.00	0.00	1.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.95	16.95	17.16	99.85	99.85	6.74	41.26	0.00	0.00	25.89	0.00	0.00
d_A, Approach Delay [s/veh]	245.92			1127.01			1.30			0.80		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	15.84											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.936

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	887	39	59	1731	1794	1120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	887	39	59	1731	1794	1120
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	249	11	17	485	503	314
Total Analysis Volume [veh/h]	994	44	66	1941	2011	1256
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	32	0	12	58	46	46
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	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	0.00
g_i, Effective Green Time [s]	28	28	6	54	44	76
g / C, Green / Cycle	0.31	0.31	0.06	0.60	0.49	0.85
(v / s)_i Volume / Saturation Flow Rate	0.30	0.03	0.04	0.40	0.41	0.82
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1035	476	110	2943	2411	1296
d1, Uniform Delay [s]	30.47	22.00	41.03	11.92	19.72	5.87
k, delay calibration	0.11	0.11	0.11	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]	6.59	0.08	5.21	1.18	3.58	18.60
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	0.96	0.09	0.60	0.66	0.83	0.97
d, Delay for Lane Group [s/veh]	37.06	22.09	46.24	13.09	23.30	24.47
Lane Group LOS	D	C	D	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	10.63	0.63	1.52	7.21	11.18	8.40
50th-Percentile Queue Length [ft/ln]	265.71	15.75	38.04	180.33	279.45	209.94
95th-Percentile Queue Length [veh/ln]	15.98	1.13	2.74	11.62	16.66	13.15
95th-Percentile Queue Length [ft/ln]	399.38	28.35	68.48	290.44	416.52	328.75

Movement, Approach, & Intersection Results

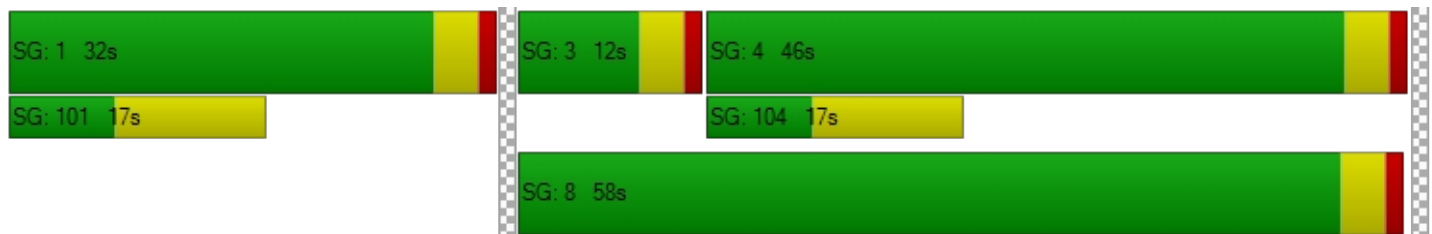
d_M, Delay for Movement [s/veh]	37.06	22.09	46.24	13.09	23.30	24.47
Movement LOS	D	C	D	B	C	C
d_A, Approach Delay [s/veh]	36.42		14.18		23.75	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	22.79					
Intersection LOS	C					
Intersection V/C	0.936					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	34.67	34.67	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.993	3.468	0.000
Crosswalk LOS	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.132	5.236	5.929
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	33.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.688

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	417	32	113	39	36	87	90	1772	424	144	1581	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	417	32	113	39	36	87	90	1772	424	144	1581	35
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	118	9	32	11	10	25	25	501	120	41	447	10
Total Analysis Volume [veh/h]	471	36	128	44	41	98	102	2002	479	163	1786	40
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	32	9	9	6	30	43	7	31	31
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.09	0.43	0.61	0.10	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.15	0.15	0.08	0.05	0.06	0.06	0.41	0.31	0.05	0.35	0.35
s, saturation flow rate [veh/h]	1714	1726	1530	1636	1530	1714	4903	1530	3329	3427	1780
c, Capacity [veh/h]	213	214	703	281	190	151	2093	930	323	1494	776
d1, Uniform Delay [s]	30.77	30.77	11.21	28.32	28.79	31.07	19.50	7.86	30.12	17.20	17.21
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.32
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]	121.56	121.11	0.57	2.76	9.67	5.22	3.46	2.03	1.22	1.05	5.75
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	1.19	1.19	0.18	0.30	0.52	0.68	0.96	0.51	0.50	0.80	0.80
d, Delay for Lane Group [s/veh]	152.33	151.88	11.78	31.07	38.47	36.29	22.96	9.89	31.34	18.25	22.97
Lane Group LOS	F	F	B	C	D	D	C	A	C	B	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.63	10.68	1.18	1.44	1.95	1.76	9.22	3.36	1.26	7.06	8.37
50th-Percentile Queue Length [ft/ln]	265.81	266.94	29.57	36.05	48.70	44.01	230.58	83.91	31.44	176.58	209.14
95th-Percentile Queue Length [veh/ln]	17.11	17.17	2.13	2.60	3.51	3.17	14.20	6.04	2.26	11.42	13.11
95th-Percentile Queue Length [ft/ln]	427.69	429.13	53.22	64.90	87.66	79.21	355.10	151.04	56.59	285.54	327.73

Movement, Approach, & Intersection Results

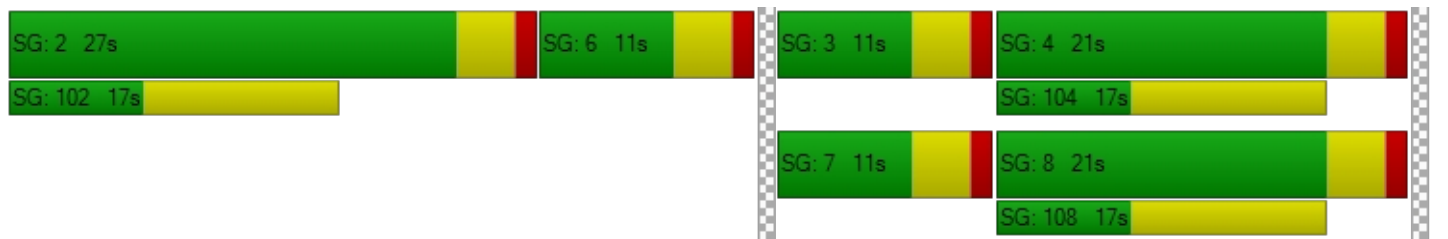
d_M, Delay for Movement [s/veh]	152.12	151.88	11.78	31.07	31.07	38.47	36.29	22.96	9.89	31.34	19.80	22.97
Movement LOS	F	F	B	C	C	D	D	C	A	C	B	C
d_A, Approach Delay [s/veh]	123.82			35.03			21.06			20.81		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	33.55											
Intersection LOS	C											
Intersection V/C	0.688											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.543	2.083	0.000	3.574
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.607	1.862	2.980	2.654
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 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	2,086.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.008

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	125	81	1731	191	86	1627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	125	81	1731	191	86	1627
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	23	485	53	24	455
Total Analysis Volume [veh/h]	140	91	1938	214	96	1822
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	5.01	0.41	0.02	0.00	0.89	0.02
d_M, Delay for Movement [s/veh]	2086.25	32.34	0.00	0.00	133.23	0.00
Movement LOS	F	D	A	A	F	A
95th-Percentile Queue Length [veh/ln]	17.08	1.89	0.00	0.00	5.33	0.00
95th-Percentile Queue Length [ft/ln]	426.99	47.19	0.00	0.00	133.26	0.00
d_A, Approach Delay [s/veh]	1277.13		0.00		6.67	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	71.57					
Intersection LOS	F					

Chateau Senior Living Facility

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Scenario 1 Existing
10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.862	36.3	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.071	18.8	C
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.003	16.9	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	7.101	15.3	B
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.305	8.6	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.973	32.6	C
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.159	2.9	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.523	22.3	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	22.067	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.851	20.6	C
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.773	61.0	E
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	36.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.862

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	157	435	418	407	540	133	130	1340	98	347	1243	227
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	157	435	418	407	540	133	130	1340	98	347	1243	227
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	40	110	106	103	137	34	33	339	25	88	315	57
Total Analysis Volume [veh/h]	159	440	423	412	547	135	132	1356	99	351	1258	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	86
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	29	0	15	33	0	15	28	28	14	27	27
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	86	86	86	86	86	86	86	86	86	86	86	86
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	0.00
g_i, Effective Green Time [s]	7	25	25	11	29	29	7	24	35	10	27	42
g / C, Green / Cycle	0.08	0.29	0.29	0.13	0.34	0.34	0.08	0.28	0.40	0.12	0.32	0.49
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.28	0.12	0.20	0.20	0.04	0.28	0.06	0.11	0.26	0.15
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	265	1001	447	426	613	571	260	1361	618	387	1549	750
d1, Uniform Delay [s]	38.26	24.73	29.79	37.33	23.28	23.28	38.07	31.03	16.35	37.54	27.08	13.15
k, delay calibration	0.11	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]	2.17	1.40	31.10	13.84	3.91	4.19	1.53	10.51	0.12	8.12	1.07	0.23
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	0.60	0.44	0.95	0.97	0.58	0.58	0.51	1.00	0.16	0.91	0.81	0.31
d, Delay for Lane Group [s/veh]	40.42	26.13	60.90	51.17	27.18	27.48	39.60	41.54	16.47	45.67	28.15	13.38
Lane Group LOS	D	C	E	D	C	C	D	D	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.60	3.51	11.54	4.93	6.12	5.76	1.31	9.73	1.13	3.88	7.35	2.37
50th-Percentile Queue Length [ft/ln]	39.98	87.77	288.52	123.32	153.02	144.00	32.72	243.23	28.13	96.99	183.82	59.36
95th-Percentile Queue Length [veh/ln]	2.88	6.32	17.11	8.58	10.18	9.70	2.36	14.84	2.03	6.98	11.80	4.27
95th-Percentile Queue Length [ft/ln]	71.96	157.98	427.81	214.38	254.46	242.40	58.89	371.11	50.64	174.59	294.99	106.84

Movement, Approach, & Intersection Results

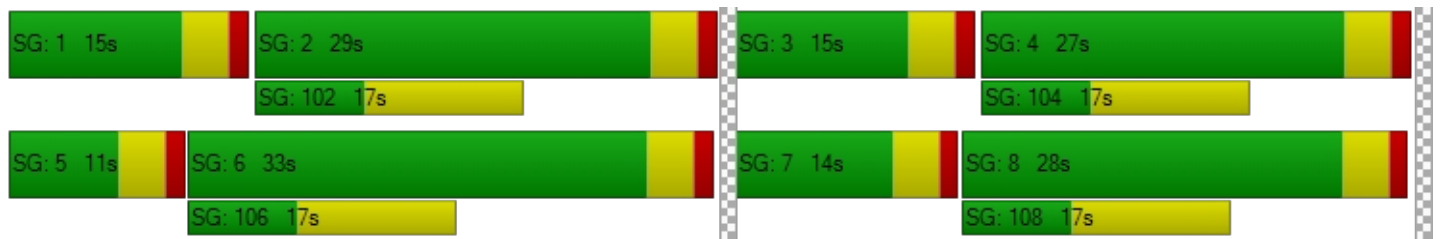
d_M, Delay for Movement [s/veh]	40.42	26.13	60.90	51.17	27.29	27.48	39.60	41.54	16.47	45.67	28.15	13.38
Movement LOS	D	C	E	D	C	C	D	D	B	D	C	B
d_A, Approach Delay [s/veh]	42.74			36.31			39.82			29.65		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	36.29											
Intersection LOS	D											
Intersection V/C	0.862											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	32.70	32.70	32.70	32.70
I_p,int, Pedestrian LOS Score for Intersection	3.060	2.861	3.413	3.501
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	581	674	558	535
d_b, Bicycle Delay [s]	21.63	18.89	22.35	23.08
I_b,int, Bicycle LOS Score for Intersection	2.403	2.462	2.432	2.571
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.071

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	363	41	54	372	19	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	363	41	54	372	19	8
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	97	11	14	100	5	2
Total Analysis Volume [veh/h]	389	44	58	399	20	9
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	0.05	0.00	0.07	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	8.34	0.00	18.79	11.56
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.15	0.15	0.28	0.28
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.73	3.73	6.93	6.93
d_A, Approach Delay [s/veh]	0.00		1.06		16.55	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.05					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	3	450	109	51	378	4	2	0	1	77	1	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	450	109	51	378	4	2	0	1	77	1	23
Peak Hour Factor	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
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	125	30	14	105	1	1	0	0	21	0	6
Total Analysis Volume [veh/h]	3	502	122	57	421	4	2	0	1	86	1	26
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.04
d_M, Delay for Movement [s/veh]	8.15	0.00	0.00	8.96	0.00	0.00	13.74	15.54	9.51	16.19	16.88	10.42
Movement LOS	A	A	A	A	A	A	B	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.19	0.00	0.00	0.01	0.01	0.00	0.80	0.80	0.12
95th-Percentile Queue Length [ft/ln]	0.20	0.00	0.00	4.69	0.00	0.00	0.36	0.36	0.09	19.92	19.92	2.93
d_A, Approach Delay [s/veh]	0.04			1.06			12.33			14.87		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.84											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	15.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	7.101

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	7	554	85	40	447	5	3	3	8	62	4	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	7	554	85	40	447	5	3	3	8	62	4	16
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	152	23	11	123	1	1	1	2	17	1	4
Total Analysis Volume [veh/h]	8	608	93	44	491	5	3	3	9	68	4	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	11	21	0	0	28	0	0	28	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	26	26	4	29	29	19	19	19	19
g / C, Green / Cycle	0.01	0.43	0.43	0.06	0.48	0.48	0.31	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00	0.20	0.20	0.03	0.14	0.14	0.03	0.01	6.17	0.01
s, saturation flow rate [veh/h]	1714	1800	1718	1714	1800	1794	194	1530	12	1530
c, Capacity [veh/h]	25	776	740	104	859	856	150	472	120	472
d1, Uniform Delay [s]	29.27	12.13	12.14	27.17	9.52	9.52	16.67	14.43	29.10	14.52
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.17	1.97	2.08	2.72	0.85	0.85	0.11	0.02	20.09	0.03
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
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	0.32	0.46	0.46	0.42	0.29	0.29	0.04	0.02	0.60	0.04
d, Delay for Lane Group [s/veh]	36.44	14.10	14.22	29.89	10.37	10.38	16.77	14.45	49.19	14.55
Lane Group LOS	D	B	B	C	B	B	B	B	D	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.15	2.88	2.78	0.60	1.56	1.56	0.06	0.08	1.68	0.17
50th-Percentile Queue Length [ft/ln]	3.74	71.89	69.40	15.10	39.02	38.94	1.44	2.06	41.99	4.14
95th-Percentile Queue Length [veh/ln]	0.27	5.18	5.00	1.09	2.81	2.80	0.10	0.15	3.02	0.30
95th-Percentile Queue Length [ft/ln]	6.73	129.41	124.93	27.18	70.24	70.09	2.60	3.70	75.59	7.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.44	14.15	14.22	29.89	10.37	10.38	16.77	16.77	14.45	49.19	49.19	14.55
Movement LOS	D	B	B	C	B	B	B	B	B	D	D	B
d_A, Approach Delay [s/veh]	14.41			11.96			15.38			42.26		
Approach LOS	B			B			B			D		
d_I, Intersection Delay [s/veh]	15.30											
Intersection LOS	B											
Intersection V/C	7.101											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	2.831			2.699			1.926			1.980		
Crosswalk LOS	C			B			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			800			800		
d_b, Bicycle Delay [s]	15.41			15.41			10.80			10.80		
I_b,int, Bicycle LOS Score for Intersection	2.145			2.005			1.584			1.708		
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 5: Ridgecrest Rd (NS) at Pahute Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.305

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	11	615	41	24	522	3	4	3	11	77	6	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	11	615	41	24	522	3	4	3	11	77	6	65
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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]	3	167	11	7	142	1	1	1	3	21	2	18
Total Analysis Volume [veh/h]	12	668	45	26	567	3	4	3	12	84	7	71
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	28	0	11	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	38	38	2	39	39	8	8	8	8
g / C, Green / Cycle	0.02	0.63	0.63	0.04	0.65	0.65	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.20	0.02	0.16	0.16	0.00	0.01	0.06	0.05
s, saturation flow rate [veh/h]	1714	1800	1760	1714	1800	1797	1342	1577	1421	1551
c, Capacity [veh/h]	37	1138	1113	71	1174	1172	180	200	237	196
d1, Uniform Delay [s]	28.94	5.08	5.08	28.00	4.32	4.32	27.48	23.12	26.84	24.11
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	5.05	0.73	0.75	3.14	0.49	0.49	0.05	0.16	0.89	1.30
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	0.33	0.32	0.32	0.37	0.24	0.24	0.02	0.08	0.35	0.40
d, Delay for Lane Group [s/veh]	33.99	5.81	5.83	31.15	4.81	4.81	27.53	23.28	27.74	25.41
Lane Group LOS	C	A	A	C	A	A	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.22	1.80	1.77	0.38	0.77	0.77	0.06	0.19	1.12	0.99
50th-Percentile Queue Length [ft/ln]	5.41	45.10	44.32	9.44	19.25	19.23	1.39	4.72	28.11	24.77
95th-Percentile Queue Length [veh/ln]	0.39	3.25	3.19	0.68	1.39	1.38	0.10	0.34	2.02	1.78
95th-Percentile Queue Length [ft/ln]	9.74	81.18	79.77	17.00	34.65	34.61	2.50	8.49	50.59	44.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.99	5.82	5.83	31.15	4.81	4.81	27.53	23.28	23.28	27.74	25.41	25.41
Movement LOS	C	A	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	6.28			5.96			24.17			26.62		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	8.57											
Intersection LOS	A											
Intersection V/C	0.305											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.762			1.929			2.020		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	800			767			567			567		
d_b, Bicycle Delay [s]	10.80			11.41			15.41			15.41		
I_b,int, Bicycle LOS Score for Intersection	2.158			2.051			1.591			1.827		
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 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	32.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.973

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	15	16	15	93	0	651	653	2686	16	1	1925	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	15	16	15	93	0	651	653	2686	16	1	1925	54
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	4	4	24	0	166	167	687	4	0	492	14
Total Analysis Volume [veh/h]	15	16	15	95	0	666	668	2746	16	1	1968	55
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	53	97	0	12	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	70	49	101	101	0	52	52
g / C, Green / Cycle	0.13	0.13	0.54	0.38	0.78	0.78	0.00	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.11	0.14	0.25	0.39	0.53	0.53	0.00	0.39	0.39
s, saturation flow rate [veh/h]	409	701	2708	1714	3427	1795	1714	3427	1775
c, Capacity [veh/h]	90	147	1455	645	2658	1392	4	1374	712
d1, Uniform Delay [s]	51.18	56.91	18.44	40.52	6.95	6.97	64.75	38.13	38.18
k, delay calibration	0.50	0.50	0.11	0.49	0.11	0.24	0.11	0.11	0.45
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]	19.28	20.05	0.23	44.54	0.31	1.34	36.16	6.14	25.65
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	0.51	0.65	0.46	1.03	0.68	0.68	0.27	0.97	0.97
d, Delay for Lane Group [s/veh]	70.46	76.96	18.67	85.06	7.26	8.31	100.91	44.27	63.83
Lane Group LOS	E	E	B	F	A	A	F	D	E
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.84	3.88	5.84	27.59	8.86	9.73	0.07	20.87	25.54
50th-Percentile Queue Length [ft/ln]	46.00	96.94	145.93	689.87	221.51	243.35	1.73	521.70	638.58
95th-Percentile Queue Length [veh/ln]	3.31	6.98	9.80	37.12	13.74	14.85	0.12	28.36	33.83
95th-Percentile Queue Length [ft/ln]	82.81	174.49	244.98	928.01	343.55	371.27	3.11	709.00	845.80

Movement, Approach, & Intersection Results

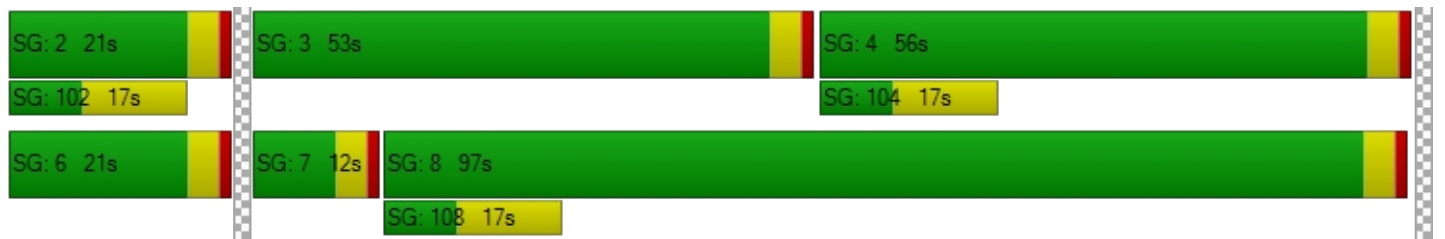
d_M, Delay for Movement [s/veh]	70.46	70.46	70.46	76.96	76.96	18.67	85.06	7.62	8.31	100.91	50.60	63.83
Movement LOS	E	E	E	E	E	B	F	A	A	F	D	E
d_A, Approach Delay [s/veh]	70.46			25.94			22.70			50.98		
Approach LOS	E			C			C			D		
d_I, Intersection Delay [s/veh]	32.59											
Intersection LOS	C											
Intersection V/C	0.973											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	54.47	54.47	0.00	54.47
I_p,int, Pedestrian LOS Score for Intersection	1.758	2.756	0.000	3.766
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	262	262	1431	800
d_b, Bicycle Delay [s]	49.11	49.11	5.27	23.40
I_b,int, Bicycle LOS Score for Intersection	1.636	2.815	3.446	2.673
Bicycle LOS	A	C	C	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	2.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.159

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	15	9	6	354	404	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	15	9	6	354	404	8
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	2	93	106	2
Total Analysis Volume [veh/h]	16	9	6	372	425	8
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	18	39	21	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	60	60	60	60	60
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]	2	1	50	45	45
g / C, Green / Cycle	0.04	0.01	0.83	0.75	0.75
(v / s)_i Volume / Saturation Flow Rate	0.02	0.00	0.11	0.12	0.01
s, saturation flow rate [veh/h]	1643	1714	3427	3427	1530
c, Capacity [veh/h]	69	23	2827	2554	1140
d1, Uniform Delay [s]	28.03	29.40	1.03	2.23	1.96
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.16	6.11	0.10	0.14	0.01
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	0.36	0.27	0.13	0.17	0.01
d, Delay for Lane Group [s/veh]	31.19	35.51	1.13	2.37	1.97
Lane Group LOS	C	D	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.40	0.11	0.04	0.10	0.01
50th-Percentile Queue Length [ft/ln]	9.99	2.84	0.95	2.45	0.13
95th-Percentile Queue Length [veh/ln]	0.72	0.20	0.07	0.18	0.01
95th-Percentile Queue Length [ft/ln]	17.98	5.10	1.70	4.41	0.23

Movement, Approach, & Intersection Results

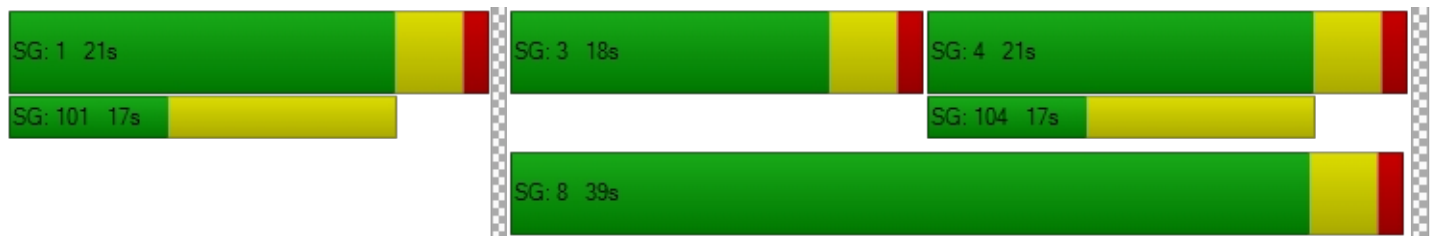
d_M, Delay for Movement [s/veh]	31.19	31.19	35.51	1.13	2.37	1.97
Movement LOS	C	C	D	A	A	A
d_A, Approach Delay [s/veh]	31.19		1.68		2.36	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.91					
Intersection LOS	A					
Intersection V/C	0.159					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	20.01	20.01	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.708	2.672	0.000
Crosswalk LOS	A	B	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.174	4.444	4.490
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	22.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌⇌			⇌⇌⇌			⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	81	548	173	171	729	177	160	256	59	158	214	76
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	81	548	173	171	729	177	160	256	59	158	214	76
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	147	47	46	196	48	43	69	16	43	58	20
Total Analysis Volume [veh/h]	87	590	186	184	785	191	172	276	64	170	230	82
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	66
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	12	22	0	12	21	0	12	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66	66	66	66
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]	6	26	26	8	29	29	7	8	8	8	9	9
g / C, Green / Cycle	0.09	0.40	0.40	0.12	0.43	0.43	0.10	0.12	0.12	0.12	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.05	0.17	0.12	0.11	0.23	0.12	0.05	0.08	0.04	0.10	0.09	0.09
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1642
c, Capacity [veh/h]	148	1363	608	209	1484	663	342	401	179	209	245	224
d1, Uniform Delay [s]	29.13	14.53	13.69	28.62	13.82	12.17	28.13	28.10	26.96	28.36	27.16	27.22
k, delay calibration	0.11	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]	3.65	1.01	1.30	11.26	1.35	1.10	1.14	2.11	1.20	7.42	3.00	3.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.43	0.31	0.88	0.53	0.29	0.50	0.69	0.36	0.81	0.66	0.67
d, Delay for Lane Group [s/veh]	32.78	15.53	14.99	39.87	15.17	13.27	29.27	30.21	28.17	35.78	30.16	30.72
Lane Group LOS	C	B	B	D	B	B	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.32	2.70	1.71	3.15	3.52	1.59	1.23	2.02	0.91	2.80	2.39	2.26
50th-Percentile Queue Length [ft/ln]	33.04	67.38	42.69	78.79	88.02	39.79	30.67	50.47	22.65	70.09	59.68	56.48
95th-Percentile Queue Length [veh/ln]	2.38	4.85	3.07	5.67	6.34	2.86	2.21	3.63	1.63	5.05	4.30	4.07
95th-Percentile Queue Length [ft/ln]	59.46	121.28	76.85	141.82	158.44	71.62	55.20	90.85	40.77	126.16	107.42	101.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.78	15.53	14.99	39.87	15.17	13.27	29.27	30.21	28.17	35.78	30.33	30.72
Movement LOS	C	B	B	D	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	17.15			18.77			29.64			32.32		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	22.32											
Intersection LOS	C											
Intersection V/C	0.523											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	22.92			22.92			22.92			22.92		
I_p,int, Pedestrian LOS Score for Intersection	2.996			3.033			2.895			2.613		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	515			545			515			515		
d_b, Bicycle Delay [s]	18.19			17.45			18.19			18.19		
I_b,int, Bicycle LOS Score for Intersection	2.272			2.517			1.982			1.957		
Bicycle LOS	B			B			A			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	22.067

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	71	69	0	53	30	1977	21	60	1829	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	71	69	0	53	30	1977	21	60	1829	49
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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	0	19	19	0	14	8	537	6	16	497	13
Total Analysis Volume [veh/h]	2	0	77	75	0	58	33	2149	23	65	1988	53
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.55	0.00	0.42	22.07	0.00	0.27	0.27	0.02	0.00	0.62	0.02	0.00
d_M, Delay for Movement [s/veh]	1411.62	8630.24	37.84	10000.0	10000.0	28.22	45.02	0.00	0.00	83.70	0.00	0.00
Movement LOS	F	F	E	F	F	D	E	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.77	0.77	1.89	11.41	11.41	1.07	1.02	0.00	0.00	3.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	19.28	19.28	47.15	285.36	285.36	26.72	25.43	0.00	0.00	75.93	0.00	0.00
d_A, Approach Delay [s/veh]	72.62			5651.40			0.67			2.58		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	168.98											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.851

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	1081	71	36	2108	1872	949
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	1081	71	36	2108	1872	949
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	280	18	9	546	484	246
Total Analysis Volume [veh/h]	1119	73	37	2182	1938	982
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	73
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	29	0	13	44	31	31
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	73	73	73	73	73	73
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	0.00
g_i, Effective Green Time [s]	25	25	4	40	32	61
g / C, Green / Cycle	0.34	0.34	0.05	0.55	0.44	0.84
(v / s)_i Volume / Saturation Flow Rate	0.34	0.05	0.02	0.45	0.40	0.64
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1139	524	90	2689	2164	1283
d1, Uniform Delay [s]	23.83	16.61	33.56	13.43	18.86	2.67
k, delay calibration	0.11	0.11	0.11	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]	8.92	0.12	3.01	2.79	6.29	4.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.98	0.14	0.41	0.81	0.90	0.77
d, Delay for Lane Group [s/veh]	32.75	16.73	36.57	16.23	25.15	7.07
Lane Group LOS	C	B	D	B	C	A
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.65	0.77	0.67	8.04	9.55	1.57
50th-Percentile Queue Length [ft/ln]	241.37	19.18	16.70	200.98	238.73	39.20
95th-Percentile Queue Length [veh/ln]	14.75	1.38	1.20	12.69	14.62	2.82
95th-Percentile Queue Length [ft/ln]	368.77	34.53	30.07	317.24	365.43	70.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.75	16.73	36.57	16.23	25.15	7.07
Movement LOS	C	B	D	B	C	A
d_A, Approach Delay [s/veh]	31.77		16.56		19.07	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	20.58					
Intersection LOS	C					
Intersection V/C	0.851					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	26.33	26.33	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.928	3.487	0.000
Crosswalk LOS	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	36.50	36.50	36.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.353	5.738
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	61.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.773

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	454	73	172	62	21	107	159	2169	470	131	1429	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	454	73	172	62	21	107	159	2169	470	131	1429	37
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	121	19	46	17	6	29	42	578	125	35	381	10
Total Analysis Volume [veh/h]	484	78	183	66	22	114	170	2312	501	140	1523	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	32	8	8	7	30	42	8	31	31
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.10	0.43	0.60	0.11	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.16	0.16	0.12	0.07	0.07	0.10	0.47	0.33	0.04	0.30	0.30
s, saturation flow rate [veh/h]	1714	1737	1530	1339	1530	1714	4903	1530	3329	3427	1777
c, Capacity [veh/h]	203	206	702	248	181	173	2094	922	360	1488	772
d1, Uniform Delay [s]	30.96	30.96	11.67	29.69	29.49	31.52	20.13	8.25	29.17	16.06	16.07
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	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
d2, Incremental Delay [s]	197.08	194.71	0.90	3.92	15.38	27.88	48.82	2.30	0.68	0.58	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
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	1.38	1.37	0.26	0.35	0.63	0.98	1.10	0.54	0.39	0.69	0.69
d, Delay for Lane Group [s/veh]	228.05	225.67	12.57	33.61	44.87	59.40	68.95	10.55	29.85	16.65	18.46
Lane Group LOS	F	F	B	C	D	E	F	B	C	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	14.42	14.48	1.77	1.59	2.48	3.97	18.70	3.69	1.04	5.59	6.19
50th-Percentile Queue Length [ft/ln]	360.51	361.92	44.26	39.72	61.99	99.34	467.46	92.33	26.10	139.72	154.66
95th-Percentile Queue Length [veh/ln]	23.19	23.25	3.19	2.86	4.46	7.15	27.59	6.65	1.88	9.47	10.27
95th-Percentile Queue Length [ft/ln]	579.85	581.25	79.66	71.49	111.58	178.82	689.68	166.19	46.98	236.65	256.64

Movement, Approach, & Intersection Results

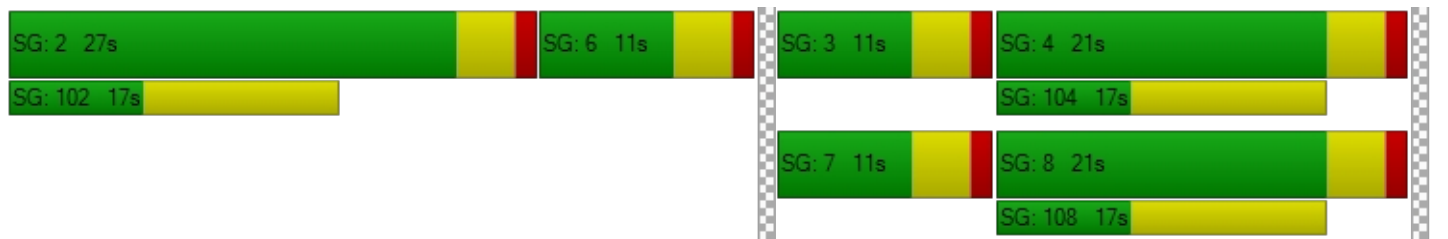
d_M, Delay for Movement [s/veh]	227.05	225.67	12.57	33.61	33.61	44.87	59.40	68.95	10.55	29.85	17.23	18.46
Movement LOS	F	F	B	C	C	D	E	F	B	C	B	B
d_A, Approach Delay [s/veh]	174.22			39.97			58.60			18.30		
Approach LOS	F			D			E			B		
d_I, Intersection Delay [s/veh]	61.05											
Intersection LOS	E											
Intersection V/C	0.773											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.561	2.138	0.000	3.622
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.789	1.893	3.200	2.496
Bicycle LOS	C	A	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	116	113	2125	271	101	1481
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	116	113	2125	271	101	1481
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	30	567	72	27	395
Total Analysis Volume [veh/h]	124	121	2268	289	108	1581
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.71	0.02	0.00	1.62	0.02
d_M, Delay for Movement [s/veh]	10000.00	65.05	0.00	0.00	441.34	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	18.07	4.29	0.00	0.00	9.45	0.00
95th-Percentile Queue Length [ft/ln]	451.82	107.26	0.00	0.00	236.35	0.00
d_A, Approach Delay [s/veh]	5093.35		0.00		28.22	
Approach LOS	F		A		D	
d_I, Intersection Delay [s/veh]	288.47					
Intersection LOS	F					

EXISTING PLUS PROJECT

Chateau Senior Living Facility

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Report File: G:\...IAM EP.pdf

Scenario 2 Existing Plus Project
10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.877	38.0	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.321	30.8	D
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.003	20.5	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	5.988	28.4	C
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.539	14.5	B
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	1.067	50.6	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.258	2.0	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.625	25.8	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.936	23.0	C
11	Project East Dwy (NS) at Yates Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.098	25.5	D
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.690	33.7	C
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	5.304	2,233.9	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	38.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.877

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	110	502	358	263	320	79	196	1267	101	315	1305	218
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	25	25	0	0	0	34	0	8	11	8
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]	110	502	383	288	320	79	196	1301	101	323	1316	226
Peak Hour Factor	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740
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	144	110	82	92	23	56	372	29	92	376	65
Total Analysis Volume [veh/h]	126	574	438	330	366	90	224	1489	116	370	1506	259
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	91
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	31	0	13	33	0	11	32	32	15	36	36
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	91	91	91	91	91	91	91	91	91	91	91	91
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	0.00
g_i, Effective Green Time [s]	7	27	27	9	29	29	7	28	39	11	32	45
g / C, Green / Cycle	0.07	0.30	0.30	0.10	0.32	0.32	0.08	0.31	0.42	0.12	0.35	0.49
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.29	0.10	0.13	0.13	0.07	0.30	0.08	0.11	0.31	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	246	1025	457	330	583	544	257	1497	647	403	1712	753
d1, Uniform Delay [s]	40.57	26.87	31.35	41.01	23.94	23.94	41.57	31.56	16.39	39.57	27.84	14.13
k, delay calibration	0.11	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]	1.64	2.21	32.74	23.14	2.08	2.23	8.95	9.71	0.13	8.76	1.61	0.27
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	0.51	0.56	0.96	1.00	0.40	0.41	0.87	0.99	0.18	0.92	0.88	0.34
d, Delay for Lane Group [s/veh]	42.21	29.09	64.08	64.16	26.01	26.18	50.52	41.27	16.52	48.33	29.45	14.41
Lane Group LOS	D	C	E	F	C	C	D	D	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.34	5.13	12.73	4.62	4.07	3.83	2.67	11.14	1.37	4.37	9.58	2.94
50th-Percentile Queue Length [ft/ln]	33.52	128.17	318.13	115.49	101.81	95.81	66.65	278.59	34.37	109.36	239.38	73.50
95th-Percentile Queue Length [veh/ln]	2.41	8.84	18.58	8.15	7.33	6.90	4.80	16.62	2.47	7.80	14.65	5.29
95th-Percentile Queue Length [ft/ln]	60.34	221.01	464.38	203.65	183.26	172.46	119.97	415.46	61.87	195.11	366.25	132.30

Movement, Approach, & Intersection Results

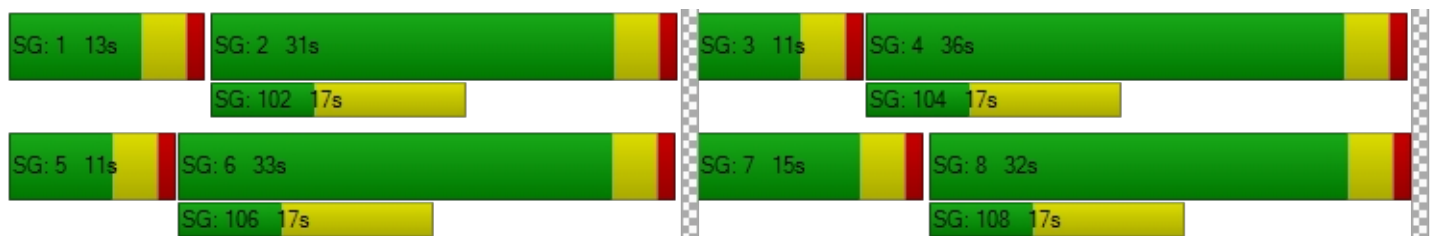
d_M, Delay for Movement [s/veh]	42.21	29.09	64.08	64.16	26.07	26.18	50.52	41.27	16.52	48.33	29.45	14.41
Movement LOS	D	C	E	F	C	C	D	D	B	D	C	B
d_A, Approach Delay [s/veh]	44.01			42.07			40.84			30.90		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	38.01											
Intersection LOS	D											
Intersection V/C	0.877											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	35.16			35.16			35.16			35.16		
I_p,int, Pedestrian LOS Score for Intersection	3.056			2.852			3.490			3.563		
Crosswalk LOS	C			C			C			D		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	593			637			615			703		
d_b, Bicycle Delay [s]	22.51			21.12			21.81			19.13		
I_b,int, Bicycle LOS Score for Intersection	2.498			2.208			2.566			2.734		
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	30.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.321

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	241	28	22	629	59	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	109	0	0	35	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]	350	28	22	664	59	9
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	97	8	6	184	16	2
Total Analysis Volume [veh/h]	388	31	24	737	65	10
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	0.02	0.01	0.32	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	8.19	0.00	30.78	18.51
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.06	0.06	1.41	1.41
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.46	1.46	35.35	35.35
d_A, Approach Delay [s/veh]	0.00		0.26		29.15	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	1.90					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (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):	0.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	1	266	58	35	760	0	1	0	5	95	1	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	109	0	0	35	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	375	58	35	795	0	1	0	5	95	1	29
Peak Hour Factor	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150
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	102	16	10	217	0	0	0	1	26	0	8
Total Analysis Volume [veh/h]	1	410	63	38	869	0	1	0	5	104	1	32
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.01	0.26	0.00	0.04
d_M, Delay for Movement [s/veh]	9.60	0.00	0.00	8.39	0.00	0.00	19.10	17.61	11.31	17.17	20.50	9.87
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.11	0.00	0.00	0.01	0.01	0.03	1.04	1.04	0.13
95th-Percentile Queue Length [ft/ln]	0.10	0.00	0.00	2.68	0.00	0.00	0.29	0.29	0.66	26.01	26.01	3.24
d_A, Approach Delay [s/veh]	0.02			0.35			12.61			15.49		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.66											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.988

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	0	0	0	0	0	0
Pocket Length [ft]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	4	307	50	28	788	2	4	1	21	130	6	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	101	0	3	32	0	0	0	0	0	0	8
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]	4	408	50	31	820	2	4	1	21	130	6	37
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	113	14	9	228	1	1	0	6	36	2	10
Total Analysis Volume [veh/h]	4	454	56	34	912	2	4	1	23	145	7	41
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	62
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	18	28	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	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
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	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]	1	30	30	3	33	33	17	17	17	17
g / C, Green / Cycle	0.01	0.48	0.48	0.05	0.52	0.52	0.27	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.15	0.02	0.25	0.25	0.08	0.02	5.15	0.03
s, saturation flow rate [veh/h]	1714	1800	1732	1714	1800	1799	61	1530	29	1530
c, Capacity [veh/h]	16	866	833	90	943	942	121	419	121	419
d1, Uniform Delay [s]	30.56	9.78	9.79	28.48	9.45	9.45	18.61	16.64	30.68	16.84
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.64	0.88	0.93	2.63	1.78	1.79	0.14	0.05	164.93	0.10
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	0.25	0.30	0.30	0.38	0.49	0.49	0.04	0.05	1.25	0.10
d, Delay for Lane Group [s/veh]	38.20	10.66	10.72	31.11	11.24	11.24	18.75	16.69	195.61	16.94
Lane Group LOS	D	B	B	C	B	B	B	B	F	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.09	1.70	1.66	0.49	3.03	3.03	0.05	0.24	7.32	0.43
50th-Percentile Queue Length [ft/ln]	2.17	42.50	41.51	12.34	75.78	75.73	1.35	5.91	183.08	10.68
95th-Percentile Queue Length [veh/ln]	0.16	3.06	2.99	0.89	5.46	5.45	0.10	0.43	13.05	0.77
95th-Percentile Queue Length [ft/ln]	3.91	76.50	74.72	22.21	136.41	136.32	2.43	10.64	326.13	19.22

Movement, Approach, & Intersection Results

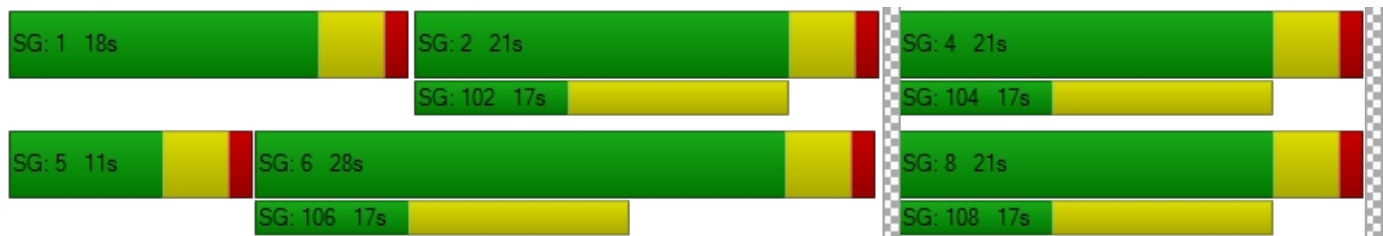
d_M, Delay for Movement [s/veh]	38.20	10.69	10.72	31.11	11.24	11.24	18.75	18.75	16.69	195.61	195.61	16.94
Movement LOS	D	B	B	C	B	B	B	B	B	F	F	B
d_A, Approach Delay [s/veh]	10.91			11.95			17.06			157.65		
Approach LOS	B			B			B			F		
d_I, Intersection Delay [s/veh]	28.43											
Intersection LOS	C											
Intersection V/C	5.988											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.98			20.98			20.98			20.98		
l_p,int, Pedestrian LOS Score for Intersection	3.055			2.802			1.931			1.996		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	548			774			548			548		
d_b, Bicycle Delay [s]	16.33			11.65			16.33			16.33		
l_b,int, Bicycle LOS Score for Intersection	1.984			2.342			1.606			1.878		
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 5: Ridgcrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	14.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.539

Intersection Setup

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	5	282	59	79	942	3	5	6	16	246	6	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	101	0	0	32	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	383	59	79	974	3	5	6	16	246	6	80
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	103	16	21	263	1	1	2	4	66	2	22
Total Analysis Volume [veh/h]	5	414	64	85	1052	3	5	6	17	266	6	86
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	27	0	12	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	27	27	5	32	32	16	16	16	16
g / C, Green / Cycle	0.01	0.45	0.45	0.09	0.53	0.53	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.14	0.05	0.29	0.29	0.00	0.01	0.19	0.06
s, saturation flow rate [veh/h]	1714	1800	1717	1714	1800	1798	1325	1592	1410	1545
c, Capacity [veh/h]	16	810	773	152	952	951	358	416	424	404
d1, Uniform Delay [s]	29.52	10.50	10.52	26.22	9.42	9.42	20.28	16.61	22.75	17.41
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	10.01	0.95	1.01	3.19	2.32	2.33	0.02	0.05	1.53	0.28
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	0.30	0.30	0.30	0.56	0.55	0.55	0.01	0.06	0.63	0.23
d, Delay for Lane Group [s/veh]	39.53	11.45	11.53	29.42	11.74	11.74	20.30	16.67	24.28	17.69
Lane Group LOS	D	B	B	C	B	B	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.12	2.05	1.99	1.13	3.48	3.48	0.06	0.23	3.37	0.91
50th-Percentile Queue Length [ft/ln]	2.88	51.20	49.78	28.35	87.08	87.01	1.42	5.78	84.19	22.71
95th-Percentile Queue Length [veh/ln]	0.21	3.69	3.58	2.04	6.27	6.26	0.10	0.42	6.06	1.64
95th-Percentile Queue Length [ft/ln]	5.18	92.17	89.61	51.03	156.74	156.62	2.55	10.41	151.53	40.88

Movement, Approach, & Intersection Results

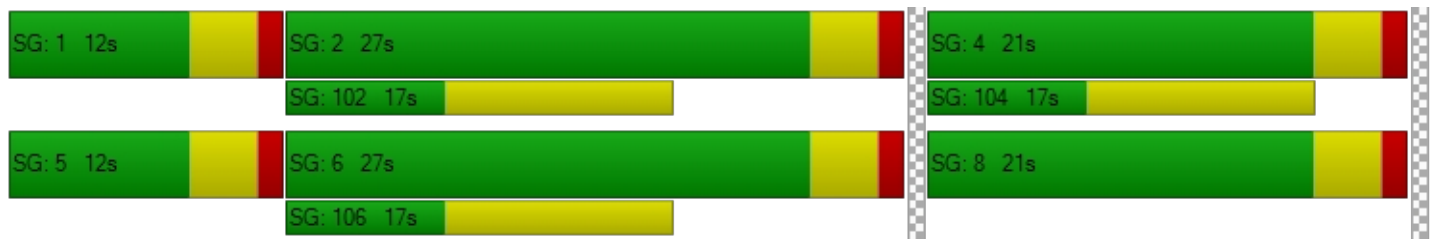
d_M, Delay for Movement [s/veh]	39.53	11.48	11.53	29.42	11.74	11.74	20.30	16.67	16.67	24.28	17.69	17.69
Movement LOS	D	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	11.78			13.06			17.31			22.59		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	14.51											
Intersection LOS	B											
Intersection V/C	0.539											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.873			1.929			2.140		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	767			767			567			567		
d_b, Bicycle Delay [s]	11.41			11.41			15.41			15.41		
I_b,int, Bicycle LOS Score for Intersection	1.958			2.500			1.606			2.150		
Bicycle LOS	A			B			A			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	50.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.067

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	3	3	85	8	1024	517	2204	16	8	2040	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	27	84	0	0	0	0	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]	16	3	3	90	8	1051	601	2204	16	8	2040	50
Peak Hour Factor	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790
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]	5	1	1	26	2	299	171	627	5	2	580	14
Total Analysis Volume [veh/h]	18	3	3	102	9	1196	684	2507	18	9	2321	57
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	51	98	0	11	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	68	47	99	99	2	54	54
g / C, Green / Cycle	0.13	0.13	0.52	0.36	0.76	0.76	0.02	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.05	0.08	0.44	0.40	0.48	0.48	0.01	0.46	0.46
s, saturation flow rate [veh/h]	485	1391	2708	1714	3427	1793	1714	3427	1778
c, Capacity [veh/h]	111	233	1412	620	2616	1369	26	1429	742
d1, Uniform Delay [s]	56.30	53.53	26.66	41.50	7.04	7.06	63.37	37.88	37.88
k, delay calibration	0.50	0.50	0.18	0.50	0.11	0.21	0.11	0.13	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]	4.40	6.84	2.39	68.04	0.26	0.93	7.76	45.62	63.43
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	0.22	0.48	0.85	1.10	0.63	0.64	0.35	1.09	1.10
d, Delay for Lane Group [s/veh]	60.71	60.37	29.05	109.54	7.30	8.00	71.13	83.50	101.31
Lane Group LOS	E	E	C	F	A	A	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.91	3.80	15.13	30.62	8.10	8.79	0.35	30.52	35.34
50th-Percentile Queue Length [ft/ln]	22.85	95.06	378.27	765.44	202.50	219.86	8.64	763.12	883.55
95th-Percentile Queue Length [veh/ln]	1.65	6.84	21.51	42.47	12.77	13.66	0.62	42.22	48.30
95th-Percentile Queue Length [ft/ln]	41.13	171.11	537.76	1061.75	319.19	341.45	15.54	1055.50	1207.53

Movement, Approach, & Intersection Results

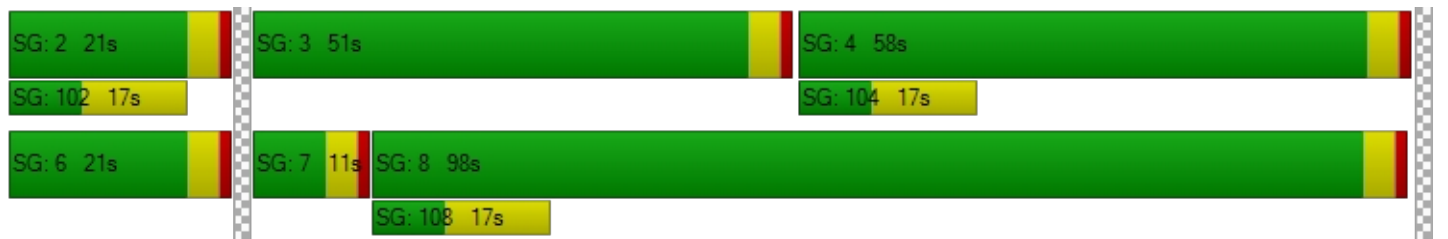
d_M, Delay for Movement [s/veh]	60.71	60.71	60.71	60.37	60.37	29.05	109.54	7.53	8.00	71.13	89.32	101.31
Movement LOS	E	E	E	E	E	C	F	A	A	E	F	F
d_A, Approach Delay [s/veh]	60.71			31.71			29.28			89.54		
Approach LOS	E			C			C			F		
d_I, Intersection Delay [s/veh]	50.61											
Intersection LOS	D											
Intersection V/C	1.067											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	54.47	54.47	0.00	54.47
I_p,int, Pedestrian LOS Score for Intersection	1.757	2.917	0.000	3.801
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	262	262	1446	831
d_b, Bicycle Delay [s]	49.11	49.11	4.98	22.22
I_b,int, Bicycle LOS Score for Intersection	1.599	3.716	3.325	2.872
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	2.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.258

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	7	1	4	262	620	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	18	59	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]	7	1	4	280	679	8
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	84	203	2
Total Analysis Volume [veh/h]	8	1	5	335	812	10
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	117
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	19	96	77	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	117	117	117	117	117
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]	2	1	107	102	102
g / C, Green / Cycle	0.02	0.01	0.92	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.10	0.24	0.01
s, saturation flow rate [veh/h]	1692	1714	3427	3427	1530
c, Capacity [veh/h]	26	16	3139	2990	1335
d1, Uniform Delay [s]	56.98	57.55	0.46	1.25	0.96
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.42	10.39	0.07	0.22	0.01
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	0.34	0.31	0.11	0.27	0.01
d, Delay for Lane Group [s/veh]	64.39	67.94	0.53	1.47	0.97
Lane Group LOS	E	E	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.32	0.19	0.03	0.15	0.00
50th-Percentile Queue Length [ft/ln]	8.00	4.70	0.75	3.82	0.12
95th-Percentile Queue Length [veh/ln]	0.58	0.34	0.05	0.27	0.01
95th-Percentile Queue Length [ft/ln]	14.39	8.46	1.34	6.87	0.22

Movement, Approach, & Intersection Results

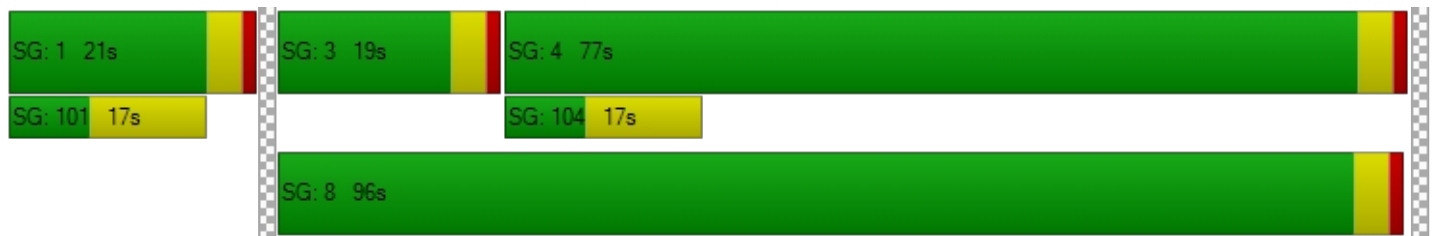
d_M, Delay for Movement [s/veh]	64.39	64.39	67.94	0.53	1.47	0.97
Movement LOS	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	64.39		1.52		1.47	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	1.97					
Intersection LOS	A					
Intersection V/C	0.258					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	48.02	48.02	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.737	2.809	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	58.50	58.50	58.50
I_b,int, Bicycle LOS Score for Intersection	4.147	4.413	4.811
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	25.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	84	507	83	83	492	253	188	249	102	196	401	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	0	0	0	25	8	5	5	0	17	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]	101	507	83	83	492	278	196	254	107	196	418	124
Peak Hour Factor	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280
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	153	25	25	149	84	59	77	32	59	126	37
Total Analysis Volume [veh/h]	122	612	100	100	594	336	237	307	129	237	505	150
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	68
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	11	21	0	11	21	0	15	25	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	68	68	68	68	68	68	68	68	68	68	68	68
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]	6	24	24	6	23	23	7	11	11	11	15	15
g / C, Green / Cycle	0.09	0.35	0.35	0.09	0.34	0.34	0.10	0.17	0.17	0.16	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.07	0.18	0.07	0.06	0.17	0.22	0.07	0.09	0.08	0.14	0.19	0.19
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1660
c, Capacity [veh/h]	162	1189	531	153	1171	523	342	574	256	278	408	377
d1, Uniform Delay [s]	30.14	17.73	15.58	30.07	17.90	18.96	29.58	25.99	25.84	27.80	25.17	25.17
k, delay calibration	0.11	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]	6.93	1.60	0.79	4.68	1.57	5.98	2.51	0.78	1.53	7.27	4.52	4.90
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	0.75	0.51	0.19	0.65	0.51	0.64	0.69	0.53	0.50	0.85	0.83	0.83
d, Delay for Lane Group [s/veh]	37.07	19.32	16.37	34.75	19.47	24.94	32.09	26.76	27.37	35.07	29.69	30.07
Lane Group LOS	D	B	B	C	B	C	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.04	3.36	1.01	1.60	3.28	4.49	1.83	2.12	1.83	3.94	5.17	4.81
50th-Percentile Queue Length [ft/ln]	50.92	84.02	25.14	40.10	81.96	112.26	45.80	53.00	45.71	98.57	129.19	120.20
95th-Percentile Queue Length [veh/ln]	3.67	6.05	1.81	2.89	5.90	7.97	3.30	3.82	3.29	7.10	8.90	8.40
95th-Percentile Queue Length [ft/ln]	91.65	151.23	45.24	72.18	147.53	199.15	82.44	95.41	82.29	177.43	222.39	210.10

Movement, Approach, & Intersection Results

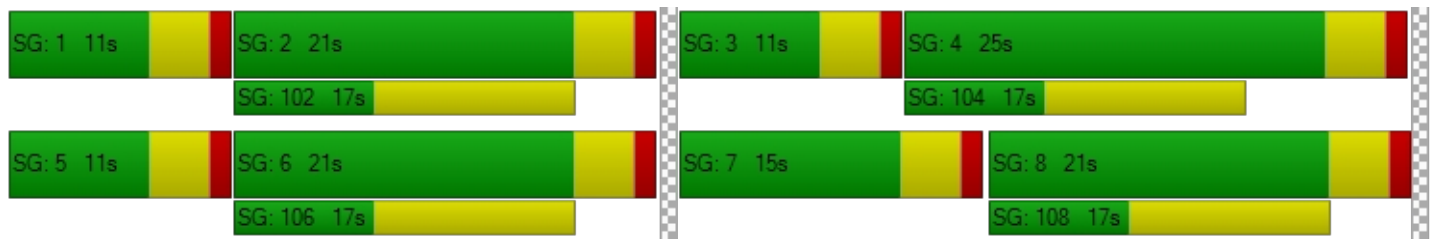
d_M, Delay for Movement [s/veh]	37.07	19.32	16.37	34.75	19.47	24.94	32.09	26.76	27.37	35.07	29.81	30.07
Movement LOS	D	B	B	C	B	C	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	21.57			22.74			28.76			31.25		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	25.85											
Intersection LOS	C											
Intersection V/C	0.625											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	23.89	23.89	23.89	23.89
I_p,int, Pedestrian LOS Score for Intersection	2.972	3.042	3.009	2.694
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	500	500	618
d_b, Bicycle Delay [s]	19.13	19.13	19.13	16.24
I_b,int, Bicycle LOS Score for Intersection	2.248	2.409	2.115	2.296
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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↑ ↑			↔ ↑ ↑↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	41	19	2	19	53	1745	2	37	1696	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	84	0	0	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	41	19	2	19	53	1829	2	37	1723	51
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]	0	0	11	5	1	5	14	492	1	10	463	14
Total Analysis Volume [veh/h]	1	0	44	20	2	20	57	1967	2	40	1853	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.20	2.41	1.65	0.09	0.40	0.02	0.00	0.30	0.02	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	25.96	2429.98	4974.12	21.72	46.14	0.00	0.00	43.37	0.00	0.00
Movement LOS	F	F	D	F	F	C	E	A	A	E	A	A
95th-Percentile Queue Length [veh/ln]	0.68	0.68	0.74	4.09	4.09	0.28	1.72	0.00	0.00	1.17	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.95	16.95	18.61	102.26	102.26	6.90	43.04	0.00	0.00	29.34	0.00	0.00
d_A, Approach Delay [s/veh]	247.60			1404.34			1.30			0.89		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	18.34											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	23.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.936

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	887	39	59	1731	1794	1120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	84	27	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]	887	39	59	1815	1821	1120
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	249	11	17	509	510	314
Total Analysis Volume [veh/h]	994	44	66	2035	2041	1256
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	32	0	17	58	41	41
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	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	0.00
g_i, Effective Green Time [s]	28	28	6	54	44	76
g / C, Green / Cycle	0.31	0.31	0.06	0.60	0.49	0.85
(v / s)_i Volume / Saturation Flow Rate	0.30	0.03	0.04	0.42	0.42	0.82
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1035	476	110	2943	2411	1296
d1, Uniform Delay [s]	30.47	22.00	41.03	12.31	19.92	5.87
k, delay calibration	0.11	0.11	0.11	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]	6.59	0.08	5.21	1.36	3.90	18.60
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	0.96	0.09	0.60	0.69	0.85	0.97
d, Delay for Lane Group [s/veh]	37.06	22.09	46.24	13.67	23.82	24.47
Lane Group LOS	D	C	D	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	10.63	0.63	1.52	7.83	11.51	8.40
50th-Percentile Queue Length [ft/ln]	265.71	15.75	38.04	195.83	287.84	209.94
95th-Percentile Queue Length [veh/ln]	15.98	1.13	2.74	12.42	17.08	13.15
95th-Percentile Queue Length [ft/ln]	399.38	28.35	68.48	310.59	426.96	328.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	37.06	22.09	46.24	13.67	23.82	24.47
Movement LOS	D	C	D	B	C	C
d_A, Approach Delay [s/veh]	36.42		14.69		24.07	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	23.00					
Intersection LOS	C					
Intersection V/C	0.936					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	34.67	34.67	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.993	3.490	0.000
Crosswalk LOS	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.132	5.288	5.946
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	25.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.098

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	266	651	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	35	109	0	0	59
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]	18	35	109	266	651	59
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	9	29	70	171	16
Total Analysis Volume [veh/h]	19	37	115	280	685	62
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	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.06	0.13	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	25.49	10.78	9.76	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.32	0.18	0.45	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.00	4.45	11.36	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.78		2.84		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.67					
Intersection LOS	D					

Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	33.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	417	32	113	39	36	87	90	1772	424	144	1581	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	0	17	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]	417	32	113	39	36	87	90	1777	424	144	1598	35
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	118	9	32	11	10	25	25	502	120	41	451	10
Total Analysis Volume [veh/h]	471	36	128	44	41	98	102	2008	479	163	1806	40
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	32	9	9	6	30	43	7	31	31
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.09	0.43	0.61	0.10	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.15	0.15	0.08	0.05	0.06	0.06	0.41	0.31	0.05	0.35	0.35
s, saturation flow rate [veh/h]	1714	1726	1530	1636	1530	1714	4903	1530	3329	3427	1780
c, Capacity [veh/h]	213	214	703	281	190	151	2093	930	323	1495	776
d1, Uniform Delay [s]	30.77	30.77	11.21	28.32	28.79	31.07	19.54	7.86	30.12	17.30	17.32
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.33
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]	121.58	121.12	0.57	2.76	9.67	5.22	3.64	2.03	1.22	1.11	6.17
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	1.19	1.19	0.18	0.30	0.52	0.68	0.96	0.51	0.50	0.81	0.81
d, Delay for Lane Group [s/veh]	152.35	151.89	11.78	31.07	38.47	36.29	23.18	9.89	31.34	18.41	23.49
Lane Group LOS	F	F	B	C	D	D	C	A	C	B	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.63	10.68	1.18	1.44	1.95	1.76	9.30	3.36	1.26	7.19	8.58
50th-Percentile Queue Length [ft/ln]	265.83	266.95	29.57	36.05	48.70	44.01	232.54	83.91	31.44	179.76	214.43
95th-Percentile Queue Length [veh/ln]	17.11	17.17	2.13	2.60	3.51	3.17	14.30	6.04	2.26	11.59	13.38
95th-Percentile Queue Length [ft/ln]	427.72	429.16	53.22	64.90	87.66	79.21	357.58	151.04	56.59	289.70	334.51

Movement, Approach, & Intersection Results

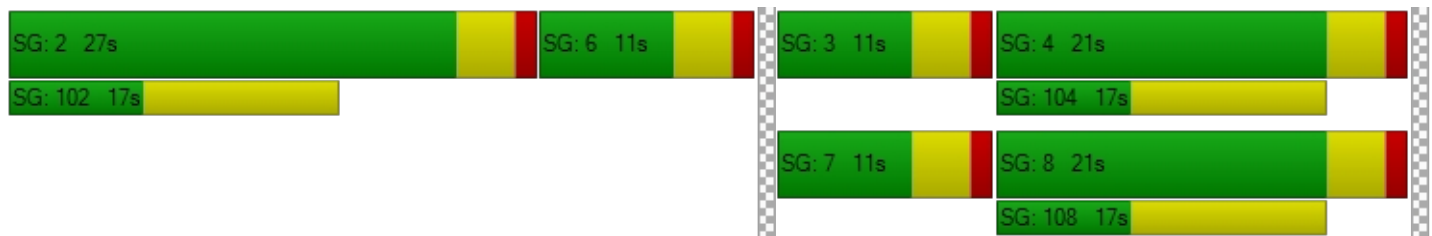
d_M, Delay for Movement [s/veh]	152.14	151.89	11.78	31.07	31.07	38.47	36.29	23.18	9.89	31.34	20.08	23.49
Movement LOS	F	F	B	C	C	D	D	C	A	C	C	C
d_A, Approach Delay [s/veh]	123.83			35.03			21.24			21.06		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	33.67											
Intersection LOS	C											
Intersection V/C	0.690											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.543	2.083	0.000	3.579
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.607	1.862	2.984	2.665
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 15: Peach Ave (NS) at Bear Valley Rd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	2,233.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.304

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	125	81	1731	191	86	1627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	0	17
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]	125	81	1736	191	86	1644
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	23	486	53	24	460
Total Analysis Volume [veh/h]	140	91	1944	214	96	1841
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	5.30	0.41	0.02	0.00	0.90	0.02
d_M, Delay for Movement [s/veh]	2233.90	32.54	0.00	0.00	135.40	0.00
Movement LOS	F	D	A	A	F	A
95th-Percentile Queue Length [veh/ln]	17.25	1.90	0.00	0.00	5.37	0.00
95th-Percentile Queue Length [ft/ln]	431.13	47.49	0.00	0.00	134.30	0.00
d_A, Approach Delay [s/veh]	1366.70		0.00		6.71	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	75.98					
Intersection LOS	F					

Chateau Senior Living Facility

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Scenario 2 Existing Plus Project
10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.877	39.1	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.092	23.0	C
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.003	18.7	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	7.274	16.0	B
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.319	8.6	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	1.012	35.7	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.164	2.9	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.535	22.7	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	29.013	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.855	21.7	C
11	Project East Dwy (NS) at Yates Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.190	18.4	C
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.777	62.6	E
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	39.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.877

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	157	435	418	407	540	133	130	1340	98	347	1243	227
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	12	0	0	0	16	0	26	34	26
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]	157	435	430	419	540	133	130	1356	98	373	1277	253
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	40	110	109	106	137	34	33	343	25	94	323	64
Total Analysis Volume [veh/h]	159	440	435	424	547	135	132	1372	99	378	1293	256
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	98
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	33	0	17	39	0	11	32	32	16	37	37
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	98	98	98	98	98	98	98	98	98	98	98	98
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	0.00
g_i, Effective Green Time [s]	7	29	29	13	35	35	7	28	39	12	33	50
g / C, Green / Cycle	0.07	0.30	0.30	0.13	0.36	0.36	0.07	0.28	0.40	0.12	0.34	0.51
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.28	0.13	0.20	0.20	0.04	0.28	0.06	0.11	0.26	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	235	1021	456	442	648	604	232	1390	604	408	1649	780
d1, Uniform Delay [s]	44.46	27.72	33.76	42.25	24.97	24.98	44.18	34.94	19.18	42.57	29.32	14.14
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.12
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]	3.36	1.33	32.16	12.37	3.27	3.51	2.19	8.59	0.13	9.34	0.85	0.27
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	0.68	0.43	0.95	0.96	0.54	0.54	0.57	0.99	0.16	0.93	0.78	0.33
d, Delay for Lane Group [s/veh]	47.82	29.05	65.92	54.61	28.24	28.49	46.36	43.54	19.31	51.91	30.16	14.40
Lane Group LOS	D	C	E	D	C	C	D	D	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.91	4.06	13.40	5.69	6.78	6.37	1.55	11.07	1.36	4.86	8.60	3.05
50th-Percentile Queue Length [ft/ln]	47.65	101.55	335.01	142.13	169.44	159.25	38.77	276.71	34.02	121.58	215.05	76.37
95th-Percentile Queue Length [veh/ln]	3.43	7.31	19.40	9.60	11.05	10.51	2.79	16.52	2.45	8.48	13.41	5.50
95th-Percentile Queue Length [ft/ln]	85.77	182.80	485.10	239.89	276.18	262.73	69.79	413.11	61.23	212.00	335.30	137.47

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.82	29.05	65.92	54.61	28.32	28.49	46.36	43.54	19.31	51.91	30.16	14.40
Movement LOS	D	C	E	D	C	C	D	D	B	D	C	B
d_A, Approach Delay [s/veh]	47.45			38.42			42.27			32.34		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	39.09											
Intersection LOS	D											
Intersection V/C	0.877											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	38.62	38.62	38.62	38.62
I_p,int, Pedestrian LOS Score for Intersection	3.075	2.876	3.429	3.529
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	592	714	571	673
d_b, Bicycle Delay [s]	24.29	20.25	25.00	21.56
I_b,int, Bicycle LOS Score for Intersection	2.413	2.472	2.441	2.619
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	23.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	363	41	54	372	19	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	52	0	0	112	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]	415	41	54	484	19	8
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	111	11	14	130	5	2
Total Analysis Volume [veh/h]	445	44	58	519	20	9
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	0.05	0.01	0.09	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	8.51	0.00	23.04	12.57
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.16	0.16	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.92	3.92	8.84	8.84
d_A, Approach Delay [s/veh]	0.00		0.86		19.79	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.97					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	3	450	109	51	378	4	2	0	1	77	1	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	52	0	0	112	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	502	109	51	490	4	2	0	1	77	1	23
Peak Hour Factor	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
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	140	30	14	137	1	1	0	0	21	0	6
Total Analysis Volume [veh/h]	3	560	122	57	546	4	2	0	1	86	1	26
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.23	0.00	0.04
d_M, Delay for Movement [s/veh]	8.51	0.00	0.00	9.17	0.00	0.00	15.31	16.87	9.95	17.71	18.74	10.67
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.20	0.00	0.00	0.02	0.02	0.00	0.90	0.90	0.12
95th-Percentile Queue Length [ft/ln]	0.22	0.00	0.00	4.94	0.00	0.00	0.43	0.43	0.10	22.53	22.53	3.07
d_A, Approach Delay [s/veh]	0.04			0.86			13.52			16.10		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.71											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	7.274

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	7	554	85	40	447	5	3	3	8	62	4	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	48	0	9	103	0	0	0	0	0	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	602	85	49	550	5	3	3	8	62	4	20
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	165	23	13	151	1	1	1	2	17	1	5
Total Analysis Volume [veh/h]	8	661	93	54	604	5	3	3	9	68	4	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	11	21	0	0	28	0	0	28	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	25	25	4	28	28	19	19	19	19
g / C, Green / Cycle	0.01	0.42	0.42	0.07	0.47	0.47	0.32	0.32	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.21	0.21	0.03	0.17	0.17	0.03	0.01	6.30	0.01
s, saturation flow rate [veh/h]	1714	1800	1723	1714	1800	1795	191	1530	11	1530
c, Capacity [veh/h]	25	749	717	119	848	845	150	481	120	481
d1, Uniform Delay [s]	29.27	13.00	13.01	26.83	10.11	10.11	16.52	14.18	29.08	14.30
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.17	2.51	2.63	2.71	1.19	1.19	0.11	0.02	20.09	0.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.32	0.51	0.51	0.45	0.36	0.36	0.04	0.02	0.60	0.05
d, Delay for Lane Group [s/veh]	36.44	15.51	15.64	29.54	11.30	11.30	16.63	14.20	49.17	14.34
Lane Group LOS	D	B	B	C	B	B	B	B	D	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.15	3.32	3.21	0.73	2.05	2.04	0.06	0.08	1.68	0.20
50th-Percentile Queue Length [ft/ln]	3.74	83.08	80.32	18.25	51.15	51.04	1.43	2.03	42.00	5.01
95th-Percentile Queue Length [veh/ln]	0.27	5.98	5.78	1.31	3.68	3.68	0.10	0.15	3.02	0.36
95th-Percentile Queue Length [ft/ln]	6.73	149.54	144.57	32.85	92.07	91.88	2.57	3.66	75.59	9.02

Movement, Approach, & Intersection Results

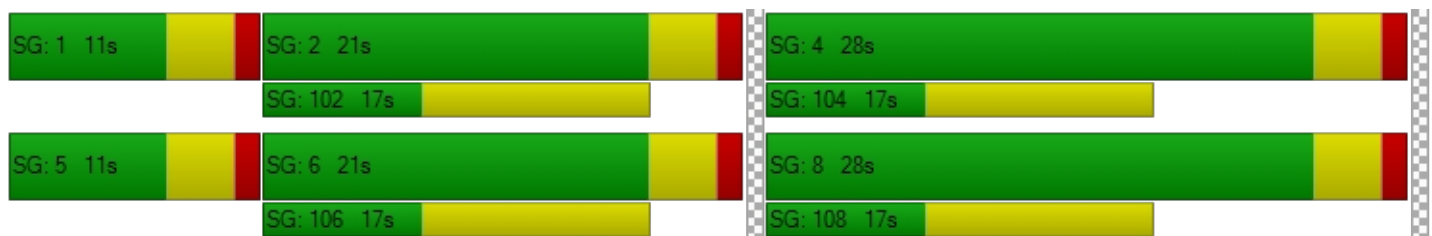
d_M, Delay for Movement [s/veh]	36.44	15.56	15.64	29.54	11.30	11.30	16.63	16.63	14.20	49.17	49.17	14.34
Movement LOS	D	B	B	C	B	B	B	B	B	D	D	B
d_A, Approach Delay [s/veh]	15.79			12.78			15.17			41.02		
Approach LOS	B			B			B			D		
d_I, Intersection Delay [s/veh]	16.03											
Intersection LOS	B											
Intersection V/C	7.274											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	2.890			2.764			1.926			1.984		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			800			800		
d_b, Bicycle Delay [s]	15.41			15.41			10.80			10.80		
I_b,int, Bicycle LOS Score for Intersection	2.188			2.107			1.584			1.715		
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 5: Ridgcrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.319

Intersection Setup

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	11	615	41	24	522	3	4	3	11	77	6	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	48	0	0	103	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]	11	663	41	24	625	3	4	3	11	77	6	65
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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]	3	180	11	7	170	1	1	1	3	21	2	18
Total Analysis Volume [veh/h]	12	721	45	26	679	3	4	3	12	84	7	71
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	28	0	11	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65
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	2.00	0.00	2.00	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]	1	42	42	3	44	44	8	8	8	8
g / C, Green / Cycle	0.02	0.65	0.65	0.04	0.67	0.67	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.01	0.21	0.22	0.02	0.19	0.19	0.00	0.01	0.06	0.05
s, saturation flow rate [veh/h]	1714	1800	1763	1714	1800	1797	1342	1577	1421	1551
c, Capacity [veh/h]	36	1171	1147	70	1206	1204	170	196	228	192
d1, Uniform Delay [s]	31.36	5.05	5.05	30.38	4.37	4.37	29.79	25.18	29.09	26.26
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	5.16	0.76	0.77	3.29	0.59	0.59	0.06	0.16	0.99	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	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	0.33	0.33	0.33	0.37	0.28	0.28	0.02	0.08	0.37	0.41
d, Delay for Lane Group [s/veh]	36.52	5.81	5.83	33.67	4.95	4.95	29.84	25.34	30.08	27.63
Lane Group LOS	D	A	A	C	A	A	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.23	2.05	2.02	0.41	1.02	1.02	0.06	0.21	1.24	1.10
50th-Percentile Queue Length [ft/ln]	5.84	51.31	50.43	10.37	25.49	25.46	1.53	5.20	31.06	27.42
95th-Percentile Queue Length [veh/ln]	0.42	3.69	3.63	0.75	1.84	1.83	0.11	0.37	2.24	1.97
95th-Percentile Queue Length [ft/ln]	10.52	92.35	90.78	18.67	45.88	45.83	2.75	9.36	55.91	49.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.52	5.82	5.83	33.67	4.95	4.95	29.84	25.34	25.34	30.08	27.63	27.63
Movement LOS	D	A	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	6.29			6.01			26.29			28.90		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	8.60											
Intersection LOS	A											
Intersection V/C	0.319											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			22.43			22.43			22.43		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.825			1.933			2.025		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	738			708			523			523		
d_b, Bicycle Delay [s]	12.93			13.57			17.72			17.72		
I_b,int, Bicycle LOS Score for Intersection	2.201			2.144			1.591			1.827		
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 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	35.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.012

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	15	16	15	93	0	651	653	2686	16	1	1925	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	86	40	0	0	0	0	8
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]	15	16	15	110	0	737	693	2686	16	1	1925	62
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	4	4	28	0	188	177	687	4	0	492	16
Total Analysis Volume [veh/h]	15	16	15	112	0	754	709	2746	16	1	1968	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	53	97	0	12	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	70	49	101	101	0	52	52
g / C, Green / Cycle	0.13	0.13	0.54	0.38	0.78	0.78	0.00	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.11	0.16	0.28	0.41	0.53	0.53	0.00	0.39	0.39
s, saturation flow rate [veh/h]	406	699	2708	1714	3427	1795	1714	3427	1772
c, Capacity [veh/h]	89	146	1454	646	2659	1393	4	1376	711
d1, Uniform Delay [s]	51.24	58.19	19.31	40.51	6.92	6.94	64.75	38.18	38.24
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.24	0.11	0.11	0.45
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]	19.65	31.28	0.29	65.31	0.31	1.33	36.16	6.50	26.49
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	0.52	0.77	0.52	1.10	0.68	0.68	0.27	0.97	0.97
d, Delay for Lane Group [s/veh]	70.89	89.47	19.60	105.83	7.23	8.27	100.91	44.68	64.72
Lane Group LOS	E	F	B	F	A	A	F	D	E
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.85	4.91	6.92	31.32	8.82	9.69	0.07	21.06	25.81
50th-Percentile Queue Length [ft/ln]	46.17	122.83	173.00	783.10	220.55	242.32	1.73	526.57	645.18
95th-Percentile Queue Length [veh/ln]	3.32	8.55	11.23	43.24	13.69	14.80	0.12	28.59	34.14
95th-Percentile Queue Length [ft/ln]	83.11	213.71	280.86	1080.96	342.32	369.96	3.11	714.74	853.46

Movement, Approach, & Intersection Results

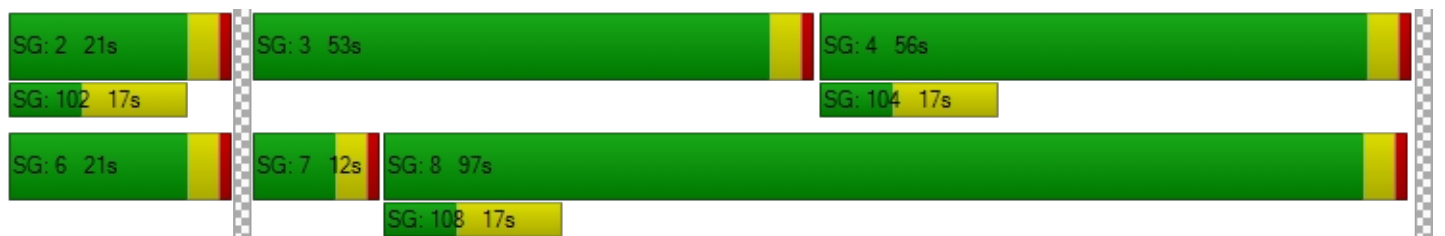
d_M, Delay for Movement [s/veh]	70.89	70.89	70.89	89.47	89.47	19.60	105.83	7.58	8.27	100.91	51.10	64.72
Movement LOS	E	E	E	F	F	B	F	A	A	F	D	E
d_A, Approach Delay [s/veh]	70.89			28.64			27.65			51.54		
Approach LOS	E			C			C			D		
d_I, Intersection Delay [s/veh]	35.66											
Intersection LOS	D											
Intersection V/C	1.012											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	54.47	54.47	0.00	54.47
I_p,int, Pedestrian LOS Score for Intersection	1.758	2.801	0.000	3.796
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	262	262	1431	800
d_b, Bicycle Delay [s]	49.11	49.11	5.27	23.40
I_b,int, Bicycle LOS Score for Intersection	1.636	2.989	3.469	2.677
Bicycle LOS	A	C	C	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	2.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.164

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	15	9	6	354	404	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	60	28	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]	15	9	6	414	432	8
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	2	109	114	2
Total Analysis Volume [veh/h]	16	9	6	435	454	8
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	78
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	18	42	24	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	78	78	78	78	78
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]	3	1	67	62	62
g / C, Green / Cycle	0.04	0.01	0.86	0.80	0.80
(v / s)_i Volume / Saturation Flow Rate	0.02	0.00	0.13	0.13	0.01
s, saturation flow rate [veh/h]	1643	1714	3427	3427	1530
c, Capacity [veh/h]	64	21	2942	2724	1216
d1, Uniform Delay [s]	36.61	38.21	0.90	1.90	1.65
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.81	6.95	0.11	0.13	0.01
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	0.39	0.28	0.15	0.17	0.01
d, Delay for Lane Group [s/veh]	40.42	45.16	1.00	2.03	1.66
Lane Group LOS	D	D	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.53	0.15	0.04	0.15	0.01
50th-Percentile Queue Length [ft/ln]	13.24	3.65	1.08	3.85	0.16
95th-Percentile Queue Length [veh/ln]	0.95	0.26	0.08	0.28	0.01
95th-Percentile Queue Length [ft/ln]	23.84	6.57	1.95	6.93	0.29

Movement, Approach, & Intersection Results

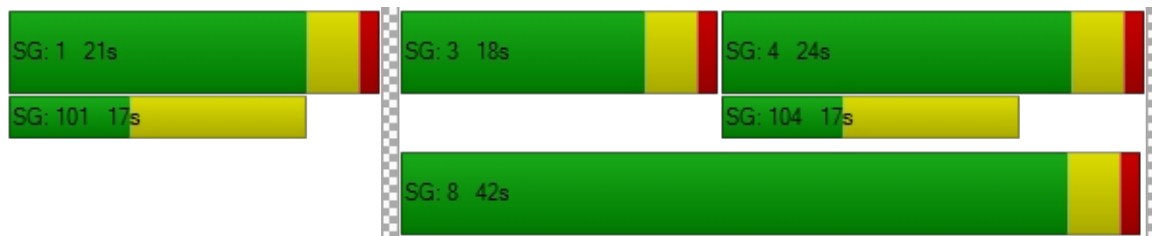
d_M, Delay for Movement [s/veh]	40.42	40.42	45.16	1.00	2.03	1.66
Movement LOS	D	D	D	A	A	A
d_A, Approach Delay [s/veh]	40.42		1.60		2.02	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.86					
Intersection LOS	A					
Intersection V/C	0.164					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	28.78	28.78	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.723	2.714	0.000
Crosswalk LOS	A	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	39.00	39.00	39.00
I_b,int, Bicycle LOS Score for Intersection	4.174	4.496	4.514
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (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):	0.535

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	81	548	173	171	729	177	160	256	59	158	214	76
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	0	0	12	26	17	17	0	8	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]	89	548	173	171	729	189	186	273	76	158	222	76
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290
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	147	47	46	196	51	50	73	20	43	60	20
Total Analysis Volume [veh/h]	96	590	186	184	785	203	200	294	82	170	239	82
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	66
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	12	22	0	11	21	0	12	22	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66	66	66	66
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]	6	26	26	8	28	28	7	8	8	8	9	9
g / C, Green / Cycle	0.09	0.39	0.39	0.12	0.43	0.43	0.10	0.12	0.12	0.12	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.06	0.17	0.12	0.11	0.23	0.13	0.06	0.09	0.05	0.10	0.09	0.09
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1646
c, Capacity [veh/h]	154	1342	599	209	1453	648	348	422	188	209	253	231
d1, Uniform Delay [s]	29.09	14.82	13.97	28.62	14.27	12.68	28.27	27.88	26.93	28.36	26.97	27.02
k, delay calibration	0.11	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]	4.10	1.05	1.35	11.26	1.45	1.26	1.50	2.09	1.59	7.42	2.88	3.34
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	0.62	0.44	0.31	0.88	0.54	0.31	0.57	0.70	0.44	0.81	0.66	0.67
d, Delay for Lane Group [s/veh]	33.19	15.87	15.31	39.87	15.72	13.94	29.77	29.97	28.51	35.78	29.85	30.37
Lane Group LOS	C	B	B	D	B	B	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.47	2.74	1.74	3.15	3.62	1.76	1.44	2.14	1.17	2.80	2.44	2.31
50th-Percentile Queue Length [ft/ln]	36.72	68.50	43.40	78.79	90.52	43.93	36.11	53.54	29.27	70.09	60.97	57.71
95th-Percentile Queue Length [veh/ln]	2.64	4.93	3.13	5.67	6.52	3.16	2.60	3.86	2.11	5.05	4.39	4.16
95th-Percentile Queue Length [ft/ln]	66.09	123.29	78.13	141.82	162.93	79.07	65.00	96.38	52.69	126.16	109.75	103.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.19	15.87	15.31	39.87	15.72	13.94	29.77	29.97	28.51	35.78	30.01	30.37
Movement LOS	C	B	B	D	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	17.66			19.20			29.69			32.06		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	22.74											
Intersection LOS	C											
Intersection V/C	0.535											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	22.92			22.92			22.92			22.92		
I_p,int, Pedestrian LOS Score for Intersection	3.004			3.045			2.912			2.621		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	515			545			515			545		
d_b, Bicycle Delay [s]	18.19			17.45			18.19			17.45		
I_b,int, Bicycle LOS Score for Intersection	2.279			2.527			2.035			1.965		
Bicycle LOS	B			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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	29.013

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	71	69	0	53	30	1977	21	60	1829	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	40	0	0	86	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	71	69	0	53	30	2017	21	60	1915	49
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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	0	19	19	0	14	8	548	6	16	520	13
Total Analysis Volume [veh/h]	2	0	77	75	0	58	33	2192	23	65	2082	53
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.70	0.00	0.43	29.01	0.00	0.29	0.30	0.02	0.00	0.65	0.02	0.00
d_M, Delay for Movement [s/veh]	1829.33	10000.0	39.68	10000.0	10000.0	30.62	51.45	0.00	0.00	92.02	0.00	0.00
Movement LOS	F	F	E	F	F	D	F	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.81	0.81	1.97	11.50	11.50	1.17	1.15	0.00	0.00	3.22	0.00	0.00
95th-Percentile Queue Length [ft/ln]	20.35	20.35	49.28	287.45	287.45	29.21	28.86	0.00	0.00	80.54	0.00	0.00
d_A, Approach Delay [s/veh]	84.98			5652.45			0.76			2.72		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	164.41											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	21.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	1081	71	36	2108	1872	949
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	40	86	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]	1081	71	36	2148	1958	949
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	280	18	9	556	507	246
Total Analysis Volume [veh/h]	1119	73	37	2224	2027	982
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	79
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	31	0	12	48	36	36
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	79	79	79	79	79	79
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	0.00
g_i, Effective Green Time [s]	27	27	4	44	36	67
g / C, Green / Cycle	0.34	0.34	0.05	0.56	0.46	0.85
(v / s)_i Volume / Saturation Flow Rate	0.34	0.05	0.02	0.45	0.41	0.64
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1137	523	87	2733	2236	1298
d1, Uniform Delay [s]	25.83	18.00	36.42	14.18	19.95	2.55
k, delay calibration	0.11	0.11	0.11	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]	9.25	0.12	3.27	2.79	6.74	4.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.98	0.14	0.43	0.81	0.91	0.76
d, Delay for Lane Group [s/veh]	35.08	18.13	39.69	16.97	26.69	6.71
Lane Group LOS	D	B	D	B	C	A
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.64	0.85	0.73	9.06	11.03	1.50
50th-Percentile Queue Length [ft/ln]	265.97	21.31	18.32	226.52	275.83	37.47
95th-Percentile Queue Length [veh/ln]	15.99	1.53	1.32	14.00	16.48	2.70
95th-Percentile Queue Length [ft/ln]	399.70	38.36	32.98	349.94	412.02	67.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.08	18.13	39.69	16.97	26.69	6.71
Movement LOS	D	B	D	B	C	A
d_A, Approach Delay [s/veh]	34.04		17.34		20.17	
Approach LOS	C		B		C	
d_I, Intersection Delay [s/veh]	21.74					
Intersection LOS	C					
Intersection V/C	0.855					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	29.27	29.27	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.932	3.515	0.000
Crosswalk LOS	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	39.50	39.50	39.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.376	5.787
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.190

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	371	426	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	112	52	0	0	28
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]	60	112	52	371	426	28
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	29	14	98	112	7
Total Analysis Volume [veh/h]	63	118	55	391	448	29
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	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.15	0.05	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.36	10.39	8.46	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.69	0.53	0.16	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	17.21	13.17	3.96	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.17		1.04		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	2.58					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	62.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.777

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	454	73	172	62	21	107	159	2169	470	131	1429	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	0	8	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]	454	73	172	62	21	107	159	2186	470	131	1437	37
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	121	19	46	17	6	29	42	583	125	35	383	10
Total Analysis Volume [veh/h]	484	78	183	66	22	114	170	2330	501	140	1532	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	32	8	8	7	30	42	8	31	31
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.10	0.43	0.60	0.11	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.16	0.16	0.12	0.07	0.07	0.10	0.48	0.33	0.04	0.30	0.30
s, saturation flow rate [veh/h]	1714	1737	1530	1339	1530	1714	4903	1530	3329	3427	1777
c, Capacity [veh/h]	203	206	702	248	181	173	2094	922	360	1488	772
d1, Uniform Delay [s]	30.96	30.96	11.67	29.69	29.49	31.52	20.13	8.25	29.17	16.10	16.11
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.24
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]	197.08	194.71	0.90	3.92	15.38	27.88	52.57	2.30	0.68	0.59	2.46
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	1.38	1.37	0.26	0.35	0.63	0.98	1.11	0.54	0.39	0.70	0.70
d, Delay for Lane Group [s/veh]	228.05	225.67	12.57	33.61	44.87	59.40	72.70	10.55	29.85	16.70	18.57
Lane Group LOS	F	F	B	C	D	E	F	B	C	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	14.42	14.48	1.77	1.59	2.48	3.97	19.42	3.69	1.04	5.64	6.25
50th-Percentile Queue Length [ft/ln]	360.51	361.92	44.26	39.72	61.99	99.34	485.62	92.33	26.10	140.90	156.24
95th-Percentile Queue Length [veh/ln]	23.19	23.25	3.19	2.86	4.46	7.15	28.66	6.65	1.88	9.53	10.35
95th-Percentile Queue Length [ft/ln]	579.85	581.25	79.66	71.49	111.58	178.82	716.43	166.19	46.98	238.24	258.74

Movement, Approach, & Intersection Results

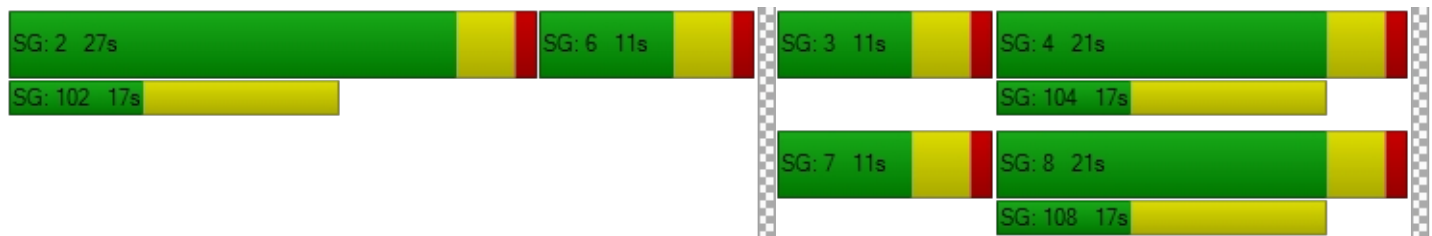
d_M, Delay for Movement [s/veh]	227.05	225.67	12.57	33.61	33.61	44.87	59.40	72.70	10.55	29.85	17.31	18.57
Movement LOS	F	F	B	C	C	D	E	F	B	C	B	B
d_A, Approach Delay [s/veh]	174.22			39.97			61.57			18.36		
Approach LOS	F			D			E			B		
d_I, Intersection Delay [s/veh]	62.56											
Intersection LOS	E											
Intersection V/C	0.777											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.561	2.138	0.000	3.626
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.789	1.893	3.210	2.501
Bicycle LOS	C	A	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	116	113	2125	271	101	1481
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	8
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]	116	113	2142	271	101	1489
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	30	572	72	27	397
Total Analysis Volume [veh/h]	124	121	2286	289	108	1589
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.72	0.02	0.00	1.66	0.02
d_M, Delay for Movement [s/veh]	10000.00	67.08	0.00	0.00	458.48	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	18.07	4.38	0.00	0.00	9.58	0.00
95th-Percentile Queue Length [ft/ln]	451.82	109.41	0.00	0.00	239.39	0.00
d_A, Approach Delay [s/veh]	5094.36		0.00		29.18	
Approach LOS	F		A		D	
d_I, Intersection Delay [s/veh]	287.28					
Intersection LOS	F					

Chateau Senior Living Facility

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Report File: G:\...\IAM EP MIT.pdf

Scenario 2 Existing Plus Project
10/7/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.845	28.3	C
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Signalized	HCM 6th Edition	WB Left	0.506	4.9	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Right	0.722	32.5	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.425	3.0	A
11	Project East Dwy (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	SB Right	0.240	3.1	A
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.702	26.5	C
15	Peach Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.550	8.3	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: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	28.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.845

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	110	502	358	263	320	79	196	1267	101	315	1305	218
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	25	25	0	0	0	34	0	8	11	8
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]	110	502	383	288	320	79	196	1301	101	323	1316	226
Peak Hour Factor	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740
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	144	110	82	92	23	56	372	29	92	376	65
Total Analysis Volume [veh/h]	126	574	438	330	366	90	224	1489	116	370	1506	259
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	74
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups			2,7						5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
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	1.0
Split [s]	11	21	21	12	22	0	11	29	29	12	30	30
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	3.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	10
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	2.0
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	2.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	No
Maximum Recall	No	No	No	No	No		No	No	No	No	No	No
Pedestrian Recall	No	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	C	L	C	R	L	C	R
C, Cycle Length [s]	74	74	74	74	74	74	74	74	74	74	74	74
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	0.00
g_i, Effective Green Time [s]	7	15	29	8	16	16	7	25	36	10	28	40
g / C, Green / Cycle	0.09	0.20	0.39	0.11	0.22	0.22	0.09	0.34	0.48	0.14	0.38	0.54
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.29	0.10	0.13	0.13	0.07	0.30	0.08	0.11	0.31	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	294	689	600	361	398	372	313	1653	733	458	1866	831
d1, Uniform Delay [s]	32.02	28.42	19.17	32.69	25.86	25.87	32.61	23.38	10.87	31.02	20.52	9.31
k, delay calibration	0.11	0.11	0.24	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	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]	0.99	2.73	3.70	9.20	1.40	1.51	3.05	8.32	0.10	3.45	3.86	0.21
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	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	0.83	0.73	0.91	0.59	0.59	0.72	0.90	0.16	0.81	0.81	0.31
d, Delay for Lane Group [s/veh]	33.02	31.15	22.87	41.89	27.26	27.38	35.66	31.70	10.97	34.47	24.38	9.53
Lane Group LOS	C	C	C	D	C	C	D	C	B	C	C	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.02	4.62	5.96	3.21	3.59	3.37	1.92	8.28	0.89	3.17	7.32	1.87
50th-Percentile Queue Length [ft/ln]	25.52	115.42	149.11	80.25	89.77	84.25	47.89	207.11	22.21	79.34	182.99	46.76
95th-Percentile Queue Length [veh/ln]	1.84	8.14	9.97	5.78	6.46	6.07	3.45	13.00	1.60	5.71	11.76	3.37
95th-Percentile Queue Length [ft/ln]	45.94	203.52	249.24	144.45	161.59	151.65	86.20	325.12	39.98	142.81	293.91	84.16

Movement, Approach, & Intersection Results

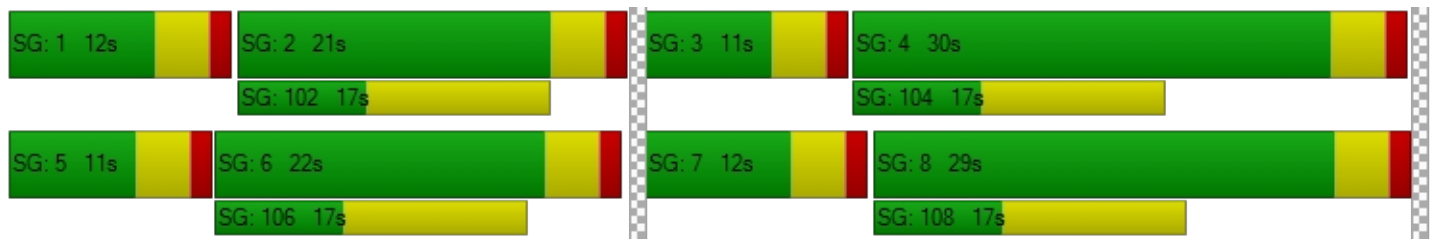
d_M, Delay for Movement [s/veh]	33.02	31.15	22.87	41.89	27.30	27.38	35.66	31.70	10.97	34.47	24.38	9.53
Movement LOS	C	C	C	D	C	C	D	C	B	C	C	A
d_A, Approach Delay [s/veh]	28.17			33.44			30.87			24.33		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.32											
Intersection LOS	C											
Intersection V/C	0.845											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	26.82	26.82	26.82	26.82
I_p,int, Pedestrian LOS Score for Intersection	3.045	2.841	3.480	3.552
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	459	486	676	703
d_b, Bicycle Delay [s]	21.95	21.19	16.22	15.57
I_b,int, Bicycle LOS Score for Intersection	2.498	2.208	2.566	2.734
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	4.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.506

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	241	28	22	629	59	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	109	0	0	35	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]	350	28	22	664	59	9
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	97	8	6	184	16	2
Total Analysis Volume [veh/h]	388	31	24	737	65	10
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	2	0	0	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	48	0	0	48	12	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	C	C	C
C, Cycle Length [s]	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00
g_i, Effective Green Time [s]	47	47	5
g / C, Green / Cycle	0.78	0.78	0.08
(v / s)_i Volume / Saturation Flow Rate	0.24	0.43	0.04
s, saturation flow rate [veh/h]	1777	1780	1687
c, Capacity [veh/h]	1389	1454	143
d1, Uniform Delay [s]	1.87	2.48	26.30
k, delay calibration	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00
d2, Incremental Delay [s]	0.56	1.35	2.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.52	0.52
d, Delay for Lane Group [s/veh]	2.43	3.83	29.24
Lane Group LOS	A	A	C
Critical Lane Group	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.22	0.55	1.11
50th-Percentile Queue Length [ft/ln]	5.39	13.65	27.67
95th-Percentile Queue Length [veh/ln]	0.39	0.98	1.99
95th-Percentile Queue Length [ft/ln]	9.70	24.56	49.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	2.43	2.43	3.83	3.83	29.24	29.24
Movement LOS	A	A	A	A	C	C
d_A, Approach Delay [s/veh]	2.43		3.83		29.24	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	4.88					
Intersection LOS	A					
Intersection V/C	0.506					

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	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	4.824	5.388	4.256
Bicycle LOS	E	F	E

Sequence

Ring 1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (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):	0.722

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rrrr			rrrr		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	3	3	85	8	1024	517	2204	16	8	2040	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	27	84	0	0	0	0	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]	16	3	3	90	8	1051	601	2204	16	8	2040	50
Peak Hour Factor	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790
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]	5	1	1	26	2	299	171	627	5	2	580	14
Total Analysis Volume [veh/h]	18	3	3	102	9	1196	684	2507	18	9	2321	57
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	96
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	24	56	0	19	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	96	96	96	96	96	96	96	96	96
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	41	20	65	65	2	47	47
g / C, Green / Cycle	0.18	0.18	0.43	0.21	0.68	0.68	0.02	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.03	0.08	0.44	0.21	0.48	0.48	0.01	0.46	0.46
s, saturation flow rate [veh/h]	798	1424	2708	3329	3427	1793	1714	3427	1778
c, Capacity [veh/h]	207	324	1151	686	2336	1222	28	1685	874
d1, Uniform Delay [s]	35.88	35.25	27.60	38.08	9.42	9.45	46.71	22.82	22.91
k, delay calibration	0.11	0.11	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]	0.25	0.62	29.25	15.23	1.85	3.53	6.62	10.40	17.89
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	0.34	1.04	1.00	0.71	0.71	0.33	0.93	0.93
d, Delay for Lane Group [s/veh]	36.12	35.87	56.85	53.30	11.27	12.98	53.33	33.22	40.80
Lane Group LOS	D	D	F	D	B	B	D	C	D
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.54	2.27	16.44	9.02	8.47	9.50	0.26	16.83	19.41
50th-Percentile Queue Length [ft/ln]	13.44	56.75	410.90	225.46	211.82	237.45	6.40	420.67	485.34
95th-Percentile Queue Length [veh/ln]	0.97	4.09	23.71	13.94	13.25	14.55	0.46	23.55	26.64
95th-Percentile Queue Length [ft/ln]	24.20	102.15	592.78	348.58	331.17	363.80	11.53	588.85	665.99

Movement, Approach, & Intersection Results

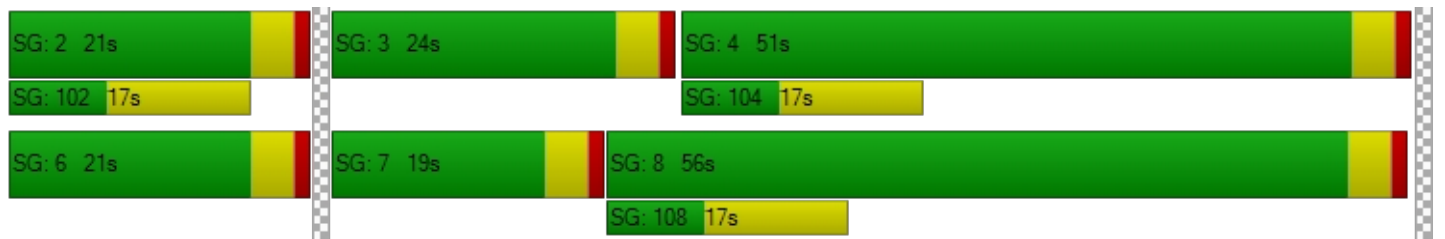
d_M, Delay for Movement [s/veh]	36.12	36.12	36.12	35.87	35.87	56.85	53.30	11.85	12.98	53.33	35.69	40.80
Movement LOS	D	D	D	D	D	F	D	B	B	D	D	D
d_A, Approach Delay [s/veh]	36.12			55.07			20.69			35.88		
Approach LOS	D			E			C			D		
d_I, Intersection Delay [s/veh]	32.47											
Intersection LOS	C											
Intersection V/C	0.722											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.63	37.63	0.00	37.63
I_p,int, Pedestrian LOS Score for Intersection	1.742	2.903	0.000	3.786
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	354	1083	979
d_b, Bicycle Delay [s]	32.51	32.51	10.08	12.51
I_b,int, Bicycle LOS Score for Intersection	1.599	3.716	3.325	2.872
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	3.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.425

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	41	19	2	19	53	1745	2	37	1696	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	84	0	0	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	41	19	2	19	53	1829	2	37	1723	51
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]	0	0	11	5	1	5	14	492	1	10	463	14
Total Analysis Volume [veh/h]	1	0	44	20	2	20	57	1967	2	40	1853	55
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	91
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	21	0	0	21	0	0	70	0	0	70	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
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	C	L	C	R
C, Cycle Length [s]	91	91	91	91	91	91	91	91	91	91
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]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	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]	5	5	5	5	78	78	78	78	78	78
g / C, Green / Cycle	0.05	0.05	0.05	0.05	0.86	0.86	0.86	0.86	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.01	0.01	0.23	0.38	0.38	0.18	0.38	0.04
s, saturation flow rate [veh/h]	1412	1530	1384	1551	253	3427	1799	225	4903	1530
c, Capacity [veh/h]	109	81	89	83	266	2943	1545	246	4211	1314
d1, Uniform Delay [s]	43.57	41.95	45.29	41.33	3.96	1.45	1.45	3.72	1.46	0.94
k, delay calibration	0.11	0.11	0.11	0.11	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.03	5.48	1.26	1.70	1.83	0.48	0.91	1.41	0.34	0.06
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	0.01	0.54	0.22	0.27	0.21	0.44	0.44	0.16	0.44	0.04
d, Delay for Lane Group [s/veh]	43.60	47.43	46.55	43.04	5.80	1.93	2.36	5.13	1.79	1.00
Lane Group LOS	D	D	D	D	A	A	A	A	A	A
Critical Lane Group	No	Yes	No	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.02	1.08	0.48	0.51	0.36	0.20	0.39	0.24	0.13	0.02
50th-Percentile Queue Length [ft/ln]	0.57	26.94	12.05	12.72	8.90	4.88	9.74	6.05	3.27	0.55
95th-Percentile Queue Length [veh/ln]	0.04	1.94	0.87	0.92	0.64	0.35	0.70	0.44	0.24	0.04
95th-Percentile Queue Length [ft/ln]	1.03	48.48	21.69	22.90	16.03	8.78	17.52	10.88	5.89	0.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.60	47.43	47.43	46.55	43.04	43.04	5.80	2.08	2.36	5.13	1.79	1.00
Movement LOS	D	D	D	D	D	D	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	47.35			44.71			2.18			1.84		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	2.96											
Intersection LOS	A											
Intersection V/C	0.425											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			0.000			0.000		
Crosswalk LOS	F			F			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	374			374			1451			1451		
d_b, Bicycle Delay [s]	30.09			30.09			3.43			3.43		
I_b,int, Bicycle LOS Score for Intersection	1.634			1.629			2.674			2.631		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	3.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.240

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	266	651	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	35	109	0	0	59
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]	18	35	109	266	651	59
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	9	29	70	171	16
Total Analysis Volume [veh/h]	19	37	115	280	685	62
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	1	0	0	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	0	0	48	48	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	L	C	C	R
C, Cycle Length [s]	60	60	60	60	60	60
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	2.00	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]	4	4	48	48	48	48
g / C, Green / Cycle	0.07	0.07	0.80	0.80	0.80	0.80
(v / s)_i Volume / Saturation Flow Rate	0.01	0.02	0.15	0.08	0.20	0.04
s, saturation flow rate [veh/h]	1714	1530	769	3427	3427	1530
c, Capacity [veh/h]	124	111	660	2722	2722	1215
d1, Uniform Delay [s]	26.11	26.46	3.12	1.38	1.59	1.33
k, delay calibration	0.11	0.11	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]	0.56	1.74	0.57	0.08	0.22	0.08
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	0.15	0.33	0.17	0.10	0.25	0.05
d, Delay for Lane Group [s/veh]	26.67	28.20	3.69	1.46	1.81	1.41
Lane Group LOS	C	C	A	A	A	A
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.27	0.54	0.31	0.03	0.08	0.03
50th-Percentile Queue Length [ft/ln]	6.64	13.49	7.78	0.72	2.10	0.67
95th-Percentile Queue Length [veh/ln]	0.48	0.97	0.56	0.05	0.15	0.05
95th-Percentile Queue Length [ft/ln]	11.96	24.29	14.00	1.29	3.78	1.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	26.67	28.20	3.69	1.46	1.81	1.41
Movement LOS	C	C	A	A	A	A
d_A, Approach Delay [s/veh]	27.68		2.11		1.78	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	3.10					
Intersection LOS	A					
Intersection V/C	0.240					

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	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	4.132	4.458	4.749
Bicycle LOS	D	E	E

Sequence

Ring 1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	26.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.702

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐			⇐⇐⇐⇐⇐			⇐⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	417	32	113	39	36	87	90	1772	424	144	1581	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	0	17	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]	417	32	113	39	36	87	90	1777	424	144	1598	35
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	118	9	32	11	10	25	25	502	120	41	451	10
Total Analysis Volume [veh/h]	471	36	128	44	41	98	102	2008	479	163	1806	40
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	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	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	18	23	0	11	16	0	35	45	45	11	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	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	2.0	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	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]	14	22	5	12	7	41	59	7	41	41
g / C, Green / Cycle	0.16	0.24	0.05	0.14	0.08	0.45	0.65	0.08	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.14	0.10	0.03	0.09	0.06	0.41	0.31	0.05	0.35	0.35
s, saturation flow rate [veh/h]	3329	1582	1714	1601	1714	4903	1530	3329	3427	1780
c, Capacity [veh/h]	518	382	90	221	131	2216	997	255	1549	804
d1, Uniform Delay [s]	37.39	28.90	41.50	36.63	40.82	22.91	7.94	40.36	20.94	20.96
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.41	0.11	0.11	0.30
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]	6.47	3.50	4.12	12.81	9.41	1.63	1.35	2.65	0.90	4.65
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	0.43	0.49	0.63	0.78	0.91	0.48	0.64	0.78	0.79
d, Delay for Lane Group [s/veh]	43.86	32.39	45.62	49.43	50.23	24.54	9.29	43.00	21.85	25.61
Lane Group LOS	D	C	D	D	D	C	A	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.47	3.32	1.02	3.56	2.46	11.80	3.94	1.77	9.70	10.94
50th-Percentile Queue Length [ft/ln]	136.66	82.94	25.55	89.07	61.53	295.00	98.45	44.18	242.53	273.46
95th-Percentile Queue Length [veh/ln]	9.30	5.97	1.84	6.41	4.43	17.43	7.09	3.18	14.81	16.36
95th-Percentile Queue Length [ft/ln]	232.52	149.29	46.00	160.33	110.76	435.84	177.21	79.52	370.23	409.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.86	32.39	32.39	45.62	49.43	49.43	50.23	24.54	9.29	43.00	23.08	25.61
Movement LOS	D	C	C	D	D	D	D	C	A	D	C	C
d_A, Approach Delay [s/veh]	40.90			48.51			22.73			24.75		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	26.48											
Intersection LOS	C											
Intersection V/C	0.702											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	34.67	34.67	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	2.556	2.096	0.000	3.529
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	267	911	378
d_b, Bicycle Delay [s]	28.01	33.80	13.34	29.61
I_b,int, Bicycle LOS Score for Intersection	2.607	1.862	2.984	2.665
Bicycle LOS	B	A	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 15: Peach Ave (NS) at Bear Valley Rd (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):	0.550

Intersection Setup

Name	Northbound		Eastbound		Westbound	
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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Eastbound		Westbound	
Base Volume Input [veh/h]	125	81	1731	191	86	1627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	0	17
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]	125	81	1736	191	86	1644
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	23	486	53	24	460
Total Analysis Volume [veh/h]	140	91	1944	214	96	1841
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
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]	15	0	26	0	29	55
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	R	C	R	L	C
C, Cycle Length [s]	70	70	70	70	70	70
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	44	44	6	54
g / C, Green / Cycle	0.11	0.11	0.63	0.63	0.09	0.78
(v / s)_i Volume / Saturation Flow Rate	0.08	0.06	0.40	0.14	0.06	0.38
s, saturation flow rate [veh/h]	1714	1530	4903	1530	1714	4903
c, Capacity [veh/h]	189	169	3101	968	148	3802
d1, Uniform Delay [s]	30.21	29.50	7.85	5.51	31.02	2.83
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.57	2.65	0.97	0.53	4.76	0.44
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	0.74	0.54	0.63	0.22	0.65	0.48
d, Delay for Lane Group [s/veh]	35.78	32.15	8.82	6.04	35.79	3.27
Lane Group LOS	D	C	A	A	D	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.39	1.46	4.11	1.03	1.64	0.94
50th-Percentile Queue Length [ft/ln]	59.76	36.40	102.67	25.72	41.08	23.40
95th-Percentile Queue Length [veh/ln]	4.30	2.62	7.39	1.85	2.96	1.69
95th-Percentile Queue Length [ft/ln]	107.57	65.51	184.81	46.30	73.94	42.13

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.78	32.15	8.82	6.04	35.79	3.27
Movement LOS	D	C	A	A	D	A
d_A, Approach Delay [s/veh]	34.35		8.55		4.89	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	8.28					
Intersection LOS	A					
Intersection V/C	0.550					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	35.00	35.00	35.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.319	5.198
Bicycle LOS	D	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Chateau Senior Living Facility

Vistro File: G:\...\PM E MIT.vistro
Report File: G:\...\PM EP MIT.pdf

Scenario 2 Existing Plus Project
10/7/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.849	28.2	C
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Signalized	HCM 6th Edition	WB Left	0.383	2.9	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.874	24.1	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.508	5.5	A
11	Project East Dwy (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	SB Right	0.247	6.9	A
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.763	31.8	C
15	Peach Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.621	10.0	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: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	28.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.849

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	157	435	418	407	540	133	130	1340	98	347	1243	227
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	12	0	0	0	16	0	26	34	26
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]	157	435	430	419	540	133	130	1356	98	373	1277	253
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	40	110	109	106	137	34	33	343	25	94	323	64
Total Analysis Volume [veh/h]	159	440	435	424	547	135	132	1372	99	378	1293	256
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	72
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups			2,7						5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
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	1.0
Split [s]	11	21	21	14	24	0	11	26	26	11	26	26
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	3.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	10
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	2.0
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	2.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	No
Maximum Recall	No	No	No	No	No		No	No	No	No	No	No
Pedestrian Recall	No	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	C	L	C	R	L	C	R
C, Cycle Length [s]	72	72	72	72	72	72	72	72	72	72	72	72
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	0.00
g_i, Effective Green Time [s]	7	13	28	10	16	16	7	22	33	11	26	40
g / C, Green / Cycle	0.09	0.18	0.39	0.14	0.23	0.23	0.09	0.31	0.46	0.15	0.37	0.56
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.28	0.13	0.20	0.20	0.04	0.28	0.06	0.11	0.26	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	311	627	590	463	411	384	301	1513	700	490	1792	857
d1, Uniform Delay [s]	31.09	27.59	18.99	30.61	26.67	26.68	31.04	23.91	11.33	29.55	19.70	8.37
k, delay calibration	0.11	0.11	0.22	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	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]	1.30	1.44	3.61	7.62	5.26	5.65	1.01	9.43	0.09	2.60	2.55	0.19
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	0.51	0.70	0.74	0.92	0.86	0.86	0.44	0.91	0.14	0.77	0.72	0.30
d, Delay for Lane Group [s/veh]	32.39	29.04	22.61	38.23	31.93	32.33	32.05	33.35	11.42	32.15	22.24	8.57
Lane Group LOS	C	C	C	D	C	C	C	C	B	C	C	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.25	3.30	5.74	3.86	5.91	5.56	1.03	7.71	0.77	3.05	5.76	1.65
50th-Percentile Queue Length [ft/ln]	31.35	82.39	143.57	96.62	147.71	138.99	25.81	192.81	19.19	76.22	144.11	41.37
95th-Percentile Queue Length [veh/ln]	2.26	5.93	9.67	6.96	9.89	9.43	1.86	12.27	1.38	5.49	9.70	2.98
95th-Percentile Queue Length [ft/ln]	56.43	148.30	241.82	173.91	247.37	235.66	46.45	306.67	34.55	137.20	242.54	74.47

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.39	29.04	22.61	38.23	32.07	32.33	32.05	33.35	11.42	32.15	22.24	8.57
Movement LOS	C	C	C	D	C	C	C	C	B	C	C	A
d_A, Approach Delay [s/veh]	26.85			34.46			31.89			22.37		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.24											
Intersection LOS	C											
Intersection V/C	0.849											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	25.84	25.84	25.84	25.84
I_p,int, Pedestrian LOS Score for Intersection	3.059	2.860	3.413	3.513
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	472	556	611	611
d_b, Bicycle Delay [s]	21.01	18.78	17.36	17.36
I_b,int, Bicycle LOS Score for Intersection	2.413	2.472	2.441	2.619
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	2.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.383

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	363	41	54	372	19	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	52	0	0	112	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]	415	41	54	484	19	8
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	111	11	14	130	5	2
Total Analysis Volume [veh/h]	445	44	58	519	20	9
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	69
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	2	0	0	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	57	0	0	57	12	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	C	C	C
C, Cycle Length [s]	69	69	69
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00
g_i, Effective Green Time [s]	58	58	3
g / C, Green / Cycle	0.84	0.84	0.04
(v / s)_i Volume / Saturation Flow Rate	0.28	0.34	0.02
s, saturation flow rate [veh/h]	1772	1681	1653
c, Capacity [veh/h]	1487	1468	74
d1, Uniform Delay [s]	1.23	1.31	32.04
k, delay calibration	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00
d2, Incremental Delay [s]	0.59	0.79	3.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	0.39	0.39
d, Delay for Lane Group [s/veh]	1.82	2.10	35.39
Lane Group LOS	A	A	D
Critical Lane Group	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.24	0.39	0.53
50th-Percentile Queue Length [ft/ln]	6.11	9.86	13.28
95th-Percentile Queue Length [veh/ln]	0.44	0.71	0.96
95th-Percentile Queue Length [ft/ln]	11.00	17.74	23.90

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	1.82	1.82	2.10	2.10	35.39	35.39
Movement LOS	A	A	A	A	D	D
d_A, Approach Delay [s/veh]	1.82		2.10		35.39	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	2.86					
Intersection LOS	A					
Intersection V/C	0.383					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	34.50	34.50	34.50
I_b,int, Bicycle LOS Score for Intersection	4.939	5.084	4.180
Bicycle LOS	E	F	D

Sequence

Ring 1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	24.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.874

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rrrr			rrrr		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	15	16	15	93	0	651	653	2686	16	1	1925	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	86	40	0	0	0	0	8
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]	15	16	15	110	0	737	693	2686	16	1	1925	62
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	4	4	28	0	188	177	687	4	0	492	16
Total Analysis Volume [veh/h]	15	16	15	112	0	754	709	2746	16	1	1968	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	96
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	24	56	0	19	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	96	96	96	96	96	96	96	96	96
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	41	20	67	67	0	47	47
g / C, Green / Cycle	0.18	0.18	0.43	0.21	0.70	0.70	0.00	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.09	0.15	0.28	0.21	0.53	0.53	0.00	0.39	0.39
s, saturation flow rate [veh/h]	495	732	2708	3329	3427	1795	1714	3427	1772
c, Capacity [veh/h]	137	205	1151	686	2382	1248	4	1685	871
d1, Uniform Delay [s]	34.17	38.64	21.99	38.11	9.46	9.49	47.79	20.36	20.39
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.42	2.27	0.64	25.33	2.34	4.44	25.12	3.95	7.46
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	0.33	0.55	0.65	1.03	0.76	0.76	0.23	0.79	0.80
d, Delay for Lane Group [s/veh]	35.58	40.91	22.63	63.44	11.80	13.93	72.91	24.31	27.85
Lane Group LOS	D	D	C	F	B	B	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.97	2.58	6.24	10.01	9.52	10.75	0.05	11.92	13.21
50th-Percentile Queue Length [ft/ln]	24.15	64.42	155.94	250.31	237.93	268.83	1.33	297.88	330.31
95th-Percentile Queue Length [veh/ln]	1.74	4.64	10.33	15.46	14.58	16.13	0.10	17.58	19.17
95th-Percentile Queue Length [ft/ln]	43.46	115.95	258.34	386.50	364.41	403.28	2.40	439.40	479.34

Movement, Approach, & Intersection Results

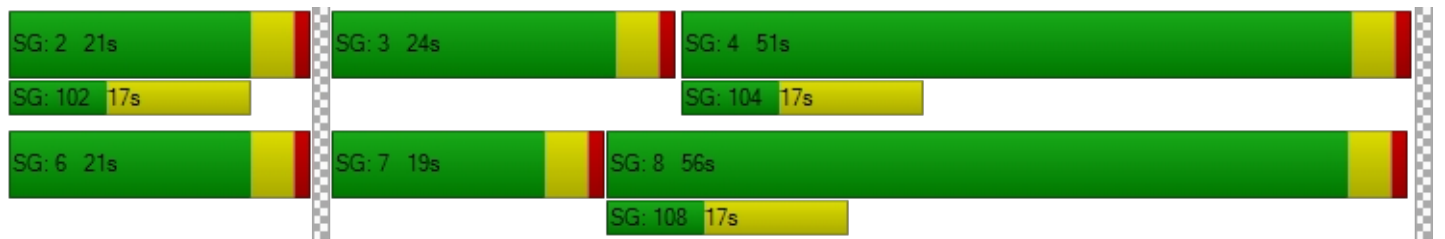
d_M, Delay for Movement [s/veh]	35.58	35.58	35.58	40.91	40.91	22.63	63.44	12.53	13.93	72.91	25.44	27.85
Movement LOS	D	D	D	D	D	C	F	B	B	E	C	C
d_A, Approach Delay [s/veh]	35.58			24.99			22.93			25.54		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	24.13											
Intersection LOS	C											
Intersection V/C	0.874											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.63	37.63	0.00	37.63
I_p,int, Pedestrian LOS Score for Intersection	1.743	2.786	0.000	3.781
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	354	1083	979
d_b, Bicycle Delay [s]	32.51	32.51	10.08	12.51
I_b,int, Bicycle LOS Score for Intersection	1.636	2.989	3.469	2.677
Bicycle LOS	A	C	C	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	5.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.508

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔↔↔			↔↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	71	69	0	53	30	1977	21	60	1829	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	40	0	0	86	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	0	71	69	0	53	30	2017	21	60	1915	49
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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	0	19	19	0	14	8	548	6	16	520	13
Total Analysis Volume [veh/h]	2	0	77	75	0	58	33	2192	23	65	2082	53
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	74
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	51	0	0	51	0	0	23	0	0	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
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	C	L	C	R
C, Cycle Length [s]	74	74	74	74	74	74	74	74	74	74
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]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	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	58	58	58	58	58	58
g / C, Green / Cycle	0.11	0.11	0.11	0.11	0.78	0.78	0.78	0.78	0.78	0.78
(v / s)_i Volume / Saturation Flow Rate	0.00	0.05	0.06	0.04	0.16	0.42	0.42	0.37	0.42	0.03
s, saturation flow rate [veh/h]	1366	1530	1343	1530	202	3427	1790	177	4903	1530
c, Capacity [veh/h]	213	169	200	169	197	2676	1398	185	3829	1195
d1, Uniform Delay [s]	30.90	30.67	33.30	30.27	11.36	3.07	3.08	15.03	3.07	1.83
k, delay calibration	0.11	0.11	0.11	0.11	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.02	1.91	1.17	1.20	1.83	0.80	1.53	5.19	0.56	0.07
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	0.01	0.46	0.38	0.34	0.17	0.54	0.54	0.35	0.54	0.04
d, Delay for Lane Group [s/veh]	30.92	32.58	34.47	31.47	13.19	3.87	4.60	20.22	3.63	1.90
Lane Group LOS	C	C	C	C	B	A	A	C	A	A
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.03	1.33	1.34	0.98	0.36	1.20	1.54	0.97	1.33	0.07
50th-Percentile Queue Length [ft/ln]	0.82	33.32	33.48	24.52	9.03	29.96	38.45	24.26	33.36	1.87
95th-Percentile Queue Length [veh/ln]	0.06	2.40	2.41	1.77	0.65	2.16	2.77	1.75	2.40	0.13
95th-Percentile Queue Length [ft/ln]	1.48	59.98	60.27	44.13	16.26	53.94	69.20	43.67	60.05	3.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.92	32.58	32.58	34.47	31.47	31.47	13.19	4.12	4.60	20.22	3.63	1.90
Movement LOS	C	C	C	C	C	C	B	A	A	C	A	A
d_A, Approach Delay [s/veh]	32.54			33.16			4.25			4.08		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	5.48											
Intersection LOS	A											
Intersection V/C	0.508											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			0.000			0.000		
Crosswalk LOS	F			F			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1270			1270			514			514		
d_b, Bicycle Delay [s]	4.93			4.93			20.44			20.44		
I_b,int, Bicycle LOS Score for Intersection	1.690			1.779			2.796			2.770		
Bicycle LOS	A			A			C			C		

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (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):	0.247

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	371	426	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	112	52	0	0	28
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]	60	112	52	371	426	28
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	29	14	98	112	7
Total Analysis Volume [veh/h]	63	118	55	391	448	29
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	1	0	0	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	24	0	0	36	36	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	L	C	C	R
C, Cycle Length [s]	60	60	60	60	60	60
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	2.00	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]	7	7	45	45	45	45
g / C, Green / Cycle	0.12	0.12	0.75	0.75	0.75	0.75
(v / s)_i Volume / Saturation Flow Rate	0.04	0.09	0.06	0.13	0.15	0.02
s, saturation flow rate [veh/h]	1543	1377	861	3084	3084	1377
c, Capacity [veh/h]	182	163	692	2310	2310	1031
d1, Uniform Delay [s]	24.35	25.55	3.63	2.17	2.22	1.94
k, delay calibration	0.11	0.11	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]	1.12	6.04	0.22	0.16	0.19	0.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.73	0.08	0.17	0.19	0.03
d, Delay for Lane Group [s/veh]	25.48	31.59	3.85	2.33	2.41	1.99
Lane Group LOS	C	C	A	A	A	A
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.85	1.83	0.14	0.08	0.10	0.02
50th-Percentile Queue Length [ft/ln]	21.24	45.76	3.38	2.12	2.49	0.47
95th-Percentile Queue Length [veh/ln]	1.53	3.29	0.24	0.15	0.18	0.03
95th-Percentile Queue Length [ft/ln]	38.23	82.36	6.09	3.81	4.49	0.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.48	31.59	3.85	2.33	2.41	1.99
Movement LOS	C	C	A	A	A	A
d_A, Approach Delay [s/veh]	29.46		2.52		2.38	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	6.88					
Intersection LOS	A					
Intersection V/C	0.247					

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	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	4.132	4.500	4.526
Bicycle LOS	D	E	E

Sequence

Ring 1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	31.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.763

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐			⇐⇐⇐⇐⇐			⇐⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	454	73	172	62	21	107	159	2169	470	131	1429	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	0	8	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]	454	73	172	62	21	107	159	2186	470	131	1437	37
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	121	19	46	17	6	29	42	583	125	35	383	10
Total Analysis Volume [veh/h]	484	78	183	66	22	114	170	2330	501	140	1532	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	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	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	22	24	0	17	19	0	17	62	62	12	57	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	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	2.0	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	115	115	115	115	115	115	115	115	115	115
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]	18	27	6	15	13	59	81	7	53	53
g / C, Green / Cycle	0.16	0.23	0.05	0.13	0.11	0.51	0.70	0.06	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.15	0.16	0.04	0.09	0.10	0.48	0.33	0.04	0.30	0.30
s, saturation flow rate [veh/h]	3329	1602	1714	1568	1714	4903	1530	3329	3427	1777
c, Capacity [veh/h]	521	376	92	206	194	2513	1077	201	1575	817
d1, Uniform Delay [s]	47.87	40.25	53.57	47.49	50.21	26.04	7.50	53.01	24.05	24.05
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.50	0.11	0.11	0.21
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]	7.81	10.15	10.01	15.34	11.77	1.87	1.45	4.34	0.47	1.76
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
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	0.93	0.69	0.72	0.66	0.88	0.93	0.47	0.70	0.66	0.66
d, Delay for Lane Group [s/veh]	55.68	50.41	63.58	62.83	61.98	27.91	8.95	57.35	24.52	25.81
Lane Group LOS	E	D	E	E	E	C	A	E	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.38	7.79	2.10	4.52	5.31	18.18	4.81	2.05	10.24	10.91
50th-Percentile Queue Length [ft/ln]	184.46	194.74	52.55	112.90	132.70	454.48	120.29	51.35	255.90	272.87
95th-Percentile Queue Length [veh/ln]	11.83	12.37	3.78	8.00	9.09	25.17	8.41	3.70	15.48	16.33
95th-Percentile Queue Length [ft/ln]	295.83	309.18	94.58	200.03	227.17	629.29	210.22	92.44	387.08	408.32

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.68	50.41	50.41	63.58	62.83	62.83	61.98	27.91	8.95	57.35	24.94	25.81
Movement LOS	E	D	D	E	E	E	E	C	A	E	C	C
d_A, Approach Delay [s/veh]	53.83			63.08			26.67			27.61		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	31.83											
Intersection LOS	C											
Intersection V/C	0.763											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	47.03	47.03	0.00	47.03
I_p,int, Pedestrian LOS Score for Intersection	2.586	2.164	0.000	3.558
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	348	261	1009	922
d_b, Bicycle Delay [s]	39.24	43.48	14.13	16.71
I_b,int, Bicycle LOS Score for Intersection	2.789	1.893	3.210	2.501
Bicycle LOS	C	A	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 15: Peach Ave (NS) at Bear Valley Rd (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):	0.621

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	116	113	2125	271	101	1481
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	8
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]	116	113	2142	271	101	1489
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	30	572	72	27	397
Total Analysis Volume [veh/h]	124	121	2286	289	108	1589
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	96
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
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]	14	0	11	0	71	82
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	R	C	R	L	C
C, Cycle Length [s]	96	96	96	96	96	96
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	67	67	8	79
g / C, Green / Cycle	0.10	0.10	0.70	0.70	0.08	0.82
(v / s)_i Volume / Saturation Flow Rate	0.07	0.08	0.47	0.19	0.06	0.32
s, saturation flow rate [veh/h]	1714	1530	4903	1530	1714	4903
c, Capacity [veh/h]	170	152	3408	1063	139	4009
d1, Uniform Delay [s]	42.01	42.32	8.37	5.51	43.28	2.36
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.91	9.23	1.07	0.63	9.01	0.29
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	0.80	0.67	0.27	0.78	0.40
d, Delay for Lane Group [s/veh]	47.92	51.54	9.44	6.14	52.29	2.66
Lane Group LOS	D	D	A	A	D	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.02	3.08	6.84	1.81	2.76	1.12
50th-Percentile Queue Length [ft/ln]	75.38	76.95	170.92	45.21	69.07	28.03
95th-Percentile Queue Length [veh/ln]	5.43	5.54	11.12	3.26	4.97	2.02
95th-Percentile Queue Length [ft/ln]	135.68	138.51	278.12	81.38	124.32	50.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.92	51.54	9.44	6.14	52.29	2.66
Movement LOS	D	D	A	A	D	A
d_A, Approach Delay [s/veh]	49.71		9.07		5.82	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	10.05					
Intersection LOS	B					
Intersection V/C	0.621					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	48.00	48.00	48.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.549	5.066
Bicycle LOS	D	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



OPENING YEAR (2020) WITHOUT PROJECT

Chateau Senior Living Facility

Vistro File: G:\...IAM OY.vistro

Scenario 1 Opening Year (2020) Without Project

Report File: G:\...IAM OY.pdf

10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.852	35.2	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.312	28.9	D
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.003	19.7	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	6.350	30.2	C
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.537	14.6	B
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	1.033	44.7	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.264	2.1	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.621	25.9	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.939	23.7	C
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.700	35.2	D
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	27.735	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.852

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	111	508	361	266	323	80	200	1284	102	318	1317	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	111	508	361	266	323	80	200	1284	102	318	1317	221
Peak Hour Factor	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740
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]	32	145	103	76	92	23	57	367	29	91	377	63
Total Analysis Volume [veh/h]	127	581	413	304	370	92	229	1469	117	364	1507	253
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	83
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	12	28	0	12	28	0	11	29	29	14	32	32
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	83	83	83	83	83	83	83	83	83	83	83	83
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	0.00
g_i, Effective Green Time [s]	7	24	24	8	25	25	7	25	36	10	28	40
g / C, Green / Cycle	0.08	0.29	0.29	0.10	0.31	0.31	0.08	0.30	0.43	0.12	0.34	0.48
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.27	0.09	0.13	0.13	0.07	0.30	0.08	0.11	0.31	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1678	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	266	996	445	321	553	515	281	1469	655	401	1646	735
d1, Uniform Delay [s]	36.53	25.16	28.62	37.29	22.98	22.99	37.37	29.07	14.71	36.05	26.44	13.43
k, delay calibration	0.11	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]	1.32	2.50	28.16	13.65	2.45	2.64	5.69	10.85	0.13	7.94	2.40	0.28
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	0.48	0.58	0.93	0.95	0.43	0.43	0.81	1.00	0.18	0.91	0.92	0.34
d, Delay for Lane Group [s/veh]	37.85	27.66	56.78	50.95	25.43	25.64	43.06	39.92	14.84	43.98	28.84	13.70
Lane Group LOS	D	C	E	D	C	C	D	D	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.20	4.75	10.59	3.54	3.86	3.64	2.35	10.10	1.21	3.86	8.88	2.60
50th-Percentile Queue Length [ft/ln]	29.98	118.66	264.87	88.40	96.50	90.93	58.79	252.59	30.31	96.45	221.90	65.07
95th-Percentile Queue Length [veh/ln]	2.16	8.32	15.93	6.36	6.95	6.55	4.23	15.32	2.18	6.94	13.76	4.68
95th-Percentile Queue Length [ft/ln]	53.97	207.98	398.32	159.12	173.70	163.67	105.83	382.91	54.57	173.61	344.06	117.12

Movement, Approach, & Intersection Results

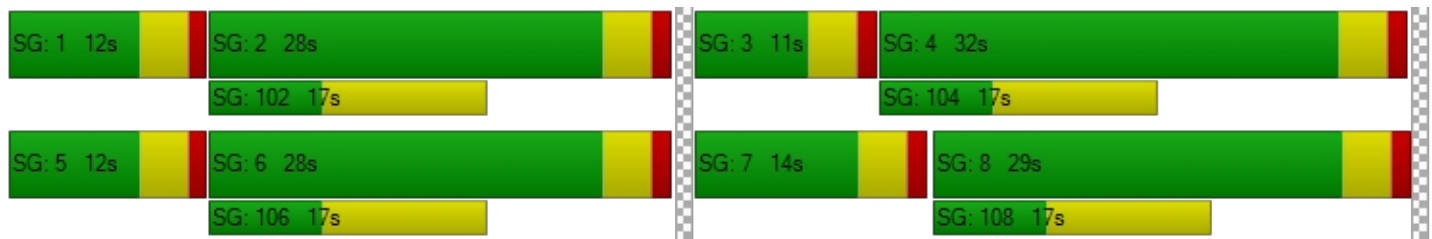
d_M, Delay for Movement [s/veh]	37.85	27.66	56.78	50.95	25.51	25.64	43.06	39.92	14.84	43.98	28.84	13.70
Movement LOS	D	C	E	D	C	C	D	D	B	D	C	B
d_A, Approach Delay [s/veh]	39.54			35.62			38.70			29.63		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	35.15											
Intersection LOS	D											
Intersection V/C	0.852											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	31.23	31.23	31.23	31.23
l_p,int, Pedestrian LOS Score for Intersection	3.047	2.844	3.484	3.545
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	578	578	602	675
d_b, Bicycle Delay [s]	20.97	20.97	20.27	18.22
l_b,int, Bicycle LOS Score for Intersection	2.484	2.192	2.558	2.728
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	28.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.312

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	291	28	31	659	60	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	291	28	31	659	60	19
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	81	8	9	183	17	5
Total Analysis Volume [veh/h]	323	31	34	731	67	21
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	0.03	0.01	0.31	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	8.05	0.00	28.90	17.19
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.08	1.46	1.46
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.96	1.96	36.48	36.48
d_A, Approach Delay [s/veh]	0.00		0.36		26.10	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	2.13					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	19.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	1	289	59	35	782	0	2	0	8	99	1	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	289	59	35	782	0	2	0	8	99	1	30
Peak Hour Factor	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150
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	79	16	10	214	0	1	0	2	27	0	8
Total Analysis Volume [veh/h]	1	316	64	38	855	0	2	0	9	108	1	33
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.01	0.00	0.01	0.00	0.02	0.25	0.00	0.04
d_M, Delay for Movement [s/veh]	9.54	0.00	0.00	8.13	0.00	0.00	18.76	17.10	11.29	16.30	19.72	9.54
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.10	0.00	0.00	0.02	0.02	0.05	1.01	1.01	0.12
95th-Percentile Queue Length [ft/ln]	0.09	0.00	0.00	2.47	0.00	0.00	0.57	0.57	1.18	25.15	25.15	3.12
d_A, Approach Delay [s/veh]	0.03			0.35			12.65			14.75		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.79											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	30.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.350

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	0	0	0	0	0	0
Pocket Length [ft]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	4	316	51	28	801	2	5	1	21	135	6	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	4	316	51	28	801	2	5	1	21	135	6	30
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	88	14	8	223	1	1	0	6	38	2	8
Total Analysis Volume [veh/h]	4	352	57	31	891	2	6	1	23	150	7	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	18	28	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	28	28	3	31	31	17	17	17	17
g / C, Green / Cycle	0.01	0.47	0.47	0.05	0.51	0.51	0.28	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.12	0.12	0.02	0.25	0.25	0.16	0.02	5.47	0.02
s, saturation flow rate [veh/h]	1714	1800	1714	1714	1800	1799	43	1530	29	1530
c, Capacity [veh/h]	16	843	803	85	915	914	123	433	125	433
d1, Uniform Delay [s]	29.58	9.61	9.63	27.69	9.68	9.68	17.83	15.71	29.70	15.81
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.50	0.70	0.75	2.63	1.86	1.86	0.19	0.05	164.11	0.07
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	0.24	0.25	0.25	0.37	0.49	0.49	0.06	0.05	1.25	0.08
d, Delay for Lane Group [s/veh]	37.07	10.31	10.38	30.32	11.54	11.55	18.02	15.76	193.80	15.89
Lane Group LOS	D	B	B	C	B	B	B	B	F	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.08	1.30	1.27	0.44	2.96	2.95	0.07	0.22	7.46	0.32
50th-Percentile Queue Length [ft/ln]	2.11	32.54	31.76	10.91	73.92	73.87	1.80	5.58	186.49	8.07
95th-Percentile Queue Length [veh/ln]	0.15	2.34	2.29	0.79	5.32	5.32	0.13	0.40	13.27	0.58
95th-Percentile Queue Length [ft/ln]	3.80	58.56	57.17	19.64	133.06	132.97	3.24	10.05	331.64	14.53

Movement, Approach, & Intersection Results

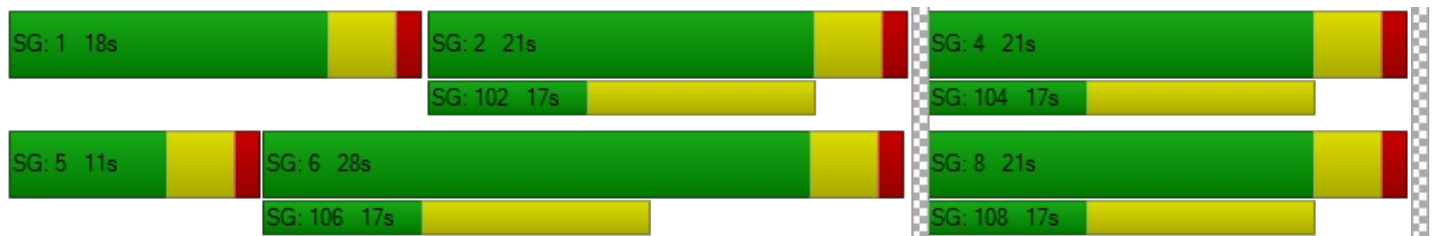
d_M, Delay for Movement [s/veh]	37.07	10.34	10.38	30.32	11.54	11.55	18.02	18.02	15.76	193.80	193.80	15.89
Movement LOS	D	B	B	C	B	B	B	B	B	F	F	B
d_A, Approach Delay [s/veh]	10.61			12.17			16.29			162.90		
Approach LOS	B			B			B			F		
d_I, Intersection Delay [s/veh]	30.23											
Intersection LOS	C											
Intersection V/C	6.350											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
l_p,int, Pedestrian LOS Score for Intersection	3.019			2.756			1.929			1.993		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			800			567			567		
d_b, Bicycle Delay [s]	15.41			10.80			15.41			15.41		
l_b,int, Bicycle LOS Score for Intersection	1.900			2.322			1.609			1.873		
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 5: Ridgcrest Rd (NS) at Pahute Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.537

Intersection Setup

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
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]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	5	325	61	80	965	3	6	6	18	248	6	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	325	61	80	965	3	6	6	18	248	6	81
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	88	16	22	261	1	2	2	5	67	2	22
Total Analysis Volume [veh/h]	5	351	66	86	1042	3	6	6	19	268	6	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	26	0	13	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	27	27	5	32	32	16	16	16	16
g / C, Green / Cycle	0.01	0.45	0.45	0.09	0.53	0.53	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.00	0.12	0.12	0.05	0.29	0.29	0.00	0.02	0.19	0.06
s, saturation flow rate [veh/h]	1714	1800	1703	1714	1800	1798	1324	1587	1408	1545
c, Capacity [veh/h]	16	805	761	153	948	947	360	419	426	408
d1, Uniform Delay [s]	29.52	10.40	10.43	26.21	9.48	9.48	20.19	16.52	22.71	17.30
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	10.01	0.80	0.87	3.22	2.31	2.31	0.02	0.06	1.54	0.28
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	0.30	0.26	0.27	0.56	0.55	0.55	0.02	0.06	0.63	0.23
d, Delay for Lane Group [s/veh]	39.53	11.20	11.29	29.44	11.79	11.79	20.21	16.58	24.24	17.59
Lane Group LOS	D	B	B	C	B	B	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.12	1.76	1.71	1.15	3.47	3.47	0.07	0.25	3.39	0.91
50th-Percentile Queue Length [ft/ln]	2.88	44.04	42.77	28.69	86.70	86.63	1.70	6.27	84.78	22.86
95th-Percentile Queue Length [veh/ln]	0.21	3.17	3.08	2.07	6.24	6.24	0.12	0.45	6.10	1.65
95th-Percentile Queue Length [ft/ln]	5.18	79.28	76.98	51.65	156.06	155.94	3.06	11.28	152.61	41.16

Movement, Approach, & Intersection Results

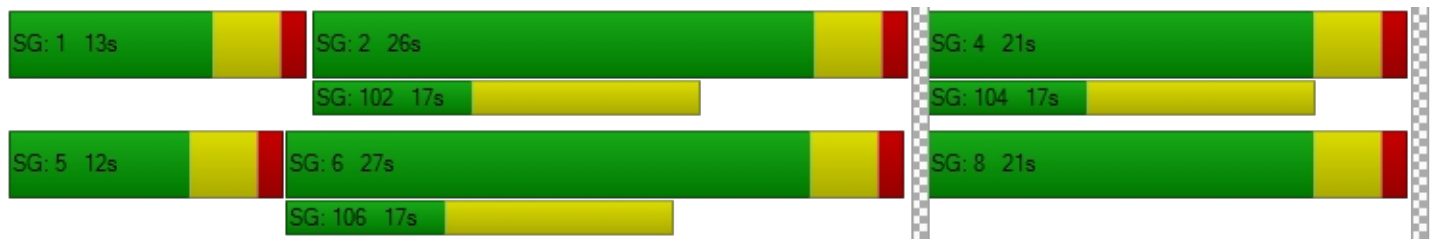
d_M, Delay for Movement [s/veh]	39.53	11.24	11.29	29.44	11.79	11.79	20.21	16.58	16.58	24.24	17.59	17.59
Movement LOS	D	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	11.58			13.13			17.28			22.53		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	14.61											
Intersection LOS	B											
Intersection V/C	0.537											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
l_p,int, Pedestrian LOS Score for Intersection	0.000			2.849			1.930			2.143		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	733			767			567			567		
d_b, Bicycle Delay [s]	12.03			11.41			15.41			15.41		
l_b,int, Bicycle LOS Score for Intersection	1.908			2.493			1.611			2.155		
Bicycle LOS	A			B			A			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	44.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.033

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	3	3	93	8	1037	549	2224	16	8	2058	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	16	3	3	93	8	1037	549	2224	16	8	2058	38
Peak Hour Factor	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790
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]	5	1	1	26	2	295	156	633	5	2	585	11
Total Analysis Volume [veh/h]	18	3	3	106	9	1180	625	2530	18	9	2341	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	129
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	49	97	0	11	59	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	129	129	129	129	129	129	129	129	129
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	66	45	98	98	2	55	55
g / C, Green / Cycle	0.13	0.13	0.51	0.35	0.76	0.76	0.02	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.05	0.08	0.44	0.36	0.49	0.49	0.01	0.46	0.46
s, saturation flow rate [veh/h]	464	1389	2708	1714	3427	1794	1714	3427	1783
c, Capacity [veh/h]	109	235	1382	598	2609	1365	26	1466	763
d1, Uniform Delay [s]	55.89	53.14	27.42	42.00	7.17	7.19	62.88	36.90	36.90
k, delay calibration	0.50	0.50	0.18	0.50	0.11	0.21	0.11	0.12	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]	4.56	7.13	2.71	49.24	0.26	0.99	7.74	34.77	53.69
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	0.22	0.49	0.85	1.05	0.64	0.64	0.35	1.07	1.07
d, Delay for Lane Group [s/veh]	60.45	60.27	30.12	91.23	7.43	8.18	70.61	71.67	90.59
Lane Group LOS	E	E	C	F	A	A	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.91	3.92	15.12	26.32	8.25	8.97	0.34	28.81	33.99
50th-Percentile Queue Length [ft/ln]	22.79	98.05	377.95	658.03	206.20	224.22	8.57	720.17	849.73
95th-Percentile Queue Length [veh/ln]	1.64	7.06	21.49	35.83	12.96	13.88	0.62	39.48	45.88
95th-Percentile Queue Length [ft/ln]	41.02	176.50	537.36	895.68	323.95	347.01	15.43	987.05	1147.05

Movement, Approach, & Intersection Results

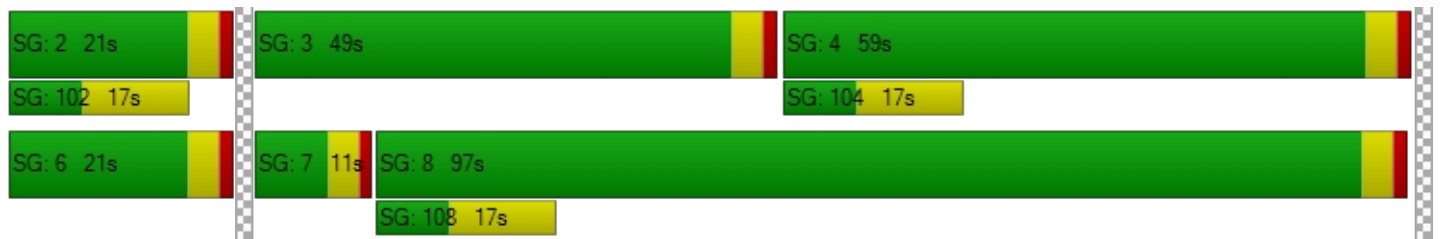
d_M, Delay for Movement [s/veh]	60.45	60.45	60.45	60.27	60.27	30.12	91.23	7.69	8.18	70.61	77.94	90.59
Movement LOS	E	E	E	E	E	C	F	A	A	E	F	F
d_A, Approach Delay [s/veh]	60.45			32.80			24.15			78.14		
Approach LOS	E			C			C			E		
d_I, Intersection Delay [s/veh]	44.67											
Intersection LOS	D											
Intersection V/C	1.033											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	53.97	53.97	0.00	53.97
I_p,int, Pedestrian LOS Score for Intersection	1.756	2.892	0.000	3.813
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	264	264	1442	853
d_b, Bicycle Delay [s]	48.62	48.62	5.02	21.22
I_b,int, Bicycle LOS Score for Intersection	1.599	3.696	3.305	2.876
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	2.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.264

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	8	1	4	322	679	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	8	1	4	322	679	8
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	96	203	2
Total Analysis Volume [veh/h]	10	1	5	385	812	10
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	19	90	71	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	90	90	90	90	90
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]	2	1	80	75	75
g / C, Green / Cycle	0.02	0.01	0.89	0.84	0.84
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.11	0.24	0.01
s, saturation flow rate [veh/h]	1696	1714	3427	3427	1530
c, Capacity [veh/h]	33	17	3056	2870	1281
d1, Uniform Delay [s]	43.57	44.26	0.59	1.56	1.20
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.86	9.54	0.08	0.25	0.01
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	0.34	0.30	0.13	0.28	0.01
d, Delay for Lane Group [s/veh]	49.43	53.81	0.68	1.80	1.21
Lane Group LOS	D	D	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.30	0.15	0.04	0.11	0.00
50th-Percentile Queue Length [ft/ln]	7.39	3.71	0.90	2.80	0.10
95th-Percentile Queue Length [veh/ln]	0.53	0.27	0.06	0.20	0.01
95th-Percentile Queue Length [ft/ln]	13.30	6.68	1.62	5.03	0.19

Movement, Approach, & Intersection Results

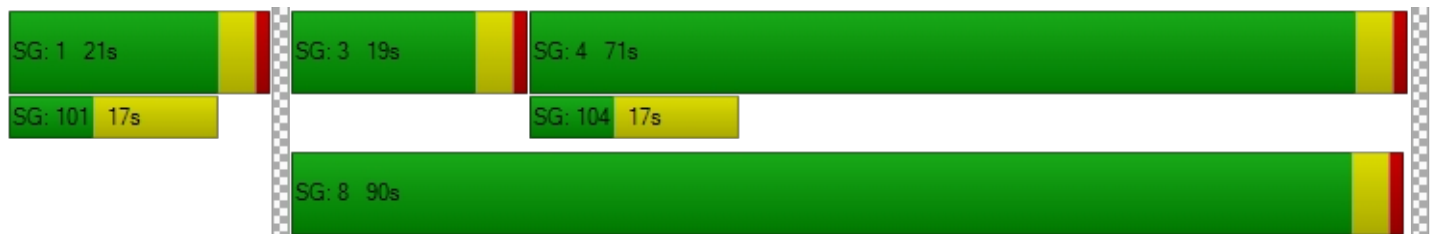
d_M, Delay for Movement [s/veh]	49.43	49.43	53.81	0.68	1.80	1.21
Movement LOS	D	D	D	A	A	A
d_A, Approach Delay [s/veh]	49.43		1.36		1.80	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.09					
Intersection LOS	A					
Intersection V/C	0.264					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	34.67	34.67	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.725	2.811	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.151	4.454	4.811
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	25.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.621

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	86	512	84	88	499	276	206	270	106	198	428	129
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	86	512	84	88	499	276	206	270	106	198	428	129
Peak Hour Factor	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280
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	155	25	27	151	83	62	82	32	60	129	39
Total Analysis Volume [veh/h]	104	618	101	106	603	333	249	326	128	239	517	156
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	68
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	11	21	0	11	21	0	15	25	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	68	68	68	68	68	68	68	68	68	68	68	68
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]	6	23	23	6	23	23	7	12	12	11	16	16
g / C, Green / Cycle	0.09	0.34	0.34	0.09	0.34	0.34	0.10	0.17	0.17	0.16	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.06	0.18	0.07	0.06	0.18	0.22	0.07	0.10	0.08	0.14	0.19	0.19
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1659
c, Capacity [veh/h]	155	1165	520	156	1167	521	343	592	264	278	417	384
d1, Uniform Delay [s]	30.07	18.15	15.92	30.08	18.02	18.98	29.67	25.81	25.49	27.84	25.01	25.01
k, delay calibration	0.11	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]	4.98	1.73	0.83	5.15	1.64	5.91	2.92	0.80	1.37	7.63	4.58	4.96
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	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	0.67	0.53	0.19	0.68	0.52	0.64	0.72	0.55	0.48	0.86	0.84	0.84
d, Delay for Lane Group [s/veh]	35.06	19.88	16.76	35.23	19.66	24.89	32.59	26.62	26.87	35.47	29.59	29.97
Lane Group LOS	D	B	B	D	B	C	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.68	3.46	1.03	1.71	3.35	4.45	1.94	2.25	1.79	4.00	5.31	4.93
50th-Percentile Queue Length [ft/ln]	41.93	86.60	25.84	42.86	83.80	111.15	48.62	56.17	44.80	100.10	132.66	123.28
95th-Percentile Queue Length [veh/ln]	3.02	6.24	1.86	3.09	6.03	7.90	3.50	4.04	3.23	7.21	9.08	8.57
95th-Percentile Queue Length [ft/ln]	75.47	155.89	46.51	77.15	150.84	197.60	87.52	101.11	80.64	180.17	227.10	214.32

Movement, Approach, & Intersection Results

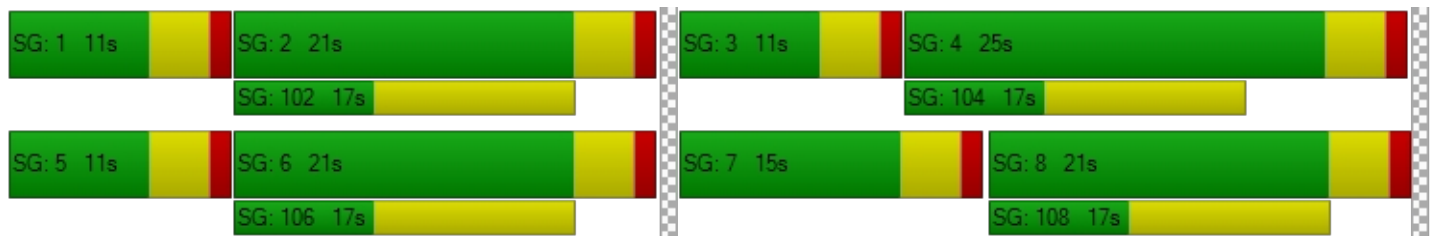
d_M, Delay for Movement [s/veh]	35.06	19.88	16.76	35.23	19.66	24.89	32.59	26.62	26.87	35.47	29.71	29.97
Movement LOS	D	B	B	D	B	C	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	21.41			22.92			28.78			31.26		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	25.93											
Intersection LOS	C											
Intersection V/C	0.621											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	23.89	23.89	23.89	23.89
I_p,int, Pedestrian LOS Score for Intersection	2.972	3.053	3.013	2.707
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	500	500	618
d_b, Bicycle Delay [s]	19.13	19.13	19.13	16.24
I_b,int, Bicycle LOS Score for Intersection	2.239	2.419	2.140	2.312
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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	41	19	2	19	53	1782	2	37	1711	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	41	19	2	19	53	1782	2	37	1711	51
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]	0	0	11	5	1	5	14	479	1	10	460	14
Total Analysis Volume [veh/h]	1	0	44	20	2	20	57	1916	2	40	1840	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.20	2.22	1.45	0.08	0.39	0.02	0.00	0.28	0.02	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	24.97	2167.11	4370.35	21.54	45.18	0.00	0.00	40.37	0.00	0.00
Movement LOS	F	F	C	F	F	C	E	A	A	E	A	A
95th-Percentile Queue Length [veh/ln]	0.68	0.68	0.71	4.04	4.04	0.27	1.69	0.00	0.00	1.09	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.95	16.95	17.78	101.04	101.04	6.83	42.23	0.00	0.00	27.35	0.00	0.00
d_A, Approach Delay [s/veh]	246.64			1250.33			1.30			0.83		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	16.96											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (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):	0.939

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	897	41	62	1753	1810	1130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	897	41	62	1753	1810	1130
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	251	11	17	491	507	317
Total Analysis Volume [veh/h]	1006	46	70	1965	2029	1267
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	95
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	34	0	18	61	43	43
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	95	95	95	95	95	95
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	0.00
g_i, Effective Green Time [s]	30	30	6	57	47	81
g / C, Green / Cycle	0.32	0.32	0.06	0.60	0.50	0.85
(v / s)_i Volume / Saturation Flow Rate	0.30	0.03	0.04	0.40	0.41	0.83
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1051	483	108	2942	2427	1305
d1, Uniform Delay [s]	31.88	22.94	43.48	12.68	20.68	5.99
k, delay calibration	0.11	0.11	0.11	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]	6.25	0.08	6.35	1.22	3.61	18.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.96	0.10	0.65	0.67	0.84	0.97
d, Delay for Lane Group [s/veh]	38.13	23.02	49.83	13.90	24.28	24.90
Lane Group LOS	D	C	D	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	11.36	0.70	1.74	7.97	12.06	9.13
50th-Percentile Queue Length [ft/ln]	283.99	17.47	43.40	199.33	301.59	228.14
95th-Percentile Queue Length [veh/ln]	16.89	1.26	3.12	12.60	17.76	14.08
95th-Percentile Queue Length [ft/ln]	422.17	31.44	78.12	315.10	443.99	351.99

Movement, Approach, & Intersection Results

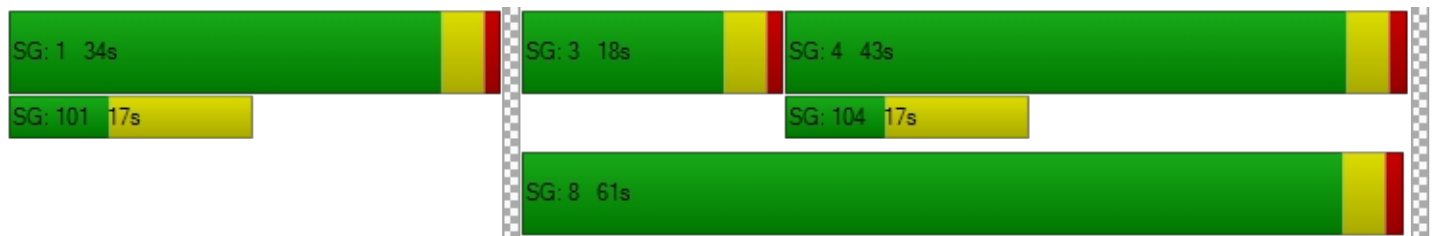
d_M, Delay for Movement [s/veh]	38.13	23.02	49.83	13.90	24.28	24.90
Movement LOS	D	C	D	B	C	C
d_A, Approach Delay [s/veh]	37.47		15.13		24.52	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	23.66					
Intersection LOS	C					
Intersection V/C	0.939					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	37.14	37.14	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.007	3.479	0.000
Crosswalk LOS	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	47.50	47.50	47.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.252	5.945
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	422	37	118	44	41	92	100	1782	434	149	1601	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	422	37	118	44	41	92	100	1782	434	149	1601	40
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	10	33	12	12	26	28	503	123	42	452	11
Total Analysis Volume [veh/h]	477	42	133	50	46	104	113	2014	490	168	1809	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	32	9	9	6	30	43	7	30	30
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.09	0.43	0.61	0.10	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.15	0.15	0.09	0.06	0.07	0.07	0.41	0.32	0.05	0.36	0.36
s, saturation flow rate [veh/h]	1714	1728	1530	1629	1530	1714	4903	1530	3329	3427	1778
c, Capacity [veh/h]	212	214	703	280	190	155	2093	930	324	1487	771
d1, Uniform Delay [s]	30.77	30.77	11.25	28.55	28.93	31.11	19.58	7.95	30.14	17.48	17.50
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.33
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]	132.69	132.08	0.60	3.32	10.94	6.38	3.84	2.13	1.28	1.18	6.57
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	1.22	1.22	0.19	0.34	0.55	0.73	0.96	0.53	0.52	0.82	0.82
d, Delay for Lane Group [s/veh]	163.46	162.85	11.85	31.87	39.87	37.49	23.42	10.08	31.42	18.66	24.07
Lane Group LOS	F	F	B	C	D	D	C	B	C	B	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.27	11.32	1.23	1.66	2.11	1.99	9.38	3.48	1.30	7.29	8.74
50th-Percentile Queue Length [ft/ln]	281.80	283.08	30.85	41.39	52.72	49.72	234.59	87.00	32.47	182.36	218.59
95th-Percentile Queue Length [veh/ln]	18.12	18.19	2.22	2.98	3.80	3.58	14.41	6.26	2.34	11.72	13.59
95th-Percentile Queue Length [ft/ln]	453.10	454.72	55.53	74.51	94.89	89.50	360.19	156.60	58.44	293.09	339.83

Movement, Approach, & Intersection Results

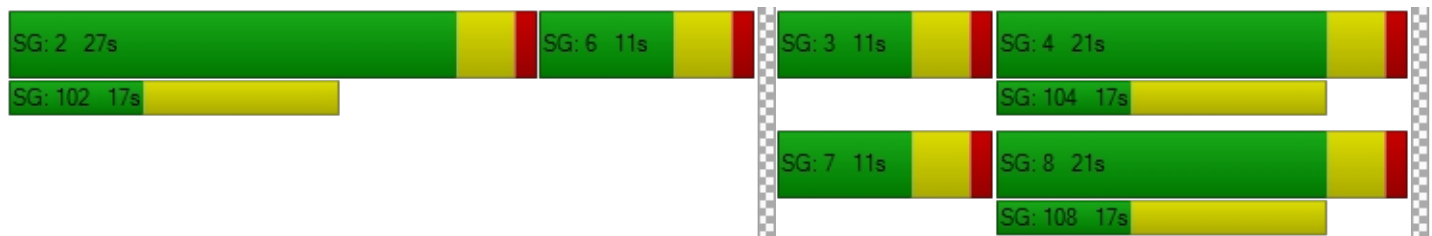
d_M, Delay for Movement [s/veh]	163.18	162.85	11.85	31.87	31.87	39.87	37.49	23.42	10.08	31.42	20.42	24.07
Movement LOS	F	F	B	C	C	D	D	C	B	C	C	C
d_A, Approach Delay [s/veh]	132.29			36.03			21.53			21.42		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	35.17											
Intersection LOS	D											
Intersection V/C	0.700											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.550	2.100	0.000	3.592
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.635	1.890	2.999	2.672
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 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	27.735

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	110.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	130	86	1751	196	91	1657
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	130	86	1751	196	91	1657
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	24	490	55	25	464
Total Analysis Volume [veh/h]	146	96	1961	219	102	1856
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	27.74	0.44	0.02	0.00	0.98	0.02
d_M, Delay for Movement [s/veh]	10000.00	34.20	0.00	0.00	159.22	0.00
Movement LOS	F	D	A	A	F	A
95th-Percentile Queue Length [veh/ln]	20.29	2.10	0.00	0.00	6.07	0.00
95th-Percentile Queue Length [ft/ln]	507.26	52.38	0.00	0.00	151.63	0.00
d_A, Approach Delay [s/veh]	6046.62		0.00		8.29	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	337.79					
Intersection LOS	F					

Chateau Senior Living Facility

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Scenario 1 Opening Year (2020) Without Project

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10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.867	37.7	D
2	Ridgecrest Road (NS) at Chinquapin Drive (EW)	Two-way stop	HCM 6th Edition	WB Left	0.092	23.2	C
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.003	17.7	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	7.366	15.5	B
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.322	8.7	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	1.001	35.2	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.169	2.9	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.540	22.9	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	25.362	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.857	21.2	C
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.786	64.6	E
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	37.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.867

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	158	439	422	412	546	134	132	1359	99	355	1254	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	158	439	422	412	546	134	132	1359	99	355	1254	232
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	40	111	107	104	138	34	33	344	25	90	317	59
Total Analysis Volume [veh/h]	160	444	427	417	553	136	134	1376	100	359	1269	235
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	94
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	32	0	16	37	0	11	31	31	15	35	35
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	94	94	94	94	94	94	94	94	94	94	94	94
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	0.00
g_i, Effective Green Time [s]	7	28	28	12	33	33	7	27	38	11	31	47
g / C, Green / Cycle	0.07	0.30	0.30	0.13	0.35	0.35	0.07	0.29	0.40	0.12	0.33	0.50
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.28	0.13	0.20	0.20	0.04	0.28	0.07	0.11	0.26	0.15
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	244	1025	458	425	636	593	241	1402	615	390	1621	766
d1, Uniform Delay [s]	42.40	26.53	32.04	40.89	24.51	24.51	42.15	33.32	17.99	41.07	28.41	13.83
k, delay calibration	0.11	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]	2.96	1.33	28.29	16.21	3.54	3.80	2.01	7.67	0.12	9.23	0.86	0.22
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	0.65	0.43	0.93	0.98	0.56	0.56	0.56	0.98	0.16	0.92	0.78	0.31
d, Delay for Lane Group [s/veh]	45.35	27.87	60.33	57.10	28.05	28.32	44.16	40.99	18.12	50.30	29.27	14.06
Lane Group LOS	D	C	E	E	C	C	D	D	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.82	3.89	12.20	5.59	6.65	6.25	1.49	10.46	1.28	4.42	8.06	2.67
50th-Percentile Queue Length [ft/ln]	45.38	97.37	304.99	139.78	166.24	156.36	37.34	261.41	32.12	110.53	201.49	66.80
95th-Percentile Queue Length [veh/ln]	3.27	7.01	17.93	9.47	10.88	10.36	2.69	15.76	2.31	7.87	12.72	4.81
95th-Percentile Queue Length [ft/ln]	81.68	175.26	448.19	236.73	271.97	258.89	67.21	393.98	57.81	196.74	317.89	120.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.35	27.87	60.33	57.10	28.14	28.32	44.16	40.99	18.12	50.30	29.27	14.06
Movement LOS	D	C	E	E	C	C	D	D	B	D	C	B
d_A, Approach Delay [s/veh]	44.02			39.08			39.83			31.40		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	37.66											
Intersection LOS	D											
Intersection V/C	0.867											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	36.64	36.64	36.64	36.64
I_p,int, Pedestrian LOS Score for Intersection	3.070	2.870	3.424	3.514
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	596	702	574	660
d_b, Bicycle Delay [s]	23.17	19.79	23.88	21.11
I_b,int, Bicycle LOS Score for Intersection	2.410	2.472	2.445	2.584
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 2: Ridgecrest Road (NS) at Chinquapin Drive (EW)

Control Type:	Two-way stop	Delay (sec / veh):	23.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	433	41	76	405	19	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	433	41	76	405	19	17
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	116	11	20	109	5	5
Total Analysis Volume [veh/h]	465	44	82	435	20	18
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	0.08	0.00	0.09	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	8.66	0.00	23.21	12.78
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.23	0.23	0.42	0.42
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.74	5.74	10.38	10.38
d_A, Approach Delay [s/veh]	0.00		1.37		18.27	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.32					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (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):	0.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	4	477	110	52	414	5	2	0	1	78	1	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	477	110	52	414	5	2	0	1	78	1	23
Peak Hour Factor	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
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	133	31	14	115	1	1	0	0	22	0	6
Total Analysis Volume [veh/h]	4	532	123	58	462	6	2	0	1	87	1	26
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.06	0.00	0.00	0.01	0.00	0.00	0.22	0.00	0.04
d_M, Delay for Movement [s/veh]	8.27	0.00	0.00	9.07	0.00	0.00	14.31	16.13	9.66	16.96	17.74	10.55
Movement LOS	A	A	A	A	A	A	B	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.20	0.00	0.00	0.02	0.02	0.00	0.86	0.86	0.12
95th-Percentile Queue Length [ft/ln]	0.27	0.00	0.00	4.91	0.00	0.00	0.39	0.39	0.10	21.50	21.50	3.00
d_A, Approach Delay [s/veh]	0.05			1.00			12.76			15.51		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.82											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	7.366

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	7	565	91	40	471	6	3	3	8	63	4	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	7	565	91	40	471	6	3	3	8	63	4	16
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	155	25	11	129	2	1	1	2	17	1	4
Total Analysis Volume [veh/h]	8	620	100	44	517	7	3	3	9	69	4	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	11	21	0	0	28	0	0	28	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	26	26	4	28	28	19	19	19	19
g / C, Green / Cycle	0.01	0.43	0.43	0.06	0.47	0.47	0.31	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00	0.20	0.21	0.03	0.15	0.15	0.03	0.01	6.40	0.01
s, saturation flow rate [veh/h]	1714	1800	1714	1714	1800	1792	193	1530	11	1530
c, Capacity [veh/h]	25	772	736	104	855	851	150	475	120	475
d1, Uniform Delay [s]	29.27	12.29	12.30	27.17	9.67	9.68	16.62	14.36	29.12	14.44
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.17	2.10	2.22	2.72	0.93	0.93	0.11	0.02	20.70	0.03
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
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	0.32	0.48	0.48	0.42	0.31	0.31	0.04	0.02	0.61	0.04
d, Delay for Lane Group [s/veh]	36.44	14.40	14.52	29.89	10.60	10.61	16.73	14.37	49.82	14.47
Lane Group LOS	D	B	B	C	B	B	B	B	D	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.15	3.00	2.89	0.60	1.68	1.67	0.06	0.08	1.71	0.16
50th-Percentile Queue Length [ft/ln]	3.74	75.06	72.30	15.10	41.95	41.82	1.44	2.05	42.85	4.12
95th-Percentile Queue Length [veh/ln]	0.27	5.40	5.21	1.09	3.02	3.01	0.10	0.15	3.09	0.30
95th-Percentile Queue Length [ft/ln]	6.73	135.10	130.14	27.18	75.51	75.27	2.59	3.69	77.14	7.42

Movement, Approach, & Intersection Results

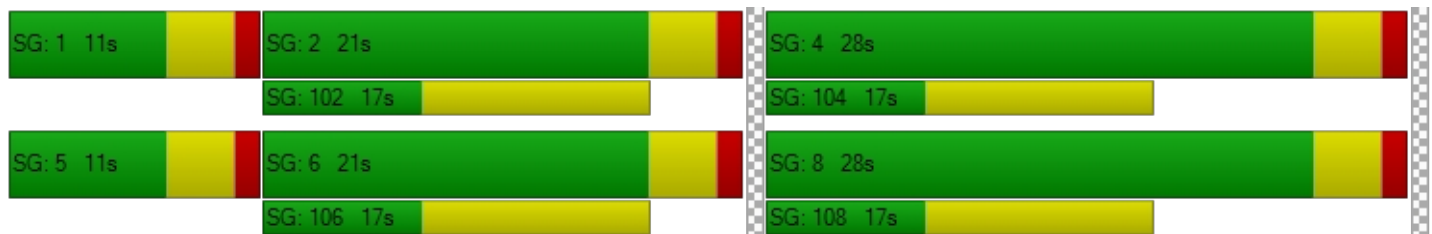
d_M, Delay for Movement [s/veh]	36.44	14.45	14.52	29.89	10.61	10.61	16.73	16.73	14.37	49.82	49.82	14.47
Movement LOS	D	B	B	C	B	B	B	B	B	D	D	B
d_A, Approach Delay [s/veh]	14.70			12.10			15.32			42.83		
Approach LOS	B			B			B			D		
d_I, Intersection Delay [s/veh]	15.48											
Intersection LOS	B											
Intersection V/C	7.366											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
l_p,int, Pedestrian LOS Score for Intersection	2.848			2.714			1.927			1.982		
Crosswalk LOS	C			B			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			800			800		
d_b, Bicycle Delay [s]	15.41			15.41			10.80			10.80		
l_b,int, Bicycle LOS Score for Intersection	2.160			2.028			1.584			1.710		
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 5: Ridgecrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.322

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	11	658	42	25	541	3	5	3	12	78	6	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	11	658	42	25	541	3	5	3	12	78	6	67
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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]	3	179	11	7	147	1	1	1	3	21	2	18
Total Analysis Volume [veh/h]	12	715	46	27	588	3	5	3	13	85	7	73
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	28	0	11	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	38	38	3	39	39	8	8	8	8
g / C, Green / Cycle	0.02	0.63	0.63	0.04	0.65	0.65	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.01	0.21	0.21	0.02	0.16	0.16	0.00	0.01	0.06	0.05
s, saturation flow rate [veh/h]	1714	1800	1762	1714	1800	1797	1339	1574	1419	1550
c, Capacity [veh/h]	37	1132	1108	73	1170	1168	180	202	239	199
d1, Uniform Delay [s]	28.94	5.25	5.25	27.95	4.39	4.39	27.47	23.03	26.79	24.04
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	5.05	0.81	0.83	3.09	0.52	0.52	0.06	0.17	0.90	1.31
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
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	0.33	0.34	0.34	0.37	0.25	0.25	0.03	0.08	0.36	0.40
d, Delay for Lane Group [s/veh]	33.99	6.07	6.09	31.04	4.91	4.91	27.53	23.20	27.69	25.34
Lane Group LOS	C	A	A	C	A	A	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.22	1.99	1.95	0.39	0.82	0.82	0.07	0.20	1.14	1.01
50th-Percentile Queue Length [ft/ln]	5.41	49.73	48.87	9.76	20.41	20.39	1.74	5.02	28.41	25.36
95th-Percentile Queue Length [veh/ln]	0.39	3.58	3.52	0.70	1.47	1.47	0.13	0.36	2.05	1.83
95th-Percentile Queue Length [ft/ln]	9.74	89.51	87.96	17.56	36.74	36.70	3.13	9.04	51.14	45.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.99	6.08	6.09	31.04	4.91	4.91	27.53	23.20	23.20	27.69	25.34	25.34
Movement LOS	C	A	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	6.51			6.06			24.23			26.55		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	8.66											
Intersection LOS	A											
Intersection V/C	0.322											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.789			1.929			2.022		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	800			767			567			567		
d_b, Bicycle Delay [s]	10.80			11.41			15.41			15.41		
I_b,int, Bicycle LOS Score for Intersection	2.197			2.069			1.594			1.832		
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 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.001

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	18	16	98	0	660	683	2710	16	1	1942	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	16	18	16	98	0	660	683	2710	16	1	1942	59
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	5	4	25	0	169	175	693	4	0	496	15
Total Analysis Volume [veh/h]	16	18	16	100	0	675	698	2771	16	1	1986	60
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	52	97	0	12	57	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	69	48	101	101	0	53	53
g / C, Green / Cycle	0.13	0.13	0.53	0.37	0.77	0.77	0.00	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.12	0.14	0.25	0.41	0.53	0.53	0.00	0.39	0.39
s, saturation flow rate [veh/h]	420	695	2708	1714	3427	1795	1714	3427	1773
c, Capacity [veh/h]	92	146	1436	632	2654	1390	4	1399	724
d1, Uniform Delay [s]	51.21	57.31	19.10	41.03	7.08	7.10	64.71	37.49	37.55
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.25	0.11	0.11	0.44
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]	21.42	22.85	0.24	67.96	0.32	1.41	29.29	5.44	24.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.68	0.47	1.10	0.69	0.69	0.25	0.96	0.97
d, Delay for Lane Group [s/veh]	72.63	80.16	19.34	108.99	7.40	8.51	94.00	42.93	61.64
Lane Group LOS	E	F	B	F	A	A	F	D	E
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.02	4.18	6.06	31.16	9.10	10.01	0.07	20.85	25.40
50th-Percentile Queue Length [ft/ln]	50.58	104.46	151.42	779.00	227.45	250.21	1.63	521.20	635.11
95th-Percentile Queue Length [veh/ln]	3.64	7.52	10.09	43.18	14.04	15.20	0.12	28.34	33.67
95th-Percentile Queue Length [ft/ln]	91.05	188.03	252.32	1079.43	351.11	379.91	2.94	708.40	841.76

Movement, Approach, & Intersection Results

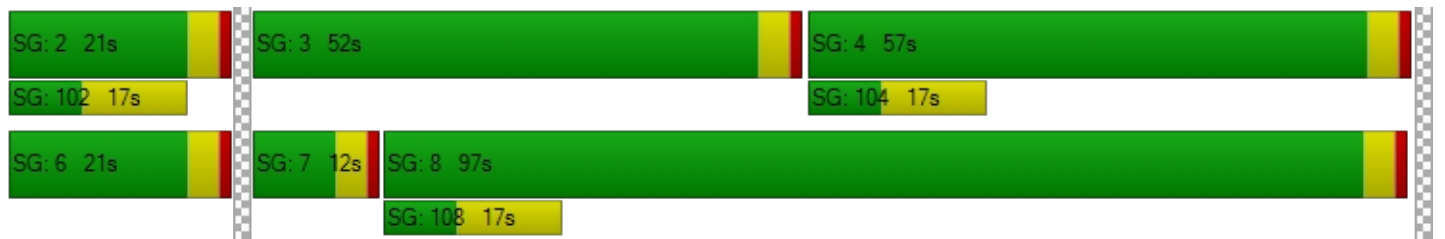
d_M, Delay for Movement [s/veh]	72.63	72.63	72.63	80.16	80.16	19.34	108.99	7.78	8.51	94.00	48.95	61.64
Movement LOS	E	E	E	F	F	B	F	A	A	F	D	E
d_A, Approach Delay [s/veh]	72.63			27.19			28.05			49.34		
Approach LOS	E			C			C			D		
d_I, Intersection Delay [s/veh]	35.15											
Intersection LOS	D											
Intersection V/C	1.001											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	54.47	54.47	0.00	54.47
I_p,int, Pedestrian LOS Score for Intersection	1.760	2.771	0.000	3.785
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	262	262	1431	815
d_b, Bicycle Delay [s]	49.11	49.11	5.27	22.80
I_b,int, Bicycle LOS Score for Intersection	1.642	2.838	3.476	2.685
Bicycle LOS	A	C	C	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	2.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.169

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	15	9	6	437	453	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	15	9	6	437	453	8
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	2	115	119	2
Total Analysis Volume [veh/h]	16	9	6	460	476	8
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	86
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	18	44	26	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	86	86	86	86	86
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]	3	1	75	70	70
g / C, Green / Cycle	0.04	0.01	0.87	0.81	0.81
(v / s)_i Volume / Saturation Flow Rate	0.02	0.00	0.13	0.14	0.01
s, saturation flow rate [veh/h]	1643	1714	3427	3427	1530
c, Capacity [veh/h]	62	21	2979	2777	1240
d1, Uniform Delay [s]	40.44	42.13	0.85	1.80	1.55
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.12	7.27	0.11	0.13	0.01
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	0.40	0.29	0.15	0.17	0.01
d, Delay for Lane Group [s/veh]	44.56	49.40	0.96	1.93	1.56
Lane Group LOS	D	D	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.59	0.16	0.05	0.18	0.01
50th-Percentile Queue Length [ft/ln]	14.70	4.01	1.14	4.60	0.18
95th-Percentile Queue Length [veh/ln]	1.06	0.29	0.08	0.33	0.01
95th-Percentile Queue Length [ft/ln]	26.45	7.22	2.05	8.29	0.32

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.56	44.56	49.40	0.96	1.93	1.56
Movement LOS	D	D	D	A	A	A
d_A, Approach Delay [s/veh]	44.56		1.59		1.92	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.86					
Intersection LOS	A					
Intersection V/C	0.169					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	32.70	32.70	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.728	2.733	0.000
Crosswalk LOS	A	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	43.00	43.00	43.00
I_b,int, Bicycle LOS Score for Intersection	4.174	4.517	4.532
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	22.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.540

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	85	553	175	177	736	193	182	290	65	159	232	78
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	553	175	177	736	193	182	290	65	159	232	78
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290
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	149	47	48	198	52	49	78	17	43	62	21
Total Analysis Volume [veh/h]	91	595	188	191	792	208	196	312	70	171	250	84
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	67
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	13	23	0	11	21	0	12	22	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	67	67	67	67	67	67	67	67	67	67	67	67
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]	6	26	26	9	29	29	7	9	9	8	10	10
g / C, Green / Cycle	0.09	0.38	0.38	0.13	0.43	0.43	0.10	0.13	0.13	0.12	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.05	0.17	0.12	0.11	0.23	0.14	0.06	0.09	0.05	0.10	0.10	0.10
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1649
c, Capacity [veh/h]	149	1301	581	231	1465	654	343	437	195	206	260	239
d1, Uniform Delay [s]	29.60	15.67	14.76	28.32	14.34	12.77	28.76	28.17	26.84	28.92	27.22	27.27
k, delay calibration	0.11	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]	3.97	1.16	1.48	7.26	1.44	1.28	1.51	2.19	1.11	8.30	2.88	3.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.46	0.32	0.83	0.54	0.32	0.57	0.71	0.36	0.83	0.66	0.68
d, Delay for Lane Group [s/veh]	33.56	16.83	16.24	35.59	15.78	14.04	30.27	30.36	27.95	37.22	30.10	30.60
Lane Group LOS	C	B	B	D	B	B	C	C	C	D	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.42	2.92	1.85	3.07	3.71	1.83	1.44	2.32	0.99	2.92	2.58	2.44
50th-Percentile Queue Length [ft/ln]	35.39	73.06	46.33	76.79	92.70	45.72	36.09	57.89	24.83	72.90	64.40	60.91
95th-Percentile Queue Length [veh/ln]	2.55	5.26	3.34	5.53	6.67	3.29	2.60	4.17	1.79	5.25	4.64	4.39
95th-Percentile Queue Length [ft/ln]	63.71	131.50	83.39	138.21	166.86	82.30	64.96	104.20	44.69	131.22	115.91	109.63

Movement, Approach, & Intersection Results

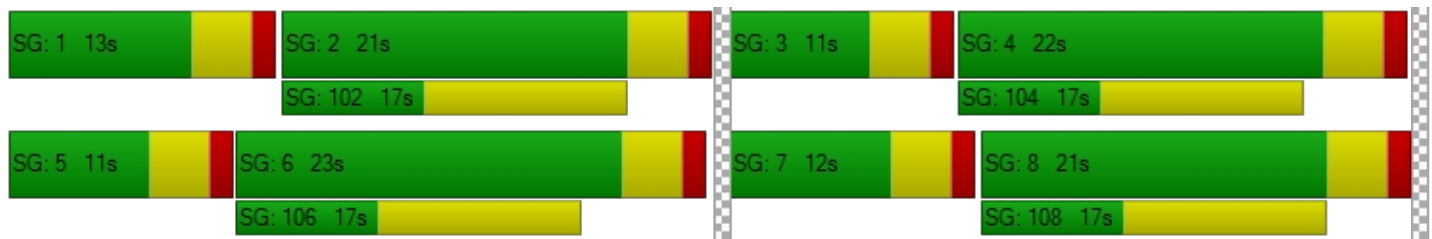
d_M, Delay for Movement [s/veh]	33.56	16.83	16.24	35.59	15.78	14.04	30.27	30.36	27.95	37.22	30.25	30.60
Movement LOS	C	B	B	D	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	18.45			18.65			30.04			32.67		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	22.94											
Intersection LOS	C											
Intersection V/C	0.540											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	23.40	23.40	23.40	23.40
I_p,int, Pedestrian LOS Score for Intersection	3.005	3.052	2.915	2.633
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	507	567	507	537
d_b, Bicycle Delay [s]	18.66	17.19	18.66	17.92
I_b,int, Bicycle LOS Score for Intersection	2.281	2.542	2.036	1.976
Bicycle LOS	B	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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	25.362

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔↔↔			↔↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	72	70	0	53	30	2002	21	61	1845	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	72	70	0	53	30	2002	21	61	1845	51
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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	0	20	19	0	14	8	544	6	17	501	14
Total Analysis Volume [veh/h]	2	0	78	76	0	58	33	2176	23	66	2005	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.62	0.00	0.43	25.36	0.00	0.28	0.28	0.02	0.00	0.65	0.02	0.00
d_M, Delay for Movement [s/veh]	1606.06	10000.0	39.28	10000.0	10000.0	28.63	46.22	0.00	0.00	90.26	0.00	0.00
Movement LOS	F	F	E	F	F	D	E	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.79	0.79	1.98	11.59	11.59	1.09	1.04	0.00	0.00	3.22	0.00	0.00
95th-Percentile Queue Length [ft/ln]	19.84	19.84	49.40	289.64	289.64	27.15	26.08	0.00	0.00	80.58	0.00	0.00
d_A, Approach Delay [s/veh]	78.45			5684.03			0.68			2.80		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	169.60											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	21.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.857

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	1091	72	37	2127	1889	963
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	1091	72	37	2127	1889	963
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	282	19	10	550	489	249
Total Analysis Volume [veh/h]	1129	75	38	2202	1955	997
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	30	0	12	45	33	33
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	75	75	75	75	75	75
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	0.00
g_i, Effective Green Time [s]	26	26	4	41	33	63
g / C, Green / Cycle	0.35	0.35	0.05	0.55	0.44	0.84
(v / s)_i Volume / Saturation Flow Rate	0.34	0.05	0.02	0.45	0.40	0.65
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1153	530	90	2683	2163	1286
d1, Uniform Delay [s]	24.28	16.87	34.47	13.98	19.50	2.73
k, delay calibration	0.11	0.11	0.11	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]	8.35	0.12	3.10	2.97	6.76	4.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.98	0.14	0.42	0.82	0.90	0.77
d, Delay for Lane Group [s/veh]	32.63	16.99	37.56	16.95	26.26	7.34
Lane Group LOS	C	B	D	B	C	A
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.93	0.81	0.71	8.57	10.10	1.65
50th-Percentile Queue Length [ft/ln]	248.24	20.28	17.68	214.32	252.61	41.18
95th-Percentile Queue Length [veh/ln]	15.10	1.46	1.27	13.37	15.32	2.96
95th-Percentile Queue Length [ft/ln]	377.44	36.50	31.83	334.37	382.94	74.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.63	16.99	37.56	16.95	26.26	7.34
Movement LOS	C	B	D	B	C	A
d_A, Approach Delay [s/veh]	31.65		17.30		19.87	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	21.19					
Intersection LOS	C					
Intersection V/C	0.857					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	27.31	27.31	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.940	3.496	0.000
Crosswalk LOS	C	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	37.50	37.50	37.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.364	5.756
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	64.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.786

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	459	78	177	67	26	112	164	2189	475	136	1449	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	459	78	177	67	26	112	164	2189	475	136	1449	42
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	122	21	47	18	7	30	44	583	127	36	386	11
Total Analysis Volume [veh/h]	489	83	189	71	28	119	175	2334	506	145	1545	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	26	26	0	11	0	12	21	21	12	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	32	8	8	8	30	42	8	30	30
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.11	0.43	0.60	0.11	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.17	0.17	0.12	0.07	0.08	0.10	0.48	0.33	0.04	0.31	0.31
s, saturation flow rate [veh/h]	1714	1738	1530	1372	1530	1714	4903	1530	3329	3427	1774
c, Capacity [veh/h]	200	203	702	248	179	197	2094	919	372	1452	752
d1, Uniform Delay [s]	31.03	31.03	11.72	29.91	29.72	30.64	20.13	8.37	28.97	16.80	16.80
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.24
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]	216.71	213.85	0.94	4.73	17.98	12.43	53.40	2.37	0.66	0.69	2.94
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	1.42	1.42	0.27	0.40	0.67	0.89	1.11	0.55	0.39	0.72	0.72
d, Delay for Lane Group [s/veh]	247.74	244.88	12.67	34.65	47.70	43.07	73.53	10.74	29.64	17.49	19.74
Lane Group LOS	F	F	B	C	D	D	F	B	C	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	15.29	15.34	1.84	1.82	2.68	3.35	19.59	3.78	1.08	5.91	6.59
50th-Percentile Queue Length [ft/ln]	382.27	383.56	45.94	45.49	67.06	83.69	489.67	94.58	26.91	147.71	164.78
95th-Percentile Queue Length [veh/ln]	24.60	24.65	3.31	3.28	4.83	6.03	28.90	6.81	1.94	9.89	10.80
95th-Percentile Queue Length [ft/ln]	615.05	616.19	82.70	81.88	120.70	150.65	722.40	170.25	48.44	247.36	270.04

Movement, Approach, & Intersection Results

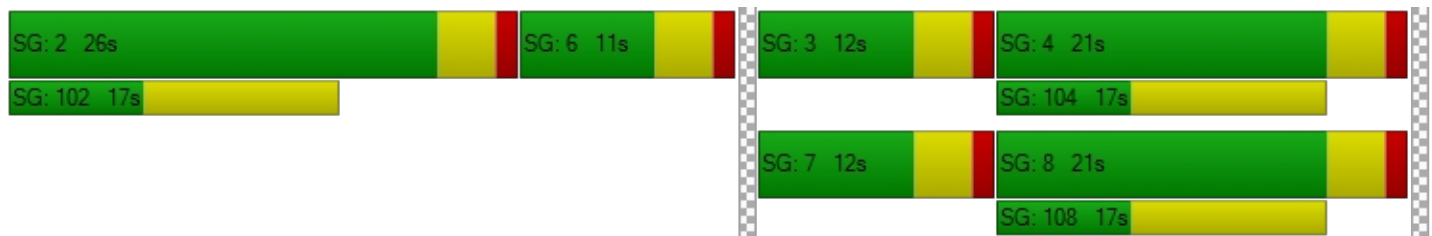
d_M, Delay for Movement [s/veh]	246.55	244.88	12.67	34.65	34.65	47.70	43.07	73.53	10.74	29.64	18.22	19.74
Movement LOS	F	F	B	C	C	D	D	F	B	C	B	B
d_A, Approach Delay [s/veh]	188.28			41.77			61.23			19.21		
Approach LOS	F			D			E			B		
d_I, Intersection Delay [s/veh]	64.64											
Intersection LOS	E											
Intersection V/C	0.786											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.567	2.152	0.000	3.640
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	629	200	486	486
d_b, Bicycle Delay [s]	16.46	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.815	1.919	3.218	2.514
Bicycle LOS	C	A	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	121	118	2155	276	106	1511
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	121	118	2155	276	106	1511
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	31	575	74	28	403
Total Analysis Volume [veh/h]	129	126	2300	295	113	1613
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.75	0.02	0.00	1.77	0.02
d_M, Delay for Movement [s/veh]	10000.00	73.03	0.00	0.00	510.35	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	18.71	4.77	0.00	0.00	10.28	0.00
95th-Percentile Queue Length [ft/ln]	467.76	119.21	0.00	0.00	257.09	0.00
d_A, Approach Delay [s/veh]	5094.91		0.00		33.41	
Approach LOS	F		A		D	
d_I, Intersection Delay [s/veh]	296.52					
Intersection LOS	F					

OPENING YEAR (2020) WITH PROJECT

Chateau Senior Living Facility

Vistro File: G:\...IAM OY.vistro

Scenario 2 Opening Year (2020) With Project

Report File: G:\...IAM OYP.pdf

10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.886	39.2	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.393	38.6	E
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.004	21.3	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	6.498	30.3	C
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.548	14.7	B
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	1.157	45.8	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.286	2.1	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.666	26.7	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.942	23.9	C
11	Project East Dwy (NS) at Yates Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.109	28.2	D
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.701	35.3	D
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	41.127	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	39.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.886

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	111	508	361	266	323	80	200	1284	102	318	1317	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	25	25	0	0	0	34	0	8	11	8
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	508	386	291	323	80	200	1318	102	326	1328	229
Peak Hour Factor	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740
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]	32	145	110	83	92	23	57	377	29	93	380	66
Total Analysis Volume [veh/h]	127	581	442	333	370	92	229	1508	117	373	1519	262
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	91
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	31	0	13	33	0	11	32	32	15	36	36
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	91	91	91	91	91	91	91	91	91	91	91	91
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	0.00
g_i, Effective Green Time [s]	7	27	27	9	29	29	7	28	39	11	32	45
g / C, Green / Cycle	0.07	0.30	0.30	0.10	0.32	0.32	0.08	0.31	0.42	0.12	0.35	0.49
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.29	0.10	0.13	0.13	0.07	0.31	0.08	0.11	0.31	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1678	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	247	1024	457	330	583	543	257	1497	648	403	1712	753
d1, Uniform Delay [s]	40.57	26.94	31.46	41.01	23.99	24.00	41.63	31.63	16.40	39.61	27.94	14.17
k, delay calibration	0.11	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]	1.66	2.28	34.50	25.39	2.13	2.29	10.30	12.70	0.13	9.40	1.73	0.28
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	0.51	0.57	0.97	1.01	0.41	0.41	0.89	1.01	0.18	0.93	0.89	0.35
d, Delay for Lane Group [s/veh]	42.23	29.22	65.96	66.41	26.12	26.29	51.94	44.33	16.53	49.00	29.67	14.44
Lane Group LOS	D	C	E	F	C	C	D	F	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.35	5.21	13.06	4.72	4.14	3.89	2.77	11.63	1.39	4.45	9.71	2.98
50th-Percentile Queue Length [ft/ln]	33.81	130.16	326.48	118.07	103.48	97.31	69.26	290.74	34.69	111.13	242.75	74.53
95th-Percentile Queue Length [veh/ln]	2.43	8.95	18.99	8.31	7.45	7.01	4.99	17.30	2.50	7.90	14.82	5.37
95th-Percentile Queue Length [ft/ln]	60.85	223.71	474.64	207.87	186.27	175.15	124.67	432.57	62.44	197.57	370.51	134.16

Movement, Approach, & Intersection Results

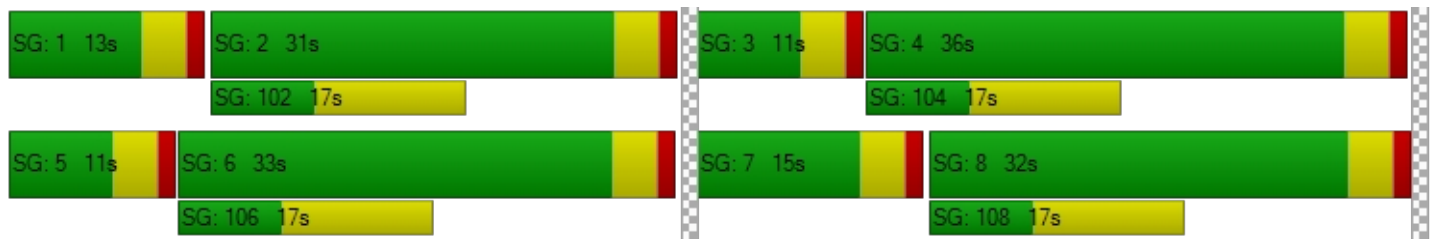
d_M, Delay for Movement [s/veh]	42.23	29.22	65.96	66.41	26.18	26.29	51.94	44.33	16.53	49.00	29.67	14.44
Movement LOS	D	C	E	F	C	C	D	F	B	D	C	B
d_A, Approach Delay [s/veh]	44.78			43.04			43.52			31.17		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	39.23											
Intersection LOS	D											
Intersection V/C	0.886											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	35.16	35.16	35.16	35.16
I_p,int, Pedestrian LOS Score for Intersection	3.061	2.857	3.498	3.570
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	593	637	615	703
d_b, Bicycle Delay [s]	22.51	21.12	21.81	19.13
I_b,int, Bicycle LOS Score for Intersection	2.508	2.215	2.579	2.744
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	38.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.393

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	291	28	31	659	60	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	109	0	0	35	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]	400	28	31	694	60	19
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	111	8	9	193	17	5
Total Analysis Volume [veh/h]	444	31	34	770	67	21
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	0.03	0.01	0.39	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	8.38	0.00	38.57	23.40
Movement LOS	A	A	A	A	E	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.09	1.98	1.98
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.18	2.18	49.39	49.39
d_A, Approach Delay [s/veh]	0.00		0.35		34.95	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	2.46					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	21.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	1	289	59	35	782	0	2	0	8	99	1	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	109	0	0	35	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	398	59	35	817	0	2	0	8	99	1	30
Peak Hour Factor	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150
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	109	16	10	223	0	1	0	2	27	0	8
Total Analysis Volume [veh/h]	1	435	64	38	893	0	2	0	9	108	1	33
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.01	0.00	0.01	0.00	0.02	0.28	0.00	0.04
d_M, Delay for Movement [s/veh]	9.69	0.00	0.00	8.47	0.00	0.00	19.67	18.08	11.48	17.94	21.34	9.98
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.11	0.00	0.00	0.02	0.02	0.05	1.14	1.14	0.14
95th-Percentile Queue Length [ft/ln]	0.10	0.00	0.00	2.74	0.00	0.00	0.61	0.61	1.21	28.60	28.60	3.42
d_A, Approach Delay [s/veh]	0.02			0.35			12.97			16.11		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.74											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	30.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.498

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	4	316	51	28	801	2	5	1	21	135	6	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	101	0	3	32	0	0	0	0	0	0	8
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]	4	417	51	31	833	2	5	1	21	135	6	38
Peak Hour Factor	0.8990	0.8990	0.8990	0.8990	0.8990	0.8990	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	116	14	9	232	1	1	0	6	38	2	11
Total Analysis Volume [veh/h]	4	464	57	34	927	2	6	1	23	150	7	42
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	62
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	19	29	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	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
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	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]	1	30	30	3	33	33	17	17	17	17
g / C, Green / Cycle	0.01	0.48	0.48	0.05	0.52	0.52	0.27	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.00	0.15	0.15	0.02	0.26	0.26	0.16	0.02	5.61	0.03
s, saturation flow rate [veh/h]	1714	1800	1732	1714	1800	1799	43	1530	28	1530
c, Capacity [veh/h]	16	866	833	90	942	942	119	419	121	419
d1, Uniform Delay [s]	30.56	9.82	9.83	28.48	9.51	9.51	18.68	16.64	30.69	16.85
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.64	0.91	0.96	2.63	1.84	1.84	0.20	0.05	182.05	0.10
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	0.25	0.31	0.31	0.38	0.49	0.49	0.06	0.05	1.30	0.10
d, Delay for Lane Group [s/veh]	38.20	10.73	10.79	31.11	11.35	11.35	18.88	16.69	212.74	16.95
Lane Group LOS	D	B	B	C	B	B	B	B	F	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.09	1.74	1.70	0.49	3.10	3.10	0.08	0.24	7.88	0.44
50th-Percentile Queue Length [ft/ln]	2.17	43.62	42.59	12.34	77.59	77.54	1.90	5.91	196.96	10.95
95th-Percentile Queue Length [veh/ln]	0.16	3.14	3.07	0.89	5.59	5.58	0.14	0.43	14.04	0.79
95th-Percentile Queue Length [ft/ln]	3.91	78.51	76.66	22.21	139.66	139.57	3.42	10.64	351.06	19.70

Movement, Approach, & Intersection Results

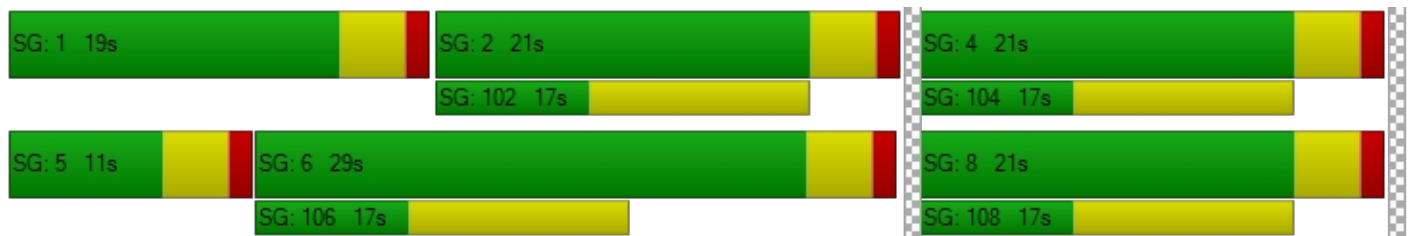
d_M, Delay for Movement [s/veh]	38.20	10.76	10.79	31.11	11.35	11.35	18.88	18.88	16.69	212.74	212.74	16.95
Movement LOS	D	B	B	C	B	B	B	B	B	F	F	B
d_A, Approach Delay [s/veh]	10.97			12.05			17.20			171.42		
Approach LOS	B			B			B			F		
d_I, Intersection Delay [s/veh]	30.28											
Intersection LOS	C											
Intersection V/C	6.498											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.98			20.98			20.98			20.98		
l_p,int, Pedestrian LOS Score for Intersection	3.074			2.815			1.931			1.998		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	548			806			548			548		
d_b, Bicycle Delay [s]	16.33			11.04			16.33			16.33		
l_b,int, Bicycle LOS Score for Intersection	1.993			2.354			1.609			1.888		
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 5: Ridgecrest Rd (NS) at Pahute Ave (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):	0.548

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
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]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	5	325	61	80	965	3	6	6	18	248	6	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	101	0	0	32	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	426	61	80	997	3	6	6	18	248	6	81
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	115	16	22	269	1	2	2	5	67	2	22
Total Analysis Volume [veh/h]	5	460	66	86	1077	3	6	6	19	268	6	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	27	0	12	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	27	27	5	32	32	16	16	16	16
g / C, Green / Cycle	0.01	0.45	0.45	0.09	0.53	0.53	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.00	0.15	0.15	0.05	0.30	0.30	0.00	0.02	0.19	0.06
s, saturation flow rate [veh/h]	1714	1800	1722	1714	1800	1798	1324	1587	1408	1545
c, Capacity [veh/h]	16	805	770	153	948	947	360	419	426	408
d1, Uniform Delay [s]	29.52	10.78	10.80	26.21	9.61	9.61	20.19	16.52	22.71	17.30
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	10.01	1.11	1.18	3.22	2.49	2.49	0.02	0.06	1.54	0.28
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	0.30	0.33	0.34	0.56	0.57	0.57	0.02	0.06	0.63	0.23
d, Delay for Lane Group [s/veh]	39.53	11.89	11.97	29.44	12.10	12.10	20.21	16.58	24.24	17.59
Lane Group LOS	D	B	B	C	B	B	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.12	2.31	2.25	1.15	3.65	3.65	0.07	0.25	3.39	0.91
50th-Percentile Queue Length [ft/ln]	2.88	57.84	56.22	28.69	91.28	91.21	1.70	6.27	84.78	22.86
95th-Percentile Queue Length [veh/ln]	0.21	4.16	4.05	2.07	6.57	6.57	0.12	0.45	6.10	1.65
95th-Percentile Queue Length [ft/ln]	5.18	104.12	101.20	51.65	164.31	164.18	3.06	11.28	152.61	41.16

Movement, Approach, & Intersection Results

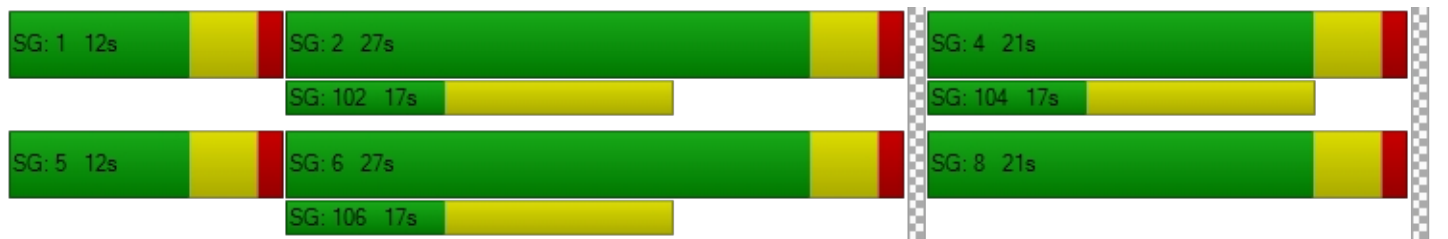
d_M, Delay for Movement [s/veh]	39.53	11.92	11.97	29.44	12.10	12.10	20.21	16.58	16.58	24.24	17.59	17.59
Movement LOS	D	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	12.19			13.38			17.28			22.53		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	14.71											
Intersection LOS	B											
Intersection V/C	0.548											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
l_p,int, Pedestrian LOS Score for Intersection	0.000			2.900			1.930			2.143		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	767			767			567			567		
d_b, Bicycle Delay [s]	11.41			11.41			15.41			15.41		
l_b,int, Bicycle LOS Score for Intersection	1.998			2.522			1.611			2.155		
Bicycle LOS	A			B			A			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	45.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.157

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	3	3	93	8	1037	549	2224	16	8	2058	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	27	84	0	0	0	0	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]	16	3	3	98	8	1064	633	2224	16	8	2058	55
Peak Hour Factor	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790
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]	5	1	1	28	2	303	180	633	5	2	585	16
Total Analysis Volume [veh/h]	18	3	3	111	9	1210	720	2530	18	9	2341	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	124
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	52	98	0	11	57	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	124	124	124	124	124	124	124	124	124
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	63	48	99	99	2	53	53
g / C, Green / Cycle	0.09	0.09	0.51	0.39	0.80	0.80	0.02	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.22	0.09	0.45	0.42	0.49	0.49	0.01	0.46	0.46
s, saturation flow rate [veh/h]	110	1397	2708	1714	3427	1794	1714	3427	1776
c, Capacity [veh/h]	60	177	1371	663	2745	1437	26	1471	762
d1, Uniform Delay [s]	57.87	56.53	27.33	38.00	4.79	4.81	60.43	35.38	35.38
k, delay calibration	0.50	0.50	0.15	0.50	0.11	0.19	0.11	0.12	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]	18.40	18.81	2.82	60.41	0.22	0.73	7.61	37.23	56.43
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	0.40	0.68	0.88	1.09	0.61	0.61	0.34	1.07	1.08
d, Delay for Lane Group [s/veh]	76.27	75.34	30.15	98.42	5.01	5.54	68.04	72.61	91.80
Lane Group LOS	E	E	C	F	A	A	E	F	F
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.07	4.58	15.21	30.12	5.48	5.98	0.33	28.39	33.49
50th-Percentile Queue Length [ft/ln]	26.79	114.58	380.22	752.89	136.99	149.47	8.25	709.71	837.19
95th-Percentile Queue Length [veh/ln]	1.93	8.09	21.60	41.45	9.32	9.99	0.59	39.12	45.51
95th-Percentile Queue Length [ft/ln]	48.22	202.36	540.11	1036.33	232.97	249.72	14.85	978.07	1137.82

Movement, Approach, & Intersection Results

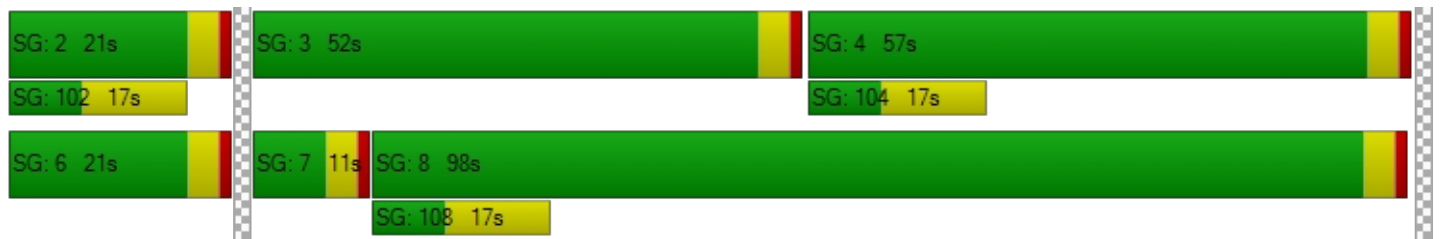
d_M, Delay for Movement [s/veh]	76.27	76.27	76.27	75.34	75.34	30.15	98.42	5.19	5.54	68.04	78.85	91.80
Movement LOS	E	E	E	E	E	C	F	A	A	E	F	F
d_A, Approach Delay [s/veh]	76.27			34.23			25.73			79.14		
Approach LOS	E			C			C			E		
d_I, Intersection Delay [s/veh]	45.83											
Intersection LOS	D											
Intersection V/C	1.157											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	51.49	51.49	0.00	51.49
I_p,int, Pedestrian LOS Score for Intersection	1.755	2.934	0.000	3.824
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	274	274	1516	855
d_b, Bicycle Delay [s]	46.17	46.17	3.63	20.33
I_b,int, Bicycle LOS Score for Intersection	1.599	3.754	3.357	2.887
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	2.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.286

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	8	1	4	322	679	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	18	59	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]	8	1	4	340	738	8
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	102	221	2
Total Analysis Volume [veh/h]	10	1	5	407	883	10
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	19	97	78	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	90	90	90	90	90
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]	2	1	80	75	75
g / C, Green / Cycle	0.02	0.01	0.89	0.84	0.84
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.12	0.26	0.01
s, saturation flow rate [veh/h]	1696	1714	3427	3427	1530
c, Capacity [veh/h]	33	17	3056	2870	1281
d1, Uniform Delay [s]	43.57	44.26	0.60	1.60	1.20
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.86	9.54	0.09	0.28	0.01
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	0.34	0.30	0.13	0.31	0.01
d, Delay for Lane Group [s/veh]	49.43	53.80	0.69	1.88	1.21
Lane Group LOS	D	D	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.30	0.15	0.04	0.13	0.00
50th-Percentile Queue Length [ft/ln]	7.39	3.71	0.96	3.15	0.10
95th-Percentile Queue Length [veh/ln]	0.53	0.27	0.07	0.23	0.01
95th-Percentile Queue Length [ft/ln]	13.30	6.68	1.73	5.66	0.19

Movement, Approach, & Intersection Results

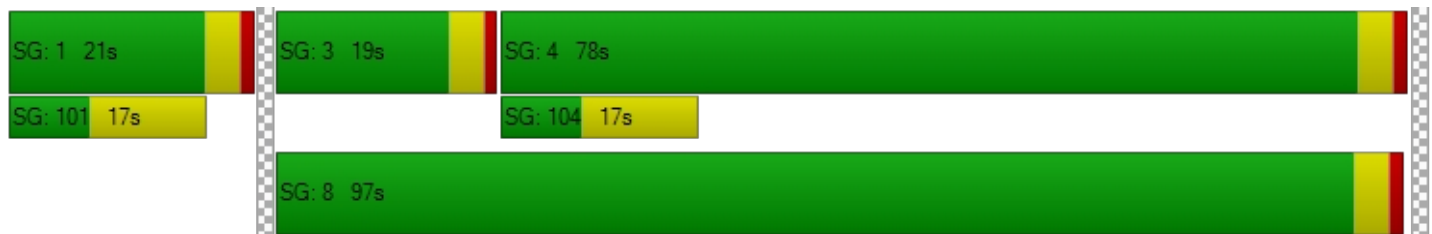
d_M, Delay for Movement [s/veh]	49.43	49.43	53.80	0.69	1.88	1.21
Movement LOS	D	D	D	A	A	A
d_A, Approach Delay [s/veh]	49.43		1.33		1.87	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.10					
Intersection LOS	A					
Intersection V/C	0.286					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	34.67	34.67	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.725	2.838	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.151	4.472	4.869
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.666

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	86	512	84	88	499	276	206	270	106	198	428	129
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	0	0	0	25	8	5	5	0	17	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]	103	512	84	88	499	301	214	275	111	198	445	129
Peak Hour Factor	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280
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	155	25	27	151	91	65	83	34	60	134	39
Total Analysis Volume [veh/h]	124	618	101	106	603	364	258	332	134	239	537	156
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	68
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	11	21	0	11	21	0	15	25	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	68	68	68	68	68	68	68	68	68	68	68	68
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]	6	23	23	6	23	23	7	12	12	11	16	16
g / C, Green / Cycle	0.09	0.34	0.34	0.09	0.33	0.33	0.10	0.18	0.18	0.16	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.07	0.18	0.07	0.06	0.18	0.24	0.08	0.10	0.09	0.14	0.20	0.20
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1662
c, Capacity [veh/h]	162	1145	511	156	1131	505	346	612	273	278	426	394
d1, Uniform Delay [s]	30.15	18.47	16.21	30.08	18.59	20.10	29.71	25.50	25.24	27.84	24.85	24.85
k, delay calibration	0.11	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]	7.22	1.83	0.87	5.15	1.80	8.61	3.22	0.75	1.36	7.63	4.65	5.02
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	0.76	0.54	0.20	0.68	0.53	0.72	0.75	0.54	0.49	0.86	0.84	0.84
d, Delay for Lane Group [s/veh]	37.37	20.29	17.07	35.23	20.39	28.71	32.93	26.25	26.60	35.47	29.50	29.86
Lane Group LOS	D	C	B	D	C	C	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.08	3.52	1.05	1.71	3.44	5.33	2.03	2.27	1.86	4.00	5.45	5.08
50th-Percentile Queue Length [ft/ln]	52.02	87.93	26.21	42.86	86.06	133.31	50.72	56.71	46.62	100.10	136.33	126.93
95th-Percentile Queue Length [veh/ln]	3.75	6.33	1.89	3.09	6.20	9.12	3.65	4.08	3.36	7.21	9.28	8.77
95th-Percentile Queue Length [ft/ln]	93.63	158.28	47.18	77.15	154.91	227.99	91.30	102.07	83.91	180.17	232.07	219.31

Movement, Approach, & Intersection Results

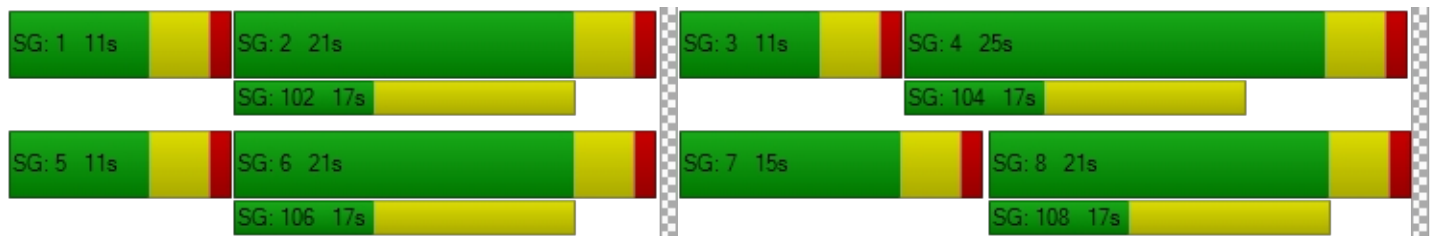
d_M, Delay for Movement [s/veh]	37.37	20.29	17.07	35.23	20.39	28.71	32.93	26.25	26.60	35.47	29.62	29.86
Movement LOS	D	C	B	D	C	C	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	22.42			24.68			28.70			31.16		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	26.65											
Intersection LOS	C											
Intersection V/C	0.666											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	23.89	23.89	23.89	23.89
I_p,int, Pedestrian LOS Score for Intersection	2.979	3.065	3.030	2.715
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	500	500	618
d_b, Bicycle Delay [s]	19.13	19.13	19.13	16.24
I_b,int, Bicycle LOS Score for Intersection	2.255	2.445	2.157	2.329
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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↑ ↑			↔ ↑ ↑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	41	19	2	19	53	1782	2	37	1711	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	84	0	0	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	41	19	2	19	53	1866	2	37	1738	51
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]	0	0	11	5	1	5	14	502	1	10	467	14
Total Analysis Volume [veh/h]	1	0	44	20	2	20	57	2006	2	40	1869	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.21	2.60	1.86	0.09	0.41	0.02	0.00	0.32	0.02	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	26.75	2694.53	5580.72	21.94	47.36	0.00	0.00	45.88	0.00	0.00
Movement LOS	F	F	D	F	F	C	E	A	A	E	A	A
95th-Percentile Queue Length [veh/ln]	0.68	0.68	0.77	4.13	4.13	0.28	1.76	0.00	0.00	1.24	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.95	16.95	19.27	103.28	103.28	6.99	44.05	0.00	0.00	30.96	0.00	0.00
d_A, Approach Delay [s/veh]	248.38			1559.31			1.31			0.93		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	19.73											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	23.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.942

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	897	41	62	1753	1810	1130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	84	27	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]	897	41	62	1837	1837	1130
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	251	11	17	515	515	317
Total Analysis Volume [veh/h]	1006	46	70	2059	2059	1267
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	93
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	33	0	17	60	43	43
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	93	93	93	93	93	93
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	0.00
g_i, Effective Green Time [s]	29	29	6	56	46	79
g / C, Green / Cycle	0.31	0.31	0.06	0.60	0.50	0.85
(v / s)_i Volume / Saturation Flow Rate	0.30	0.03	0.04	0.42	0.42	0.83
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1038	477	110	2953	2428	1301
d1, Uniform Delay [s]	31.58	22.72	42.49	12.69	20.43	6.09
k, delay calibration	0.11	0.11	0.11	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]	7.62	0.09	6.03	1.39	3.91	19.50
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	0.97	0.10	0.64	0.70	0.85	0.97
d, Delay for Lane Group [s/veh]	39.20	22.80	48.52	14.08	24.34	25.59
Lane Group LOS	D	C	D	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	11.35	0.69	1.69	8.32	12.08	9.23
50th-Percentile Queue Length [ft/ln]	283.67	17.14	42.24	208.08	301.91	230.83
95th-Percentile Queue Length [veh/ln]	16.87	1.23	3.04	13.05	17.78	14.22
95th-Percentile Queue Length [ft/ln]	421.78	30.86	76.03	326.36	444.39	355.41

Movement, Approach, & Intersection Results

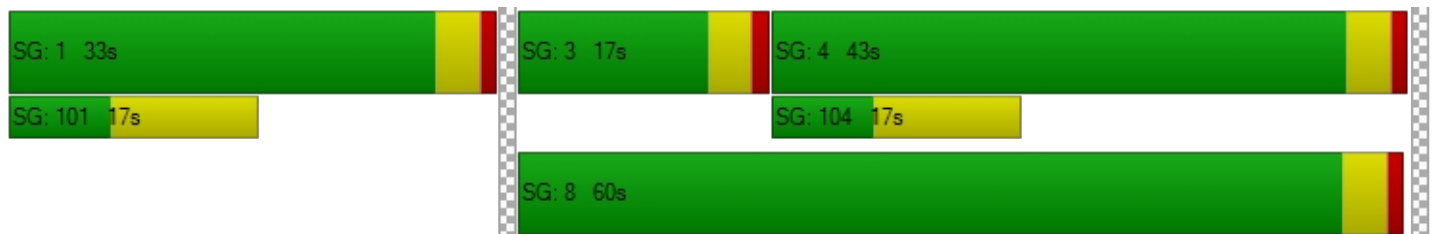
d_M, Delay for Movement [s/veh]	39.20	22.80	48.52	14.08	24.34	25.59
Movement LOS	D	C	D	B	C	C
d_A, Approach Delay [s/veh]	38.48		15.21		24.81	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	23.88					
Intersection LOS	C					
Intersection V/C	0.942					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	36.15	36.15	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.006	3.501	0.000
Crosswalk LOS	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	46.50	46.50	46.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.303	5.962
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	28.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.109

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	326	690	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	35	109	0	0	59
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]	18	35	109	326	690	59
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	9	29	86	182	16
Total Analysis Volume [veh/h]	19	37	115	343	726	62
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	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.06	0.14	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	28.25	10.97	9.96	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.36	0.18	0.47	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.04	4.59	11.83	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.84		2.50		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.60					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	35.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.701

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	422	37	118	44	41	92	100	1782	434	149	1601	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	0	17	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]	422	37	118	44	41	92	100	1787	434	149	1618	40
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	10	33	12	12	26	28	505	123	42	457	11
Total Analysis Volume [veh/h]	477	42	133	50	46	104	113	2019	490	168	1828	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	32	9	9	6	30	43	7	30	30
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.09	0.43	0.61	0.10	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.15	0.15	0.09	0.06	0.07	0.07	0.41	0.32	0.05	0.36	0.36
s, saturation flow rate [veh/h]	1714	1728	1530	1629	1530	1714	4903	1530	3329	3427	1778
c, Capacity [veh/h]	212	214	703	280	190	155	2093	930	324	1487	771
d1, Uniform Delay [s]	30.77	30.77	11.25	28.55	28.93	31.11	19.61	7.95	30.14	17.58	17.60
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.34
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]	132.69	132.08	0.60	3.32	10.94	6.38	4.03	2.13	1.28	1.25	7.03
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
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	1.22	1.22	0.19	0.34	0.55	0.73	0.96	0.53	0.52	0.83	0.83
d, Delay for Lane Group [s/veh]	163.46	162.86	11.85	31.87	39.87	37.49	23.64	10.08	31.42	18.83	24.64
Lane Group LOS	F	F	B	C	D	D	C	B	C	B	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	11.27	11.32	1.23	1.66	2.11	1.99	9.46	3.48	1.30	7.42	8.96
50th-Percentile Queue Length [ft/ln]	281.81	283.08	30.85	41.39	52.72	49.72	236.38	87.00	32.47	185.51	224.05
95th-Percentile Queue Length [veh/ln]	18.12	18.19	2.22	2.98	3.80	3.58	14.50	6.26	2.34	11.89	13.87
95th-Percentile Queue Length [ft/ln]	453.11	454.72	55.53	74.51	94.89	89.50	362.45	156.60	58.44	297.19	346.79

Movement, Approach, & Intersection Results

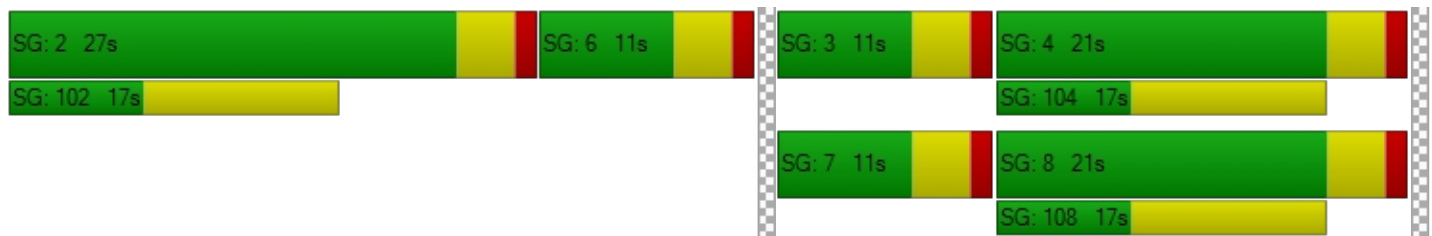
d_M, Delay for Movement [s/veh]	163.19	162.86	11.85	31.87	31.87	39.87	37.49	23.64	10.08	31.42	20.72	24.64
Movement LOS	F	F	B	C	C	D	D	C	B	C	C	C
d_A, Approach Delay [s/veh]	132.29			36.03			21.70			21.69		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	35.29											
Intersection LOS	D											
Intersection V/C	0.701											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.550	2.100	0.000	3.596
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.635	1.890	3.002	2.682
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 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	41.127

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	110.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	130	86	1751	196	91	1657
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	0	17
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]	130	86	1756	196	91	1674
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	24	492	55	25	469
Total Analysis Volume [veh/h]	146	96	1966	219	102	1875
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	41.13	0.44	0.02	0.00	0.99	0.02
d_M, Delay for Movement [s/veh]	10000.00	34.39	0.00	0.00	161.41	0.00
Movement LOS	F	D	A	A	F	A
95th-Percentile Queue Length [veh/ln]	20.48	2.11	0.00	0.00	6.10	0.00
95th-Percentile Queue Length [ft/ln]	511.99	52.66	0.00	0.00	152.56	0.00
d_A, Approach Delay [s/veh]	6046.70		0.00		8.33	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	336.00					
Intersection LOS	F					

Chateau Senior Living Facility

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Scenario 2 Opening Year (2020) With Project

Report File: G:\...\IPM OYP.pdf

10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.895	40.8	D
2	Ridgecrest Road (NS) at Chinquapin Drive (EW)	Two-way stop	HCM 6th Edition	WB Left	0.119	29.1	D
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.003	19.7	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	7.525	16.3	B
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.335	8.7	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	1.047	40.5	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.178	2.9	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.551	23.4	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	33.763	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.860	22.4	C
11	Project East Dwy (NS) at Yates Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.220	21.1	C
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.790	66.2	E
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	40.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.895

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	158	439	422	412	546	134	132	1359	99	355	1254	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	12	0	0	0	16	0	26	34	26
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	439	434	424	546	134	132	1375	99	381	1288	258
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	40	111	110	107	138	34	33	348	25	96	326	65
Total Analysis Volume [veh/h]	160	444	439	429	553	136	134	1392	100	386	1304	261
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	30	0	16	35	0	11	29	29	15	33	33
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	90	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	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	0.00
g_i, Effective Green Time [s]	7	26	26	12	31	31	7	25	36	11	29	45
g / C, Green / Cycle	0.08	0.29	0.29	0.13	0.35	0.35	0.08	0.28	0.40	0.12	0.32	0.50
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.29	0.13	0.20	0.20	0.04	0.28	0.07	0.12	0.27	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	255	998	445	444	626	584	251	1350	606	407	1581	765
d1, Uniform Delay [s]	40.33	25.99	31.72	38.81	23.86	23.87	40.11	32.63	17.55	39.23	28.16	13.56
k, delay calibration	0.11	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]	2.53	1.44	39.19	13.23	3.72	3.99	1.77	20.52	0.13	11.57	1.14	0.26
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	0.63	0.44	0.99	0.97	0.57	0.57	0.53	1.03	0.16	0.95	0.82	0.34
d, Delay for Lane Group [s/veh]	42.86	27.43	70.92	52.04	27.58	27.86	41.88	53.15	17.68	50.80	29.30	13.82
Lane Group LOS	D	C	E	D	C	C	D	F	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.71	3.76	13.44	5.33	6.42	6.04	1.41	11.45	1.23	4.67	8.07	2.86
50th-Percentile Queue Length [ft/ln]	42.79	93.98	336.08	133.27	160.40	150.98	35.28	286.13	30.70	116.70	201.81	71.44
95th-Percentile Queue Length [veh/ln]	3.08	6.77	19.46	9.12	10.57	10.07	2.54	17.30	2.21	8.21	12.73	5.14
95th-Percentile Queue Length [ft/ln]	77.03	169.17	486.40	227.93	264.26	251.74	63.50	432.46	55.26	205.28	318.30	128.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	42.86	27.43	70.92	52.04	27.68	27.86	41.88	53.15	17.68	50.80	29.30	13.82
Movement LOS	D	C	E	D	C	C	D	F	B	D	C	B
d_A, Approach Delay [s/veh]	48.10			37.05			50.04			31.48		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	40.85											
Intersection LOS	D											
Intersection V/C	0.895											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	34.67	34.67	34.67	34.67
I_p,int, Pedestrian LOS Score for Intersection	3.077	2.876	3.431	3.533
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	578	689	556	644
d_b, Bicycle Delay [s]	22.76	19.34	23.47	20.67
I_b,int, Bicycle LOS Score for Intersection	2.420	2.482	2.454	2.633
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 2: Ridgecrest Road (NS) at Chinquapin Drive (EW)

Control Type:	Two-way stop	Delay (sec / veh):	29.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.119

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	433	41	76	405	19	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	52	0	0	112	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]	485	41	76	517	19	17
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	130	11	20	139	5	5
Total Analysis Volume [veh/h]	520	44	82	555	20	18
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	0.08	0.01	0.12	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	8.85	0.00	29.06	14.19
Movement LOS	A	A	A	A	D	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.24	0.24	0.53	0.53
95th-Percentile Queue Length [ft/ln]	0.00	0.00	6.04	6.04	13.22	13.22
d_A, Approach Delay [s/veh]	0.00		1.14		22.02	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.26					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	19.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	4	477	110	52	414	5	2	0	1	78	1	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	52	0	0	112	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	529	110	52	526	5	2	0	1	78	1	23
Peak Hour Factor	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970
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	147	31	14	147	1	1	0	0	22	0	6
Total Analysis Volume [veh/h]	4	590	123	58	586	6	2	0	1	87	1	26
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.06	0.01	0.00	0.01	0.00	0.00	0.25	0.00	0.04
d_M, Delay for Movement [s/veh]	8.64	0.00	0.00	9.29	0.00	0.00	15.98	17.54	10.10	18.61	19.75	10.81
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.21	0.00	0.00	0.02	0.02	0.00	0.97	0.97	0.13
95th-Percentile Queue Length [ft/ln]	0.30	0.00	0.00	5.18	0.00	0.00	0.46	0.46	0.11	24.33	24.33	3.14
d_A, Approach Delay [s/veh]	0.05			0.83			14.02			16.84		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.71											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	16.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	7.525

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	7	565	91	40	471	6	3	3	8	63	4	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	48	0	9	103	0	0	0	0	0	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	613	91	49	574	6	3	3	8	63	4	20
Peak Hour Factor	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110	0.9110
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	168	25	13	158	2	1	1	2	17	1	5
Total Analysis Volume [veh/h]	8	673	100	54	630	7	3	3	9	69	4	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	11	21	0	0	28	0	0	28	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	25	25	4	28	28	19	19	19	19
g / C, Green / Cycle	0.01	0.41	0.41	0.07	0.47	0.47	0.32	0.32	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.22	0.22	0.03	0.18	0.18	0.03	0.01	6.52	0.01
s, saturation flow rate [veh/h]	1714	1800	1720	1714	1800	1793	190	1530	11	1530
c, Capacity [veh/h]	25	746	713	119	845	842	150	484	120	484
d1, Uniform Delay [s]	29.27	13.17	13.17	26.83	10.27	10.27	16.48	14.12	29.10	14.24
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	7.17	2.68	2.81	2.71	1.29	1.29	0.11	0.02	20.70	0.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.32	0.53	0.53	0.45	0.38	0.38	0.04	0.02	0.61	0.05
d, Delay for Lane Group [s/veh]	36.44	15.84	15.98	29.54	11.55	11.56	16.59	14.13	49.80	14.28
Lane Group LOS	D	B	B	C	B	B	B	B	D	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.15	3.46	3.34	0.73	2.18	2.17	0.06	0.08	1.71	0.20
50th-Percentile Queue Length [ft/ln]	3.74	86.59	83.54	18.25	54.45	54.29	1.43	2.03	42.85	5.00
95th-Percentile Queue Length [veh/ln]	0.27	6.23	6.02	1.31	3.92	3.91	0.10	0.15	3.09	0.36
95th-Percentile Queue Length [ft/ln]	6.73	155.86	150.38	32.85	98.00	97.72	2.57	3.65	77.14	9.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.44	15.90	15.98	29.54	11.56	11.56	16.59	16.59	14.13	49.80	49.80	14.28
Movement LOS	D	B	B	C	B	B	B	B	B	D	D	B
d_A, Approach Delay [s/veh]	16.12			12.96			15.11			41.58		
Approach LOS	B			B			B			D		
d_I, Intersection Delay [s/veh]	16.26											
Intersection LOS	B											
Intersection V/C	7.525											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
l_p,int, Pedestrian LOS Score for Intersection	2.908			2.778			1.927			1.986		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			800			800		
d_b, Bicycle Delay [s]	15.41			15.41			10.80			10.80		
l_b,int, Bicycle LOS Score for Intersection	2.204			2.130			1.584			1.716		
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 5: Ridgcrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.335

Intersection Setup

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
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]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	11	658	42	25	541	3	5	3	12	78	6	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	48	0	0	103	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]	11	706	42	25	644	3	5	3	12	78	6	67
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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]	3	192	11	7	175	1	1	1	3	21	2	18
Total Analysis Volume [veh/h]	12	767	46	27	700	3	5	3	13	85	7	73
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	28	0	11	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65
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	2.00	0.00	2.00	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]	1	42	42	3	43	43	8	8	8	8
g / C, Green / Cycle	0.02	0.65	0.65	0.04	0.67	0.67	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.01	0.23	0.23	0.02	0.20	0.20	0.00	0.01	0.06	0.05
s, saturation flow rate [veh/h]	1714	1800	1764	1714	1800	1797	1339	1574	1419	1550
c, Capacity [veh/h]	36	1166	1143	72	1203	1201	171	198	229	195
d1, Uniform Delay [s]	31.36	5.23	5.23	30.32	4.45	4.45	29.78	25.09	29.04	26.19
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	5.16	0.84	0.85	3.24	0.62	0.62	0.07	0.17	0.99	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	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	0.33	0.35	0.35	0.38	0.29	0.29	0.03	0.08	0.37	0.41
d, Delay for Lane Group [s/veh]	36.52	6.07	6.08	33.56	5.06	5.07	29.84	25.26	30.03	27.56
Lane Group LOS	D	A	A	C	A	A	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.23	2.25	2.21	0.43	1.07	1.07	0.08	0.22	1.26	1.12
50th-Percentile Queue Length [ft/ln]	5.84	56.23	55.28	10.72	26.86	26.83	1.91	5.53	31.40	28.07
95th-Percentile Queue Length [veh/ln]	0.42	4.05	3.98	0.77	1.93	1.93	0.14	0.40	2.26	2.02
95th-Percentile Queue Length [ft/ln]	10.52	101.21	99.51	19.30	48.35	48.30	3.44	9.96	56.53	50.53

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.52	6.07	6.08	33.56	5.07	5.07	29.84	25.26	25.26	30.03	27.56	27.56
Movement LOS	D	A	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	6.52			6.12			26.35			28.83		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	8.70											
Intersection LOS	A											
Intersection V/C	0.335											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
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	22.43	22.43	22.43
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.852	1.934	2.027
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	738	708	523	523
d_b, Bicycle Delay [s]	12.93	13.57	17.72	17.72
I_b,int, Bicycle LOS Score for Intersection	2.240	2.162	1.594	1.832
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 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	40.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.047

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	18	16	98	0	660	683	2710	16	1	1942	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	86	40	0	0	0	0	8
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]	16	18	16	115	0	746	723	2710	16	1	1942	67
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	5	4	29	0	191	185	693	4	0	496	17
Total Analysis Volume [veh/h]	16	18	16	118	0	763	739	2771	16	1	1986	69
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	55	97	0	12	54	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	72	51	101	101	0	50	50
g / C, Green / Cycle	0.13	0.13	0.55	0.39	0.78	0.78	0.00	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.12	0.17	0.28	0.43	0.53	0.53	0.00	0.40	0.40
s, saturation flow rate [veh/h]	413	689	2708	1714	3427	1795	1714	3427	1769
c, Capacity [veh/h]	90	145	1497	672	2659	1393	3	1322	682
d1, Uniform Delay [s]	51.34	58.61	18.10	39.50	6.99	7.01	64.78	39.93	39.93
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.25	0.11	0.11	0.49
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]	22.36	37.64	0.27	64.99	0.32	1.40	42.94	18.32	41.30
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	0.55	0.81	0.51	1.10	0.69	0.69	0.30	1.02	1.03
d, Delay for Lane Group [s/veh]	73.70	96.25	18.37	104.49	7.31	8.41	107.72	58.25	81.22
Lane Group LOS	E	F	B	F	A	A	F	F	F
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.04	5.35	6.73	32.47	9.00	9.91	0.07	23.41	28.53
50th-Percentile Queue Length [ft/ln]	51.02	133.87	168.29	811.75	225.10	247.65	1.82	585.36	713.24
95th-Percentile Queue Length [veh/ln]	3.67	9.15	10.99	44.71	13.92	15.07	0.13	31.90	38.03
95th-Percentile Queue Length [ft/ln]	91.84	228.75	274.66	1117.82	348.12	376.69	3.27	797.44	950.87

Movement, Approach, & Intersection Results

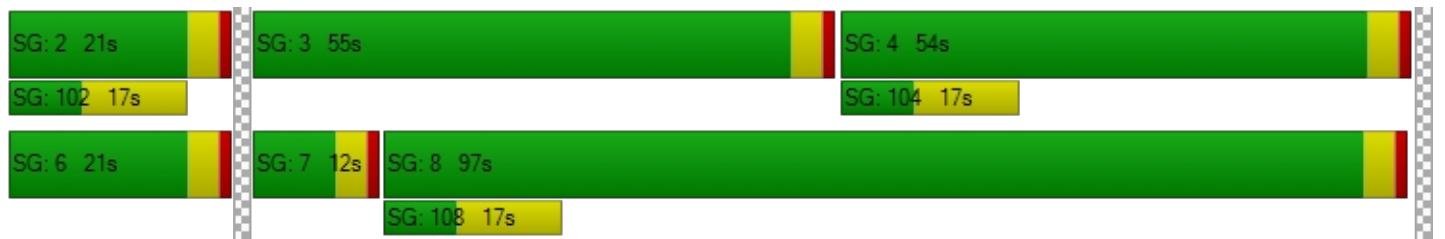
d_M, Delay for Movement [s/veh]	73.70	73.70	73.70	96.25	96.25	18.37	104.49	7.68	8.41	107.72	65.56	81.22
Movement LOS	E	E	E	F	F	B	F	A	A	F	E	F
d_A, Approach Delay [s/veh]	73.70			28.80			27.98			66.11		
Approach LOS	E			C			C			E		
d_I, Intersection Delay [s/veh]	40.48											
Intersection LOS	D											
Intersection V/C	1.047											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	54.47	54.47	0.00	54.47
I_p,int, Pedestrian LOS Score for Intersection	1.760	2.817	0.000	3.816
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	262	262	1431	769
d_b, Bicycle Delay [s]	49.11	49.11	5.27	24.62
I_b,int, Bicycle LOS Score for Intersection	1.642	3.013	3.499	2.690
Bicycle LOS	A	C	C	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	2.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.178

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	15	9	6	437	453	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	60	28	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]	15	9	6	497	481	8
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	2	131	126	2
Total Analysis Volume [veh/h]	16	9	6	523	506	8
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	102
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	18	47	29	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	102	102	102	102	102
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	1	90	85	85
g / C, Green / Cycle	0.04	0.01	0.89	0.84	0.84
(v / s)_i Volume / Saturation Flow Rate	0.02	0.00	0.15	0.15	0.01
s, saturation flow rate [veh/h]	1643	1714	3427	3427	1530
c, Capacity [veh/h]	58	19	3037	2864	1279
d1, Uniform Delay [s]	48.19	50.03	0.78	1.61	1.38
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.97	8.80	0.12	0.13	0.01
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	0.43	0.31	0.17	0.18	0.01
d, Delay for Lane Group [s/veh]	53.16	58.83	0.90	1.75	1.39
Lane Group LOS	D	E	A	A	A
Critical Lane Group	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.71	0.19	0.05	0.24	0.01
50th-Percentile Queue Length [ft/ln]	17.67	4.79	1.30	5.93	0.20
95th-Percentile Queue Length [veh/ln]	1.27	0.35	0.09	0.43	0.01
95th-Percentile Queue Length [ft/ln]	31.80	8.63	2.34	10.67	0.37

Movement, Approach, & Intersection Results

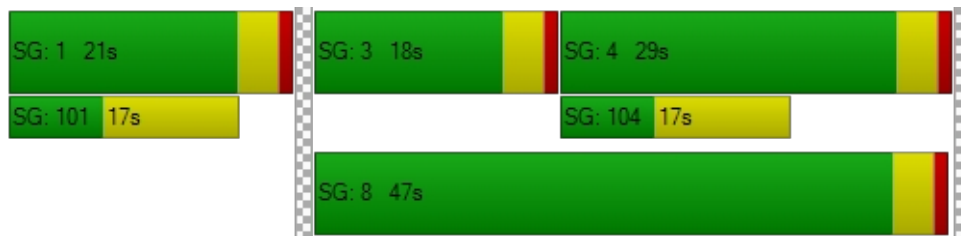
d_M, Delay for Movement [s/veh]	53.16	53.16	58.83	0.90	1.75	1.39
Movement LOS	D	D	E	A	A	A
d_A, Approach Delay [s/veh]	53.16		1.56		1.74	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.86					
Intersection LOS	A					
Intersection V/C	0.178					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	40.59	40.59	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.737	2.770	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	51.00	51.00	51.00
I_b,int, Bicycle LOS Score for Intersection	4.174	4.569	4.556
Bicycle LOS	D	E	E

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	23.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	85	553	175	177	736	193	182	290	65	159	232	78
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	0	0	12	26	17	17	0	8	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]	93	553	175	177	736	205	208	307	82	159	240	78
Peak Hour Factor	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290	0.9290
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	149	47	48	198	55	56	83	22	43	65	21
Total Analysis Volume [veh/h]	100	595	188	191	792	221	224	330	88	171	258	84
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	67
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	21	0	13	23	0	11	21	0	12	22	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	67	67	67	67	67	67	67	67	67	67	67	67
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]	6	25	25	9	28	28	7	9	9	8	10	10
g / C, Green / Cycle	0.09	0.37	0.37	0.13	0.42	0.42	0.10	0.13	0.13	0.12	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.06	0.17	0.12	0.11	0.23	0.14	0.07	0.10	0.06	0.10	0.10	0.10
s, saturation flow rate [veh/h]	1714	3427	1530	1714	3427	1530	3329	3427	1530	1714	1800	1652
c, Capacity [veh/h]	154	1280	572	231	1434	640	346	457	204	206	269	247
d1, Uniform Delay [s]	29.58	15.97	15.05	28.32	14.79	13.29	28.95	27.95	26.80	28.92	26.97	27.03
k, delay calibration	0.11	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]	4.51	1.21	1.54	7.26	1.54	1.47	2.04	2.17	1.44	8.30	2.71	3.11
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	0.65	0.46	0.33	0.83	0.55	0.35	0.65	0.72	0.43	0.83	0.66	0.67
d, Delay for Lane Group [s/veh]	34.08	17.18	16.58	35.59	16.32	14.76	30.99	30.13	28.24	37.22	29.68	30.14
Lane Group LOS	C	B	B	D	B	B	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.57	2.97	1.88	3.07	3.81	2.02	1.68	2.44	1.26	2.92	2.61	2.47
50th-Percentile Queue Length [ft/ln]	39.25	74.21	47.06	76.79	95.16	50.45	41.94	61.00	31.47	72.90	65.35	61.81
95th-Percentile Queue Length [veh/ln]	2.83	5.34	3.39	5.53	6.85	3.63	3.02	4.39	2.27	5.25	4.71	4.45
95th-Percentile Queue Length [ft/ln]	70.65	133.57	84.71	138.21	171.30	90.81	75.49	109.79	56.64	131.22	117.63	111.26

Movement, Approach, & Intersection Results

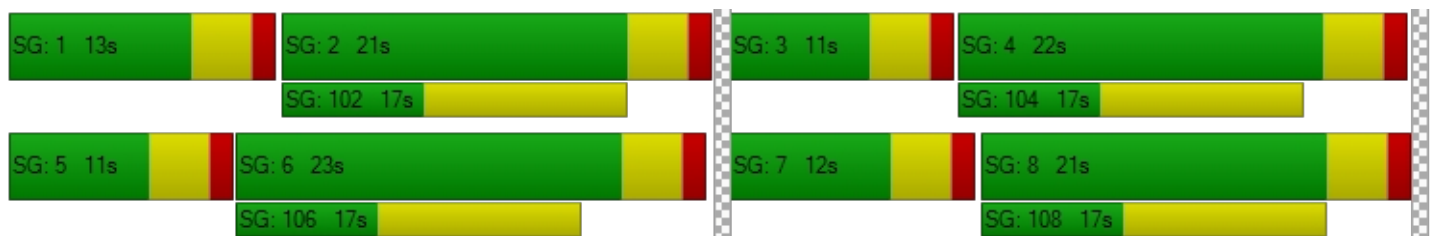
d_M, Delay for Movement [s/veh]	34.08	17.18	16.58	35.59	16.32	14.76	30.99	30.13	28.24	37.22	29.83	30.14
Movement LOS	C	B	B	D	B	B	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	18.97			19.09			30.17			32.34		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	23.35											
Intersection LOS	C											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	23.40	23.40	23.40	23.40
I_p,int, Pedestrian LOS Score for Intersection	3.013	3.064	2.932	2.641
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	507	567	507	537
d_b, Bicycle Delay [s]	18.66	17.19	18.66	17.92
I_b,int, Bicycle LOS Score for Intersection	2.288	2.553	2.089	1.983
Bicycle LOS	B	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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	33.763

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	72	70	0	53	30	2002	21	61	1845	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	40	0	0	86	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	72	70	0	53	30	2042	21	61	1931	51
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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	0	20	19	0	14	8	555	6	17	525	14
Total Analysis Volume [veh/h]	2	0	78	76	0	58	33	2220	23	66	2099	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.79	0.00	0.45	33.76	0.00	0.30	0.31	0.02	0.00	0.68	0.02	0.00
d_M, Delay for Movement [s/veh]	2104.14	10000.0	41.28	10000.0	10000.0	31.09	52.90	0.00	0.00	99.72	0.00	0.00
Movement LOS	F	F	E	F	F	D	F	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.83	0.83	2.07	11.66	11.66	1.19	1.18	0.00	0.00	3.42	0.00	0.00
95th-Percentile Queue Length [ft/ln]	20.86	20.86	51.70	291.56	291.56	29.69	29.60	0.00	0.00	85.50	0.00	0.00
d_A, Approach Delay [s/veh]	92.85			5685.10			0.77			2.96		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	165.09											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	22.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.860

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	1091	72	37	2127	1889	963
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	40	86	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]	1091	72	37	2167	1975	963
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	282	19	10	561	511	249
Total Analysis Volume [veh/h]	1129	75	38	2243	2045	997
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	81
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	32	0	12	49	37	37
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	81	81	81	81	81	81
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	0.00
g_i, Effective Green Time [s]	28	28	4	45	37	69
g / C, Green / Cycle	0.35	0.35	0.05	0.56	0.46	0.85
(v / s)_i Volume / Saturation Flow Rate	0.34	0.05	0.02	0.46	0.42	0.65
s, saturation flow rate [veh/h]	3329	1530	1714	4903	4903	1530
c, Capacity [veh/h]	1150	529	88	2726	2233	1301
d1, Uniform Delay [s]	26.28	18.27	37.33	14.74	20.62	2.61
k, delay calibration	0.11	0.11	0.11	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]	8.79	0.12	3.36	2.96	7.33	4.36
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	0.98	0.14	0.43	0.82	0.92	0.77
d, Delay for Lane Group [s/veh]	35.07	18.39	40.69	17.70	27.95	6.97
Lane Group LOS	D	B	D	B	C	A
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.94	0.90	0.77	9.62	11.67	1.58
50th-Percentile Queue Length [ft/ln]	273.57	22.46	19.35	240.40	291.71	39.38
95th-Percentile Queue Length [veh/ln]	16.37	1.62	1.39	14.70	17.27	2.84
95th-Percentile Queue Length [ft/ln]	409.20	40.44	34.83	367.54	431.77	70.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.07	18.39	40.69	17.70	27.95	6.97
Movement LOS	D	B	D	B	C	A
d_A, Approach Delay [s/veh]	34.04		18.08		21.08	
Approach LOS	C		B		C	
d_I, Intersection Delay [s/veh]	22.42					
Intersection LOS	C					
Intersection V/C	0.860					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	30.25	30.25	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.944	3.524	0.000
Crosswalk LOS	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	40.50	40.50	40.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.387	5.806
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (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):	0.220

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	450	481	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	112	52	0	0	28
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]	60	112	52	450	481	28
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	29	14	118	127	7
Total Analysis Volume [veh/h]	63	118	55	474	506	29
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	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.16	0.05	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	21.09	10.67	8.64	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.82	0.55	0.17	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	20.56	13.85	4.17	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.30		0.90		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	2.46					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	66.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.790

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	459	78	177	67	26	112	164	2189	475	136	1449	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	0	8	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]	459	78	177	67	26	112	164	2206	475	136	1457	42
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	122	21	47	18	7	30	44	588	127	36	388	11
Total Analysis Volume [veh/h]	489	83	189	71	28	119	175	2352	506	145	1553	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	26	26	0	11	0	12	21	21	12	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	32	8	8	8	30	42	8	30	30
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.11	0.43	0.60	0.11	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.17	0.17	0.12	0.07	0.08	0.10	0.48	0.33	0.04	0.31	0.31
s, saturation flow rate [veh/h]	1714	1738	1530	1372	1530	1714	4903	1530	3329	3427	1774
c, Capacity [veh/h]	200	203	702	248	179	197	2094	919	372	1452	752
d1, Uniform Delay [s]	31.03	31.03	11.72	29.91	29.72	30.64	20.13	8.37	28.97	16.84	16.84
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.25
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]	216.71	213.85	0.94	4.73	17.98	12.43	57.17	2.37	0.66	0.70	3.02
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	1.42	1.42	0.27	0.40	0.67	0.89	1.12	0.55	0.39	0.72	0.73
d, Delay for Lane Group [s/veh]	247.74	244.88	12.67	34.65	47.70	43.07	77.30	10.74	29.64	17.54	19.87
Lane Group LOS	F	F	B	C	D	D	F	B	C	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	15.29	15.34	1.84	1.82	2.68	3.35	20.32	3.78	1.08	5.95	6.65
50th-Percentile Queue Length [ft/ln]	382.27	383.56	45.94	45.49	67.06	83.69	507.92	94.58	26.91	148.81	166.31
95th-Percentile Queue Length [veh/ln]	24.60	24.65	3.31	3.28	4.83	6.03	29.98	6.81	1.94	9.95	10.88
95th-Percentile Queue Length [ft/ln]	615.05	616.19	82.70	81.88	120.70	150.65	749.43	170.25	48.44	248.84	272.06

Movement, Approach, & Intersection Results

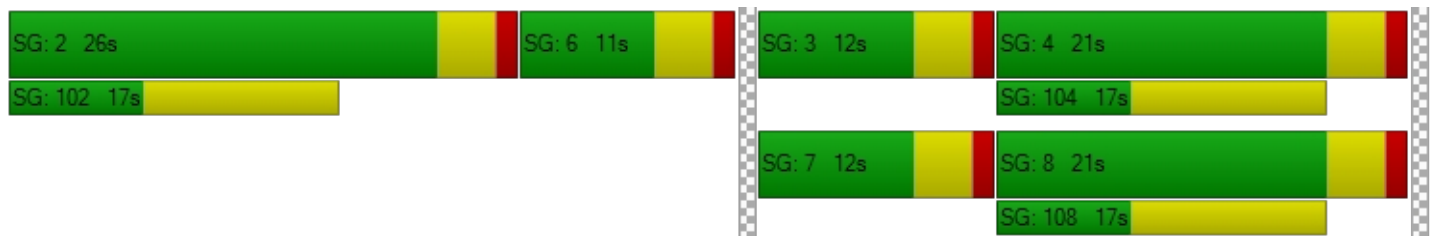
d_M, Delay for Movement [s/veh]	246.55	244.88	12.67	34.65	34.65	47.70	43.07	77.30	10.74	29.64	18.29	19.87
Movement LOS	F	F	B	C	C	D	D	F	B	C	B	B
d_A, Approach Delay [s/veh]	188.28			41.77			64.22			19.27		
Approach LOS	F			D			E			B		
d_I, Intersection Delay [s/veh]	66.16											
Intersection LOS	E											
Intersection V/C	0.790											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.567	2.152	0.000	3.644
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	629	200	486	486
d_b, Bicycle Delay [s]	16.46	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.815	1.919	3.228	2.518
Bicycle LOS	C	A	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	121	118	2155	276	106	1511
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	8
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]	121	118	2172	276	106	1519
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	31	580	74	28	405
Total Analysis Volume [veh/h]	129	126	2318	295	113	1621
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.76	0.02	0.00	1.81	0.02
d_M, Delay for Movement [s/veh]	10000.00	75.45	0.00	0.00	529.29	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	18.71	4.86	0.00	0.00	10.40	0.00
95th-Percentile Queue Length [ft/ln]	467.76	121.58	0.00	0.00	260.11	0.00
d_A, Approach Delay [s/veh]	5096.10		0.00		34.49	
Approach LOS	F		A		D	
d_I, Intersection Delay [s/veh]	295.38					
Intersection LOS	F					

Chateau Senior Living Facility

Vistro File: G:\...\IAM OY MIT.vistro
Report File: G:\...\IAM OYP MIT.pdfScenario 2 Opening Year (2020) With Project
10/7/2020**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.858	28.4	C
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Signalized	HCM 6th Edition	WB Left	0.544	5.4	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.728	35.5	D
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.430	3.0	A
11	Project East Dwy (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	SB Right	0.253	3.0	A
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.715	28.0	C
15	Peach Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.562	8.6	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: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.858

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	111	508	361	266	323	80	200	1284	102	318	1317	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	25	25	0	0	0	34	0	8	11	8
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	508	386	291	323	80	200	1318	102	326	1328	229
Peak Hour Factor	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740	0.8740
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]	32	145	110	83	92	23	57	377	29	93	380	66
Total Analysis Volume [veh/h]	127	581	442	333	370	92	229	1508	117	373	1519	262
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	74
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups			2,7						5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
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	1.0
Split [s]	12	21	21	12	21	0	12	30	30	11	29	29
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	3.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	10
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	2.0
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	2.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	No
Maximum Recall	No	No	No	No	No		No	No	No	No	No	No
Pedestrian Recall	No	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	C	L	C	R	L	C	R
C, Cycle Length [s]	74	74	74	74	74	74	74	74	74	74	74	74
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	0.00
g_i, Effective Green Time [s]	7	15	28	8	17	17	7	26	36	9	28	40
g / C, Green / Cycle	0.09	0.20	0.38	0.11	0.22	0.22	0.10	0.35	0.49	0.12	0.38	0.54
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.29	0.10	0.13	0.13	0.07	0.31	0.08	0.11	0.31	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1678	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	294	694	580	361	401	374	320	1717	753	409	1849	825
d1, Uniform Delay [s]	32.02	28.38	20.07	32.73	25.82	25.82	32.52	22.60	10.34	32.11	20.84	9.48
k, delay calibration	0.11	0.11	0.24	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	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]	1.00	2.77	4.57	9.90	1.42	1.53	3.00	6.74	0.09	8.15	4.26	0.22
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	0.43	0.84	0.76	0.92	0.60	0.60	0.72	0.88	0.16	0.91	0.82	0.32
d, Delay for Lane Group [s/veh]	33.03	31.15	24.64	42.63	27.23	27.35	35.53	29.34	10.43	40.26	25.10	9.70
Lane Group LOS	C	C	C	D	C	C	D	C	B	D	C	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.03	4.68	6.32	3.27	3.64	3.41	1.95	8.01	0.86	3.51	7.52	1.92
50th-Percentile Queue Length [ft/ln]	25.73	116.89	158.03	81.83	90.97	85.30	48.86	200.33	21.53	87.71	187.93	48.00
95th-Percentile Queue Length [veh/ln]	1.85	8.22	10.44	5.89	6.55	6.14	3.52	12.66	1.55	6.32	12.01	3.46
95th-Percentile Queue Length [ft/ln]	46.31	205.55	261.11	147.29	163.75	153.55	87.95	316.40	38.76	157.88	300.35	86.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.03	31.15	24.64	42.63	27.28	27.35	35.53	29.34	10.43	40.26	25.10	9.70
Movement LOS	C	C	C	D	C	C	D	C	B	D	C	A
d_A, Approach Delay [s/veh]	28.85			33.72			28.91			25.85		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.43											
Intersection LOS	C											
Intersection V/C	0.858											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	26.82			26.82			26.82			26.82		
I_p,int, Pedestrian LOS Score for Intersection	3.050			2.847			3.487			3.559		
Crosswalk LOS	C			C			C			D		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	459			459			703			676		
d_b, Bicycle Delay [s]	21.95			21.95			15.57			16.22		
I_b,int, Bicycle LOS Score for Intersection	2.508			2.215			2.579			2.744		
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (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):	0.544

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	291	28	31	659	60	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	109	0	0	35	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]	400	28	31	694	60	19
Peak Hour Factor	0.9010	0.9010	0.9010	0.9010	0.9010	0.9010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	111	8	9	193	17	5
Total Analysis Volume [veh/h]	444	31	34	770	67	21
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	2	0	0	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	48	0	0	48	12	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	C	C	C
C, Cycle Length [s]	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00
g_i, Effective Green Time [s]	47	47	5
g / C, Green / Cycle	0.78	0.78	0.09
(v / s)_i Volume / Saturation Flow Rate	0.27	0.46	0.05
s, saturation flow rate [veh/h]	1780	1766	1666
c, Capacity [veh/h]	1380	1432	152
d1, Uniform Delay [s]	2.07	2.74	26.16
k, delay calibration	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00
d2, Incremental Delay [s]	0.68	1.60	3.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.34	0.56	0.58
d, Delay for Lane Group [s/veh]	2.75	4.34	29.58
Lane Group LOS	A	A	C
Critical Lane Group	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.26	0.64	1.31
50th-Percentile Queue Length [ft/ln]	6.55	15.88	32.66
95th-Percentile Queue Length [veh/ln]	0.47	1.14	2.35
95th-Percentile Queue Length [ft/ln]	11.79	28.58	58.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	2.75	2.75	4.34	4.34	29.58	29.58
Movement LOS	A	A	A	A	C	C
d_A, Approach Delay [s/veh]	2.75		4.34		29.58	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	5.41					
Intersection LOS	A					
Intersection V/C	0.544					

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	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	4.916	5.459	4.278
Bicycle LOS	E	F	E

Sequence

Ring 1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	35.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rllr			rllr		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	3	3	93	8	1037	549	2224	16	8	2058	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	27	84	0	0	0	0	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]	16	3	3	98	8	1064	633	2224	16	8	2058	55
Peak Hour Factor	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790
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]	5	1	1	28	2	303	180	633	5	2	585	16
Total Analysis Volume [veh/h]	18	3	3	111	9	1210	720	2530	18	9	2341	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	96
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	24	56	0	19	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	96	96	96	96	96	96	96	96	96
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	41	20	65	65	2	47	47
g / C, Green / Cycle	0.18	0.18	0.43	0.21	0.68	0.68	0.02	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.03	0.08	0.45	0.22	0.49	0.49	0.01	0.46	0.46
s, saturation flow rate [veh/h]	742	1416	2708	3329	3427	1794	1714	3427	1776
c, Capacity [veh/h]	197	323	1151	686	2336	1222	28	1685	873
d1, Uniform Delay [s]	36.14	35.51	27.60	38.11	9.50	9.53	46.71	23.03	23.14
k, delay calibration	0.11	0.11	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]	0.27	0.71	33.59	30.82	1.91	3.64	6.62	11.47	19.48
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	0.37	1.05	1.05	0.72	0.72	0.33	0.94	0.94
d, Delay for Lane Group [s/veh]	36.42	36.22	61.19	68.93	11.41	13.17	53.33	34.50	42.62
Lane Group LOS	D	D	F	F	B	B	D	C	D
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.54	2.48	17.13	10.54	8.63	9.68	0.26	17.37	20.11
50th-Percentile Queue Length [ft/ln]	13.57	61.88	428.25	263.40	215.79	242.06	6.40	434.29	502.75
95th-Percentile Queue Length [veh/ln]	0.98	4.46	24.76	16.26	13.45	14.79	0.46	24.21	27.46
95th-Percentile Queue Length [ft/ln]	24.43	111.39	619.12	406.40	336.24	369.64	11.53	605.17	686.61

Movement, Approach, & Intersection Results

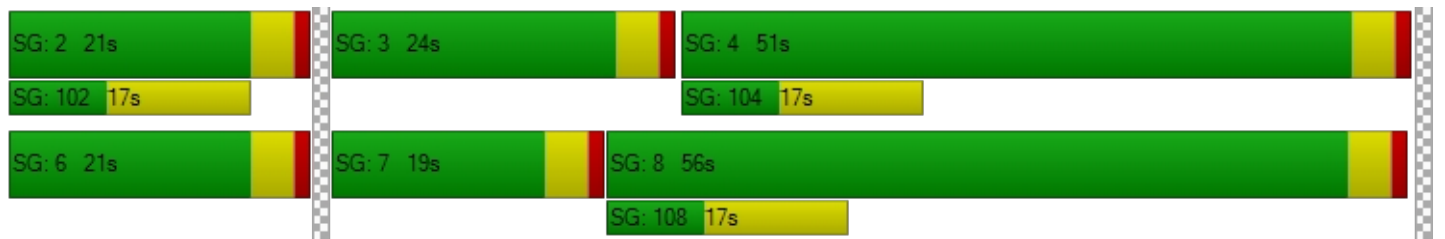
d_M, Delay for Movement [s/veh]	36.42	36.42	36.42	36.22	36.22	61.19	68.93	12.01	13.17	53.33	37.14	42.62
Movement LOS	D	D	D	D	D	F	F	B	B	D	D	D
d_A, Approach Delay [s/veh]	36.42			58.94			24.55			37.34		
Approach LOS	D			E			C			D		
d_I, Intersection Delay [s/veh]	35.48											
Intersection LOS	D											
Intersection V/C	0.728											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.63	37.63	0.00	37.63
I_p,int, Pedestrian LOS Score for Intersection	1.742	2.922	0.000	3.811
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	354	1083	979
d_b, Bicycle Delay [s]	32.51	32.51	10.08	12.51
I_b,int, Bicycle LOS Score for Intersection	1.599	3.754	3.357	2.887
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	3.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.430

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	41	19	2	19	53	1782	2	37	1711	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	84	0	0	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	41	19	2	19	53	1866	2	37	1738	51
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]	0	0	11	5	1	5	14	502	1	10	467	14
Total Analysis Volume [veh/h]	1	0	44	20	2	20	57	2006	2	40	1869	55
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	22	0	0	22	0	0	78	0	0	78	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
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	C	L	C	R
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]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	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]	5	5	5	5	87	87	87	87	87	87
g / C, Green / Cycle	0.05	0.05	0.05	0.05	0.87	0.87	0.87	0.87	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.01	0.01	0.23	0.38	0.38	0.18	0.38	0.04
s, saturation flow rate [veh/h]	1412	1530	1384	1551	249	3427	1799	217	4903	1530
c, Capacity [veh/h]	98	77	78	78	262	2980	1564	237	4264	1331
d1, Uniform Delay [s]	48.16	46.40	49.91	45.71	3.64	1.38	1.38	3.47	1.37	0.88
k, delay calibration	0.11	0.11	0.11	0.11	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.04	6.51	1.71	1.94	1.90	0.48	0.91	1.53	0.33	0.06
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	0.01	0.57	0.26	0.28	0.22	0.44	0.44	0.17	0.44	0.04
d, Delay for Lane Group [s/veh]	48.20	52.91	51.62	47.65	5.54	1.86	2.29	5.00	1.70	0.94
Lane Group LOS	D	D	D	D	A	A	A	A	A	A
Critical Lane Group	No	Yes	No	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.03	1.20	0.54	0.57	0.36	0.20	0.39	0.25	0.18	0.02
50th-Percentile Queue Length [ft/ln]	0.64	30.09	13.50	14.16	8.93	4.94	9.86	6.25	4.49	0.61
95th-Percentile Queue Length [veh/ln]	0.05	2.17	0.97	1.02	0.64	0.36	0.71	0.45	0.32	0.04
95th-Percentile Queue Length [ft/ln]	1.15	54.16	24.29	25.49	16.07	8.89	17.75	11.24	8.08	1.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.20	52.91	52.91	51.62	47.65	47.65	5.54	2.00	2.29	5.00	1.70	0.94
Movement LOS	D	D	D	D	D	D	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	52.80			49.54			2.10			1.75		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	2.97											
Intersection LOS	A											
Intersection V/C	0.430											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			0.000			0.000		
Crosswalk LOS	F			F			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	360			360			1480			1480		
d_b, Bicycle Delay [s]	33.62			33.62			3.38			3.38		
I_b,int, Bicycle LOS Score for Intersection	1.634			1.629			2.695			2.640		
Bicycle LOS	A			A			B			B		

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	3.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.253

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	326	690	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	35	109	0	0	59
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]	18	35	109	326	690	59
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	9	29	86	182	16
Total Analysis Volume [veh/h]	19	37	115	343	726	62
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	1	0	0	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	0	0	48	48	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	L	C	C	R
C, Cycle Length [s]	60	60	60	60	60	60
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	2.00	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]	4	4	48	48	48	48
g / C, Green / Cycle	0.07	0.07	0.80	0.80	0.80	0.80
(v / s)_i Volume / Saturation Flow Rate	0.01	0.02	0.16	0.10	0.21	0.04
s, saturation flow rate [veh/h]	1714	1530	740	3427	3427	1530
c, Capacity [veh/h]	124	111	637	2722	2722	1215
d1, Uniform Delay [s]	26.11	26.46	3.23	1.41	1.61	1.33
k, delay calibration	0.11	0.11	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]	0.56	1.74	0.62	0.10	0.24	0.08
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	0.15	0.33	0.18	0.13	0.27	0.05
d, Delay for Lane Group [s/veh]	26.67	28.20	3.85	1.51	1.85	1.41
Lane Group LOS	C	C	A	A	A	A
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.27	0.54	0.33	0.04	0.09	0.03
50th-Percentile Queue Length [ft/ln]	6.64	13.49	8.17	0.90	2.27	0.67
95th-Percentile Queue Length [veh/ln]	0.48	0.97	0.59	0.06	0.16	0.05
95th-Percentile Queue Length [ft/ln]	11.96	24.29	14.70	1.62	4.09	1.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	26.67	28.20	3.85	1.51	1.85	1.41
Movement LOS	C	C	A	A	A	A
d_A, Approach Delay [s/veh]	27.68		2.10		1.82	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	3.03					
Intersection LOS	A					
Intersection V/C	0.253					

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	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	4.132	4.510	4.783
Bicycle LOS	D	E	E

Sequence

Ring 1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	28.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTT			TT			TTT			TTT		
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	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	422	37	118	44	41	92	100	1782	434	149	1601	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	0	17	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]	422	37	118	44	41	92	100	1787	434	149	1618	40
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	10	33	12	12	26	28	505	123	42	457	11
Total Analysis Volume [veh/h]	477	42	133	50	46	104	113	2019	490	168	1828	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	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	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	18	23	0	12	17	0	34	44	44	11	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	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	2.0	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	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]	14	22	5	13	8	40	58	7	39	39
g / C, Green / Cycle	0.16	0.25	0.06	0.15	0.08	0.44	0.64	0.08	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.14	0.11	0.03	0.09	0.07	0.41	0.32	0.05	0.36	0.36
s, saturation flow rate [veh/h]	3329	1587	1714	1604	1714	4903	1530	3329	3427	1778
c, Capacity [veh/h]	518	392	95	236	144	2172	984	255	1493	775
d1, Uniform Delay [s]	37.46	28.70	41.34	36.14	40.43	23.73	8.43	40.41	22.38	22.40
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.42	0.11	0.11	0.33
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]	7.25	3.66	4.39	12.45	8.99	2.20	1.52	2.87	1.21	6.74
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	0.92	0.45	0.52	0.64	0.78	0.93	0.50	0.66	0.83	0.83
d, Delay for Lane Group [s/veh]	44.71	32.36	45.74	48.60	49.41	25.94	9.96	43.28	23.59	29.14
Lane Group LOS	D	C	D	D	D	C	A	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.60	3.54	1.16	3.79	2.70	12.28	4.27	1.83	10.38	11.99
50th-Percentile Queue Length [ft/ln]	139.91	88.44	29.02	94.87	67.48	306.93	106.69	45.72	259.48	299.76
95th-Percentile Queue Length [veh/ln]	9.48	6.37	2.09	6.83	4.86	18.02	7.66	3.29	15.66	17.67
95th-Percentile Queue Length [ft/ln]	236.91	159.18	52.23	170.76	121.46	450.59	191.38	82.30	391.57	441.73

Movement, Approach, & Intersection Results

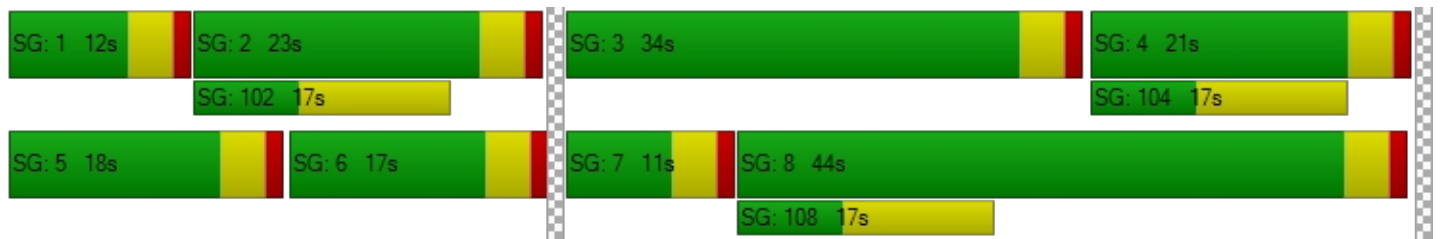
d_M, Delay for Movement [s/veh]	44.71	32.36	32.36	45.74	48.60	48.60	49.41	25.94	9.96	43.28	25.40	29.14
Movement LOS	D	C	C	D	D	D	D	C	A	D	C	C
d_A, Approach Delay [s/veh]	41.40			47.88			23.96			26.95		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	28.00											
Intersection LOS	C											
Intersection V/C	0.715											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	34.67	34.67	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	2.564	2.113	0.000	3.538
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	289	889	378
d_b, Bicycle Delay [s]	28.01	32.94	13.89	29.61
I_b,int, Bicycle LOS Score for Intersection	2.635	1.890	3.002	2.682
Bicycle LOS	B	A	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 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	110.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	130	86	1751	196	91	1657
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	0	17
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]	130	86	1756	196	91	1674
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	24	492	55	25	469
Total Analysis Volume [veh/h]	146	96	1966	219	102	1875
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
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]	13	0	25	0	32	57
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	R	C	R	L	C
C, Cycle Length [s]	70	70	70	70	70	70
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	44	44	6	54
g / C, Green / Cycle	0.11	0.11	0.63	0.63	0.09	0.77
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.40	0.14	0.06	0.38
s, saturation flow rate [veh/h]	1714	1530	4903	1530	1714	4903
c, Capacity [veh/h]	193	172	3081	962	150	3791
d1, Uniform Delay [s]	30.18	29.45	8.08	5.65	31.03	2.92
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.91	2.79	1.02	0.55	5.26	0.46
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	0.76	0.56	0.64	0.23	0.68	0.49
d, Delay for Lane Group [s/veh]	36.09	32.25	9.10	6.20	36.28	3.38
Lane Group LOS	D	C	A	A	D	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.51	1.54	4.28	1.08	1.76	1.01
50th-Percentile Queue Length [ft/ln]	62.65	38.47	106.91	26.95	44.00	25.26
95th-Percentile Queue Length [veh/ln]	4.51	2.77	7.67	1.94	3.17	1.82
95th-Percentile Queue Length [ft/ln]	112.78	69.24	191.70	48.52	79.20	45.47

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.09	32.25	9.10	6.20	36.28	3.38
Movement LOS	D	C	A	A	D	A
d_A, Approach Delay [s/veh]	34.56		8.81		5.08	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	8.55					
Intersection LOS	A					
Intersection V/C	0.562					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	35.00	35.00	35.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.334	5.220
Bicycle LOS	D	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Chateau Senior Living Facility

Vistro File: G:\...\IPM OY MIT.vistro
Report File: G:\...\IPM OYP MIT.pdf

Scenario 2 Opening Year (2020) With Project
10/7/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.843	29.6	C
2	Ridgecrest Road (NS) at Chinquapin Drive (EW)	Signalized	HCM 6th Edition	WB Left	0.442	3.4	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.891	26.4	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.515	5.6	A
11	Project East Dwy (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	SB Right	0.241	6.2	A
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.778	32.7	C
15	Peach Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.638	9.9	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: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	29.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	158	439	422	412	546	134	132	1359	99	355	1254	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	12	0	0	0	16	0	26	34	26
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	439	434	424	546	134	132	1375	99	381	1288	258
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	40	111	110	107	138	34	33	348	25	96	326	65
Total Analysis Volume [veh/h]	160	444	439	429	553	136	134	1392	100	386	1304	261
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	76
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups			2,7						5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
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	1.0
Split [s]	12	21	21	15	24	0	11	27	27	13	29	29
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	3.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	10
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	2.0
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	2.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	No
Maximum Recall	No	No	No	No	No		No	No	No	No	No	No
Pedestrian Recall	No	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	C	L	C	R	L	C	R
C, Cycle Length [s]	76	76	76	76	76	76	76	76	76	76	76	76
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	0.00
g_i, Effective Green Time [s]	7	13	30	11	17	17	7	23	34	13	29	44
g / C, Green / Cycle	0.09	0.17	0.39	0.14	0.23	0.23	0.09	0.30	0.45	0.17	0.38	0.58
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.29	0.13	0.20	0.20	0.04	0.28	0.07	0.12	0.27	0.17
s, saturation flow rate [veh/h]	3329	3427	1530	3329	1800	1679	3329	4903	1530	3329	4903	1530
c, Capacity [veh/h]	297	594	599	482	412	384	289	1498	685	552	1887	891
d1, Uniform Delay [s]	33.14	29.86	19.73	31.92	28.19	28.20	33.05	25.61	12.42	29.93	19.61	8.00
k, delay calibration	0.11	0.11	0.25	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	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]	1.52	1.91	3.99	5.81	5.53	5.95	1.16	11.55	0.10	1.61	2.10	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	0.54	0.75	0.73	0.89	0.86	0.87	0.46	0.93	0.15	0.70	0.69	0.29
d, Delay for Lane Group [s/veh]	34.65	31.77	23.72	37.73	33.72	34.15	34.21	37.15	12.52	31.54	21.71	8.18
Lane Group LOS	C	C	C	D	C	C	C	D	B	C	C	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.36	3.64	6.22	4.01	6.38	6.01	1.13	8.66	0.86	3.19	5.95	1.70
50th-Percentile Queue Length [ft/ln]	34.01	91.10	155.57	100.37	159.60	150.24	28.21	216.56	21.60	79.63	148.70	42.46
95th-Percentile Queue Length [veh/ln]	2.45	6.56	10.31	7.23	10.53	10.03	2.03	13.49	1.56	5.73	9.95	3.06
95th-Percentile Queue Length [ft/ln]	61.22	163.98	257.84	180.66	263.20	250.75	50.77	337.23	38.88	143.34	248.70	76.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.65	31.77	23.72	37.73	33.88	34.15	34.21	37.15	12.52	31.54	21.71	8.18
Movement LOS	C	C	C	D	C	C	C	D	B	C	C	A
d_A, Approach Delay [s/veh]	28.82			35.39			35.40			21.85		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	29.59											
Intersection LOS	C											
Intersection V/C	0.843											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	27.80	27.80	27.80	27.80
I_p,int, Pedestrian LOS Score for Intersection	3.068	2.868	3.422	3.524
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	526	605	658
d_b, Bicycle Delay [s]	22.90	20.63	18.48	17.11
I_b,int, Bicycle LOS Score for Intersection	2.420	2.482	2.454	2.633
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 2: Ridgecrest Road (NS) at Chinquapin Drive (EW)

Control Type:	Signalized	Delay (sec / veh):	3.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.442

Intersection Setup

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Yates Rd		Chinquapin Dr	
Base Volume Input [veh/h]	433	41	76	405	19	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	52	0	0	112	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]	485	41	76	517	19	17
Peak Hour Factor	0.9320	0.9320	0.9320	0.9320	0.9320	0.9320
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	130	11	20	139	5	5
Total Analysis Volume [veh/h]	520	44	82	555	20	18
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	69
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	2	0	0	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	57	0	0	57	12	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	C	C	C
C, Cycle Length [s]	69	69	69
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00
g_i, Effective Green Time [s]	57	57	4
g / C, Green / Cycle	0.83	0.83	0.05
(v / s)_i Volume / Saturation Flow Rate	0.32	0.39	0.02
s, saturation flow rate [veh/h]	1776	1621	1622
c, Capacity [veh/h]	1474	1404	88
d1, Uniform Delay [s]	1.46	1.54	31.62
k, delay calibration	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00
d2, Incremental Delay [s]	0.75	1.06	3.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.45	0.43
d, Delay for Lane Group [s/veh]	2.21	2.60	34.98
Lane Group LOS	A	A	C
Critical Lane Group	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.31	0.51	0.68
50th-Percentile Queue Length [ft/ln]	7.73	12.70	17.11
95th-Percentile Queue Length [veh/ln]	0.56	0.91	1.23
95th-Percentile Queue Length [ft/ln]	13.91	22.86	30.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	2.21	2.21	2.60	2.60	34.98	34.98
Movement LOS	A	A	A	A	C	C
d_A, Approach Delay [s/veh]	2.21		2.60		34.98	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.42					
Intersection LOS	A					
Intersection V/C	0.442					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	34.50	34.50	34.50
I_b,int, Bicycle LOS Score for Intersection	5.063	5.183	4.195
Bicycle LOS	F	F	D

Sequence

Ring 1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	26.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.891

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rllr			rllr		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	16	18	16	98	0	660	683	2710	16	1	1942	59
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	86	40	0	0	0	0	8
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]	16	18	16	115	0	746	723	2710	16	1	1942	67
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	5	4	29	0	191	185	693	4	0	496	17
Total Analysis Volume [veh/h]	16	18	16	118	0	763	739	2771	16	1	1986	69
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	96
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	24	56	0	19	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	96	96	96	96	96	96	96	96	96
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	41	20	67	67	0	47	47
g / C, Green / Cycle	0.18	0.18	0.43	0.21	0.70	0.70	0.00	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.11	0.17	0.28	0.22	0.53	0.53	0.00	0.40	0.40
s, saturation flow rate [veh/h]	447	709	2708	3329	3427	1795	1714	3427	1769
c, Capacity [veh/h]	129	201	1151	686	2382	1248	4	1685	870
d1, Uniform Delay [s]	34.32	39.16	22.09	38.11	9.56	9.59	47.79	20.52	20.55
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.91	2.72	0.66	41.25	2.43	4.60	25.12	4.18	7.89
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	0.39	0.59	0.66	1.08	0.77	0.77	0.23	0.80	0.81
d, Delay for Lane Group [s/veh]	36.22	41.88	22.75	79.36	11.99	14.19	72.91	24.69	28.44
Lane Group LOS	D	D	C	F	B	B	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.06	2.77	6.34	11.53	9.72	10.99	0.05	12.19	13.54
50th-Percentile Queue Length [ft/ln]	26.54	69.14	158.58	288.26	242.89	274.70	1.33	304.70	338.38
95th-Percentile Queue Length [veh/ln]	1.91	4.98	10.47	17.76	14.83	16.42	0.10	17.91	19.57
95th-Percentile Queue Length [ft/ln]	47.77	124.45	261.84	443.99	370.69	410.61	2.40	447.84	489.21

Movement, Approach, & Intersection Results

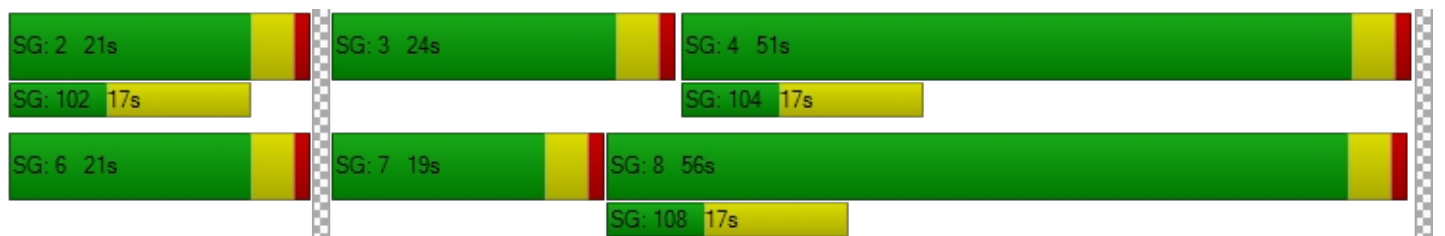
d_M, Delay for Movement [s/veh]	36.22	36.22	36.22	41.88	41.88	22.75	79.36	12.74	14.19	72.91	25.89	28.44
Movement LOS	D	D	D	D	D	C	F	B	B	E	C	C
d_A, Approach Delay [s/veh]	36.22			25.31			26.71			25.99		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	26.37											
Intersection LOS	C											
Intersection V/C	0.891											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.63	37.63	0.00	37.63
I_p,int, Pedestrian LOS Score for Intersection	1.745	2.802	0.000	3.801
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	354	1083	979
d_b, Bicycle Delay [s]	32.51	32.51	10.08	12.51
I_b,int, Bicycle LOS Score for Intersection	1.642	3.013	3.499	2.690
Bicycle LOS	A	C	C	B

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Apatite Ave (NS) at Bear Valley Rd (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):	0.515

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵			↵↵↵			↵↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	72	70	0	53	30	2002	21	61	1845	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	40	0	0	86	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	0	72	70	0	53	30	2042	21	61	1931	51
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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	0	20	19	0	14	8	555	6	17	525	14
Total Analysis Volume [veh/h]	2	0	78	76	0	58	33	2220	23	66	2099	55
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	73
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	MultiBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	50	0	0	50	0	0	23	0	0	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
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	C	L	C	R
C, Cycle Length [s]	73	73	73	73	73	73	73	73	73	73
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]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	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	57	57	57	57	57	57
g / C, Green / Cycle	0.11	0.11	0.11	0.11	0.78	0.78	0.78	0.78	0.78	0.78
(v / s)_i Volume / Saturation Flow Rate	0.00	0.05	0.06	0.04	0.17	0.43	0.43	0.38	0.43	0.04
s, saturation flow rate [veh/h]	1366	1530	1342	1530	198	3427	1791	172	4903	1530
c, Capacity [veh/h]	216	171	202	171	195	2666	1393	182	3815	1190
d1, Uniform Delay [s]	30.41	30.20	32.83	29.79	11.58	3.14	3.14	15.76	3.13	1.86
k, delay calibration	0.11	0.11	0.11	0.11	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.02	1.88	1.15	1.16	1.87	0.83	1.59	5.51	0.58	0.07
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	0.01	0.46	0.38	0.34	0.17	0.55	0.55	0.36	0.55	0.05
d, Delay for Lane Group [s/veh]	30.43	32.09	33.99	30.95	13.45	3.97	4.73	21.26	3.71	1.93
Lane Group LOS	C	C	C	C	B	A	A	C	A	A
Critical Lane Group	No	No	Yes	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.03	1.33	1.34	0.96	0.36	1.23	1.58	1.02	1.36	0.08
50th-Percentile Queue Length [ft/ln]	0.81	33.20	33.39	24.08	9.10	30.71	39.49	25.43	33.88	1.95
95th-Percentile Queue Length [veh/ln]	0.06	2.39	2.40	1.73	0.66	2.21	2.84	1.83	2.44	0.14
95th-Percentile Queue Length [ft/ln]	1.45	59.76	60.11	43.35	16.38	55.28	71.08	45.77	60.98	3.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.43	32.09	32.09	33.99	30.95	30.95	13.45	4.23	4.73	21.26	3.71	1.93
Movement LOS	C	C	C	C	C	C	B	A	A	C	A	A
d_A, Approach Delay [s/veh]	32.04			32.67			4.37			4.19		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	5.56											
Intersection LOS	A											
Intersection V/C	0.515											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			0.000			0.000		
Crosswalk LOS	F			F			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1260			1260			521			521		
d_b, Bicycle Delay [s]	4.99			4.99			19.97			19.97		
I_b,int, Bicycle LOS Score for Intersection	1.692			1.781			2.811			2.781		
Bicycle LOS	A			A			C			C		

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	6.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.241

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	450	481	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	112	52	0	0	28
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]	60	112	52	450	481	28
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	29	14	118	127	7
Total Analysis Volume [veh/h]	63	118	55	474	506	29
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	1	0	0	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	23	0	0	37	37	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	L	C	C	R
C, Cycle Length [s]	60	60	60	60	60	60
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	2.00	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]	7	7	45	45	45	45
g / C, Green / Cycle	0.11	0.11	0.75	0.75	0.75	0.75
(v / s)_i Volume / Saturation Flow Rate	0.04	0.08	0.06	0.14	0.15	0.02
s, saturation flow rate [veh/h]	1714	1530	907	3427	3427	1530
c, Capacity [veh/h]	195	174	725	2580	2580	1152
d1, Uniform Delay [s]	24.47	25.55	3.55	2.13	2.15	1.87
k, delay calibration	0.11	0.11	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]	0.94	4.53	0.20	0.16	0.17	0.04
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	0.32	0.68	0.08	0.18	0.20	0.03
d, Delay for Lane Group [s/veh]	25.42	30.07	3.75	2.29	2.32	1.91
Lane Group LOS	C	C	A	A	A	A
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.85	1.77	0.13	0.08	0.08	0.02
50th-Percentile Queue Length [ft/ln]	21.13	44.29	3.24	1.94	2.10	0.38
95th-Percentile Queue Length [veh/ln]	1.52	3.19	0.23	0.14	0.15	0.03
95th-Percentile Queue Length [ft/ln]	38.04	79.73	5.83	3.48	3.77	0.68

Movement, Approach, & Intersection Results

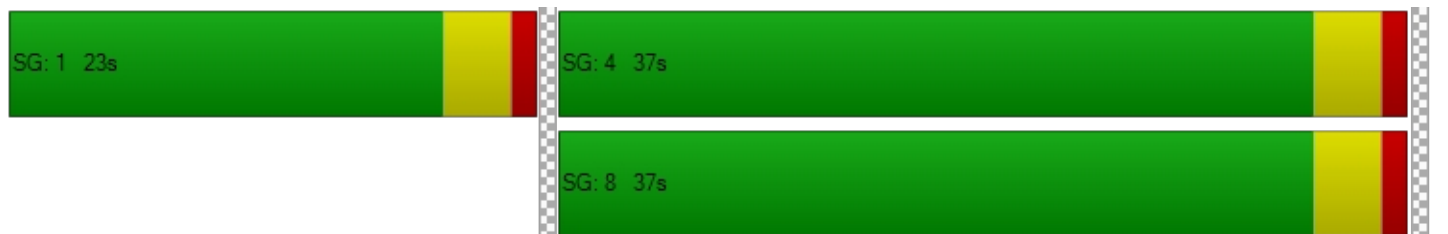
d_M, Delay for Movement [s/veh]	25.42	30.07	3.75	2.29	2.32	1.91
Movement LOS	C	C	A	A	A	A
d_A, Approach Delay [s/veh]	28.45		2.44		2.30	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	6.16					
Intersection LOS	A					
Intersection V/C	0.241					

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	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	4.132	4.569	4.574
Bicycle LOS	D	E	E

Sequence

Ring 1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (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):	0.778

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTT			TT			TTT			TTT		
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	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	459	78	177	67	26	112	164	2189	475	136	1449	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	0	8	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]	459	78	177	67	26	112	164	2206	475	136	1457	42
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	122	21	47	18	7	30	44	588	127	36	388	11
Total Analysis Volume [veh/h]	489	83	189	71	28	119	175	2352	506	145	1553	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	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	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	21	24	0	16	19	0	28	59	59	11	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	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	2.0	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	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
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]	17	26	6	15	13	55	76	7	49	49
g / C, Green / Cycle	0.15	0.24	0.06	0.14	0.12	0.50	0.69	0.06	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.15	0.17	0.04	0.09	0.10	0.48	0.33	0.04	0.31	0.31
s, saturation flow rate [veh/h]	3329	1603	1714	1575	1714	4903	1530	3329	3427	1774
c, Capacity [veh/h]	515	378	97	217	206	2449	1056	210	1516	785
d1, Uniform Delay [s]	46.08	38.70	51.08	45.13	47.43	26.49	7.88	50.50	24.69	24.70
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.50	0.11	0.11	0.24
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.98	11.24	10.18	15.82	9.39	3.26	1.56	4.04	0.58	2.44
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	0.95	0.72	0.73	0.68	0.85	0.96	0.48	0.69	0.69	0.69
d, Delay for Lane Group [s/veh]	56.06	49.95	61.26	60.95	56.82	29.74	9.43	54.54	25.27	27.14
Lane Group LOS	E	D	E	E	E	C	A	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.29	7.89	2.16	4.69	5.08	18.39	4.90	2.02	10.35	11.13
50th-Percentile Queue Length [ft/ln]	182.26	197.28	54.05	117.15	127.07	459.64	122.51	50.45	258.66	278.16
95th-Percentile Queue Length [veh/ln]	11.72	12.50	3.89	8.24	8.78	25.42	8.53	3.63	15.62	16.60
95th-Percentile Queue Length [ft/ln]	292.96	312.45	97.30	205.91	219.50	635.44	213.27	90.81	390.54	414.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.06	49.95	49.95	61.26	60.95	60.95	56.82	29.74	9.43	54.54	25.87	27.14
Movement LOS	E	D	D	E	E	E	E	C	A	D	C	C
d_A, Approach Delay [s/veh]	53.87			61.05			27.92			28.29		
Approach LOS	D			E			C			C		
d_I, Intersection Delay [s/veh]	32.72											
Intersection LOS	C											
Intersection V/C	0.778											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	44.55	44.55	0.00	44.55
I_p,int, Pedestrian LOS Score for Intersection	2.590	2.176	0.000	3.566
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	364	273	1000	691
d_b, Bicycle Delay [s]	36.82	41.02	13.75	23.56
I_b,int, Bicycle LOS Score for Intersection	2.815	1.919	3.228	2.518
Bicycle LOS	C	A	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 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.638

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	121	118	2155	276	106	1511
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	8
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]	121	118	2172	276	106	1519
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	31	580	74	28	405
Total Analysis Volume [veh/h]	129	126	2318	295	113	1621
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
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]	12	0	11	0	52	63
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	R	C	R	L	C
C, Cycle Length [s]	75	75	75	75	75	75
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	49	49	6	59
g / C, Green / Cycle	0.11	0.11	0.65	0.65	0.09	0.79
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.47	0.19	0.07	0.33
s, saturation flow rate [veh/h]	1714	1530	4903	1530	1714	4903
c, Capacity [veh/h]	184	164	3168	988	149	3854
d1, Uniform Delay [s]	32.35	32.60	8.92	5.83	33.53	2.57
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.77	7.26	1.53	0.77	7.72	0.34
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	0.77	0.73	0.30	0.76	0.42
d, Delay for Lane Group [s/veh]	37.12	39.87	10.45	6.60	41.25	2.91
Lane Group LOS	D	D	B	A	D	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.34	2.40	6.01	1.60	2.19	0.84
50th-Percentile Queue Length [ft/ln]	58.60	59.97	150.15	39.95	54.82	20.90
95th-Percentile Queue Length [veh/ln]	4.22	4.32	10.02	2.88	3.95	1.50
95th-Percentile Queue Length [ft/ln]	105.48	107.94	250.62	71.91	98.67	37.61

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	37.12	39.87	10.45	6.60	41.25	2.91
Movement LOS	D	D	B	A	D	A
d_A, Approach Delay [s/veh]	38.48		10.02		5.41	
Approach LOS	D		B		A	
d_I, Intersection Delay [s/veh]	9.86					
Intersection LOS	A					
Intersection V/C	0.638					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	37.50	37.50	37.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.570	5.086
Bicycle LOS	D	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



BUILDOUT YEAR (2040) WITHOUT PROJECT

Chateau Senior Living Facility

Vistro File: G:\...\IAM LR.vistro

Scenario 1 Year 2040 Without Project

Report File: G:\...\IAM LR.pdf

10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.833	36.3	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.307	29.1	D
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.004	21.7	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	6.502	30.5	C
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.546	14.9	B
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	1.128	46.0	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.484	2.1	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.871	44.8	D
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Thru	3.851	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.964	24.5	C
12	Ridgecrest Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	WB Left	0.799	20.7	C
13	Hesperia Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	NB Right	0.843	39.1	D
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.751	40.9	D
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	36.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.833

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	121	552	394	289	352	90	234	1491	115	347	1436	240
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	121	552	394	289	352	90	234	1491	115	347	1436	240
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	145	104	76	93	24	62	392	30	91	378	63
Total Analysis Volume [veh/h]	127	581	415	304	371	95	246	1569	121	365	1512	253
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	81
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	12	26	0	11	25	0	11	28	28	13	30	30
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	81	81	81	81	81	81	81	81	81	81	81	81
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	0.00
g_i, Effective Green Time [s]	7	25	25	7	25	25	7	24	35	9	26	37
g / C, Green / Cycle	0.08	0.31	0.31	0.09	0.31	0.31	0.09	0.30	0.43	0.11	0.32	0.46
(v / s)_i Volume / Saturation Flow Rate	0.04	0.16	0.26	0.09	0.13	0.13	0.07	0.30	0.07	0.10	0.29	0.16
s, saturation flow rate [veh/h]	3514	3618	1615	3514	1900	1768	3514	5176	1615	3514	5176	1615
c, Capacity [veh/h]	287	1122	501	304	599	557	304	1525	687	391	1653	735
d1, Uniform Delay [s]	35.45	22.97	25.95	37.01	21.77	21.78	36.35	28.57	14.44	35.71	26.51	14.25
k, delay calibration	0.11	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]	1.07	1.71	14.61	23.93	2.01	2.17	5.11	19.09	0.12	10.43	2.38	0.28
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	0.44	0.52	0.83	1.00	0.40	0.40	0.81	1.03	0.18	0.93	0.91	0.34
d, Delay for Lane Group [s/veh]	36.52	24.68	40.56	60.94	23.78	23.95	41.46	47.67	14.57	46.14	28.89	14.53
Lane Group LOS	D	C	D	E	C	C	D	F	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.15	4.33	8.59	3.88	3.67	3.45	2.43	11.39	1.22	3.91	8.72	2.66
50th-Percentile Queue Length [ft/ln]	28.86	108.30	214.85	96.90	91.81	86.33	60.83	284.79	30.39	97.84	217.98	66.50
95th-Percentile Queue Length [veh/ln]	2.08	7.75	13.40	6.98	6.61	6.22	4.38	17.21	2.19	7.04	13.56	4.79
95th-Percentile Queue Length [ft/ln]	51.95	193.64	335.04	174.42	165.25	155.39	109.50	430.35	54.70	176.11	339.04	119.70

Movement, Approach, & Intersection Results

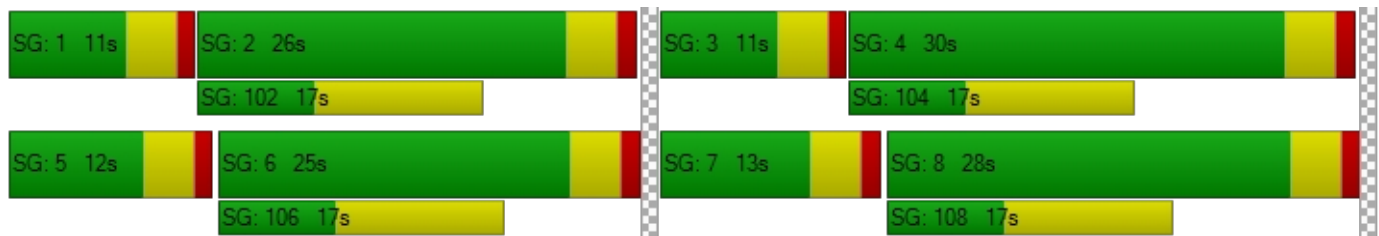
d_M, Delay for Movement [s/veh]	36.52	24.68	40.56	60.94	23.84	23.95	41.46	47.67	14.57	46.14	28.89	14.53
Movement LOS	D	C	D	E	C	C	D	F	B	D	C	B
d_A, Approach Delay [s/veh]	31.89			38.50			44.81			30.14		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	36.32											
Intersection LOS	D											
Intersection V/C	0.833											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	30.25	30.25	30.25	30.25
I_p,int, Pedestrian LOS Score for Intersection	3.048	2.848	3.506	3.561
Crosswalk LOS	C	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	543	519	593	642
d_b, Bicycle Delay [s]	21.49	22.22	20.06	18.67
I_b,int, Bicycle LOS Score for Intersection	2.486	2.195	2.624	2.731
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	29.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.307

Intersection Setup

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Base Volume Input [veh/h]	429	31	60	678	65	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	429	31	60	678	65	130
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	113	8	16	178	17	34
Total Analysis Volume [veh/h]	452	33	63	714	68	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	0.00	0.00	0.06	0.01	0.31	0.18
d_M, Delay for Movement [s/veh]	0.00	0.00	8.51	0.00	29.07	17.53
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.18	0.00	2.59	2.59
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.60	0.00	64.78	64.78
d_A, Approach Delay [s/veh]	0.00		0.69		21.36	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.35					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	21.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	1	432	64	39	840	1	2	0	8	105	1	36
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	432	64	39	840	1	2	0	8	105	1	36
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	114	17	10	221	0	1	0	2	28	0	9
Total Analysis Volume [veh/h]	1	455	67	41	884	1	2	0	8	111	1	38
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.01	0.00	0.01	0.00	0.01	0.29	0.00	0.05
d_M, Delay for Movement [s/veh]	9.66	0.00	0.00	8.55	0.00	0.00	19.71	18.21	11.43	18.41	21.73	10.10
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.12	0.00	0.00	0.02	0.02	0.04	1.21	1.21	0.16
95th-Percentile Queue Length [ft/ln]	0.10	0.00	0.00	3.03	0.00	0.00	0.61	0.61	1.07	30.36	30.36	4.03
d_A, Approach Delay [s/veh]	0.02			0.38			13.08			16.32		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.83											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	30.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.502

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	4	378	56	33	911	2	5	1	23	146	7	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	4	378	56	33	911	2	5	1	23	146	7	37
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	99	15	9	240	1	1	0	6	38	2	10
Total Analysis Volume [veh/h]	4	398	59	35	959	2	5	1	24	154	7	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	18	28	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	28	28	3	31	31	17	17	17	17
g / C, Green / Cycle	0.01	0.46	0.46	0.05	0.51	0.51	0.28	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.12	0.12	0.02	0.25	0.25	0.11	0.01	5.60	0.02
s, saturation flow rate [veh/h]	1810	1900	1816	1810	1900	1899	53	1615	29	1615
c, Capacity [veh/h]	17	881	842	97	965	965	125	457	125	457
d1, Uniform Delay [s]	29.57	9.85	9.87	27.46	9.74	9.74	17.80	15.70	29.69	15.85
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	6.63	0.73	0.78	2.22	1.83	1.84	0.16	0.05	175.92	0.08
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
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	0.23	0.26	0.27	0.36	0.50	0.50	0.05	0.05	1.29	0.09
d, Delay for Lane Group [s/veh]	36.21	10.58	10.65	29.68	11.58	11.58	17.96	15.75	205.61	15.93
Lane Group LOS	D	B	B	C	B	B	B	B	F	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.08	1.48	1.44	0.48	3.18	3.18	0.06	0.23	7.88	0.38
50th-Percentile Queue Length [ft/ln]	2.05	37.00	36.08	12.02	79.55	79.50	1.54	5.82	196.88	9.55
95th-Percentile Queue Length [veh/ln]	0.15	2.66	2.60	0.87	5.73	5.72	0.11	0.42	14.01	0.69
95th-Percentile Queue Length [ft/ln]	3.69	66.60	64.94	21.63	143.18	143.09	2.77	10.47	350.14	17.19

Movement, Approach, & Intersection Results

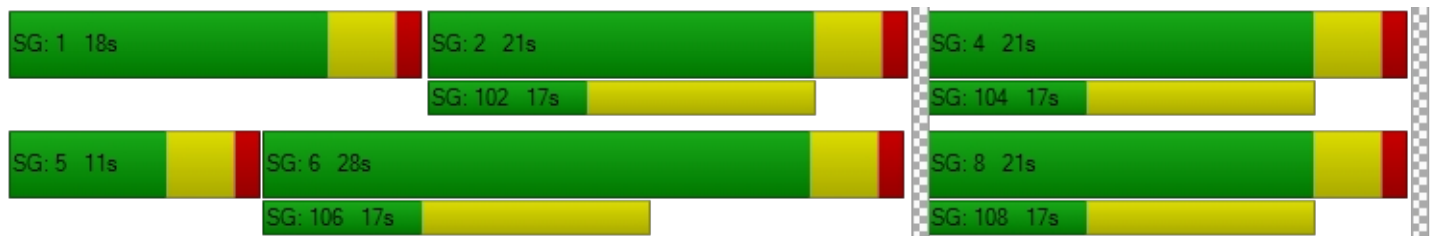
d_M, Delay for Movement [s/veh]	36.21	10.61	10.65	29.68	11.58	11.58	17.96	17.96	15.75	205.61	205.61	15.93
Movement LOS	D	B	B	C	B	B	B	B	B	F	F	B
d_A, Approach Delay [s/veh]	10.84			12.22			16.19			168.62		
Approach LOS	B			B			B			F		
d_I, Intersection Delay [s/veh]	30.45											
Intersection LOS	C											
Intersection V/C	6.502											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	3.068			2.799			1.929			1.998		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			800			567			567		
d_b, Bicycle Delay [s]	15.41			10.80			15.41			15.41		
I_b,int, Bicycle LOS Score for Intersection	1.940			2.381			1.609			1.890		
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 5: Ridgcrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

Intersection Setup

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	6	464	80	87	1027	3	7	7	18	271	7	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	6	464	80	87	1027	3	7	7	18	271	7	99
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	122	21	23	270	1	2	2	5	71	2	26
Total Analysis Volume [veh/h]	6	488	84	92	1081	3	7	7	19	285	7	104
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	27	0	12	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	26	26	6	31	31	16	16	16	16
g / C, Green / Cycle	0.01	0.43	0.43	0.09	0.51	0.51	0.27	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.00	0.15	0.16	0.05	0.29	0.29	0.01	0.02	0.20	0.07
s, saturation flow rate [veh/h]	1810	1900	1804	1810	1900	1898	1302	1683	1407	1630
c, Capacity [veh/h]	21	826	785	167	979	978	362	460	440	445
d1, Uniform Delay [s]	29.42	11.33	11.35	26.07	9.87	9.87	20.02	16.11	22.45	17.02
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	7.20	1.19	1.27	2.84	2.26	2.26	0.02	0.05	1.61	0.29
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
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	0.28	0.35	0.36	0.55	0.55	0.55	0.02	0.06	0.65	0.25
d, Delay for Lane Group [s/veh]	36.62	12.52	12.61	28.91	12.13	12.13	20.04	16.16	24.06	17.30
Lane Group LOS	D	B	B	C	B	B	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.13	2.61	2.52	1.21	3.71	3.71	0.08	0.26	3.60	1.08
50th-Percentile Queue Length [ft/ln]	3.13	65.36	63.05	30.24	92.74	92.67	1.97	6.39	89.94	26.97
95th-Percentile Queue Length [veh/ln]	0.23	4.71	4.54	2.18	6.68	6.67	0.14	0.46	6.48	1.94
95th-Percentile Queue Length [ft/ln]	5.64	117.65	113.50	54.42	166.93	166.81	3.55	11.51	161.89	48.55

Movement, Approach, & Intersection Results

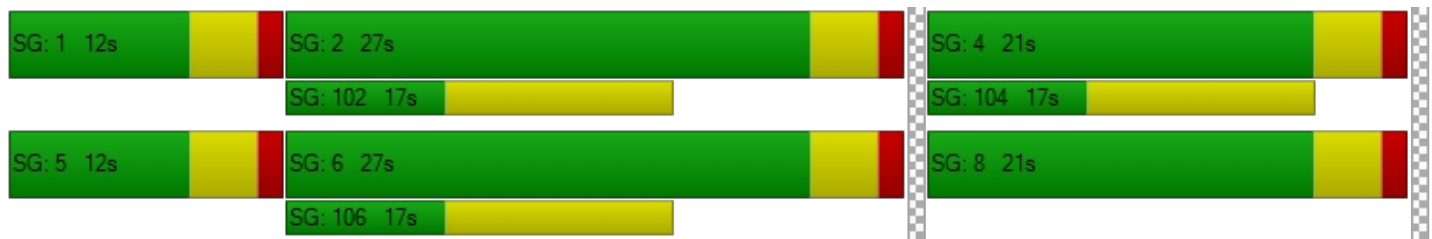
d_M, Delay for Movement [s/veh]	36.62	12.56	12.61	28.91	12.13	12.13	20.04	16.16	16.16	24.06	17.30	17.30
Movement LOS	D	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	12.81			13.44			16.98			22.17		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	14.91											
Intersection LOS	B											
Intersection V/C	0.546											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.922			1.931			2.169		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	767			767			567			567		
d_b, Bicycle Delay [s]	11.41			11.41			15.41			15.41		
I_b,int, Bicycle LOS Score for Intersection	2.036			2.530			1.614			2.213		
Bicycle LOS	B			B			A			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	46.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.128

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	18	6	4	192	11	1072	631	2374	18	10	2244	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	18	6	4	192	11	1072	631	2374	18	10	2244	112
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	1	51	3	282	166	625	5	3	591	29
Total Analysis Volume [veh/h]	19	6	4	202	12	1128	664	2499	19	11	2362	118
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	123
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	46	91	0	11	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	123	123	123	123	123	123	123	123	123
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	63	42	92	92	2	52	52
g / C, Green / Cycle	0.14	0.14	0.51	0.34	0.75	0.75	0.02	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.25	0.17	0.39	0.37	0.46	0.46	0.01	0.45	0.46
s, saturation flow rate [veh/h]	117	1278	2859	1810	3618	1893	1810	3618	1854
c, Capacity [veh/h]	64	231	1459	618	2705	1415	33	1536	787
d1, Uniform Delay [s]	52.58	54.64	24.36	40.50	7.20	7.22	59.62	35.37	35.37
k, delay calibration	0.50	0.50	0.15	0.50	0.11	0.19	0.11	0.12	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]	21.13	42.51	1.23	58.09	0.22	0.75	5.78	32.39	54.42
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	0.45	0.93	0.77	1.08	0.61	0.61	0.33	1.06	1.08
d, Delay for Lane Group [s/veh]	73.71	97.15	25.59	98.58	7.42	7.97	65.40	67.76	89.80
Lane Group LOS	E	F	C	F	A	A	E	F	F
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.29	9.28	12.49	27.72	7.78	8.41	0.38	28.43	33.97
50th-Percentile Queue Length [ft/ln]	32.28	231.97	312.20	692.93	194.60	210.22	9.62	710.70	849.13
95th-Percentile Queue Length [veh/ln]	2.32	14.27	18.28	38.18	12.36	13.16	0.69	38.88	45.95
95th-Percentile Queue Length [ft/ln]	58.11	356.86	457.09	954.60	308.98	329.12	17.32	972.05	1148.85

Movement, Approach, & Intersection Results

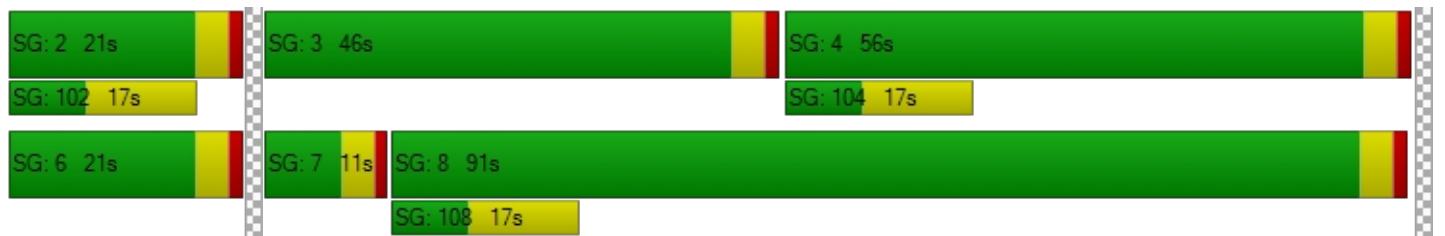
d_M, Delay for Movement [s/veh]	73.71	73.71	73.71	97.15	97.15	25.59	98.58	7.61	7.97	65.40	74.56	89.80
Movement LOS	E	E	E	F	F	C	F	A	A	E	F	F
d_A, Approach Delay [s/veh]	73.71			37.00			26.59			75.24		
Approach LOS	E			D			C			E		
d_I, Intersection Delay [s/veh]	45.98											
Intersection LOS	D											
Intersection V/C	1.128											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	50.99	50.99	0.00	50.99
I_p,int, Pedestrian LOS Score for Intersection	1.759	2.938	0.000	3.982
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	276	276	1415	846
d_b, Bicycle Delay [s]	45.67	45.67	5.27	20.49
I_b,int, Bicycle LOS Score for Intersection	1.607	3.774	3.310	2.930
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	2.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	9	1	5	1290	1543	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	9	1	5	1290	1543	9
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	339	406	2
Total Analysis Volume [veh/h]	9	1	5	1358	1624	9
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	110
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	19	109	90	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	110	110	110	110	110
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]	2	1	100	95	95
g / C, Green / Cycle	0.02	0.01	0.91	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.38	0.45	0.01
s, saturation flow rate [veh/h]	1788	1810	3618	3618	1615
c, Capacity [veh/h]	31	17	3292	3126	1396
d1, Uniform Delay [s]	53.41	54.10	0.71	1.84	1.02
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.94	8.97	0.38	0.62	0.01
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	0.32	0.29	0.41	0.52	0.01
d, Delay for Lane Group [s/veh]	59.35	63.07	1.10	2.46	1.03
Lane Group LOS	E	E	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.33	0.17	0.18	0.44	0.00
50th-Percentile Queue Length [ft/ln]	8.15	4.36	4.38	10.98	0.11
95th-Percentile Queue Length [veh/ln]	0.59	0.31	0.32	0.79	0.01
95th-Percentile Queue Length [ft/ln]	14.68	7.85	7.89	19.77	0.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	59.35	59.35	63.07	1.10	2.46	1.03
Movement LOS	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	59.35		1.32		2.46	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	2.13					
Intersection LOS	A					
Intersection V/C	0.484					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	44.55	44.55	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.734	3.353	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.149	5.257	5.480
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	44.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.871

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	282	782	93	153	769	293	343	592	254	251	814	219
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	282	782	93	153	769	293	343	592	254	251	814	219
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	206	24	40	202	77	90	156	67	66	214	58
Total Analysis Volume [veh/h]	297	823	98	161	809	308	361	623	267	264	857	231
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	85
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	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]	18	29	0	13	24	0	13	21	0	22	30	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	85	85	85	85	85	85	85	85	85	85	85	85
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]	14	25	25	9	20	20	9	21	21	14	26	26
g / C, Green / Cycle	0.16	0.30	0.30	0.11	0.24	0.24	0.11	0.24	0.24	0.17	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.16	0.23	0.06	0.09	0.22	0.19	0.10	0.17	0.17	0.15	0.30	0.30
s, saturation flow rate [veh/h]	1810	3618	1615	1810	3618	1615	3514	3618	1615	1810	1900	1764
c, Capacity [veh/h]	298	1072	478	192	859	384	373	872	389	305	577	535
d1, Uniform Delay [s]	35.49	27.27	22.42	37.30	31.85	30.55	37.87	29.58	29.34	34.43	29.28	29.41
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.33	0.34
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]	23.29	5.29	0.97	9.35	19.44	16.18	15.40	1.10	2.14	7.36	24.68	28.34
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	0.77	0.20	0.84	0.94	0.80	0.97	0.71	0.69	0.87	0.97	0.98
d, Delay for Lane Group [s/veh]	58.78	32.56	23.39	46.65	51.28	46.74	53.27	30.68	31.48	41.79	53.96	57.75
Lane Group LOS	E	C	C	D	D	D	D	C	C	D	D	E
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.51	7.51	1.45	3.52	9.62	7.06	4.33	5.53	4.82	5.59	14.20	13.87
50th-Percentile Queue Length [ft/ln]	187.75	187.80	36.14	87.98	240.48	176.42	108.19	138.15	120.39	139.84	354.94	346.77
95th-Percentile Queue Length [veh/ln]	12.00	12.01	2.60	6.33	14.71	11.41	7.74	9.38	8.41	9.47	20.38	19.98
95th-Percentile Queue Length [ft/ln]	300.11	300.17	65.05	158.37	367.64	285.33	193.48	234.53	210.37	236.80	509.43	499.47

Movement, Approach, & Intersection Results

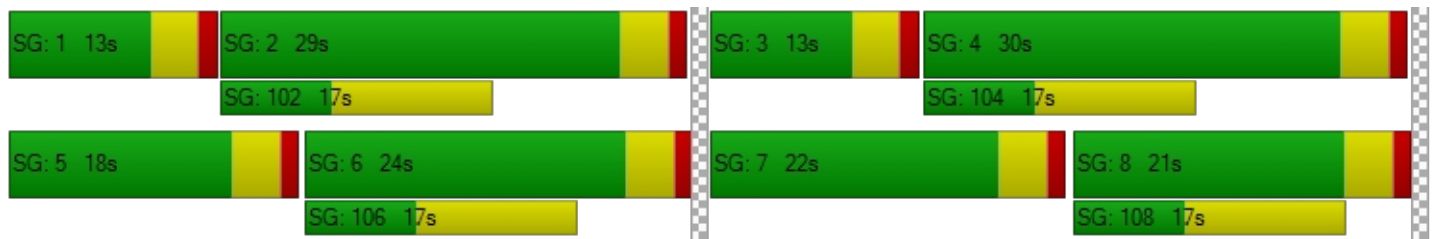
d_M, Delay for Movement [s/veh]	58.78	32.56	23.39	46.65	51.28	46.74	53.27	30.68	31.48	41.79	55.26	57.75
Movement LOS	E	C	C	D	D	D	D	C	C	D	E	E
d_A, Approach Delay [s/veh]	38.22			49.60			37.37			53.06		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	44.80											
Intersection LOS	D											
Intersection V/C	0.871											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	32.21	32.21	32.21	32.21
I_p,int, Pedestrian LOS Score for Intersection	3.211	3.252	3.218	2.950
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	588	471	400	612
d_b, Bicycle Delay [s]	21.18	24.85	27.20	20.48
I_b,int, Bicycle LOS Score for Intersection	2.564	2.614	2.592	2.675
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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.851

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	45	21	2	21	58	2061	2	41	1866	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	45	21	2	21	58	2061	2	41	1866	56
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	12	6	1	6	15	542	1	11	491	15
Total Analysis Volume [veh/h]	1	0	47	22	2	22	61	2169	2	43	1964	59
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.25	4.77	3.85	0.10	0.49	0.02	0.00	0.41	0.02	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	31.05	5319.21	10000.0	23.53	58.74	0.00	0.00	61.23	0.00	0.00
Movement LOS	F	F	D	F	F	C	F	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.68	0.68	0.97	4.61	4.61	0.34	2.24	0.00	0.00	1.70	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.95	16.95	24.26	115.15	115.15	8.38	55.99	0.00	0.00	42.62	0.00	0.00
d_A, Approach Delay [s/veh]	238.73			2990.00			1.61			1.27		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	35.34											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	24.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.964

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	976	54	88	1918	1973	1232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	976	54	88	1918	1973	1232
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	257	14	23	505	519	324
Total Analysis Volume [veh/h]	1027	57	93	2019	2077	1297
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	32	0	19	60	41	41
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	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
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	0.00
g_i, Effective Green Time [s]	28	28	7	64	53	85
g / C, Green / Cycle	0.28	0.28	0.07	0.64	0.53	0.85
(v / s)_i Volume / Saturation Flow Rate	0.29	0.04	0.05	0.39	0.40	0.80
s, saturation flow rate [veh/h]	3514	1615	1810	5176	5176	1615
c, Capacity [veh/h]	984	452	121	3312	2760	1378
d1, Uniform Delay [s]	36.00	26.87	45.91	10.63	18.20	5.47
k, delay calibration	0.11	0.11	0.11	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]	26.58	0.12	9.84	0.84	1.95	13.76
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	1.04	0.13	0.77	0.61	0.75	0.94
d, Delay for Lane Group [s/veh]	62.58	26.99	55.75	11.47	20.15	19.23
Lane Group LOS	F	C	E	B	C	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	14.87	0.99	2.52	7.36	11.36	8.57
50th-Percentile Queue Length [ft/ln]	371.65	24.67	63.08	184.02	283.96	214.22
95th-Percentile Queue Length [veh/ln]	21.74	1.78	4.54	11.81	16.89	13.37
95th-Percentile Queue Length [ft/ln]	543.49	44.40	113.54	295.26	422.14	334.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.58	26.99	55.75	11.47	20.15	19.23
Movement LOS	F	C	E	B	C	B
d_A, Approach Delay [s/veh]	60.71		13.42		19.80	
Approach LOS	E		B		B	
d_I, Intersection Delay [s/veh]	24.50					
Intersection LOS	C					
Intersection V/C	0.964					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	39.61	39.61	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.040	3.507	0.000
Crosswalk LOS	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.132	5.294	5.988
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Ridgecrest Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

Intersection Setup

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐⇐		⇐⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	1	0
Pocket Length [ft]	150.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	55.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Base Volume Input [veh/h]	449	110	1185	541	197	1347
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	449	110	1185	541	197	1347
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	112	29	296	135	52	337
Total Analysis Volume [veh/h]	449	116	1185	541	207	1347
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	86
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	44	65
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	C	R	C	C	L	C
C, Cycle Length [s]	86	86	86	86	86	86	86
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	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
g_i, Effective Green Time [s]	13	13	13	49	49	12	65
g / C, Green / Cycle	0.15	0.15	0.15	0.57	0.57	0.14	0.76
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.07	0.45	0.50	0.11	0.37
s, saturation flow rate [veh/h]	1810	1810	1615	1900	1711	1810	3618
c, Capacity [veh/h]	275	275	246	1081	974	252	2731
d1, Uniform Delay [s]	35.32	35.32	33.33	14.63	16.12	36.00	4.12
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.85	5.85	1.41	6.16	11.72	6.56	0.64
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	0.82	0.82	0.47	0.80	0.89	0.82	0.49
d, Delay for Lane Group [s/veh]	41.17	41.17	34.74	20.79	27.83	42.55	4.76
Lane Group LOS	D	D	C	C	C	D	A
Critical Lane Group	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	4.61	4.61	2.13	11.75	14.07	4.33	2.20
50th-Percentile Queue Length [ft/ln]	115.30	115.30	53.18	293.72	351.82	108.21	55.10
95th-Percentile Queue Length [veh/ln]	8.13	8.13	3.83	17.37	20.23	7.74	3.97
95th-Percentile Queue Length [ft/ln]	203.35	203.35	95.72	434.25	505.63	193.52	99.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.17	34.74	22.70	27.83	42.55	4.76
Movement LOS	D	C	C	C	D	A
d_A, Approach Delay [s/veh]	39.85		24.31		9.79	
Approach LOS	D		C		A	
d_I, Intersection Delay [s/veh]	20.73					
Intersection LOS	C					
Intersection V/C	0.799					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
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]	32.70	32.70	32.70
I_p,int, Pedestrian LOS Score for Intersection	2.841	3.499	3.301
Crosswalk LOS	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	43.00	43.00	43.00
I_b,int, Bicycle LOS Score for Intersection	5.065	5.556	5.414
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 13: Hesperia Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	39.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Base Volume Input [veh/h]	257	893	261	316	1150	164	151	915	331	364	1229	329
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	257	893	261	316	1150	164	151	915	331	364	1229	329
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	235	69	83	303	43	40	241	87	96	323	87
Total Analysis Volume [veh/h]	271	940	275	333	1211	173	159	963	348	383	1294	346
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	91
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	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]	12	22	0	21	31	0	11	33	0	15	37	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	91	91	91	91	91	91	91	91	91	91	91	91
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]	8	18	18	17	27	27	7	29	29	11	33	33
g / C, Green / Cycle	0.09	0.20	0.20	0.19	0.30	0.30	0.08	0.32	0.32	0.12	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.08	0.18	0.17	0.18	0.23	0.11	0.05	0.27	0.22	0.11	0.36	0.21
s, saturation flow rate [veh/h]	3514	5176	1615	1810	5176	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	309	1032	322	338	1544	482	266	1147	512	425	1310	585
d1, Uniform Delay [s]	41.02	35.64	35.15	36.88	29.25	25.10	40.73	28.94	27.06	39.47	28.82	23.56
k, delay calibration	0.11	0.50	0.50	0.13	0.50	0.50	0.11	0.11	0.20	0.11	0.11	0.15
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]	7.81	13.33	23.91	21.27	4.07	2.08	2.15	1.74	2.88	7.18	9.00	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	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	0.88	0.91	0.85	0.98	0.78	0.36	0.60	0.84	0.68	0.90	0.99	0.59
d, Delay for Lane Group [s/veh]	48.82	48.97	59.07	58.15	33.33	27.18	42.88	30.67	29.94	46.65	37.81	24.90
Lane Group LOS	D	D	E	E	C	C	D	C	C	D	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.16	7.58	7.60	8.84	7.94	2.98	1.71	9.11	6.38	4.39	14.04	5.64
50th-Percentile Queue Length [ft/ln]	79.10	189.45	189.92	220.99	198.53	74.60	42.74	227.63	159.44	109.63	350.91	140.95
95th-Percentile Queue Length [veh/ln]	5.69	12.09	12.12	13.72	12.56	5.37	3.08	14.05	10.52	7.82	20.18	9.53
95th-Percentile Queue Length [ft/ln]	142.37	302.32	302.93	342.89	314.07	134.28	76.93	351.35	262.98	195.48	504.52	238.31

Movement, Approach, & Intersection Results

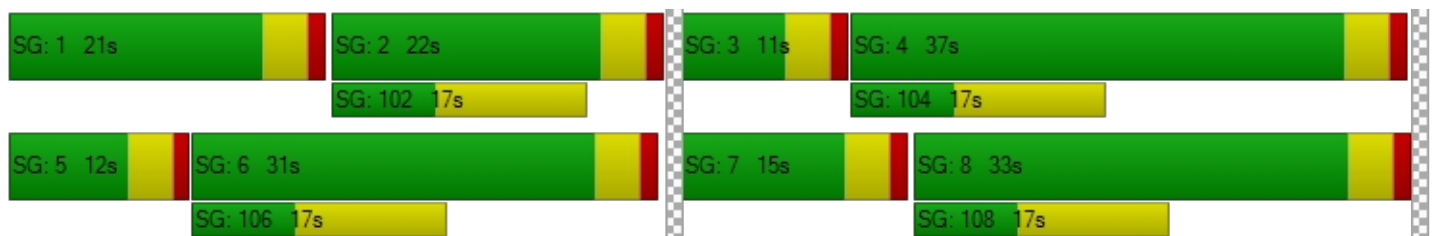
d_M, Delay for Movement [s/veh]	48.82	48.97	59.07	58.15	33.33	27.18	42.88	30.67	29.94	46.65	37.81	24.90
Movement LOS	D	D	E	E	C	C	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	50.81			37.52			31.82			37.28		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	39.15											
Intersection LOS	D											
Intersection V/C	0.843											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	35.16	35.16	35.16	35.16
I_p,int, Pedestrian LOS Score for Intersection	3.468	3.368	3.339	3.428
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	396	593	637	725
d_b, Bicycle Delay [s]	29.28	22.51	21.12	18.48
I_b,int, Bicycle LOS Score for Intersection	2.377	2.504	2.772	3.229
Bicycle LOS	B	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 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	40.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.751

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌ ⇌			⇌ ⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	452	47	138	64	51	112	120	1982	464	169	1801	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	452	47	138	64	51	112	120	1982	464	169	1801	60
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	128	13	39	18	14	32	34	560	131	48	509	17
Total Analysis Volume [veh/h]	511	53	156	72	58	127	136	2240	524	191	2035	68
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	32	9	9	7	30	43	7	30	30
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.10	0.43	0.61	0.10	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.16	0.15	0.10	0.09	0.08	0.08	0.43	0.32	0.05	0.38	0.38
s, saturation flow rate [veh/h]	1810	1826	1615	1500	1615	1810	5176	1615	3514	3618	1869
c, Capacity [veh/h]	223	225	742	264	199	175	2210	981	347	1552	802
d1, Uniform Delay [s]	30.80	30.80	11.38	29.81	29.31	30.98	20.13	8.02	30.17	18.56	18.62
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.38
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]	148.01	146.80	0.65	6.40	14.63	7.16	12.52	2.09	1.36	1.99	11.78
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	1.26	1.26	0.21	0.49	0.64	0.78	1.01	0.53	0.55	0.89	0.90
d, Delay for Lane Group [s/veh]	178.81	177.60	12.02	36.21	43.94	38.13	32.65	10.11	31.53	20.55	30.40
Lane Group LOS	F	F	B	D	D	D	F	B	C	C	C
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.78	12.82	1.46	2.44	2.70	2.41	12.31	3.73	1.48	8.88	11.43
50th-Percentile Queue Length [ft/ln]	319.51	320.49	36.44	60.95	67.60	60.35	307.75	93.24	36.99	221.98	285.77
95th-Percentile Queue Length [veh/ln]	20.40	20.44	2.62	4.39	4.87	4.35	18.23	6.71	2.66	13.77	16.98
95th-Percentile Queue Length [ft/ln]	509.93	510.95	65.60	109.71	121.68	108.63	455.81	167.84	66.59	344.15	424.39

Movement, Approach, & Intersection Results

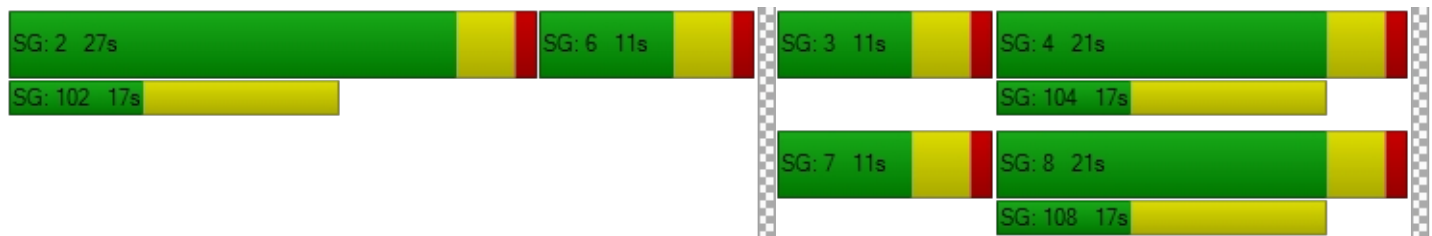
d_M, Delay for Movement [s/veh]	178.26	177.60	12.02	36.21	36.21	43.94	38.13	32.65	10.11	31.53	23.70	30.40
Movement LOS	F	F	B	D	D	D	D	F	B	C	C	C
d_A, Approach Delay [s/veh]	142.20			40.03			28.84			24.55		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	40.94											
Intersection LOS	D											
Intersection V/C	0.751											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.577	2.149	0.000	3.712
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.748	1.984	3.155	2.821
Bicycle LOS	B	A	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Northbound		Eastbound		Westbound	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Eastbound		Westbound	
Base Volume Input [veh/h]	150	106	1971	216	111	1877
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	150	106	1971	216	111	1877
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	30	552	60	31	525
Total Analysis Volume [veh/h]	168	119	2207	242	124	2102
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.66	0.02	0.00	1.64	0.02
d_M, Delay for Movement [s/veh]	10000.00	57.54	0.00	0.00	431.59	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	23.66	3.89	0.00	0.00	10.47	0.00
95th-Percentile Queue Length [ft/ln]	591.56	97.36	0.00	0.00	261.81	0.00
d_A, Approach Delay [s/veh]	5877.52		0.00		24.04	
Approach LOS	F		A		C	
d_I, Intersection Delay [s/veh]	350.74					
Intersection LOS	F					

Chateau Senior Living Facility

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Scenario 1 Year 2040 Without Project

Report File: G:\...\APM LR.pdf

10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.894	40.6	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.160	34.8	D
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.004	23.9	C
4	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	WB Left	8.085	16.1	B
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.347	8.7	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	1.175	53.2	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.517	3.1	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	NB Left	1.021	83.5	F
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	53.663	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.878	23.4	C
12	Ridgecrest Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	WB Left	0.954	36.1	D
13	Hesperia Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	SB Left	1.082	70.2	E
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Thru	0.805	71.1	E
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	40.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.894

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	173	479	460	453	595	146	155	1474	108	382	1367	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	173	479	460	453	595	146	155	1474	108	382	1367	271
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	44	121	116	115	151	37	39	373	27	97	346	69
Total Analysis Volume [veh/h]	175	485	466	459	602	148	157	1492	109	387	1384	274
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	94
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	32	0	16	37	0	11	31	31	15	35	35
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	94	94	94	94	94	94	94	94	94	94	94	94
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	0.00
g_i, Effective Green Time [s]	7	28	28	12	33	33	7	27	38	11	31	47
g / C, Green / Cycle	0.07	0.30	0.30	0.13	0.35	0.35	0.07	0.29	0.40	0.12	0.33	0.50
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.29	0.13	0.20	0.20	0.04	0.29	0.07	0.11	0.27	0.17
s, saturation flow rate [veh/h]	3514	3618	1615	3514	1900	1772	3514	5176	1615	3514	5176	1615
c, Capacity [veh/h]	260	1085	485	449	672	627	258	1474	648	412	1701	806
d1, Uniform Delay [s]	42.44	26.61	32.38	41.01	24.65	24.68	42.25	33.62	18.07	41.18	28.93	14.22
k, delay calibration	0.11	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]	3.03	1.33	32.41	25.54	3.57	3.86	2.31	13.96	0.12	10.61	0.99	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.67	0.45	0.96	1.02	0.58	0.58	0.61	1.01	0.17	0.94	0.81	0.34
d, Delay for Lane Group [s/veh]	45.47	27.94	64.79	66.56	28.22	28.54	44.56	47.58	18.19	51.79	29.92	14.47
Lane Group LOS	D	C	E	F	C	C	D	F	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.99	4.27	13.87	6.60	7.26	6.86	1.76	12.12	1.40	4.85	8.93	3.19
50th-Percentile Queue Length [ft/ln]	49.69	106.64	346.71	164.96	181.59	171.41	43.99	302.89	35.08	121.14	223.36	79.71
95th-Percentile Queue Length [veh/ln]	3.58	7.65	19.98	10.91	11.68	11.15	3.17	17.95	2.53	8.46	13.84	5.74
95th-Percentile Queue Length [ft/ln]	89.44	191.31	499.40	272.73	292.08	278.76	79.19	448.78	63.14	211.39	345.91	143.48

Movement, Approach, & Intersection Results

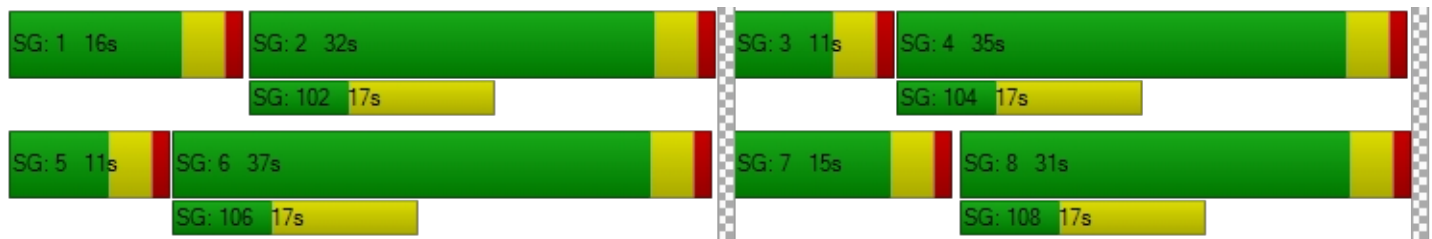
d_M, Delay for Movement [s/veh]	45.47	27.94	64.79	66.56	28.34	28.54	44.56	47.58	18.19	51.79	29.92	14.47
Movement LOS	D	C	E	F	C	C	D	F	B	D	C	B
d_A, Approach Delay [s/veh]	45.92			42.87			45.49			31.99		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	40.55											
Intersection LOS	D											
Intersection V/C	0.894											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	36.64	36.64	36.64	36.64
I_p,int, Pedestrian LOS Score for Intersection	3.112	2.915	3.477	3.576
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	596	702	574	660
d_b, Bicycle Delay [s]	23.17	19.79	23.88	21.11
I_b,int, Bicycle LOS Score for Intersection	2.489	2.557	2.527	2.684
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	34.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.160

Intersection Setup

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Base Volume Input [veh/h]	651	45	110	656	21	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	651	45	110	656	21	55
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	171	12	29	173	6	14
Total Analysis Volume [veh/h]	685	47	116	691	22	58
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	0.13	0.01	0.16	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	9.70	0.00	34.83	14.38
Movement LOS	A	A	A	A	D	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.45	0.00	0.97	0.97
95th-Percentile Queue Length [ft/ln]	0.00	0.00	11.31	0.00	24.29	24.29
d_A, Approach Delay [s/veh]	0.00		1.39		20.01	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.68					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (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):	0.004

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	4	674	120	64	664	6	2	0	1	86	1	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	674	120	64	664	6	2	0	1	86	1	26
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	177	32	17	175	2	1	0	0	23	0	7
Total Analysis Volume [veh/h]	4	709	126	67	699	6	2	0	1	91	1	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.08	0.01	0.00	0.01	0.00	0.00	0.31	0.00	0.05
d_M, Delay for Movement [s/veh]	9.01	0.00	0.00	9.86	0.00	0.00	18.46	20.27	10.55	22.62	23.95	11.40
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.27	0.00	0.00	0.02	0.02	0.00	1.29	1.29	0.14
95th-Percentile Queue Length [ft/ln]	0.33	0.00	0.00	6.77	0.00	0.00	0.56	0.56	0.12	32.34	32.34	3.59
d_A, Approach Delay [s/veh]	0.04			0.86			15.83			20.09		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	1.81											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	16.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	8.085

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	9	642	94	47	624	7	3	3	9	70	4	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	9	642	94	47	624	7	3	3	9	70	4	18
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	169	25	12	164	2	1	1	2	18	1	5
Total Analysis Volume [veh/h]	9	676	99	49	657	7	3	3	9	74	4	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	11	21	0	0	28	0	0	28	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	25	25	4	28	28	19	19	19	19
g / C, Green / Cycle	0.02	0.42	0.42	0.07	0.46	0.46	0.32	0.32	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.21	0.21	0.03	0.18	0.18	0.03	0.01	7.04	0.01
s, saturation flow rate [veh/h]	1810	1900	1816	1810	1900	1893	199	1615	11	1615
c, Capacity [veh/h]	29	791	756	118	884	880	153	515	120	515
d1, Uniform Delay [s]	29.18	12.92	12.92	26.95	10.41	10.41	16.41	14.00	29.16	14.09
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	5.73	2.26	2.37	2.33	1.22	1.23	0.10	0.01	23.86	0.03
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
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	0.31	0.50	0.50	0.42	0.38	0.38	0.04	0.02	0.65	0.04
d, Delay for Lane Group [s/veh]	34.90	15.18	15.29	29.28	11.63	11.64	16.52	14.02	53.03	14.12
Lane Group LOS	C	B	B	C	B	B	B	B	D	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.16	3.36	3.24	0.66	2.28	2.27	0.06	0.08	1.89	0.17
50th-Percentile Queue Length [ft/ln]	3.97	83.98	81.01	16.46	57.00	56.84	1.42	2.01	47.28	4.28
95th-Percentile Queue Length [veh/ln]	0.29	6.05	5.83	1.19	4.10	4.09	0.10	0.14	3.40	0.31
95th-Percentile Queue Length [ft/ln]	7.14	151.17	145.82	29.63	102.60	102.30	2.55	3.62	85.10	7.70

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.90	15.23	15.29	29.28	11.63	11.64	16.52	16.52	14.02	53.03	53.03	14.12
Movement LOS	C	B	B	C	B	B	B	B	B	D	D	B
d_A, Approach Delay [s/veh]	15.46			12.85			15.02			45.41		
Approach LOS	B			B			B			D		
d_I, Intersection Delay [s/veh]	16.10											
Intersection LOS	B											
Intersection V/C	8.085											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	2.927			2.786			1.927			1.985		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			800			800		
d_b, Bicycle Delay [s]	15.41			15.41			10.80			10.80		
I_b,int, Bicycle LOS Score for Intersection	2.206			2.148			1.584			1.720		
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 5: Ridgecrest Rd (NS) at Pahute Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.347

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	13	792	52	26	756	3	5	3	13	85	7	73
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	13	792	52	26	756	3	5	3	13	85	7	73
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	208	14	7	199	1	1	1	3	22	2	19
Total Analysis Volume [veh/h]	14	834	55	27	796	3	5	3	14	89	7	77
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	63
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	28	0	11	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	63	63	63	63	63	63	63	63	63	63
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	2.00	0.00	2.00	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]	2	40	40	3	41	41	8	8	8	8
g / C, Green / Cycle	0.02	0.64	0.64	0.04	0.65	0.65	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.01	0.24	0.24	0.01	0.21	0.21	0.00	0.01	0.06	0.05
s, saturation flow rate [veh/h]	1810	1900	1859	1810	1900	1897	1335	1659	1418	1635
c, Capacity [veh/h]	44	1209	1183	76	1243	1241	180	218	239	214
d1, Uniform Delay [s]	30.22	5.46	5.46	29.35	4.78	4.78	28.58	24.03	27.98	25.07
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	4.03	0.88	0.90	2.77	0.69	0.69	0.06	0.15	0.97	1.16
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	0.32	0.37	0.37	0.35	0.32	0.32	0.03	0.08	0.37	0.39
d, Delay for Lane Group [s/veh]	34.25	6.34	6.36	32.12	5.46	5.46	28.64	24.18	28.94	26.24
Lane Group LOS	C	A	A	C	A	A	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.25	2.49	2.44	0.41	1.27	1.27	0.07	0.22	1.26	1.12
50th-Percentile Queue Length [ft/ln]	6.32	62.14	60.97	10.20	31.86	31.83	1.83	5.61	31.54	27.97
95th-Percentile Queue Length [veh/ln]	0.46	4.47	4.39	0.73	2.29	2.29	0.13	0.40	2.27	2.01
95th-Percentile Queue Length [ft/ln]	11.38	111.85	109.74	18.36	57.35	57.29	3.29	10.10	56.77	50.34

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.25	6.35	6.36	32.12	5.46	5.46	28.64	24.18	24.18	28.94	26.24	26.24
Movement LOS	C	A	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	6.78			6.33			25.20			27.63		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	8.67											
Intersection LOS	A											
Intersection V/C	0.347											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			21.46			21.46			21.46		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.910			1.933			2.032		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	762			730			540			540		
d_b, Bicycle Delay [s]	12.07			12.70			16.79			16.79		
I_b,int, Bicycle LOS Score for Intersection	2.305			2.241			1.596			1.845		
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 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	53.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.175

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	17	27	17	204	1	788	830	2805	18	2	2118	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	17	27	17	204	1	788	830	2805	18	2	2118	154
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	7	4	52	0	201	212	717	5	1	541	39
Total Analysis Volume [veh/h]	17	28	17	209	1	806	849	2868	18	2	2166	157
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	22	0	0	22	22	43	72	0	11	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	51	39	75	75	0	36	36
g / C, Green / Cycle	0.08	0.08	0.54	0.41	0.79	0.79	0.00	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.10	0.20	0.28	0.47	0.52	0.52	0.00	0.42	0.43
s, saturation flow rate [veh/h]	618	1041	2859	1810	3618	1894	1810	3618	1835
c, Capacity [veh/h]	99	162	1529	742	2846	1490	8	1378	699
d1, Uniform Delay [s]	42.14	45.42	14.31	28.02	4.54	4.55	47.14	29.42	29.42
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.23	0.11	0.13	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]	26.05	172.33	0.28	80.24	0.27	1.09	15.64	54.54	74.89
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	0.62	1.30	0.53	1.14	0.66	0.67	0.25	1.11	1.13
d, Delay for Lane Group [s/veh]	68.19	217.75	14.59	108.25	4.81	5.64	62.79	83.96	104.31
Lane Group LOS	E	F	B	F	A	A	E	F	F
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.19	11.61	4.93	31.64	4.22	4.79	0.08	24.67	28.99
50th-Percentile Queue Length [ft/ln]	54.85	290.33	123.37	791.05	105.60	119.77	2.00	616.75	724.64
95th-Percentile Queue Length [veh/ln]	3.95	18.76	8.58	44.85	7.59	8.38	0.14	35.29	41.02
95th-Percentile Queue Length [ft/ln]	98.73	468.93	214.45	1121.21	189.86	209.51	3.60	882.21	1025.54

Movement, Approach, & Intersection Results

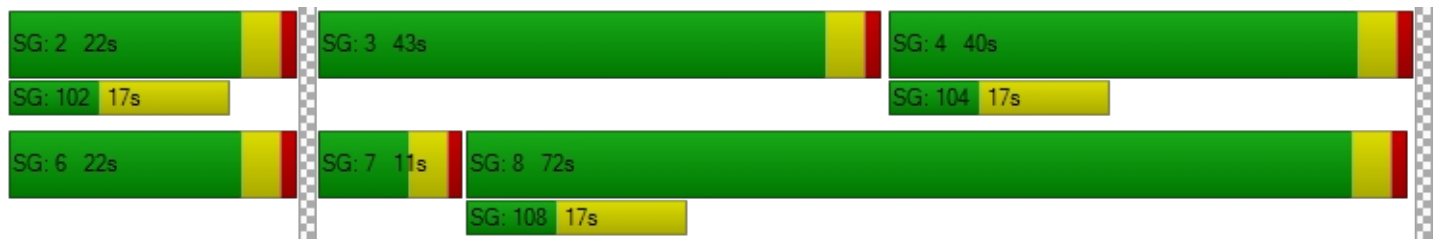
d_M, Delay for Movement [s/veh]	68.19	68.19	68.19	217.75	217.75	14.59	108.25	5.09	5.64	62.79	89.89	104.31
Movement LOS	E	E	E	F	F	B	F	A	A	E	F	F
d_A, Approach Delay [s/veh]	68.19			56.58			28.54			90.84		
Approach LOS	E			E			C			F		
d_I, Intersection Delay [s/veh]	53.17											
Intersection LOS	D											
Intersection V/C	1.175											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.14	37.14	0.00	37.14
I_p,int, Pedestrian LOS Score for Intersection	1.751	2.902	0.000	4.026
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	379	379	1432	758
d_b, Bicycle Delay [s]	31.21	31.21	3.84	18.32
I_b,int, Bicycle LOS Score for Intersection	1.662	3.236	3.614	2.838
Bicycle LOS	A	C	D	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	3.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	17	10	7	1640	1604	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	17	10	7	1640	1604	9
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	2	431	422	2
Total Analysis Volume [veh/h]	18	11	7	1725	1687	9
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	19	109	90	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	130	130	130	130	130
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]	5	2	117	112	112
g / C, Green / Cycle	0.04	0.01	0.90	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.02	0.00	0.48	0.47	0.01
s, saturation flow rate [veh/h]	1730	1810	3618	3618	1615
c, Capacity [veh/h]	61	22	3267	3111	1389
d1, Uniform Delay [s]	61.50	63.61	1.16	2.39	1.28
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.63	7.63	0.61	0.68	0.01
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	0.31	0.53	0.54	0.01
d, Delay for Lane Group [s/veh]	67.13	71.25	1.78	3.07	1.29
Lane Group LOS	E	E	A	A	A
Critical Lane Group	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.04	0.27	0.28	1.91	0.01
50th-Percentile Queue Length [ft/ln]	26.11	6.75	6.97	47.74	0.31
95th-Percentile Queue Length [veh/ln]	1.88	0.49	0.50	3.44	0.02
95th-Percentile Queue Length [ft/ln]	47.00	12.15	12.55	85.94	0.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.13	67.13	71.25	1.78	3.07	1.29
Movement LOS	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	67.13		2.06		3.06	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	3.10					
Intersection LOS	A					
Intersection V/C	0.517					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	54.47	54.47	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.751	3.492	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
I_b,int, Bicycle LOS Score for Intersection	4.180	5.561	5.532
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	83.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.021

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐⇐			⇐⇐⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	1	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	370	1101	217	258	1197	499	386	822	394	207	831	116
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	370	1101	217	258	1197	499	386	822	394	207	831	116
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	97	290	57	68	315	131	102	216	104	54	219	31
Total Analysis Volume [veh/h]	389	1159	228	272	1260	525	406	865	415	218	875	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	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]	25	42	0	21	38	0	16	31	0	16	31	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	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]	21	38	38	17	34	34	12	27	27	12	27	27
g / C, Green / Cycle	0.19	0.35	0.35	0.15	0.31	0.31	0.11	0.24	0.24	0.11	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.21	0.32	0.14	0.15	0.35	0.33	0.12	0.24	0.26	0.12	0.27	0.27
s, saturation flow rate [veh/h]	1810	3618	1615	1810	3618	1615	3514	3618	1615	1810	1900	1820
c, Capacity [veh/h]	345	1254	560	280	1122	501	384	884	395	198	464	445
d1, Uniform Delay [s]	44.50	34.56	27.35	46.27	37.95	37.95	49.00	41.28	41.57	49.00	41.57	41.57
k, delay calibration	0.30	0.50	0.50	0.12	0.50	0.50	0.11	0.11	0.41	0.11	0.44	0.44
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]	76.95	12.79	2.19	20.64	67.35	53.38	38.75	9.93	55.25	62.33	67.75	69.61
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	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	1.13	0.92	0.41	0.97	1.12	1.05	1.06	0.98	1.05	1.10	1.10	1.10
d, Delay for Lane Group [s/veh]	121.45	47.35	29.55	66.91	105.30	91.32	87.75	51.22	96.82	111.34	109.32	111.18
Lane Group LOS	F	D	C	E	F	F	F	D	F	F	F	F
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	16.22	15.84	4.58	8.59	24.38	19.83	7.16	12.31	16.24	8.67	20.72	20.08
50th-Percentile Queue Length [ft/ln]	405.62	395.94	114.47	214.66	609.56	495.64	178.95	307.73	406.06	216.64	518.00	501.88
95th-Percentile Queue Length [veh/ln]	24.24	22.36	8.09	13.39	34.92	27.96	11.80	18.06	23.53	14.02	29.72	28.95
95th-Percentile Queue Length [ft/ln]	606.10	559.11	202.20	334.80	872.99	699.05	295.06	451.58	588.27	350.53	742.94	723.71

Movement, Approach, & Intersection Results

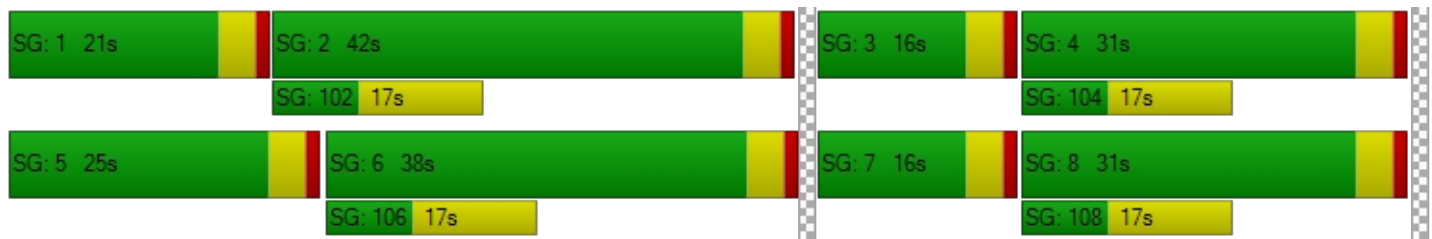
d_M, Delay for Movement [s/veh]	121.45	47.35	29.55	66.91	105.30	91.32	87.75	51.22	96.82	111.34	110.10	111.18
Movement LOS	F	D	C	E	F	F	F	D	F	F	F	F
d_A, Approach Delay [s/veh]	61.30			96.66			71.24			110.43		
Approach LOS	E			F			E			F		
d_I, Intersection Delay [s/veh]	83.45											
Intersection LOS	F											
Intersection V/C	1.021											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	44.55	44.55	44.55	44.55
I_p,int, Pedestrian LOS Score for Intersection	3.555	3.578	3.370	3.064
Crosswalk LOS	D	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	691	618	491	491
d_b, Bicycle Delay [s]	23.56	26.25	31.31	31.31
I_b,int, Bicycle LOS Score for Intersection	3.025	3.257	2.951	2.562
Bicycle LOS	C	C	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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	53.663

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↑ ↑			↔ ↑ ↑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	78	76	0	58	33	2175	23	66	2012	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	78	76	0	58	33	2175	23	66	2012	57
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	21	20	0	15	9	572	6	17	529	15
Total Analysis Volume [veh/h]	2	0	82	80	0	61	35	2289	24	69	2118	60
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.18	0.00	0.50	53.66	0.00	0.32	0.34	0.02	0.00	0.78	0.02	0.00
d_M, Delay for Movement [s/veh]	3227.48	10000.0	46.43	10000.0	10000.0	32.21	56.13	0.00	0.00	124.22	0.00	0.00
Movement LOS	F	F	E	F	F	D	F	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.89	0.89	2.40	12.26	12.26	1.29	1.32	0.00	0.00	3.99	0.00	0.00
95th-Percentile Queue Length [ft/ln]	22.13	22.13	59.92	306.51	306.51	32.32	32.93	0.00	0.00	99.79	0.00	0.00
d_A, Approach Delay [s/veh]	122.17			5687.69			0.84			3.81		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	170.70											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	23.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.878

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	1189	78	40	2319	2059	1044
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	1189	78	40	2319	2059	1044
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	308	20	10	600	533	270
Total Analysis Volume [veh/h]	1231	81	41	2401	2131	1081
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	82
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	33	0	12	49	37	37
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	82	82	82	82	82	82
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	0.00
g_i, Effective Green Time [s]	29	29	4	45	37	70
g / C, Green / Cycle	0.35	0.35	0.05	0.55	0.45	0.85
(v / s)_i Volume / Saturation Flow Rate	0.35	0.05	0.02	0.46	0.41	0.67
s, saturation flow rate [veh/h]	3514	1615	1810	5176	5176	1615
c, Capacity [veh/h]	1242	571	96	2842	2315	1372
d1, Uniform Delay [s]	26.41	18.07	37.64	15.56	21.32	2.82
k, delay calibration	0.11	0.11	0.11	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]	10.03	0.11	2.96	3.29	7.46	4.65
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	0.99	0.14	0.43	0.84	0.92	0.79
d, Delay for Lane Group [s/veh]	36.44	18.18	40.61	18.85	28.78	7.47
Lane Group LOS	D	B	D	B	C	A
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.31	0.97	0.84	10.89	12.49	1.77
50th-Percentile Queue Length [ft/ln]	307.73	24.25	20.89	272.21	312.31	44.32
95th-Percentile Queue Length [veh/ln]	18.06	1.75	1.50	16.30	18.29	3.19
95th-Percentile Queue Length [ft/ln]	451.57	43.66	37.60	407.50	457.23	79.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.44	18.18	40.61	18.85	28.78	7.47
Movement LOS	D	B	D	B	C	A
d_A, Approach Delay [s/veh]	35.31		19.22		21.61	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	23.35					
Intersection LOS	C					
Intersection V/C	0.878					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	30.74	30.74	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.016	3.571	0.000
Crosswalk LOS	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	41.00	41.00	41.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.476	5.899
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Ridgecrest Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	36.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.954

Intersection Setup

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐⇐		⇐⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	1	0
Pocket Length [ft]	150.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	55.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Base Volume Input [veh/h]	554	152	1495	594	172	1442
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	554	152	1495	594	172	1442
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	146	40	393	156	45	379
Total Analysis Volume [veh/h]	583	160	1574	625	181	1518
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	102
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	66	0	15	81
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	C	R	C	C	L	C
C, Cycle Length [s]	102	102	102	102	102	102	102
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	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
g_i, Effective Green Time [s]	17	17	17	62	62	11	77
g / C, Green / Cycle	0.17	0.17	0.17	0.61	0.61	0.11	0.75
(v / s)_i Volume / Saturation Flow Rate	0.16	0.16	0.10	0.58	0.64	0.10	0.42
s, saturation flow rate [veh/h]	1810	1810	1615	1900	1727	1810	3618
c, Capacity [veh/h]	302	302	270	1158	1052	192	2730
d1, Uniform Delay [s]	42.19	42.19	39.29	18.47	19.92	45.29	5.29
k, delay calibration	0.12	0.12	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	18.14	18.14	2.08	16.81	40.18	19.28	0.82
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	0.97	0.97	0.59	0.95	1.04	0.94	0.56
d, Delay for Lane Group [s/veh]	60.33	60.33	41.37	35.28	60.09	64.57	6.11
Lane Group LOS	E	E	D	D	F	E	A
Critical Lane Group	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	8.33	8.33	3.63	23.84	30.78	5.31	4.14
50th-Percentile Queue Length [ft/ln]	208.20	208.20	90.86	596.06	769.46	132.71	103.50
95th-Percentile Queue Length [veh/ln]	13.06	13.06	6.54	31.85	41.39	9.09	7.45
95th-Percentile Queue Length [ft/ln]	326.52	326.52	163.55	796.26	1034.74	227.17	186.29

Movement, Approach, & Intersection Results

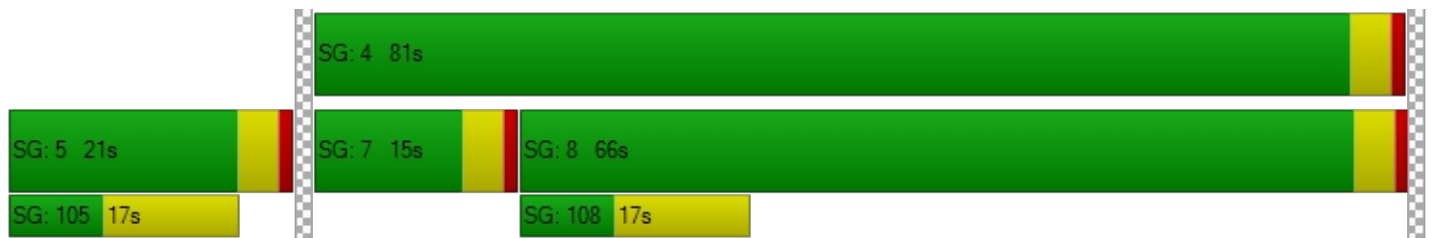
d_M, Delay for Movement [s/veh]	60.33	41.37	42.76	60.09	64.57	6.11
Movement LOS	E	D	D	E	E	A
d_A, Approach Delay [s/veh]	56.25		47.68		12.34	
Approach LOS	E		D		B	
d_I, Intersection Delay [s/veh]	36.12					
Intersection LOS	D					
Intersection V/C	0.954					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
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]	40.59	40.59	40.59
I_p,int, Pedestrian LOS Score for Intersection	2.920	3.740	3.481
Crosswalk LOS	C	D	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	51.00	51.00	51.00
I_b,int, Bicycle LOS Score for Intersection	5.358	5.947	5.534
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 13: Hesperia Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	70.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.082

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	0	2	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Base Volume Input [veh/h]	294	1150	472	340	1230	250	187	1282	357	413	1182	394
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	294	1150	472	340	1230	250	187	1282	357	413	1182	394
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	303	124	89	324	66	49	337	94	109	311	104
Total Analysis Volume [veh/h]	309	1211	497	358	1295	263	197	1349	376	435	1244	415
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	108
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	15	32	0	22	39	0	11	38	0	16	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	108	108	108	108	108	108	108	108	108	108	108	108
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	28	28	18	35	35	7	34	34	12	39	39
g / C, Green / Cycle	0.10	0.26	0.26	0.17	0.32	0.32	0.06	0.31	0.31	0.11	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.09	0.23	0.31	0.20	0.25	0.16	0.06	0.37	0.23	0.12	0.34	0.26
s, saturation flow rate [veh/h]	3514	5176	1615	1810	5176	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	358	1347	420	302	1683	525	228	1135	507	391	1302	581
d1, Uniform Delay [s]	47.76	38.57	39.95	45.00	32.81	29.38	50.03	37.07	33.16	48.00	33.72	29.78
k, delay calibration	0.11	0.50	0.50	0.24	0.50	0.50	0.11	0.15	0.26	0.11	0.11	0.25
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]	6.20	9.77	103.88	99.43	3.46	3.39	9.37	87.97	5.17	59.43	5.10	3.71
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	1.00	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	0.86	0.90	1.18	1.19	0.77	0.50	0.86	1.19	0.74	1.11	0.96	0.71
d, Delay for Lane Group [s/veh]	53.96	48.34	143.83	144.43	36.27	32.77	59.40	125.03	38.33	107.43	38.82	33.49
Lane Group LOS	D	D	F	F	D	C	E	F	D	F	D	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.23	10.92	22.60	16.01	10.02	5.67	2.83	27.74	8.95	8.25	15.52	9.20
50th-Percentile Queue Length [ft/ln]	105.76	273.06	564.96	400.20	250.52	141.71	70.72	693.42	223.82	206.30	387.89	229.93
95th-Percentile Queue Length [veh/ln]	7.60	16.34	33.38	24.44	15.21	9.57	5.09	40.40	13.86	13.51	21.98	14.17
95th-Percentile Queue Length [ft/ln]	190.09	408.56	834.56	610.92	380.31	239.33	127.29	1009.92	346.50	337.78	549.39	354.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.96	48.34	143.83	144.43	36.27	32.77	59.40	125.03	38.33	107.43	38.82	33.49
Movement LOS	D	D	F	F	D	C	E	F	D	F	D	C
d_A, Approach Delay [s/veh]	72.73			56.00			101.34			52.02		
Approach LOS	E			E			F			D		
d_I, Intersection Delay [s/veh]	70.16											
Intersection LOS	E											
Intersection V/C	1.082											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	43.56	43.56	43.56	43.56
I_p,int, Pedestrian LOS Score for Intersection	3.602	3.494	3.470	3.600
Crosswalk LOS	D	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	519	648	630	722
d_b, Bicycle Delay [s]	29.63	24.67	25.35	22.04
I_b,int, Bicycle LOS Score for Intersection	2.669	2.613	3.145	3.287
Bicycle LOS	B	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 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	71.1
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌⇌⇌			⇌⇌			⇌⇌⇌⇌			⇌⇌⇌⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	489	88	197	87	36	132	184	2339	505	156	1649	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	489	88	197	87	36	132	184	2339	505	156	1649	62
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	130	23	53	23	10	35	49	623	135	42	439	17
Total Analysis Volume [veh/h]	521	94	210	93	38	141	196	2494	538	166	1758	66
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	23	23	0	11	0	29	50	50	11	32	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	49	15	15	12	38	58	10	36	36
g / C, Green / Cycle	0.16	0.16	0.51	0.16	0.16	0.13	0.40	0.61	0.10	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.17	0.17	0.13	0.09	0.09	0.11	0.48	0.33	0.05	0.33	0.33
s, saturation flow rate [veh/h]	1810	1836	1615	1463	1615	1810	5176	1615	3514	3618	1865
c, Capacity [veh/h]	293	297	826	301	261	236	2093	982	365	1366	704
d1, Uniform Delay [s]	39.88	39.88	13.05	37.18	36.63	40.33	28.34	10.95	40.11	27.60	27.64
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.30
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]	65.19	62.72	0.74	4.51	7.78	7.31	87.28	2.19	0.89	2.02	9.75
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	1.05	1.04	0.25	0.43	0.54	0.83	1.19	0.55	0.46	0.88	0.88
d, Delay for Lane Group [s/veh]	105.07	102.60	13.79	41.70	44.41	47.64	115.62	13.14	41.00	29.62	37.39
Lane Group LOS	F	F	B	D	D	D	F	B	D	C	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.03	12.00	2.59	3.10	3.47	4.75	31.17	6.07	1.80	11.97	13.90
50th-Percentile Queue Length [ft/ln]	300.66	299.97	64.70	77.54	86.72	118.66	779.30	151.70	44.93	299.30	347.55
95th-Percentile Queue Length [veh/ln]	18.11	18.01	4.66	5.58	6.24	8.32	45.30	10.11	3.23	17.65	20.02
95th-Percentile Queue Length [ft/ln]	452.68	450.33	116.47	139.57	156.09	207.98	1132.43	252.69	80.87	441.16	500.42

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.05	102.60	13.79	41.70	41.70	44.41	47.64	115.62	13.14	41.00	32.07	37.39
Movement LOS	F	F	B	D	D	D	D	F	B	D	C	D
d_A, Approach Delay [s/veh]	80.91			43.10			94.41			32.99		
Approach LOS	F			D			F			C		
d_I, Intersection Delay [s/veh]	71.08											
Intersection LOS	E											
Intersection V/C	0.805											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.14	37.14	0.00	37.14
I_p,int, Pedestrian LOS Score for Intersection	2.608	2.215	0.000	3.762
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	147	968	589
d_b, Bicycle Delay [s]	30.40	40.76	12.64	23.63
I_b,int, Bicycle LOS Score for Intersection	2.921	2.008	3.335	2.654
Bicycle LOS	C	B	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	141	138	2325	296	126	1731
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	141	138	2325	296	126	1731
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	37	620	79	34	462
Total Analysis Volume [veh/h]	150	147	2481	316	134	1847
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	1.01	0.02	0.00	2.68	0.02
d_M, Delay for Movement [s/veh]	10000.00	138.59	0.00	0.00	933.32	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	21.38	7.53	0.00	0.00	14.07	0.00
95th-Percentile Queue Length [ft/ln]	534.52	188.25	0.00	0.00	351.69	0.00
d_A, Approach Delay [s/veh]	5119.10		0.00		63.13	
Approach LOS	F		A		F	
d_I, Intersection Delay [s/veh]	324.22					
Intersection LOS	F					

BUILDOUT YEAR (2040) WITH PROJECT

Chateau Senior Living Facility

Vistro File: G:\...IAM LR.vistro

Scenario 2 Year 2040 With Project

Report File: G:\...IAM LRP.pdf

10/8/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.846	38.1	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.308	29.5	D
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.004	22.8	C
4	Ridgecrest Rd (NS) at Pebble Beach Dr (EW)	Signalized	HCM 6th Edition	WB Left	6.575	30.5	C
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.551	15.0	B
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	1.153	51.5	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.502	2.2	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.888	48.0	D
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Thru	4.331	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.964	24.5	C
11	Project East Dwy (NS) at Yates Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	1.171	609.1	F
12	Ridgecrest Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	WB Left	0.821	23.1	C
13	Hesperia Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	NB Right	0.855	41.0	D
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.752	41.3	D
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	38.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.846

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	121	552	394	289	352	90	234	1491	115	347	1436	240
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	8	0	0	0	17	0	3	5	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]	121	552	402	297	352	90	234	1508	115	350	1441	243
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	145	106	78	93	24	62	397	30	92	379	64
Total Analysis Volume [veh/h]	127	581	423	313	371	95	246	1587	121	368	1517	256
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	81
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	12	26	0	11	25	0	11	28	28	13	30	30
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	L	C	R
C, Cycle Length [s]	81	81	81	81	81	81	81	81	81	81	81	81
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	0.00
g_i, Effective Green Time [s]	7	25	25	7	25	25	7	24	35	9	26	37
g / C, Green / Cycle	0.08	0.31	0.31	0.09	0.31	0.31	0.09	0.30	0.43	0.11	0.32	0.46
(v / s)_i Volume / Saturation Flow Rate	0.04	0.16	0.26	0.09	0.13	0.13	0.07	0.31	0.07	0.10	0.29	0.16
s, saturation flow rate [veh/h]	3514	3618	1615	3514	1900	1768	3514	5176	1615	3514	5176	1615
c, Capacity [veh/h]	287	1122	501	304	599	557	304	1525	688	391	1653	735
d1, Uniform Delay [s]	35.45	22.97	26.13	37.01	21.77	21.78	36.35	28.57	14.44	35.75	26.55	14.29
k, delay calibration	0.11	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]	1.07	1.71	15.92	31.83	2.01	2.17	5.11	23.33	0.12	11.25	2.46	0.28
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	0.44	0.52	0.84	1.03	0.40	0.40	0.81	1.04	0.18	0.94	0.92	0.35
d, Delay for Lane Group [s/veh]	36.52	24.68	42.04	68.83	23.79	23.95	41.46	51.90	14.57	47.00	29.01	14.57
Lane Group LOS	D	C	D	F	C	C	D	F	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.15	4.33	8.95	4.21	3.67	3.45	2.43	11.99	1.22	3.99	8.77	2.70
50th-Percentile Queue Length [ft/ln]	28.86	108.30	223.67	105.25	91.82	86.31	60.83	299.75	30.39	99.73	219.28	67.44
95th-Percentile Queue Length [veh/ln]	2.08	7.75	13.85	7.58	6.61	6.21	4.38	18.09	2.19	7.18	13.63	4.86
95th-Percentile Queue Length [ft/ln]	51.95	193.64	346.30	189.46	165.28	155.36	109.50	452.25	54.70	179.51	340.70	121.39

Movement, Approach, & Intersection Results

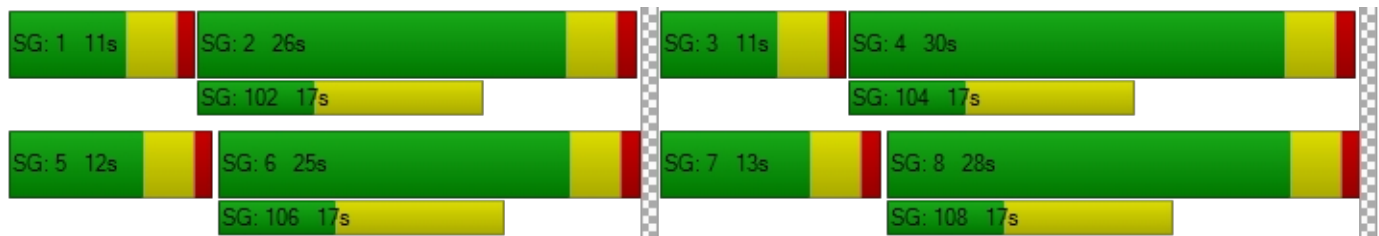
d_M, Delay for Movement [s/veh]	36.52	24.68	42.04	68.83	23.84	23.95	41.46	51.90	14.57	47.00	29.01	14.57
Movement LOS	D	C	D	F	C	C	D	F	B	D	C	B
d_A, Approach Delay [s/veh]	32.50			41.93			48.28			30.38		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	38.10											
Intersection LOS	D											
Intersection V/C	0.846											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	30.25	30.25	30.25	30.25
I_p,int, Pedestrian LOS Score for Intersection	3.050	2.850	3.510	3.569
Crosswalk LOS	C	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	543	519	593	642
d_b, Bicycle Delay [s]	21.49	22.22	20.06	18.67
I_b,int, Bicycle LOS Score for Intersection	2.493	2.202	2.634	2.737
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	29.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

Intersection Setup

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Base Volume Input [veh/h]	429	31	60	678	65	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	0	0	19	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]	487	31	60	697	65	130
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	128	8	16	183	17	34
Total Analysis Volume [veh/h]	513	33	63	734	68	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	0.01	0.00	0.06	0.01	0.31	0.19
d_M, Delay for Movement [s/veh]	0.00	0.00	8.71	0.00	29.53	18.16
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.19	0.00	2.67	2.67
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.86	0.00	66.77	66.77
d_A, Approach Delay [s/veh]	0.00		0.69		21.93	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.26					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	22.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	1	432	64	39	840	1	2	0	8	105	1	36
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	58	0	0	19	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	490	64	39	859	1	2	0	8	105	1	36
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	129	17	10	226	0	1	0	2	28	0	9
Total Analysis Volume [veh/h]	1	516	67	41	904	1	2	0	8	111	1	38
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.04	0.01	0.00	0.01	0.00	0.01	0.31	0.00	0.05
d_M, Delay for Movement [s/veh]	9.74	0.00	0.00	8.75	0.00	0.00	20.22	18.80	11.52	19.54	22.82	10.35
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.13	0.00	0.00	0.03	0.03	0.04	1.31	1.31	0.17
95th-Percentile Queue Length [ft/ln]	0.10	0.00	0.00	3.20	0.00	0.00	0.63	0.63	1.09	32.76	32.76	4.23
d_A, Approach Delay [s/veh]	0.02			0.38			13.26			17.24		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.83											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pebble Beach Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	30.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.575

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	4	378	56	33	911	2	5	1	23	146	7	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	50	0	3	16	0	0	0	0	0	0	8
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]	4	428	56	36	927	2	5	1	23	146	7	45
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	113	15	9	244	1	1	0	6	38	2	12
Total Analysis Volume [veh/h]	4	451	59	38	976	2	5	1	24	154	7	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	61
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	18	28	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	61	61	61	61	61	61	61	61	61	61
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	2.00	0.00	2.00	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]	1	29	29	3	32	32	17	17	17	17
g / C, Green / Cycle	0.01	0.47	0.47	0.06	0.52	0.52	0.28	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.14	0.14	0.02	0.26	0.26	0.11	0.01	5.67	0.03
s, saturation flow rate [veh/h]	1810	1900	1824	1810	1900	1899	52	1615	28	1615
c, Capacity [veh/h]	17	891	855	103	980	980	123	449	123	449
d1, Uniform Delay [s]	30.07	9.99	10.01	27.79	9.65	9.65	18.22	16.17	30.19	16.40
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	6.70	0.83	0.87	2.21	1.81	1.82	0.16	0.05	185.19	0.10
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	0.23	0.29	0.29	0.37	0.50	0.50	0.05	0.05	1.31	0.10
d, Delay for Lane Group [s/veh]	36.76	10.82	10.88	30.00	11.46	11.47	18.38	16.22	215.38	16.50
Lane Group LOS	D	B	B	C	B	B	B	B	F	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.08	1.70	1.66	0.53	3.25	3.25	0.06	0.24	8.09	0.48
50th-Percentile Queue Length [ft/ln]	2.08	42.47	41.42	13.22	81.24	81.19	1.58	5.99	202.30	11.91
95th-Percentile Queue Length [veh/ln]	0.15	3.06	2.98	0.95	5.85	5.85	0.11	0.43	14.41	0.86
95th-Percentile Queue Length [ft/ln]	3.75	76.45	74.56	23.80	146.23	146.14	2.85	10.78	360.17	21.44

Movement, Approach, & Intersection Results

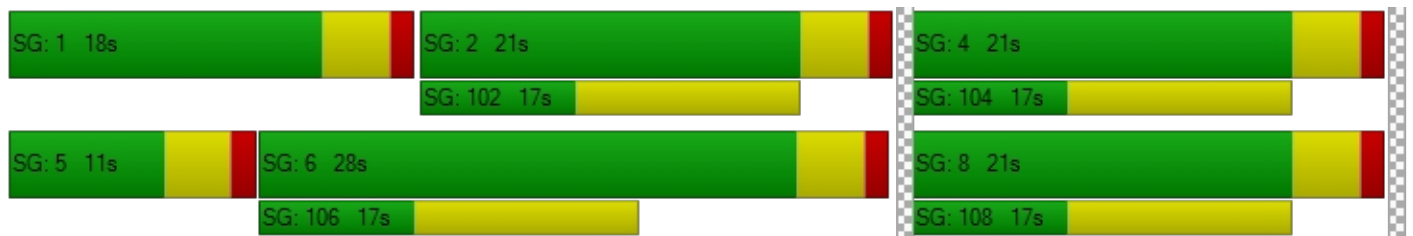
d_M, Delay for Movement [s/veh]	36.76	10.85	10.88	30.00	11.46	11.47	18.38	18.38	16.22	215.38	215.38	16.50
Movement LOS	D	B	B	C	B	B	B	B	B	F	F	B
d_A, Approach Delay [s/veh]	11.05			12.16			16.65			170.44		
Approach LOS	B			B			B			F		
d_I, Intersection Delay [s/veh]	30.53											
Intersection LOS	C											
Intersection V/C	6.575											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.49			20.49			20.49			20.49		
I_p,int, Pedestrian LOS Score for Intersection	3.094			2.828			1.930			2.001		
Crosswalk LOS	C			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	557			787			557			557		
d_b, Bicycle Delay [s]	15.87			11.22			15.87			15.87		
I_b,int, Bicycle LOS Score for Intersection	1.984			2.398			1.609			1.903		
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 5: Ridgecrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	15.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	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	1	0	0	1	0	0
Pocket Length [ft]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	6	464	80	87	1027	3	7	7	18	271	7	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	50	0	0	16	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]	6	514	80	87	1043	3	7	7	18	271	7	99
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	135	21	23	274	1	2	2	5	71	2	26
Total Analysis Volume [veh/h]	6	541	84	92	1098	3	7	7	19	285	7	104
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	22	0	17	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	26	26	6	31	31	16	16	16	16
g / C, Green / Cycle	0.01	0.43	0.43	0.09	0.51	0.51	0.27	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.00	0.17	0.17	0.05	0.29	0.29	0.01	0.02	0.20	0.07
s, saturation flow rate [veh/h]	1810	1900	1812	1810	1900	1898	1302	1683	1407	1630
c, Capacity [veh/h]	21	826	788	167	979	978	362	460	440	445
d1, Uniform Delay [s]	29.42	11.52	11.54	26.07	9.93	9.93	20.02	16.11	22.45	17.02
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	7.20	1.36	1.44	2.84	2.34	2.34	0.02	0.05	1.61	0.29
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
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	0.28	0.39	0.39	0.55	0.56	0.56	0.02	0.06	0.65	0.25
d, Delay for Lane Group [s/veh]	36.62	12.89	12.98	28.91	12.27	12.27	20.04	16.16	24.06	17.30
Lane Group LOS	D	B	B	C	B	B	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.13	2.91	2.81	1.21	3.80	3.80	0.08	0.26	3.60	1.08
50th-Percentile Queue Length [ft/ln]	3.13	72.83	70.33	30.24	94.99	94.92	1.97	6.39	89.94	26.97
95th-Percentile Queue Length [veh/ln]	0.23	5.24	5.06	2.18	6.84	6.83	0.14	0.46	6.48	1.94
95th-Percentile Queue Length [ft/ln]	5.64	131.09	126.59	54.42	170.98	170.85	3.55	11.51	161.89	48.55

Movement, Approach, & Intersection Results

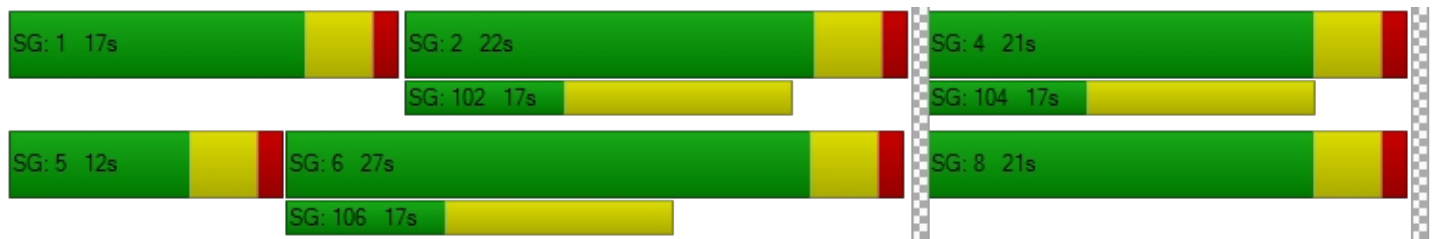
d_M, Delay for Movement [s/veh]	36.62	12.92	12.98	28.91	12.27	12.27	20.04	16.16	16.16	24.06	17.30	17.30
Movement LOS	D	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	13.16			13.55			16.98			22.17		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	15.01											
Intersection LOS	B											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			11.0			11.0			11.0		
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			20.01			20.01			20.01		
l_p,int, Pedestrian LOS Score for Intersection	0.000			2.947			1.931			2.169		
Crosswalk LOS	F			C			A			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	600			767			567			567		
d_b, Bicycle Delay [s]	14.70			11.41			15.41			15.41		
l_b,int, Bicycle LOS Score for Intersection	2.080			2.544			1.614			2.213		
Bicycle LOS	B			B			A			B		

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	51.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.153

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	18	6	4	192	11	1072	631	2374	18	10	2244	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	11	33	0	0	0	0	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]	18	6	4	197	11	1083	664	2374	18	10	2244	129
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	1	52	3	285	175	625	5	3	591	34
Total Analysis Volume [veh/h]	19	6	4	207	12	1140	699	2499	19	11	2362	136
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	125
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	48	93	0	11	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	125	125	125	125	125	125	125	125	125
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	65	44	94	94	2	52	52
g / C, Green / Cycle	0.14	0.14	0.52	0.35	0.75	0.75	0.02	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.25	0.17	0.40	0.39	0.46	0.46	0.01	0.45	0.46
s, saturation flow rate [veh/h]	116	1277	2859	1810	3618	1893	1810	3618	1848
c, Capacity [veh/h]	63	228	1482	637	2718	1422	33	1510	771
d1, Uniform Delay [s]	53.70	55.87	24.09	40.50	7.11	7.13	60.63	36.41	36.41
k, delay calibration	0.50	0.50	0.14	0.50	0.11	0.18	0.11	0.13	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]	22.04	50.08	1.13	65.35	0.22	0.73	5.99	43.82	65.23
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	0.46	0.96	0.77	1.10	0.61	0.61	0.34	1.09	1.11
d, Delay for Lane Group [s/veh]	75.74	105.95	25.21	105.85	7.33	7.86	66.62	80.22	101.64
Lane Group LOS	E	F	C	F	A	A	E	F	F
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.32	10.00	12.68	30.16	7.81	8.43	0.39	30.81	36.06
50th-Percentile Queue Length [ft/ln]	32.93	249.90	316.94	754.07	195.13	210.63	9.80	770.17	901.56
95th-Percentile Queue Length [veh/ln]	2.37	15.18	18.52	41.73	12.39	13.19	0.71	42.47	49.38
95th-Percentile Queue Length [ft/ln]	59.28	379.53	462.92	1043.34	309.67	329.64	17.64	1061.80	1234.51

Movement, Approach, & Intersection Results

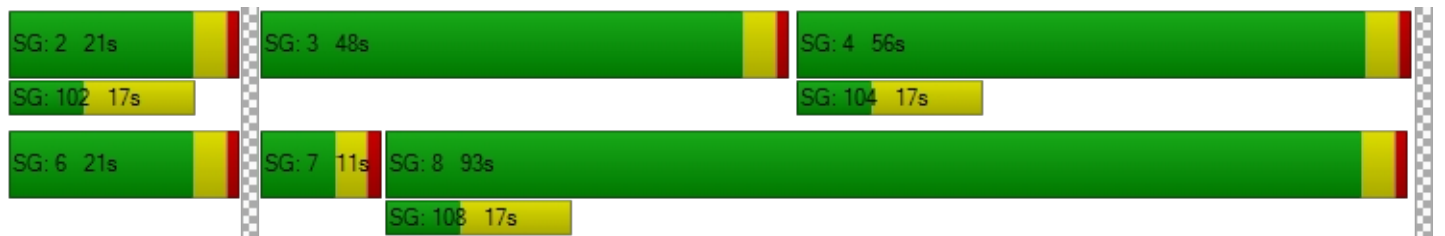
d_M, Delay for Movement [s/veh]	75.74	75.74	75.74	105.95	105.95	25.21	105.85	7.51	7.86	66.62	86.72	101.64
Movement LOS	E	E	E	F	F	C	F	A	A	E	F	F
d_A, Approach Delay [s/veh]	75.74			38.22			28.88			87.44		
Approach LOS	E			D			C			F		
d_I, Intersection Delay [s/veh]	51.51											
Intersection LOS	D											
Intersection V/C	1.153											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	51.98	51.98	0.00	51.98
I_p,int, Pedestrian LOS Score for Intersection	1.759	2.959	0.000	3.995
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	272	272	1424	832
d_b, Bicycle Delay [s]	46.66	46.66	5.18	21.32
I_b,int, Bicycle LOS Score for Intersection	1.607	3.802	3.329	2.940
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	2.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.502

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	9	1	5	1290	1543	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	18	59	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]	9	1	5	1308	1602	9
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	344	422	2
Total Analysis Volume [veh/h]	9	1	5	1377	1686	9
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	110
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	19	109	90	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	110	110	110	110	110
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]	2	1	100	95	95
g / C, Green / Cycle	0.02	0.01	0.91	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.01	0.00	0.38	0.47	0.01
s, saturation flow rate [veh/h]	1788	1810	3618	3618	1615
c, Capacity [veh/h]	31	17	3292	3126	1396
d1, Uniform Delay [s]	53.41	54.10	0.72	1.90	1.02
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.94	8.97	0.39	0.67	0.01
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	0.32	0.29	0.42	0.54	0.01
d, Delay for Lane Group [s/veh]	59.35	63.07	1.11	2.57	1.03
Lane Group LOS	E	E	A	A	A
Critical Lane Group	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.33	0.17	0.18	0.47	0.00
50th-Percentile Queue Length [ft/ln]	8.15	4.36	4.49	11.84	0.11
95th-Percentile Queue Length [veh/ln]	0.59	0.31	0.32	0.85	0.01
95th-Percentile Queue Length [ft/ln]	14.68	7.85	8.08	21.31	0.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	59.35	59.35	63.07	1.11	2.57	1.03
Movement LOS	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	59.35		1.34		2.57	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	2.20					
Intersection LOS	A					
Intersection V/C	0.502					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	44.55	44.55	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.734	3.377	0.000
Crosswalk LOS	A	C	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.149	5.273	5.531
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	48.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.888

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	282	782	93	153	769	293	343	592	254	251	814	219
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	0	0	0	25	8	5	5	0	17	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]	299	782	93	153	769	318	351	597	259	251	831	219
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	79	206	24	40	202	84	92	157	68	66	219	58
Total Analysis Volume [veh/h]	315	823	98	161	809	335	369	628	273	264	875	231
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	87
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	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	30	0	13	24	0	13	21	0	23	31	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	87	87	87	87	87	87	87	87	87	87	87	87
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]	15	26	26	9	20	20	9	21	21	15	27	27
g / C, Green / Cycle	0.17	0.30	0.30	0.10	0.23	0.23	0.10	0.24	0.24	0.17	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.17	0.23	0.06	0.09	0.22	0.21	0.11	0.17	0.17	0.15	0.30	0.30
s, saturation flow rate [veh/h]	1810	3618	1615	1810	3618	1615	3514	3618	1615	1810	1900	1766
c, Capacity [veh/h]	312	1088	486	188	839	375	364	881	393	304	585	544
d1, Uniform Delay [s]	36.02	27.54	22.65	38.39	33.06	32.39	39.01	30.14	29.98	35.25	29.77	29.92
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.36	0.36
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]	25.95	4.91	0.93	10.77	23.43	26.17	25.26	1.09	2.21	7.42	25.63	29.54
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	1.01	0.76	0.20	0.86	0.96	0.89	1.01	0.71	0.69	0.87	0.97	0.99
d, Delay for Lane Group [s/veh]	61.97	32.45	23.58	49.16	56.49	58.55	64.28	31.23	32.19	42.68	55.40	59.46
Lane Group LOS	F	C	C	D	E	E	F	C	C	D	E	E
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.28	7.61	1.47	3.68	10.32	8.88	4.96	5.72	5.07	5.74	14.86	14.57
50th-Percentile Queue Length [ft/ln]	206.98	190.35	36.80	92.00	258.02	222.02	123.89	142.93	126.74	143.55	371.60	364.35
95th-Percentile Queue Length [veh/ln]	13.06	12.14	2.65	6.62	15.59	13.77	8.65	9.64	8.76	9.67	21.19	20.84
95th-Percentile Queue Length [ft/ln]	326.38	303.48	66.24	165.61	389.73	344.20	216.19	240.96	219.06	241.79	529.67	520.88

Movement, Approach, & Intersection Results

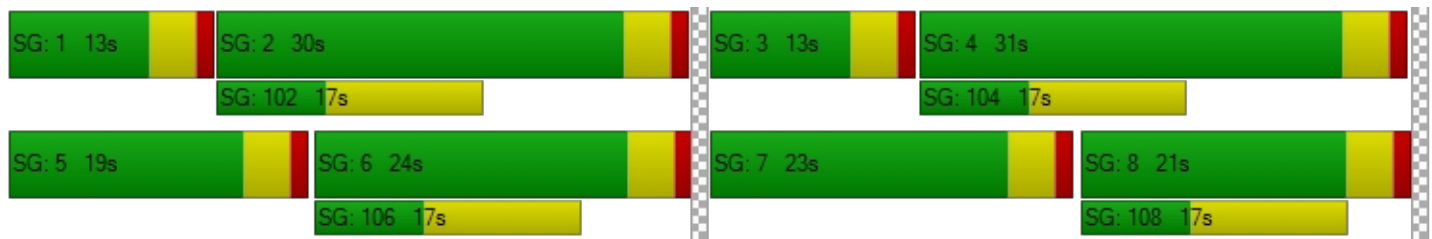
d_M, Delay for Movement [s/veh]	61.97	32.45	23.58	49.16	56.49	58.55	64.28	31.23	32.19	42.68	56.82	59.46
Movement LOS	F	C	C	D	E	E	F	C	C	D	E	E
d_A, Approach Delay [s/veh]	39.27			56.12			41.04			54.54		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	47.98											
Intersection LOS	D											
Intersection V/C	0.888											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	33.20	33.20	33.20	33.20
I_p,int, Pedestrian LOS Score for Intersection	3.220	3.263	3.234	2.958
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	598	460	391	621
d_b, Bicycle Delay [s]	21.39	25.80	28.16	20.69
I_b,int, Bicycle LOS Score for Intersection	2.579	2.636	2.607	2.690
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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.331

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	45	21	2	21	58	2061	2	41	1866	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	33	0	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	45	21	2	21	58	2094	2	41	1877	56
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	12	6	1	6	15	551	1	11	494	15
Total Analysis Volume [veh/h]	1	0	47	22	2	22	61	2204	2	43	1976	59
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.26	5.14	4.33	0.10	0.50	0.02	0.00	0.43	0.02	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	31.99	5865.86	10000.0	23.72	60.07	0.00	0.00	64.98	0.00	0.00
Movement LOS	F	F	D	F	F	C	F	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.68	0.68	1.00	4.63	4.63	0.34	2.28	0.00	0.00	1.79	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.95	16.95	25.06	115.70	115.70	8.46	56.98	0.00	0.00	44.71	0.00	0.00
d_A, Approach Delay [s/veh]	239.66			3251.54			1.62			1.34		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	37.74											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	24.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.964

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	976	54	88	1918	1973	1232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	33	11	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]	976	54	88	1951	1984	1232
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	257	14	23	513	522	324
Total Analysis Volume [veh/h]	1027	57	93	2054	2088	1297
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	32	0	18	60	42	42
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	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
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	0.00
g_i, Effective Green Time [s]	28	28	7	64	53	85
g / C, Green / Cycle	0.28	0.28	0.07	0.64	0.53	0.85
(v / s)_i Volume / Saturation Flow Rate	0.29	0.04	0.05	0.40	0.40	0.80
s, saturation flow rate [veh/h]	3514	1615	1810	5176	5176	1615
c, Capacity [veh/h]	984	452	121	3312	2760	1378
d1, Uniform Delay [s]	36.00	26.87	45.92	10.75	18.26	5.46
k, delay calibration	0.11	0.11	0.11	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]	26.58	0.12	9.89	0.88	1.99	13.75
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	1.04	0.13	0.77	0.62	0.76	0.94
d, Delay for Lane Group [s/veh]	62.58	26.99	55.81	11.63	20.25	19.21
Lane Group LOS	F	C	E	B	C	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	14.87	0.99	2.52	7.58	11.46	8.55
50th-Percentile Queue Length [ft/ln]	371.65	24.67	63.12	189.42	286.57	213.80
95th-Percentile Queue Length [veh/ln]	21.74	1.78	4.54	12.09	17.02	13.35
95th-Percentile Queue Length [ft/ln]	543.49	44.40	113.61	302.27	425.39	333.70

Movement, Approach, & Intersection Results

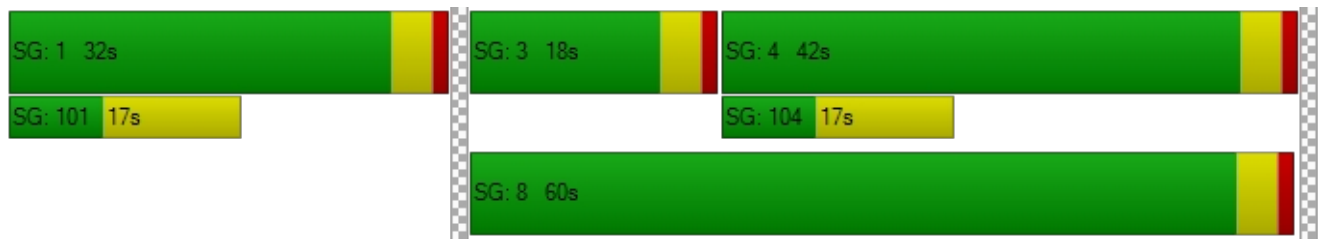
d_M, Delay for Movement [s/veh]	62.58	26.99	55.81	11.63	20.25	19.21
Movement LOS	F	C	E	B	C	B
d_A, Approach Delay [s/veh]	60.71		13.54		19.85	
Approach LOS	E		B		B	
d_I, Intersection Delay [s/veh]	24.50					
Intersection LOS	C					
Intersection V/C	0.964					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	39.61	39.61	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.040	3.515	0.000
Crosswalk LOS	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	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	4.132	5.313	5.994
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	609.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.171

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	1295	1544	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	35	108	0	0	59
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]	18	35	108	1295	1544	59
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	9	28	341	406	16
Total Analysis Volume [veh/h]	19	37	114	1363	1625	62
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	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.17	0.11	0.30	0.01	0.02	0.00
d_M, Delay for Movement [s/veh]	609.07	17.45	18.29	0.00	0.00	0.00
Movement LOS	F	C	C	A	A	A
95th-Percentile Queue Length [veh/ln]	2.85	0.38	1.22	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	71.20	9.50	30.57	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	218.18		1.41		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	4.44					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 12: Ridgecrest Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	23.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.821

Intersection Setup

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐⇐		⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	1	0
Pocket Length [ft]	150.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	55.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Base Volume Input [veh/h]	449	110	1185	541	197	1347
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	58	50	0	19	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]	449	168	1235	541	216	1363
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	112	44	309	135	57	341
Total Analysis Volume [veh/h]	449	177	1235	541	227	1363
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	92
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	50	71
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	C	R	C	C	L	C
C, Cycle Length [s]	92	92	92	92	92	92	92
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	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
g_i, Effective Green Time [s]	14	14	14	53	53	14	70
g / C, Green / Cycle	0.15	0.15	0.15	0.57	0.57	0.15	0.76
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.11	0.47	0.52	0.13	0.38
s, saturation flow rate [veh/h]	1810	1810	1615	1900	1716	1810	3618
c, Capacity [veh/h]	272	272	243	1083	978	270	2760
d1, Uniform Delay [s]	37.94	37.94	37.32	15.96	17.62	38.09	4.15
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.29	6.29	4.18	6.95	13.62	6.95	0.63
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	0.83	0.83	0.73	0.82	0.91	0.84	0.49
d, Delay for Lane Group [s/veh]	44.23	44.23	41.51	22.91	31.24	45.04	4.79
Lane Group LOS	D	D	D	C	C	D	A
Critical Lane Group	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.01	5.01	3.80	13.68	16.50	5.12	2.47
50th-Percentile Queue Length [ft/ln]	125.33	125.33	95.05	342.12	412.57	128.08	61.70
95th-Percentile Queue Length [veh/ln]	8.69	8.69	6.84	19.75	23.16	8.84	4.44
95th-Percentile Queue Length [ft/ln]	217.13	217.13	171.09	493.80	579.12	220.89	111.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.23	41.51	25.25	31.24	45.04	4.79
Movement LOS	D	D	C	C	D	A
d_A, Approach Delay [s/veh]	43.46		27.07		10.53	
Approach LOS	D		C		B	
d_I, Intersection Delay [s/veh]	23.06					
Intersection LOS	C					
Intersection V/C	0.821					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
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]	35.66	35.66	35.66
I_p,int, Pedestrian LOS Score for Intersection	2.869	3.522	3.348
Crosswalk LOS	C	D	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	46.00	46.00	46.00
I_b,int, Bicycle LOS Score for Intersection	5.165	5.598	5.444
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 13: Hesperia Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	41.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Base Volume Input [veh/h]	257	893	261	316	1150	164	151	915	331	364	1229	329
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	17	0	0	0	25	0	3	8	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]	257	893	269	333	1150	164	151	940	331	367	1237	334
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	235	71	88	303	43	40	247	87	97	326	88
Total Analysis Volume [veh/h]	271	940	283	351	1211	173	159	989	348	386	1302	352
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	92
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	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]	12	22	0	22	32	0	11	33	0	15	37	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	92	92	92	92	92	92	92	92	92	92	92	92
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]	8	18	18	18	28	28	7	29	29	11	33	33
g / C, Green / Cycle	0.09	0.20	0.20	0.20	0.31	0.31	0.07	0.31	0.31	0.12	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.08	0.18	0.18	0.19	0.23	0.11	0.05	0.27	0.22	0.11	0.36	0.22
s, saturation flow rate [veh/h]	3514	5176	1615	1810	5176	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	306	1021	319	354	1583	494	263	1134	506	420	1296	579
d1, Uniform Delay [s]	41.55	36.23	35.95	36.93	28.94	24.83	41.24	29.84	27.64	40.06	29.53	24.23
k, delay calibration	0.11	0.50	0.50	0.15	0.50	0.50	0.11	0.11	0.20	0.11	0.11	0.16
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]	8.47	14.53	28.61	24.49	3.58	1.95	2.23	2.25	3.09	8.44	12.71	1.57
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	0.92	0.89	0.99	0.76	0.35	0.60	0.87	0.69	0.92	1.00	0.61
d, Delay for Lane Group [s/veh]	50.02	50.76	64.56	61.42	32.52	26.78	43.47	32.09	30.72	48.50	42.24	25.80
Lane Group LOS	D	D	E	E	C	C	D	C	C	D	F	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.23	7.78	8.28	9.71	7.88	2.97	1.73	9.70	6.53	4.55	15.00	5.92
50th-Percentile Queue Length [ft/ln]	80.73	194.60	206.93	242.74	197.10	74.34	43.36	242.49	163.14	113.73	375.03	147.97
95th-Percentile Queue Length [veh/ln]	5.81	12.36	13.00	14.82	12.49	5.35	3.12	14.81	10.71	8.05	21.42	9.91
95th-Percentile Queue Length [ft/ln]	145.31	308.99	324.89	370.50	312.22	133.81	78.05	370.18	267.87	201.18	535.47	247.71

Movement, Approach, & Intersection Results

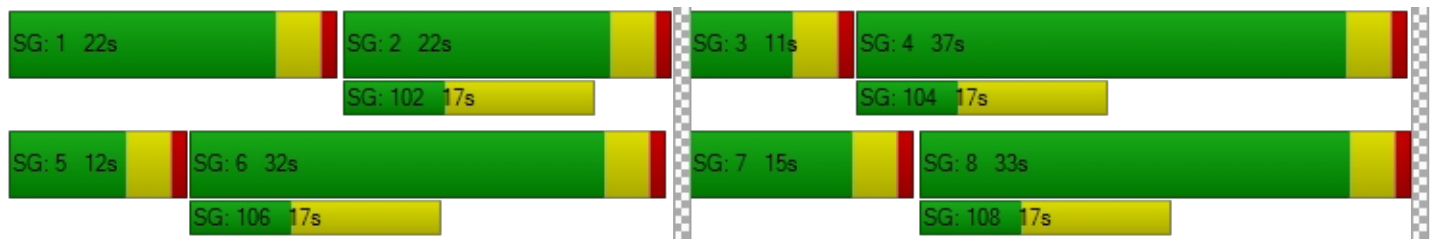
d_M, Delay for Movement [s/veh]	50.02	50.76	64.56	61.42	32.52	26.78	43.47	32.09	30.72	48.50	42.24	25.80
Movement LOS	D	D	E	E	C	C	D	C	C	D	F	C
d_A, Approach Delay [s/veh]	53.24			37.79			32.98			40.59		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	40.98											
Intersection LOS	D											
Intersection V/C	0.855											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	35.66			35.66			35.66			35.66		
I_p,int, Pedestrian LOS Score for Intersection	3.471			3.373			3.347			3.445		
Crosswalk LOS	C			C			C			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	391			609			630			717		
d_b, Bicycle Delay [s]	29.76			22.26			21.57			18.92		
I_b,int, Bicycle LOS Score for Intersection	2.381			2.514			2.794			3.243		
Bicycle LOS	B			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 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	41.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.752

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐			⇐⇐⇐⇐⇐			⇐⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	452	47	138	64	51	112	120	1982	464	169	1801	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	0	17	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]	452	47	138	64	51	112	120	1987	464	169	1818	60
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	128	13	39	18	14	32	34	561	131	48	514	17
Total Analysis Volume [veh/h]	511	53	156	72	58	127	136	2245	524	191	2054	68
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	27	27	0	11	0	11	21	21	11	21	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	32	9	9	7	30	43	7	30	30
g / C, Green / Cycle	0.12	0.12	0.46	0.12	0.12	0.10	0.43	0.61	0.10	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.16	0.15	0.10	0.09	0.08	0.08	0.43	0.32	0.05	0.39	0.39
s, saturation flow rate [veh/h]	1810	1826	1615	1500	1615	1810	5176	1615	3514	3618	1869
c, Capacity [veh/h]	223	225	742	264	199	175	2210	981	347	1552	802
d1, Uniform Delay [s]	30.80	30.80	11.38	29.81	29.31	30.98	20.13	8.02	30.17	18.66	18.73
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.38
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]	148.01	146.80	0.65	6.40	14.63	7.16	13.22	2.09	1.36	2.15	12.68
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	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	1.26	1.26	0.21	0.49	0.64	0.78	1.02	0.53	0.55	0.90	0.91
d, Delay for Lane Group [s/veh]	178.81	177.60	12.02	36.21	43.94	38.13	33.35	10.11	31.53	20.82	31.41
Lane Group LOS	F	F	B	D	D	D	F	B	C	C	C
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.78	12.82	1.46	2.44	2.70	2.41	12.45	3.73	1.48	9.04	11.76
50th-Percentile Queue Length [ft/ln]	319.51	320.49	36.44	60.95	67.60	60.35	311.30	93.24	36.99	225.93	294.11
95th-Percentile Queue Length [veh/ln]	20.40	20.44	2.62	4.39	4.87	4.35	18.44	6.71	2.66	13.97	17.39
95th-Percentile Queue Length [ft/ln]	509.93	510.95	65.60	109.71	121.68	108.63	460.94	167.84	66.59	349.18	434.73

Movement, Approach, & Intersection Results

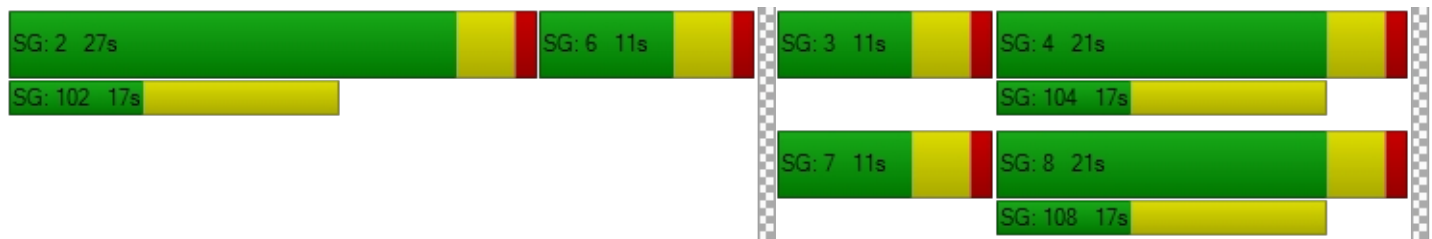
d_M, Delay for Movement [s/veh]	178.27	177.60	12.02	36.21	36.21	43.94	38.13	33.35	10.11	31.53	24.21	31.41
Movement LOS	F	F	B	D	D	D	D	F	B	C	C	C
d_A, Approach Delay [s/veh]	142.20			40.03			29.38			25.02		
Approach LOS	F			D			C			C		
d_I, Intersection Delay [s/veh]	41.31											
Intersection LOS	D											
Intersection V/C	0.752											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	24.86	24.86	0.00	24.86
I_p,int, Pedestrian LOS Score for Intersection	2.577	2.149	0.000	3.716
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	657	200	486	486
d_b, Bicycle Delay [s]	15.78	28.35	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	2.748	1.984	3.157	2.832
Bicycle LOS	B	A	C	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Northbound		Eastbound		Westbound	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Eastbound		Westbound	
Base Volume Input [veh/h]	150	106	1971	216	111	1877
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	0	17
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]	150	106	1976	216	111	1894
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	30	553	60	31	530
Total Analysis Volume [veh/h]	168	119	2213	242	124	2121
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.67	0.02	0.00	1.65	0.02
d_M, Delay for Movement [s/veh]	10000.00	58.09	0.00	0.00	437.21	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	23.66	3.92	0.00	0.00	10.52	0.00
95th-Percentile Queue Length [ft/ln]	591.56	98.02	0.00	0.00	262.98	0.00
d_A, Approach Delay [s/veh]	5877.75		0.00		24.15	
Approach LOS	F		A		C	
d_I, Intersection Delay [s/veh]	349.13					
Intersection LOS	F					

Chateau Senior Living Facility

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Scenario 2 Year 2040 With Project

Report File: G:\...\IPM LRP.pdf

10/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.897	41.6	D
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.176	38.2	E
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.004	25.5	D
4	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	WB Left	8.209	16.8	B
5	Ridgecrest Rd (NS) at Pahute Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.355	8.7	A
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	1.167	53.7	D
7	Park Rd (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.536	3.1	A
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	NB Left	1.036	89.1	F
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	61.460	10,000.0	F
10	Industrial Blvd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Left	0.879	23.9	C
11	Project East Dwy (NS) at Yates Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	4.013	1,846.8	F
12	Ridgecrest Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	WB Left	0.997	44.3	D
13	Hesperia Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	SB Left	1.101	73.2	E
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	EB Thru	0.808	72.1	E
15	Peach Ave (NS) at Bear Valley Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.000	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Hesperia Rd (NS) at Bear Valley Rd (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):	0.897

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	173	479	460	453	595	146	155	1474	108	382	1367	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	4	0	0	0	8	0	9	17	9
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]	173	479	464	457	595	146	155	1482	108	391	1384	280
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	44	121	117	116	151	37	39	375	27	99	350	71
Total Analysis Volume [veh/h]	175	485	470	463	602	148	157	1500	109	396	1401	283
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	0	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups									5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	11	34	0	17	40	0	11	33	33	16	38	38
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	10
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	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
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	C	L	C	R	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	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	7	30	30	13	36	36	7	29	40	12	34	51
g / C, Green / Cycle	0.07	0.30	0.30	0.13	0.36	0.36	0.07	0.29	0.40	0.12	0.34	0.51
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.29	0.13	0.20	0.20	0.04	0.29	0.07	0.11	0.27	0.18
s, saturation flow rate [veh/h]	3514	3618	1615	3514	1900	1772	3514	5176	1615	3514	5176	1615
c, Capacity [veh/h]	245	1092	488	457	688	642	244	1490	642	422	1753	822
d1, Uniform Delay [s]	45.56	28.15	34.38	43.51	25.54	25.57	45.35	35.62	19.47	43.64	29.99	14.63
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.15
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]	3.87	1.31	32.72	22.72	3.31	3.57	2.84	12.48	0.12	10.21	0.87	0.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.44	0.96	1.01	0.56	0.56	0.64	1.01	0.17	0.94	0.80	0.34
d, Delay for Lane Group [s/veh]	49.43	29.46	67.10	66.22	28.85	29.14	48.19	48.10	19.59	53.85	30.87	14.97
Lane Group LOS	D	C	E	F	C	C	D	F	B	D	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.16	4.57	14.79	6.92	7.64	7.20	1.91	12.86	1.53	5.26	9.61	3.53
50th-Percentile Queue Length [ft/ln]	54.06	114.37	369.76	172.94	190.92	180.12	47.74	321.43	38.31	131.46	240.14	88.16
95th-Percentile Queue Length [veh/ln]	3.89	8.08	21.10	11.29	12.17	11.61	3.44	18.81	2.76	9.02	14.69	6.35
95th-Percentile Queue Length [ft/ln]	97.32	202.06	527.44	282.26	304.22	290.18	85.93	470.35	68.96	225.47	367.21	158.69

Movement, Approach, & Intersection Results

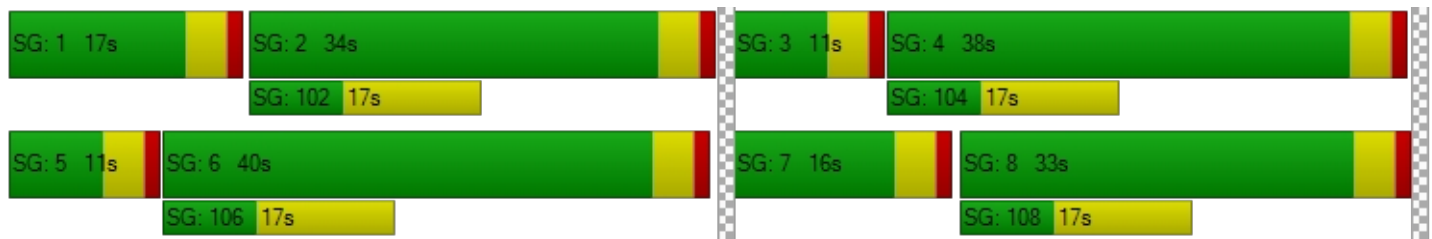
d_M, Delay for Movement [s/veh]	49.43	29.46	67.10	66.22	28.95	29.14	48.19	48.10	19.59	53.85	30.87	14.97
Movement LOS	D	C	E	F	C	C	D	F	B	D	C	B
d_A, Approach Delay [s/veh]	48.21			43.20			46.35			33.08		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	41.61											
Intersection LOS	D											
Intersection V/C	0.897											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	39.61	39.61	39.61	39.61
I_p,int, Pedestrian LOS Score for Intersection	3.118	2.921	3.484	3.587
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	720	580	680
d_b, Bicycle Delay [s]	24.50	20.48	25.21	21.78
I_b,int, Bicycle LOS Score for Intersection	2.492	2.560	2.531	2.704
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	38.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.176

Intersection Setup

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Base Volume Input [veh/h]	651	45	110	656	21	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	0	0	61	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]	679	45	110	717	21	55
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	179	12	29	189	6	14
Total Analysis Volume [veh/h]	715	47	116	755	22	58
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	0.13	0.01	0.18	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	9.84	0.00	38.16	15.18
Movement LOS	A	A	A	A	E	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.47	0.00	1.06	1.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	11.64	0.00	26.55	26.55
d_A, Approach Delay [s/veh]	0.00		1.31		21.50	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.67					
Intersection LOS	E					

Intersection Level Of Service Report

Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	25.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	4	674	120	64	664	6	2	0	1	86	1	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	0	0	61	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	702	120	64	725	6	2	0	1	86	1	26
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	185	32	17	191	2	1	0	0	23	0	7
Total Analysis Volume [veh/h]	4	739	126	67	763	6	2	0	1	91	1	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.09	0.01	0.00	0.01	0.00	0.00	0.32	0.00	0.05
d_M, Delay for Movement [s/veh]	9.23	0.00	0.00	10.00	0.00	0.00	19.68	21.25	10.82	23.95	25.54	11.55
Movement LOS	A	A	A	B	A	A	C	C	B	C	D	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.28	0.00	0.00	0.02	0.02	0.00	1.38	1.38	0.15
95th-Percentile Queue Length [ft/ln]	0.35	0.00	0.00	6.96	0.00	0.00	0.61	0.61	0.12	34.56	34.56	3.68
d_A, Approach Delay [s/veh]	0.04			0.80			16.73			21.15		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	1.79											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 4: Ridgecrest Rd (NS) at Pahute Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	16.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	8.209

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
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]	435.00	100.00	100.00	90.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			High Crest St			Pebble Beach Dr		
Base Volume Input [veh/h]	9	642	94	47	624	7	3	3	9	70	4	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	9	52	0	0	0	0	0	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	666	94	56	676	7	3	3	9	70	4	22
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	175	25	15	178	2	1	1	2	18	1	6
Total Analysis Volume [veh/h]	9	701	99	59	712	7	3	3	9	74	4	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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	11	21	0	11	21	0	0	28	0	0	28	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	R	C	R
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
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	2.00	0.00	2.00	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]	1	24	24	4	28	28	19	19	19	19
g / C, Green / Cycle	0.02	0.40	0.40	0.07	0.46	0.46	0.32	0.32	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.21	0.22	0.03	0.19	0.19	0.03	0.01	7.14	0.01
s, saturation flow rate [veh/h]	1810	1900	1819	1810	1900	1893	196	1615	11	1615
c, Capacity [veh/h]	29	766	733	132	874	871	153	523	120	523
d1, Uniform Delay [s]	29.18	13.61	13.62	26.65	10.80	10.80	16.29	13.79	29.15	13.91
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.50	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
d2, Incremental Delay [s]	5.73	2.65	2.78	2.35	1.44	1.44	0.10	0.01	23.86	0.03
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
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	0.31	0.53	0.53	0.45	0.41	0.41	0.04	0.02	0.65	0.04
d, Delay for Lane Group [s/veh]	34.90	16.27	16.39	29.00	12.23	12.24	16.40	13.81	53.01	13.95
Lane Group LOS	C	B	B	C	B	B	B	B	D	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.16	3.66	3.53	0.78	2.57	2.56	0.06	0.08	1.89	0.21
50th-Percentile Queue Length [ft/ln]	3.97	91.41	88.25	19.58	64.20	64.03	1.40	1.99	47.28	5.14
95th-Percentile Queue Length [veh/ln]	0.29	6.58	6.35	1.41	4.62	4.61	0.10	0.14	3.40	0.37
95th-Percentile Queue Length [ft/ln]	7.14	164.53	158.84	35.25	115.57	115.25	2.53	3.59	85.10	9.25

Movement, Approach, & Intersection Results

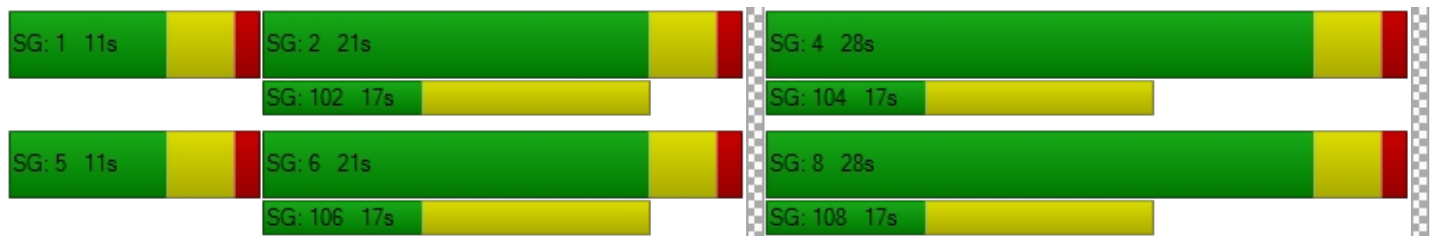
d_M, Delay for Movement [s/veh]	34.90	16.32	16.39	29.00	12.24	12.24	16.40	16.40	13.81	53.01	53.01	13.95
Movement LOS	C	B	B	C	B	B	B	B	B	D	D	B
d_A, Approach Delay [s/veh]	16.54			13.51			14.84			44.11		
Approach LOS	B			B			B			D		
d_I, Intersection Delay [s/veh]	16.77											
Intersection LOS	B											
Intersection V/C	8.209											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	20.01			20.01			20.01			20.01		
I_p,int, Pedestrian LOS Score for Intersection	2.956			2.820			1.927			1.989		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	567			567			800			800		
d_b, Bicycle Delay [s]	15.41			15.41			10.80			10.80		
I_b,int, Bicycle LOS Score for Intersection	2.227			2.201			1.584			1.726		
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 5: Ridgcrest Rd (NS) at Pahute Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.355

Intersection Setup

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
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]	310.00	100.00	100.00	410.00	100.00	100.00	61.00	100.00	100.00	122.00	100.00	100.00
Speed [mph]	25.00			55.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Ridgcrest Rd			Ridgcrest Rd			Pahute Ave			Pahute Ave		
Base Volume Input [veh/h]	13	792	52	26	756	3	5	3	13	85	7	73
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	0	52	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]	13	816	52	26	808	3	5	3	13	85	7	73
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	215	14	7	213	1	1	1	3	22	2	19
Total Analysis Volume [veh/h]	14	859	55	27	851	3	5	3	14	89	7	77
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	63
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	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]	12	28	0	11	27	0	0	21	0	0	21	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	L	C	L	C
C, Cycle Length [s]	63	63	63	63	63	63	63	63	63	63
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	2.00	0.00	2.00	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]	2	40	40	3	41	41	8	8	8	8
g / C, Green / Cycle	0.02	0.64	0.64	0.04	0.65	0.65	0.13	0.13	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.01	0.24	0.24	0.01	0.22	0.22	0.00	0.01	0.06	0.05
s, saturation flow rate [veh/h]	1810	1900	1860	1810	1900	1898	1335	1659	1418	1635
c, Capacity [veh/h]	44	1209	1184	76	1243	1241	180	218	239	214
d1, Uniform Delay [s]	30.22	5.51	5.51	29.35	4.87	4.87	28.58	24.03	27.98	25.07
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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
d2, Incremental Delay [s]	4.03	0.92	0.94	2.77	0.76	0.76	0.06	0.15	0.97	1.16
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	0.32	0.38	0.38	0.35	0.34	0.34	0.03	0.08	0.37	0.39
d, Delay for Lane Group [s/veh]	34.25	6.42	6.44	32.12	5.62	5.62	28.64	24.18	28.94	26.24
Lane Group LOS	C	A	A	C	A	A	C	C	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.25	2.58	2.53	0.41	1.39	1.39	0.07	0.22	1.26	1.12
50th-Percentile Queue Length [ft/ln]	6.32	64.49	63.30	10.20	34.78	34.75	1.83	5.61	31.54	27.97
95th-Percentile Queue Length [veh/ln]	0.46	4.64	4.56	0.73	2.50	2.50	0.13	0.40	2.27	2.01
95th-Percentile Queue Length [ft/ln]	11.38	116.08	113.93	18.36	62.61	62.55	3.29	10.10	56.77	50.34

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.25	6.43	6.44	32.12	5.62	5.62	28.64	24.18	24.18	28.94	26.24	26.24
Movement LOS	C	A	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	6.85			6.44			25.20			27.63		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	8.66											
Intersection LOS	A											
Intersection V/C	0.355											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
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	21.46	21.46	21.46
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.939	1.933	2.032
Crosswalk LOS	F	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	762	730	540	540
d_b, Bicycle Delay [s]	12.07	12.70	16.79	16.79
I_b,int, Bicycle LOS Score for Intersection	2.325	2.286	1.596	1.845
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 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	53.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.167

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rlll			rlll		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	17	27	17	204	1	788	830	2805	18	2	2118	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	35	16	0	0	0	0	8
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]	17	27	17	221	1	823	846	2805	18	2	2118	162
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	7	4	56	0	210	216	717	5	1	541	41
Total Analysis Volume [veh/h]	17	28	17	226	1	842	865	2868	18	2	2166	166
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	87
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	40	66	0	11	37	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	87	87	87	87	87	87	87	87	87
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	6	46	36	69	69	0	33	33
g / C, Green / Cycle	0.07	0.07	0.53	0.41	0.79	0.79	0.00	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.13	0.18	0.29	0.48	0.52	0.52	0.00	0.43	0.43
s, saturation flow rate [veh/h]	496	1286	2859	1810	3618	1894	1810	3618	1832
c, Capacity [veh/h]	86	170	1506	748	2855	1495	9	1379	698
d1, Uniform Delay [s]	40.78	42.02	13.81	25.54	4.05	4.07	43.13	26.94	26.94
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.22	0.11	0.13	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]	40.39	186.51	0.33	85.28	0.27	1.06	11.08	55.99	76.60
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	0.72	1.34	0.56	1.16	0.66	0.66	0.21	1.12	1.13
d, Delay for Lane Group [s/veh]	81.17	228.53	14.14	110.82	4.32	5.13	54.21	82.93	103.54
Lane Group LOS	F	F	B	F	A	A	D	F	F
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.32	12.48	4.76	31.24	3.13	3.63	0.07	23.44	27.74
50th-Percentile Queue Length [ft/ln]	58.03	311.88	118.88	780.90	78.28	90.78	1.74	586.09	693.60
95th-Percentile Queue Length [veh/ln]	4.18	19.98	8.33	44.65	5.64	6.54	0.13	33.80	39.55
95th-Percentile Queue Length [ft/ln]	104.46	499.41	208.29	1116.20	140.90	163.40	3.14	844.94	988.67

Movement, Approach, & Intersection Results

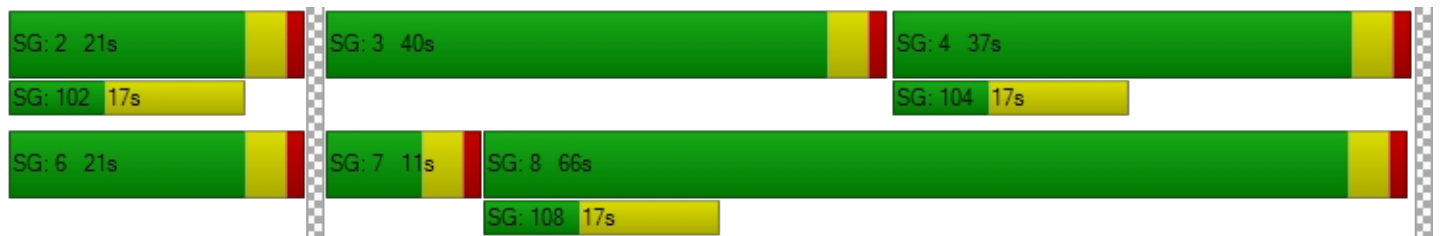
d_M, Delay for Movement [s/veh]	81.17	81.17	81.17	228.53	228.53	14.14	110.82	4.60	5.13	54.21	88.87	103.54
Movement LOS	F	F	F	F	F	B	F	A	A	D	F	F
d_A, Approach Delay [s/veh]	81.17			59.66			29.09			89.89		
Approach LOS	F			E			C			F		
d_I, Intersection Delay [s/veh]	53.73											
Intersection LOS	D											
Intersection V/C	1.167											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	33.20	33.20	0.00	33.20
I_p,int, Pedestrian LOS Score for Intersection	1.746	2.920	0.000	4.051
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	391	391	1425	759
d_b, Bicycle Delay [s]	28.16	28.16	3.59	16.76
I_b,int, Bicycle LOS Score for Intersection	1.662	3.323	3.623	2.843
Bicycle LOS	A	C	D	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Park Rd (NS) at Yates Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	3.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.536

Intersection Setup

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	330.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Park Rd		Yates Rd		Yucca Loma Rd	
Base Volume Input [veh/h]	17	10	7	1640	1604	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	60	28	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]	17	10	7	1700	1632	9
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	2	447	429	2
Total Analysis Volume [veh/h]	18	11	7	1788	1716	9
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	1	0	3	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	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]	21	0	19	109	90	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	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	L	C	C	R
C, Cycle Length [s]	130	130	130	130	130
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]	5	2	117	112	112
g / C, Green / Cycle	0.04	0.01	0.90	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.02	0.00	0.49	0.47	0.01
s, saturation flow rate [veh/h]	1730	1810	3618	3618	1615
c, Capacity [veh/h]	61	22	3267	3111	1389
d1, Uniform Delay [s]	61.50	63.61	1.20	2.42	1.28
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.63	7.63	0.66	0.71	0.01
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	0.31	0.55	0.55	0.01
d, Delay for Lane Group [s/veh]	67.13	71.25	1.87	3.13	1.29
Lane Group LOS	E	E	A	A	A
Critical Lane Group	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.04	0.27	0.30	1.97	0.01
50th-Percentile Queue Length [ft/ln]	26.11	6.75	7.53	49.35	0.31
95th-Percentile Queue Length [veh/ln]	1.88	0.49	0.54	3.55	0.02
95th-Percentile Queue Length [ft/ln]	47.00	12.15	13.55	88.82	0.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.13	67.13	71.25	1.87	3.13	1.29
Movement LOS	E	E	E	A	A	A
d_A, Approach Delay [s/veh]	67.13		2.14		3.12	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	3.15					
Intersection LOS	A					
Intersection V/C	0.536					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	54.47	54.47	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.751	3.520	0.000
Crosswalk LOS	A	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
I_b,int, Bicycle LOS Score for Intersection	4.180	5.613	5.556
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	89.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.036

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	370	1101	217	258	1197	499	386	822	394	207	831	116
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	0	0	12	26	17	17	0	8	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]	378	1101	217	258	1197	511	412	839	411	207	839	116
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	290	57	68	315	134	108	221	108	54	221	31
Total Analysis Volume [veh/h]	398	1159	228	272	1260	538	434	883	433	218	883	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	113
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	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	21	38	0	17	33	0	16	32	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	113	113	113	113	113	113	113	113	113	113	113	113
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	39	39	17	34	34	13	29	29	12	28	28
g / C, Green / Cycle	0.19	0.35	0.35	0.15	0.30	0.30	0.12	0.26	0.26	0.11	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.22	0.32	0.14	0.15	0.35	0.33	0.12	0.24	0.27	0.12	0.27	0.27
s, saturation flow rate [veh/h]	1810	3618	1615	1810	3618	1615	3514	3618	1615	1810	1900	1820
c, Capacity [veh/h]	352	1252	559	272	1092	488	404	925	413	192	469	449
d1, Uniform Delay [s]	45.50	35.55	28.13	47.99	39.45	39.45	50.00	41.43	42.07	50.50	42.56	42.56
k, delay calibration	0.32	0.50	0.50	0.13	0.50	0.50	0.11	0.11	0.46	0.11	0.46	0.46
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]	79.56	12.91	2.20	27.78	79.88	72.01	43.50	6.72	55.88	74.11	67.83	69.77
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	1.13	0.93	0.41	1.00	1.15	1.10	1.07	0.96	1.05	1.13	1.09	1.10
d, Delay for Lane Group [s/veh]	125.06	48.46	30.33	75.77	119.32	111.46	93.50	48.14	97.95	124.61	110.40	112.33
Lane Group LOS	F	D	C	E	F	F	F	D	F	F	F	F
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	17.09	16.33	4.73	9.35	26.12	22.26	7.98	12.42	17.38	9.23	21.32	20.67
50th-Percentile Queue Length [ft/ln]	427.17	408.27	118.18	233.77	653.10	556.49	199.44	310.49	434.42	230.68	532.97	516.68
95th-Percentile Queue Length [veh/ln]	25.40	22.96	8.29	14.37	37.65	31.89	12.97	18.20	24.91	14.91	30.44	29.67
95th-Percentile Queue Length [ft/ln]	635.06	573.96	207.32	359.15	941.27	797.23	324.21	454.98	622.85	372.68	760.98	741.70

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	125.06	48.46	30.33	75.77	119.32	111.46	93.50	48.14	97.95	124.61	111.21	112.33
Movement LOS	F	D	C	E	F	F	F	D	F	F	F	F
d_A, Approach Delay [s/veh]	63.22			111.56			71.71			113.71		
Approach LOS	E			F			E			F		
d_I, Intersection Delay [s/veh]	89.10											
Intersection LOS	F											
Intersection V/C	1.036											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	46.04	46.04	46.04	46.04
I_p,int, Pedestrian LOS Score for Intersection	3.565	3.591	3.389	3.073
Crosswalk LOS	D	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	690	602	513	496
d_b, Bicycle Delay [s]	24.23	27.62	31.22	31.97
I_b,int, Bicycle LOS Score for Intersection	3.032	3.267	3.003	2.569
Bicycle LOS	C	C	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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	61.460

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔			↔↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	78	76	0	58	33	2175	23	66	2012	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	16	0	0	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	78	76	0	58	33	2191	23	66	2047	57
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	21	20	0	15	9	577	6	17	539	15
Total Analysis Volume [veh/h]	2	0	82	80	0	61	35	2306	24	69	2155	60
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.33	0.00	0.50	61.46	0.00	0.33	0.35	0.02	0.00	0.79	0.02	0.00
d_M, Delay for Movement [s/veh]	3661.39	10000.0	47.43	10000.0	10000.0	33.34	59.44	0.00	0.00	129.46	0.00	0.00
Movement LOS	F	F	E	F	F	D	F	A	A	F	A	A
95th-Percentile Queue Length [veh/ln]	0.90	0.90	2.44	12.28	12.28	1.34	1.38	0.00	0.00	4.08	0.00	0.00
95th-Percentile Queue Length [ft/ln]	22.43	22.43	61.00	307.01	307.01	33.51	34.61	0.00	0.00	101.92	0.00	0.00
d_A, Approach Delay [s/veh]	133.47			5688.18			0.88			3.91		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	169.11											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Industrial Blvd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	23.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.879

Intersection Setup

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐		⇐	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	1
Pocket Length [ft]	145.00	100.00	215.00	100.00	100.00	198.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Industrial Blvd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	1189	78	40	2319	2059	1044
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	16	35	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]	1189	78	40	2335	2094	1044
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	308	20	10	604	542	270
Total Analysis Volume [veh/h]	1231	81	41	2417	2168	1081
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	85
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal group	1	0	3	8	4	4
Auxiliary Signal Groups						1,4
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	7	0	7	7	7	7
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	34	0	12	51	39	39
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	7	0	0	7	7	7
Pedestrian Clearance [s]	10	0	0	10	10	10
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
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	L	C	C	R
C, Cycle Length [s]	85	85	85	85	85	85
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	0.00
g_i, Effective Green Time [s]	30	30	4	47	39	73
g / C, Green / Cycle	0.35	0.35	0.05	0.55	0.45	0.85
(v / s)_i Volume / Saturation Flow Rate	0.35	0.05	0.02	0.47	0.42	0.67
s, saturation flow rate [veh/h]	3514	1615	1810	5176	5176	1615
c, Capacity [veh/h]	1239	570	95	2864	2349	1379
d1, Uniform Delay [s]	27.43	18.76	39.08	15.92	21.83	2.76
k, delay calibration	0.11	0.11	0.11	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]	10.43	0.11	3.09	3.25	7.53	4.53
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	0.99	0.14	0.43	0.84	0.92	0.78
d, Delay for Lane Group [s/veh]	37.87	18.88	42.17	19.18	29.36	7.29
Lane Group LOS	D	B	D	B	C	A
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.90	1.02	0.87	11.43	13.23	1.74
50th-Percentile Queue Length [ft/ln]	322.51	25.44	21.79	285.72	330.84	43.39
95th-Percentile Queue Length [veh/ln]	18.79	1.83	1.57	16.97	19.20	3.12
95th-Percentile Queue Length [ft/ln]	469.77	45.79	39.22	424.32	479.99	78.10

Movement, Approach, & Intersection Results

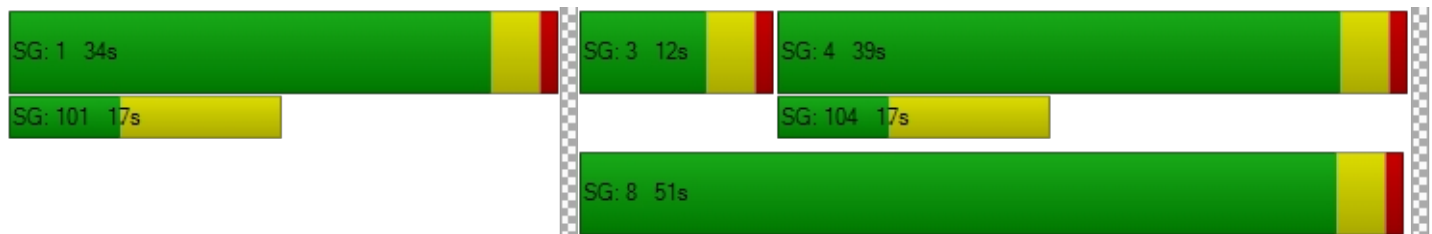
d_M, Delay for Movement [s/veh]	37.87	18.88	42.17	19.18	29.36	7.29
Movement LOS	D	B	D	B	C	A
d_A, Approach Delay [s/veh]	36.69		19.56		22.02	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	23.90					
Intersection LOS	C					
Intersection V/C	0.879					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	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]	32.21	32.21	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.018	3.582	0.000
Crosswalk LOS	C	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	42.50	42.50	42.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.484	5.919
Bicycle LOS	D	F	F

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	1,846.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.013

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	1647	1614	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	112	52	0	0	28
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]	60	112	52	1647	1614	28
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	29	14	433	425	7
Total Analysis Volume [veh/h]	63	118	55	1734	1699	29
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	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	4.01	0.38	0.15	0.02	0.02	0.00
d_M, Delay for Movement [s/veh]	1846.84	23.75	16.41	0.00	0.00	0.00
Movement LOS	F	C	C	A	A	A
95th-Percentile Queue Length [veh/ln]	8.65	1.73	0.52	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	216.13	43.36	12.92	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	658.31		0.50		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	32.47					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 12: Ridgecrest Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	44.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.997

Intersection Setup

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐⇐		⇐⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	1	0
Pocket Length [ft]	150.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	55.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Base Volume Input [veh/h]	554	152	1495	594	172	1442
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	24	0	61	51
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]	554	180	1519	594	233	1493
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	146	47	400	156	61	393
Total Analysis Volume [veh/h]	583	189	1599	625	245	1572
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	105
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	66	0	18	84
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	C	R	C	C	L	C
C, Cycle Length [s]	105	105	105	105	105	105	105
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	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
g_i, Effective Green Time [s]	17	17	17	62	62	14	80
g / C, Green / Cycle	0.16	0.16	0.16	0.59	0.59	0.13	0.76
(v / s)_i Volume / Saturation Flow Rate	0.16	0.16	0.12	0.59	0.64	0.14	0.43
s, saturation flow rate [veh/h]	1810	1810	1615	1900	1729	1810	3618
c, Capacity [veh/h]	293	293	262	1125	1023	238	2755
d1, Uniform Delay [s]	43.93	43.93	41.74	21.06	21.41	45.60	5.27
k, delay calibration	0.13	0.13	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	25.31	25.31	3.74	24.21	54.66	35.07	0.86
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	0.99	0.99	0.72	0.99	1.09	1.03	0.57
d, Delay for Lane Group [s/veh]	69.24	69.24	45.48	45.27	76.08	80.66	6.14
Lane Group LOS	E	E	D	D	F	F	A
Critical Lane Group	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	9.16	9.16	4.64	28.74	35.35	8.15	4.40
50th-Percentile Queue Length [ft/ln]	228.95	228.95	116.07	718.42	883.80	203.69	109.99
95th-Percentile Queue Length [veh/ln]	14.12	14.12	8.18	37.53	48.29	12.99	7.84
95th-Percentile Queue Length [ft/ln]	353.03	353.03	204.41	938.21	1207.35	324.82	195.99

Movement, Approach, & Intersection Results

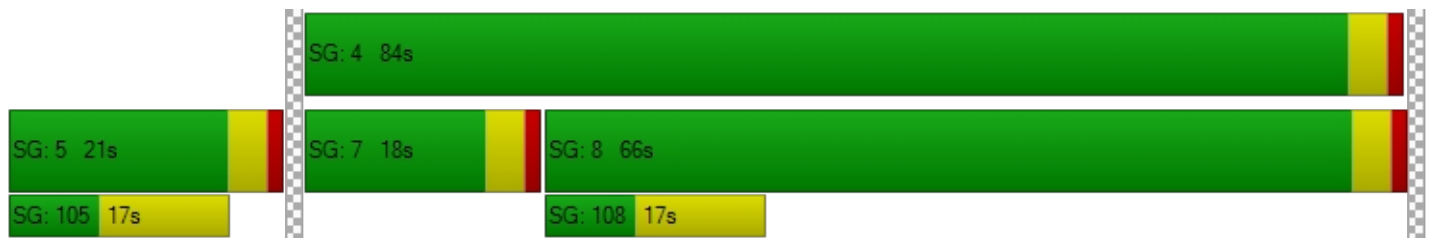
d_M, Delay for Movement [s/veh]	69.24	45.48	54.65	76.08	80.66	6.14
Movement LOS	E	D	D	E	F	A
d_A, Approach Delay [s/veh]	63.42		60.67		16.19	
Approach LOS	E		E		B	
d_I, Intersection Delay [s/veh]	44.32					
Intersection LOS	D					
Intersection V/C	0.997					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
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]	42.08	42.08	42.08
I_p,int, Pedestrian LOS Score for Intersection	2.949	3.765	3.534
Crosswalk LOS	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	52.50	52.50	52.50
I_b,int, Bicycle LOS Score for Intersection	5.406	5.967	5.631
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 13: Hesperia Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	73.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.101

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	0	2	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Base Volume Input [veh/h]	294	1150	472	340	1230	250	187	1282	357	413	1182	394
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	8	0	0	0	12	0	9	25	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]	294	1150	476	348	1230	250	187	1294	357	422	1207	411
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	303	125	92	324	66	49	341	94	111	318	108
Total Analysis Volume [veh/h]	309	1211	501	366	1295	263	197	1362	376	444	1271	433
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	103
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
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]	7	7	0	7	7	0	7	7	0	7	7	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]	14	30	0	21	37	0	11	36	0	16	41	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	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	103	103	103	103	103	103	103	103	103	103	103	103
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]	10	26	26	17	33	33	7	32	32	12	37	37
g / C, Green / Cycle	0.10	0.25	0.25	0.17	0.32	0.32	0.07	0.31	0.31	0.12	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.09	0.23	0.31	0.20	0.25	0.16	0.06	0.38	0.23	0.13	0.35	0.27
s, saturation flow rate [veh/h]	3514	5176	1615	1810	5176	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	342	1317	411	299	1668	521	240	1116	498	410	1292	577
d1, Uniform Delay [s]	46.03	37.38	38.41	43.01	31.56	28.26	47.39	35.62	32.11	45.51	32.83	29.10
k, delay calibration	0.11	0.50	0.50	0.23	0.50	0.50	0.11	0.16	0.27	0.11	0.11	0.27
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]	8.90	11.80	118.91	114.38	3.62	3.48	6.92	101.97	5.70	47.25	8.51	4.91
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	0.92	1.22	1.22	0.78	0.51	0.82	1.22	0.75	1.08	0.98	0.75
d, Delay for Lane Group [s/veh]	54.94	49.18	157.32	157.39	35.17	31.74	54.31	137.59	37.80	92.76	41.35	34.01
Lane Group LOS	D	D	F	F	D	C	D	F	D	F	D	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.16	10.70	23.25	16.69	9.55	5.41	2.62	28.69	8.61	7.67	15.81	9.41
50th-Percentile Queue Length [ft/ln]	103.91	267.42	581.33	417.16	238.85	135.29	65.43	717.32	215.34	191.87	395.22	235.25
95th-Percentile Queue Length [veh/ln]	7.48	16.06	34.71	25.64	14.62	9.23	4.71	42.17	13.43	12.61	22.33	14.44
95th-Percentile Queue Length [ft/ln]	187.04	401.51	867.71	641.00	365.58	230.67	117.78	1054.21	335.67	315.23	558.24	361.03

Movement, Approach, & Intersection Results

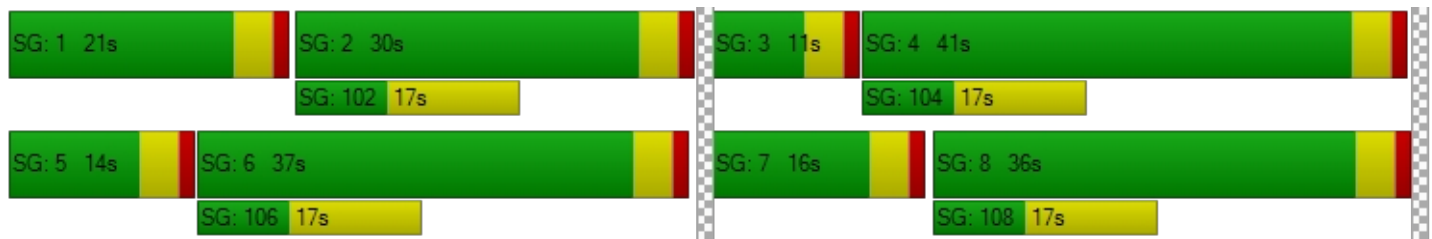
d_M, Delay for Movement [s/veh]	54.94	49.18	157.32	157.39	35.17	31.74	54.31	137.59	37.80	92.76	41.35	34.01
Movement LOS	D	D	F	F	D	C	D	F	D	F	D	C
d_A, Approach Delay [s/veh]	76.87			57.95			109.72			50.49		
Approach LOS	E			E			F			D		
d_I, Intersection Delay [s/veh]	73.20											
Intersection LOS	E											
Intersection V/C	1.101											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	41.09	41.09	41.09	41.09
I_p,int, Pedestrian LOS Score for Intersection	3.602	3.497	3.477	3.616
Crosswalk LOS	D	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	505	641	621	718
d_b, Bicycle Delay [s]	28.78	23.79	24.47	21.15
I_b,int, Bicycle LOS Score for Intersection	2.671	2.618	3.156	3.332
Bicycle LOS	B	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 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	72.1
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.808

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐			⇐⇐⇐⇐⇐			⇐⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	489	88	197	87	36	132	184	2339	505	156	1649	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	0	8	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]	489	88	197	87	36	132	184	2356	505	156	1657	62
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	130	23	53	23	10	35	49	628	135	42	442	17
Total Analysis Volume [veh/h]	521	94	210	93	38	141	196	2512	538	166	1767	66
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	0	2	2	0	6	0	3	8	8	7	4	0
Auxiliary Signal Groups			2,7						2,8			
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	7	0	7	0	7	7	7	7	7	0
Maximum Green [s]	0	30	30	0	30	0	30	30	30	30	30	0
Amber [s]	0.0	3.0	3.0	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	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	23	23	0	11	0	29	50	50	11	32	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	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	2.0	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	No	
Maximum Recall		No	No		No		No	No	No	No	No	
Pedestrian Recall		No	No		No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	C	R	L	C	R	L	C	C
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95
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]	0.00	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	0.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	49	15	15	12	39	58	10	36	36
g / C, Green / Cycle	0.16	0.16	0.51	0.16	0.16	0.13	0.41	0.61	0.10	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.17	0.17	0.13	0.09	0.09	0.11	0.49	0.33	0.05	0.33	0.33
s, saturation flow rate [veh/h]	1810	1836	1615	1463	1615	1810	5176	1615	3514	3618	1865
c, Capacity [veh/h]	292	296	824	300	260	236	2100	983	365	1371	707
d1, Uniform Delay [s]	39.92	39.92	13.12	37.24	36.69	40.33	28.28	10.92	40.10	27.54	27.58
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.50	0.11	0.11	0.30
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]	66.66	64.15	0.75	4.55	7.88	7.31	89.44	2.19	0.88	2.03	9.88
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	1.05	1.04	0.25	0.44	0.54	0.83	1.20	0.55	0.45	0.88	0.88
d, Delay for Lane Group [s/veh]	106.58	104.06	13.87	41.79	44.57	47.64	117.72	13.10	40.98	29.57	37.46
Lane Group LOS	F	F	B	D	D	D	F	B	D	C	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.09	12.07	2.60	3.11	3.48	4.75	31.68	6.05	1.80	12.03	13.99
50th-Percentile Queue Length [ft/ln]	302.34	301.63	64.92	77.65	86.91	118.66	792.01	151.37	44.91	300.64	349.71
95th-Percentile Queue Length [veh/ln]	18.23	18.13	4.67	5.59	6.26	8.32	46.07	10.09	3.23	17.71	20.12
95th-Percentile Queue Length [ft/ln]	455.73	453.35	116.86	139.77	156.45	207.98	1151.77	252.26	80.84	442.83	503.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	105.54	104.06	13.87	41.79	41.79	44.57	47.64	117.72	13.10	40.98	32.06	37.46
Movement LOS	F	F	B	D	D	D	D	F	B	D	C	D
d_A, Approach Delay [s/veh]	82.04			43.23			96.15			32.98		
Approach LOS	F			D			F			C		
d_I, Intersection Delay [s/veh]	72.13											
Intersection LOS	E											
Intersection V/C	0.808											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.14	37.14	0.00	37.14
I_p,int, Pedestrian LOS Score for Intersection	2.608	2.215	0.000	3.766
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	147	968	589
d_b, Bicycle Delay [s]	30.40	40.76	12.64	23.63
I_b,int, Bicycle LOS Score for Intersection	2.921	2.008	3.345	2.659
Bicycle LOS	C	B	C	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 15: Peach Ave (NS) at Bear Valley Rd (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	141	138	2325	296	126	1731
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	8
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]	141	138	2342	296	126	1739
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	37	625	79	34	464
Total Analysis Volume [veh/h]	150	147	2499	316	134	1856
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	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	1.03	0.02	0.00	2.74	0.02
d_M, Delay for Movement [s/veh]	10000.00	143.75	0.00	0.00	962.39	0.00
Movement LOS	F	F	A	A	F	A
95th-Percentile Queue Length [veh/ln]	21.38	7.66	0.00	0.00	14.17	0.00
95th-Percentile Queue Length [ft/ln]	534.52	191.47	0.00	0.00	354.36	0.00
d_A, Approach Delay [s/veh]	5121.65		0.00		64.80	
Approach LOS	F		A		F	
d_I, Intersection Delay [s/veh]	323.42					
Intersection LOS	F					

Chateau Senior Living Facility

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Report File: G:\...\IAM LRP MIT.pdf

Scenario 2 Year 2040 With Project
10/8/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.810	26.8	C
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Signalized	HCM 6th Edition	WB Right	0.349	6.9	A
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	EB Left	0.008	20.2	C
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.966	27.9	C
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.752	28.7	C
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.448	3.0	A
11	Project East Dwy (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	SB Right	0.488	3.1	A
12	Ridgecrest Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	WB Left	0.656	14.9	B
13	Hesperia Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	SB Left	0.856	38.6	D
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.757	33.0	C
15	Peach Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	NB Left	0.606	9.3	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: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.810

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	121	552	394	289	352	90	234	1491	115	347	1436	240
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	8	0	0	0	17	0	3	5	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]	121	552	402	297	352	90	234	1508	115	350	1441	243
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	145	106	78	93	24	62	397	30	92	379	64
Total Analysis Volume [veh/h]	127	581	423	313	371	95	246	1587	121	368	1517	256
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	71
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups			2,7						5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
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	1.0
Split [s]	11	21	21	11	21	0	11	28	28	11	28	28
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	3.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	10
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	2.0
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	2.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	No
Maximum Recall	No	No	No	No	No		No	No	No	No	No	No
Pedestrian Recall	No	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	C	L	C	R	L	C	R
C, Cycle Length [s]	71	71	71	71	71	71	71	71	71	71	71	71
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	0.00
g_i, Effective Green Time [s]	6	14	28	7	15	15	7	24	35	10	27	38
g / C, Green / Cycle	0.09	0.20	0.39	0.10	0.21	0.21	0.10	0.34	0.49	0.14	0.38	0.53
(v / s)_i Volume / Saturation Flow Rate	0.04	0.16	0.26	0.09	0.13	0.13	0.07	0.31	0.07	0.10	0.29	0.16
s, saturation flow rate [veh/h]	3514	3618	1615	3514	1900	1768	3514	5176	1615	3514	5176	1615
c, Capacity [veh/h]	323	717	633	350	391	364	348	1761	789	483	1960	863
d1, Uniform Delay [s]	30.48	27.29	17.85	31.71	25.74	25.75	31.09	22.37	10.08	29.60	19.45	9.18
k, delay calibration	0.11	0.11	0.17	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	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]	0.78	2.26	1.96	8.10	1.59	1.72	2.64	7.92	0.09	2.51	3.05	0.19
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	0.39	0.81	0.67	0.90	0.62	0.62	0.71	0.90	0.15	0.76	0.77	0.30
d, Delay for Lane Group [s/veh]	31.26	29.55	19.81	39.82	27.33	27.47	33.73	30.29	10.17	32.10	22.51	9.37
Lane Group LOS	C	C	B	D	C	C	C	C	B	C	C	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.97	4.39	5.05	2.88	3.58	3.35	1.98	8.35	0.85	2.94	6.79	1.76
50th-Percentile Queue Length [ft/ln]	24.20	109.77	126.17	71.96	89.47	83.84	49.53	208.85	21.23	73.42	169.66	44.07
95th-Percentile Queue Length [veh/ln]	1.74	7.83	8.73	5.18	6.44	6.04	3.57	13.09	1.53	5.29	11.06	3.17
95th-Percentile Queue Length [ft/ln]	43.55	195.69	218.28	129.53	161.04	150.91	89.15	327.36	38.22	132.16	276.47	79.33

Movement, Approach, & Intersection Results

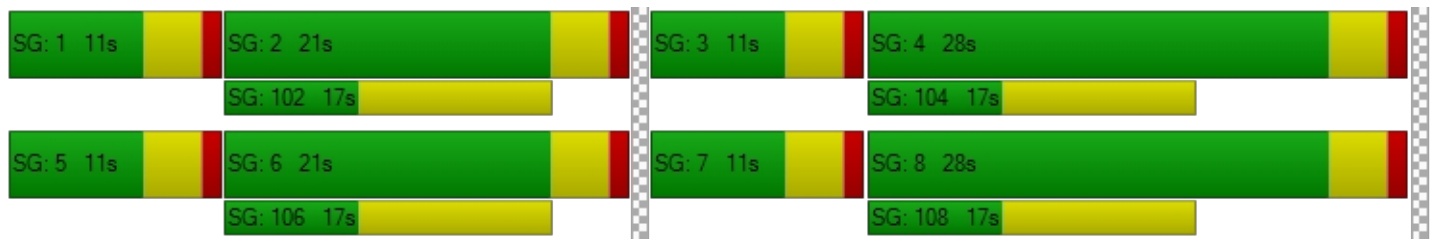
d_M, Delay for Movement [s/veh]	31.26	29.55	19.81	39.82	27.38	27.47	33.73	30.29	10.17	32.10	22.51	9.37
Movement LOS	C	C	B	D	C	C	C	C	B	C	C	A
d_A, Approach Delay [s/veh]	26.10			32.39			29.47			22.59		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	26.76											
Intersection LOS	C											
Intersection V/C	0.810											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	25.35			25.35			25.35			25.35		
I_p,int, Pedestrian LOS Score for Intersection	3.043			2.843			3.503			3.562		
Crosswalk LOS	C			C			D			D		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	479			479			676			676		
d_b, Bicycle Delay [s]	20.54			20.54			15.56			15.56		
I_b,int, Bicycle LOS Score for Intersection	2.493			2.202			2.634			2.737		
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (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):	0.349

Intersection Setup

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Base Volume Input [veh/h]	429	31	60	678	65	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	0	0	19	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]	487	31	60	697	65	130
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	128	8	16	183	17	34
Total Analysis Volume [veh/h]	513	33	63	734	68	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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	2	0	0	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	0	0	11	49	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60
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	2.00	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]	43	43	43	43	9
g / C, Green / Cycle	0.71	0.71	0.71	0.71	0.16
(v / s)_i Volume / Saturation Flow Rate	0.14	0.15	0.07	0.20	0.12
s, saturation flow rate [veh/h]	1900	1860	874	3618	1675
c, Capacity [veh/h]	1350	1322	660	2570	262
d1, Uniform Delay [s]	2.94	2.95	4.73	3.16	24.36
k, delay calibration	0.50	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.34	0.35	0.29	0.28	5.10
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	0.20	0.21	0.10	0.29	0.78
d, Delay for Lane Group [s/veh]	3.28	3.30	5.02	3.44	29.45
Lane Group LOS	A	A	A	A	C
Critical Lane Group	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.38	0.38	0.21	0.47	3.04
50th-Percentile Queue Length [ft/ln]	9.50	9.61	5.30	11.65	75.98
95th-Percentile Queue Length [veh/ln]	0.68	0.69	0.38	0.84	5.47
95th-Percentile Queue Length [ft/ln]	17.10	17.30	9.54	20.96	136.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	3.29	3.30	5.02	3.44	29.45	29.45
Movement LOS	A	A	A	A	C	C
d_A, Approach Delay [s/veh]	3.29		3.56		29.45	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	6.90					
Intersection LOS	A					
Intersection V/C	0.349					

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	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	4.583	4.790	4.471
Bicycle LOS	E	E	E

Sequence

Ring 1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	1	432	64	39	840	1	2	0	8	105	1	36
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	58	0	0	19	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	490	64	39	859	1	2	0	8	105	1	36
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	129	17	10	226	0	1	0	2	28	0	9
Total Analysis Volume [veh/h]	1	516	67	41	904	1	2	0	8	111	1	38
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.04	0.01	0.00	0.01	0.00	0.01	0.31	0.00	0.05
d_M, Delay for Movement [s/veh]	9.74	0.00	0.00	8.75	0.00	0.00	20.22	18.77	11.52	19.46	18.63	10.38
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.13	0.00	0.00	0.03	0.04	0.04	1.29	0.18	0.18
95th-Percentile Queue Length [ft/ln]	0.10	0.00	0.00	3.20	0.00	0.00	0.63	1.09	1.09	32.23	4.54	4.54
d_A, Approach Delay [s/veh]	0.02			0.38			13.26			17.15		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.82											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	27.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.966

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rllr			rllr		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	18	6	4	192	11	1072	631	2374	18	10	2244	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	11	33	0	0	0	0	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]	18	6	4	197	11	1083	664	2374	18	10	2244	129
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	1	52	3	285	175	625	5	3	591	34
Total Analysis Volume [veh/h]	19	6	4	207	12	1140	699	2499	19	11	2362	136
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	96
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	24	56	0	19	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	96	96	96	96	96	96	96	96	96
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	41	20	65	65	2	47	47
g / C, Green / Cycle	0.18	0.18	0.43	0.21	0.68	0.68	0.02	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.24	0.17	0.40	0.20	0.46	0.46	0.01	0.45	0.46
s, saturation flow rate [veh/h]	118	1277	2859	3514	3618	1893	1810	3618	1848
c, Capacity [veh/h]	83	299	1215	724	2455	1284	35	1778	908
d1, Uniform Delay [s]	36.44	39.22	26.39	37.77	9.12	9.15	46.47	22.76	23.04
k, delay calibration	0.29	0.12	0.19	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]	6.64	3.79	6.70	9.30	1.49	2.86	5.15	9.72	18.24
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	0.35	0.73	0.94	0.96	0.67	0.68	0.32	0.93	0.94
d, Delay for Lane Group [s/veh]	43.08	43.00	33.09	47.07	10.61	12.01	51.62	32.49	41.28
Lane Group LOS	D	D	C	D	B	B	D	C	D
Critical Lane Group	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.85	5.17	12.26	8.61	8.09	9.01	0.30	17.52	20.46
50th-Percentile Queue Length [ft/ln]	21.24	129.32	306.61	215.15	202.36	225.35	7.49	437.95	511.46
95th-Percentile Queue Length [veh/ln]	1.53	8.90	18.01	13.42	12.76	13.94	0.54	24.38	27.88
95th-Percentile Queue Length [ft/ln]	38.23	222.57	450.20	335.42	319.01	348.44	13.48	609.56	696.91

Movement, Approach, & Intersection Results

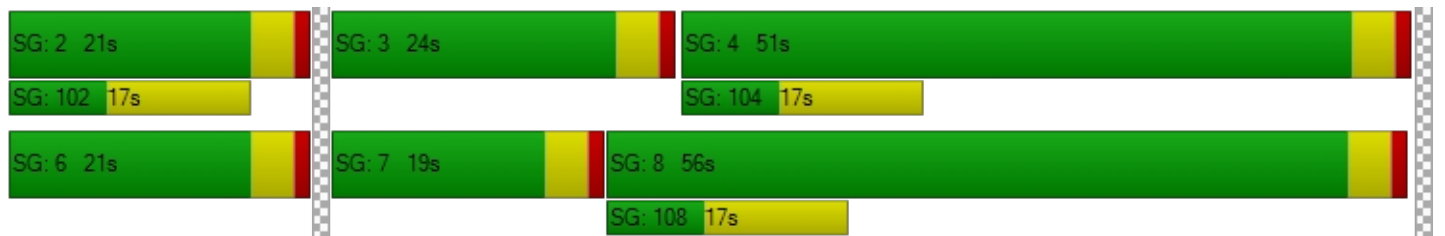
d_M, Delay for Movement [s/veh]	43.08	43.08	43.08	43.00	43.00	33.09	47.07	11.09	12.01	51.62	35.16	41.28
Movement LOS	D	D	D	D	D	C	D	B	B	D	D	D
d_A, Approach Delay [s/veh]	43.08			34.69			18.91			35.56		
Approach LOS	D			C			B			D		
d_I, Intersection Delay [s/veh]	27.90											
Intersection LOS	C											
Intersection V/C	0.966											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.63	37.63	0.00	37.63
I_p,int, Pedestrian LOS Score for Intersection	1.746	2.946	0.000	3.982
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	354	1083	979
d_b, Bicycle Delay [s]	32.51	32.51	10.08	12.51
I_b,int, Bicycle LOS Score for Intersection	1.607	3.802	3.329	2.940
Bicycle LOS	A	D	C	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	28.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.752

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	282	782	93	153	769	293	343	592	254	251	814	219
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	0	0	0	25	8	5	5	0	17	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]	299	782	93	153	769	318	351	597	259	251	831	219
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	79	206	24	40	202	84	92	157	68	66	219	58
Total Analysis Volume [veh/h]	315	823	98	161	809	335	369	628	273	264	875	231
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	68
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	6	3	8	8	7	4	0
Auxiliary Signal Groups						3,6			5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	7	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	30	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0
Split [s]	11	21	0	11	21	21	12	21	21	15	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	10	0	10	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	2.0	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	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	R
C, Cycle Length [s]	68	68	68	68	68	68	68	68	68	68	68	68
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	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	18	18	7	18	30	8	16	27	11	19	19
g / C, Green / Cycle	0.10	0.27	0.27	0.10	0.27	0.45	0.12	0.23	0.39	0.16	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.09	0.23	0.06	0.09	0.22	0.21	0.11	0.17	0.17	0.15	0.24	0.14
s, saturation flow rate [veh/h]	3514	3618	1615	1810	3618	1615	3514	3618	1615	1810	3618	1615
c, Capacity [veh/h]	365	980	438	188	980	724	416	827	632	294	985	440
d1, Uniform Delay [s]	30.11	23.48	19.31	30.09	23.37	13.12	29.64	24.58	15.23	28.05	23.84	21.09
k, delay calibration	0.11	0.50	0.50	0.11	0.50	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]	6.11	8.59	1.18	10.62	7.89	0.46	6.48	1.46	0.47	9.74	2.96	0.97
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	0.86	0.84	0.22	0.86	0.83	0.46	0.89	0.76	0.43	0.90	0.89	0.53
d, Delay for Lane Group [s/veh]	36.22	32.08	20.50	40.71	31.25	13.59	36.12	26.04	15.70	37.79	26.79	22.06
Lane Group LOS	D	C	C	D	C	B	D	C	B	D	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.55	6.39	1.17	2.84	6.18	2.82	3.08	4.35	2.69	4.59	6.28	2.86
50th-Percentile Queue Length [ft/ln]	63.75	159.66	29.14	71.07	154.40	70.46	77.01	108.83	67.32	114.87	157.02	71.59
95th-Percentile Queue Length [veh/ln]	4.59	10.53	2.10	5.12	10.25	5.07	5.54	7.77	4.85	8.11	10.39	5.15
95th-Percentile Queue Length [ft/ln]	114.75	263.27	52.45	127.92	256.29	126.82	138.62	194.37	121.17	202.75	259.77	128.87

Movement, Approach, & Intersection Results

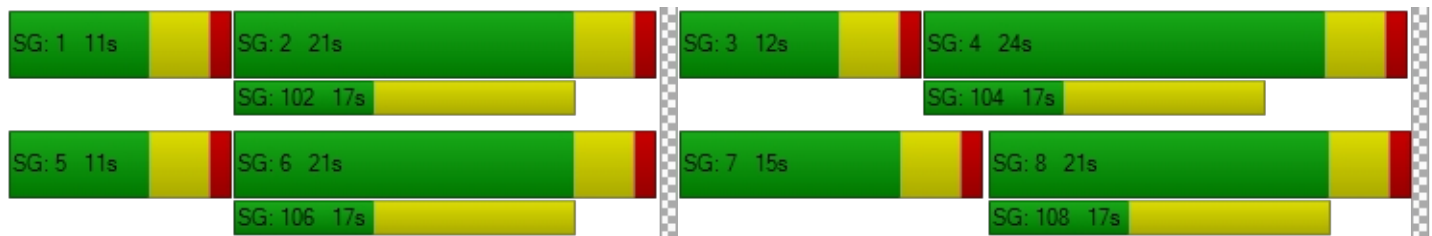
d_M, Delay for Movement [s/veh]	36.22	32.08	20.50	40.71	31.25	13.59	36.12	26.04	15.70	37.79	26.79	22.06
Movement LOS	D	C	C	D	C	B	D	C	B	D	C	C
d_A, Approach Delay [s/veh]	32.22			27.89			26.75			28.12		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.70											
Intersection LOS	C											
Intersection V/C	0.752											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	23.89	23.89	23.89	23.89
I_p,int, Pedestrian LOS Score for Intersection	3.238	3.250	3.221	2.988
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	500	500	588
d_b, Bicycle Delay [s]	19.13	19.13	19.13	16.94
I_b,int, Bicycle LOS Score for Intersection	2.579	2.636	2.607	2.690
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 9: Apatite Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	3.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵			↵↵↵			↵↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	1	0	45	21	2	21	58	2061	2	41	1866	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	33	0	0	11	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]	1	0	45	21	2	21	58	2094	2	41	1877	56
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	12	6	1	6	15	551	1	11	494	15
Total Analysis Volume [veh/h]	1	0	47	22	2	22	61	2204	2	43	1976	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	93
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	12	0	0	12	0	0	81	0	0	81	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
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	C	L	C	R
C, Cycle Length [s]	93	93	93	93	93	93	93	93	93	93
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]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	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]	5	5	5	5	80	80	80	80	80	80
g / C, Green / Cycle	0.05	0.05	0.05	0.05	0.86	0.86	0.86	0.86	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.02	0.01	0.27	0.40	0.40	0.24	0.38	0.04
s, saturation flow rate [veh/h]	1409	1615	1380	1635	224	3618	1899	179	5176	1615
c, Capacity [veh/h]	107	88	87	89	244	3110	1633	209	4450	1388
d1, Uniform Delay [s]	44.58	42.82	46.34	42.19	4.16	1.52	1.52	4.21	1.48	0.95
k, delay calibration	0.11	0.11	0.11	0.11	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.03	5.04	1.51	1.62	2.44	0.50	0.95	2.21	0.32	0.06
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	0.01	0.54	0.25	0.27	0.25	0.47	0.47	0.21	0.44	0.04
d, Delay for Lane Group [s/veh]	44.61	47.86	47.85	43.82	6.60	2.03	2.48	6.43	1.80	1.01
Lane Group LOS	D	D	D	D	A	A	A	A	A	A
Critical Lane Group	No	Yes	No	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.02	1.17	0.55	0.56	0.41	0.22	0.43	0.31	0.18	0.03
50th-Percentile Queue Length [ft/ln]	0.59	29.14	13.64	14.12	10.36	5.42	10.83	7.74	4.58	0.63
95th-Percentile Queue Length [veh/ln]	0.04	2.10	0.98	1.02	0.75	0.39	0.78	0.56	0.33	0.05
95th-Percentile Queue Length [ft/ln]	1.06	52.46	24.55	25.42	18.64	9.76	19.49	13.94	8.25	1.13

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.61	47.86	47.86	47.85	43.82	43.82	6.60	2.18	2.48	6.43	1.80	1.01
Movement LOS	D	D	D	D	D	D	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	47.79			45.75			2.30			1.87		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	3.04											
Intersection LOS	A											
Intersection V/C	0.448											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			0.000			0.000		
Crosswalk LOS	F			F			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	172			172			1656			1656		
d_b, Bicycle Delay [s]	38.84			38.84			1.38			1.38		
I_b,int, Bicycle LOS Score for Intersection	1.639			1.636			2.806			2.703		
Bicycle LOS	A			A			C			B		

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	3.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	1295	1544	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	35	108	0	0	59
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]	18	35	108	1295	1544	59
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	9	28	341	406	16
Total Analysis Volume [veh/h]	19	37	114	1363	1625	62
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	126
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	1	0	0	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	0	0	114	114	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	L	C	C	R
C, Cycle Length [s]	126	126	126	126	126	126
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	2.00	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]	6	6	112	112	112	112
g / C, Green / Cycle	0.05	0.05	0.89	0.89	0.89	0.89
(v / s)_i Volume / Saturation Flow Rate	0.01	0.02	0.36	0.38	0.45	0.04
s, saturation flow rate [veh/h]	1810	1615	315	3618	3618	1615
c, Capacity [veh/h]	87	78	301	3214	3214	1435
d1, Uniform Delay [s]	57.65	58.38	4.99	1.26	1.42	0.81
k, delay calibration	0.11	0.11	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]	1.25	4.49	3.59	0.41	0.57	0.06
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	0.22	0.48	0.38	0.42	0.51	0.04
d, Delay for Lane Group [s/veh]	58.90	62.87	8.57	1.67	1.99	0.87
Lane Group LOS	E	E	A	A	A	A
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.62	1.26	1.01	0.18	0.26	0.02
50th-Percentile Queue Length [ft/ln]	15.47	31.43	25.19	4.60	6.38	0.56
95th-Percentile Queue Length [veh/ln]	1.11	2.26	1.81	0.33	0.46	0.04
95th-Percentile Queue Length [ft/ln]	27.84	56.58	45.35	8.27	11.48	1.02

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.90	62.87	8.57	1.67	1.99	0.87
Movement LOS	E	E	A	A	A	A
d_A, Approach Delay [s/veh]	61.52		2.20		1.95	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	3.10					
Intersection LOS	A					
Intersection V/C	0.488					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	63.00	63.00	63.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.351	5.524
Bicycle LOS	D	F	F

Sequence

Ring 1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Ridgecrest Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐⇐		⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	1	0
Pocket Length [ft]	150.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	55.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Base Volume Input [veh/h]	449	110	1185	541	197	1347
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	58	50	0	19	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]	449	168	1235	541	216	1363
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	112	44	309	135	57	341
Total Analysis Volume [veh/h]	449	177	1235	541	227	1363
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	18	39
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	C	R	C	R	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60
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	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
g_i, Effective Green Time [s]	10	10	10	28	28	9	42
g / C, Green / Cycle	0.17	0.17	0.17	0.47	0.47	0.16	0.70
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.11	0.34	0.33	0.13	0.38
s, saturation flow rate [veh/h]	1810	1810	1615	3618	1615	1810	3618
c, Capacity [veh/h]	309	309	276	1706	761	287	2519
d1, Uniform Delay [s]	23.62	23.62	23.24	12.76	12.64	24.36	4.45
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.27	3.27	2.50	2.71	5.56	4.90	0.84
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	0.73	0.73	0.64	0.72	0.71	0.79	0.54
d, Delay for Lane Group [s/veh]	26.89	26.89	25.74	15.47	18.20	29.26	5.29
Lane Group LOS	C	C	C	B	B	C	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.80	2.80	2.15	5.12	5.06	3.00	1.43
50th-Percentile Queue Length [ft/ln]	70.03	70.03	53.65	128.04	126.59	74.89	35.64
95th-Percentile Queue Length [veh/ln]	5.04	5.04	3.86	8.83	8.75	5.39	2.57
95th-Percentile Queue Length [ft/ln]	126.05	126.05	96.57	220.83	218.85	134.80	64.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	26.89	25.74	15.47	18.20	29.26	5.29
Movement LOS	C	C	B	B	C	A
d_A, Approach Delay [s/veh]	26.57		16.30		8.71	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	14.89					
Intersection LOS	B					
Intersection V/C	0.656					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
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]	20.01	20.01	20.01
I_p,int, Pedestrian LOS Score for Intersection	2.846	3.488	3.325
Crosswalk LOS	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	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	5.165	5.598	5.444
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 13: Hesperia Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	38.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.856

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Base Volume Input [veh/h]	257	893	261	316	1150	164	151	915	331	364	1229	329
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	17	0	0	0	25	0	3	8	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]	257	893	269	333	1150	164	151	940	331	367	1237	334
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	235	71	88	303	43	40	247	87	97	326	88
Total Analysis Volume [veh/h]	271	940	283	351	1211	173	159	989	348	386	1302	352
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	91
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	0	7	4	4
Auxiliary Signal Groups			2,7									1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	0	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	0	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0
Split [s]	12	21	21	22	31	0	11	33	0	15	37	37
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	0	0	10	10
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	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
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	R
C, Cycle Length [s]	91	91	91	91	91	91	91	91	91	91	91	91
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	2.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	8	17	32	18	27	27	7	29	29	11	33	55
g / C, Green / Cycle	0.09	0.19	0.35	0.20	0.30	0.30	0.08	0.32	0.32	0.12	0.36	0.60
(v / s)_i Volume / Saturation Flow Rate	0.08	0.18	0.18	0.19	0.23	0.11	0.05	0.27	0.22	0.11	0.36	0.22
s, saturation flow rate [veh/h]	3514	5176	1615	1810	5176	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	309	975	571	358	1544	482	266	1147	512	425	1311	976
d1, Uniform Delay [s]	41.02	36.62	23.07	36.33	29.26	25.10	40.73	29.22	27.06	39.51	28.92	9.12
k, delay calibration	0.11	0.50	0.50	0.15	0.50	0.50	0.11	0.11	0.20	0.11	0.11	0.20
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]	7.81	21.27	3.06	21.68	4.07	2.08	2.15	2.06	2.88	7.64	10.15	0.42
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	0.88	0.96	0.50	0.98	0.78	0.36	0.60	0.86	0.68	0.91	0.99	0.36
d, Delay for Lane Group [s/veh]	48.82	57.89	26.13	58.01	33.33	27.18	42.88	31.28	29.94	47.14	39.06	9.54
Lane Group LOS	D	E	C	E	C	C	D	C	C	D	D	A
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.16	8.33	4.80	9.33	7.94	2.98	1.71	9.48	6.38	4.45	14.37	2.90
50th-Percentile Queue Length [ft/ln]	79.10	208.28	120.00	233.37	198.54	74.60	42.74	237.11	159.44	111.17	359.14	72.58
95th-Percentile Queue Length [veh/ln]	5.69	13.06	8.39	14.35	12.56	5.37	3.08	14.54	10.52	7.91	20.58	5.23
95th-Percentile Queue Length [ft/ln]	142.37	326.62	209.83	358.64	314.08	134.28	76.93	363.38	262.98	197.63	514.54	130.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.82	57.89	26.13	58.01	33.33	27.18	42.88	31.28	29.94	47.14	39.06	9.54
Movement LOS	D	E	C	E	C	C	D	C	C	D	D	A
d_A, Approach Delay [s/veh]	50.23			37.71			32.20			35.50		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	38.59											
Intersection LOS	D											
Intersection V/C	0.856											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	35.16	35.16	35.16	35.16
I_p,int, Pedestrian LOS Score for Intersection	3.470	3.373	3.347	3.470
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	374	593	637	725
d_b, Bicycle Delay [s]	30.09	22.51	21.12	18.48
I_b,int, Bicycle LOS Score for Intersection	2.381	2.514	2.794	3.243
Bicycle LOS	B	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 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (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):	0.757

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐			⇐⇐⇐⇐⇐			⇐⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	452	47	138	64	51	112	120	1982	464	169	1801	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	5	0	0	17	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]	452	47	138	64	51	112	120	1987	464	169	1818	60
Peak Hour Factor	0.8850	0.8850	0.8850	0.8850	0.8850	0.8850	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	128	13	39	18	14	32	34	561	131	48	514	17
Total Analysis Volume [veh/h]	511	53	156	72	58	127	136	2245	524	191	2054	68
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	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	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	20	29	0	12	21	0	22	53	53	11	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	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	2.0	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105
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]	16	27	6	17	10	49	69	7	46	46
g / C, Green / Cycle	0.15	0.26	0.06	0.16	0.09	0.47	0.66	0.07	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.15	0.12	0.04	0.11	0.08	0.43	0.32	0.05	0.39	0.39
s, saturation flow rate [veh/h]	3514	1679	1810	1695	1810	5176	1615	3514	3618	1869
c, Capacity [veh/h]	536	431	106	276	168	2408	1059	235	1590	821
d1, Uniform Delay [s]	44.14	33.12	48.46	41.28	46.75	26.51	9.21	48.36	26.87	26.96
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.50	0.11	0.11	0.38
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]	10.12	3.86	7.37	12.18	9.04	2.08	1.65	6.72	1.71	10.45
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	0.95	0.48	0.68	0.67	0.81	0.93	0.49	0.81	0.88	0.88
d, Delay for Lane Group [s/veh]	54.26	36.98	55.83	53.46	55.79	28.59	10.86	55.08	28.58	37.41
Lane Group LOS	D	D	E	D	E	C	B	E	C	D
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.28	4.95	2.03	5.31	3.79	16.34	5.49	2.61	14.90	17.52
50th-Percentile Queue Length [ft/ln]	182.05	123.79	50.65	132.87	94.73	408.48	137.35	65.20	372.38	438.10
95th-Percentile Queue Length [veh/ln]	11.71	8.60	3.65	9.10	6.82	22.97	9.34	4.69	21.22	24.39
95th-Percentile Queue Length [ft/ln]	292.69	215.02	91.17	227.39	170.51	574.21	233.45	117.37	530.62	609.73

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.26	36.98	36.98	55.83	53.46	53.46	55.79	28.59	10.86	55.08	31.41	37.41
Movement LOS	D	D	D	E	D	D	E	C	B	E	C	D
d_A, Approach Delay [s/veh]	49.24			54.12			26.66			33.54		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	32.99											
Intersection LOS	C											
Intersection V/C	0.757											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	42.08	42.08	0.00	42.08
I_p,int, Pedestrian LOS Score for Intersection	2.598	2.170	0.000	3.634
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	476	324	933	724
d_b, Bicycle Delay [s]	30.48	36.88	14.93	21.38
I_b,int, Bicycle LOS Score for Intersection	2.748	1.984	3.157	2.832
Bicycle LOS	B	A	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 15: Peach Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.606

Intersection Setup

Name	Bear Valley Rd		Bear Valley Rd		Bear Valley Rd	
	Northbound		Eastbound		Westbound	
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]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Bear Valley Rd		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	150	106	1971	216	111	1877
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	0	17
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]	150	106	1976	216	111	1894
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	30	553	60	31	530
Total Analysis Volume [veh/h]	168	119	2213	242	124	2121
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
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]	12	0	29	0	29	58
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	R	C	R	L	C
C, Cycle Length [s]	70	70	70	70	70	70
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	44	44	6	54
g / C, Green / Cycle	0.12	0.12	0.62	0.62	0.09	0.77
(v / s)_i Volume / Saturation Flow Rate	0.09	0.07	0.43	0.15	0.07	0.41
s, saturation flow rate [veh/h]	1810	1615	5176	1615	1810	5176
c, Capacity [veh/h]	210	188	3206	1000	169	3984
d1, Uniform Delay [s]	30.24	29.61	8.89	5.98	30.99	3.15
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.80	3.50	1.24	0.57	6.02	0.51
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	0.80	0.63	0.69	0.24	0.73	0.53
d, Delay for Lane Group [s/veh]	37.03	33.11	10.13	6.56	37.01	3.67
Lane Group LOS	D	C	B	A	D	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.93	1.94	5.28	1.24	2.16	1.27
50th-Percentile Queue Length [ft/ln]	73.21	48.47	132.01	31.11	54.05	31.78
95th-Percentile Queue Length [veh/ln]	5.27	3.49	9.05	2.24	3.89	2.29
95th-Percentile Queue Length [ft/ln]	131.79	87.24	226.23	56.00	97.29	57.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	37.03	33.11	10.13	6.56	37.01	3.67
Movement LOS	D	C	B	A	D	A
d_A, Approach Delay [s/veh]	35.41		9.78		5.51	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	9.33					
Intersection LOS	A					
Intersection V/C	0.606					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	35.00	35.00	35.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.483	5.367
Bicycle LOS	D	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Chateau Senior Living Facility

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Scenario 2 Year 2040 With Project
10/7/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Hesperia Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.860	28.9	C
2	Ridgecrest Rd (NS) at Chinquapin Dr (EW)	Signalized	HCM 6th Edition	WB Right	0.275	3.6	A
3	Ridgecrest Rd (NS) at Vista Point Dr (EW)	Two-way stop	HCM 6th Edition	WB Left	0.324	23.8	C
6	Ridgecrest Rd (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	1.083	38.0	D
8	Apple Valley Rd (NS) at Yucca Loma Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.913	50.8	D
9	Apatite Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.525	5.6	A
11	Project East Dwy (NS) at Yates Rd (EW)	Signalized	HCM 6th Edition	SB Right	0.587	5.7	A
12	Ridgecrest Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	WB Left	0.798	21.4	C
13	Hesperia Rd (NS) at Green Tree Blvd (EW)	Signalized	HCM 6th Edition	SB Left	0.985	45.8	D
14	Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.802	36.2	D
15	Peach Ave (NS) at Bear Valley Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.667	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: Hesperia Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	28.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.860

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	2	0	0	2	0	1	2	0	1
Pocket Length [ft]	130.00	100.00	205.00	135.00	100.00	100.00	385.00	100.00	138.00	222.00	100.00	185.00
Speed [mph]	50.00			40.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	173	479	460	453	595	146	155	1474	108	382	1367	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	4	0	0	0	8	0	9	17	9
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]	173	479	464	457	595	146	155	1482	108	391	1384	280
Peak Hour Factor	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880	0.9880
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]	44	121	117	116	151	37	39	375	27	99	350	71
Total Analysis Volume [veh/h]	175	485	470	463	602	148	157	1500	109	396	1401	283
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	8	7	4	4
Auxiliary Signal Groups			2,7						5,8			1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	7	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
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	1.0
Split [s]	12	21	21	15	24	0	11	28	28	11	28	28
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	3.0
Walk [s]	0	7	7	0	7	0	0	7	7	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	10	0	10	10
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	2.0
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	2.0
Minimum Recall	No	No	No	No	No		No	No	No	No	No	No
Maximum Recall	No	No	No	No	No		No	No	No	No	No	No
Pedestrian Recall	No	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	C	L	C	R	L	C	R
C, Cycle Length [s]	75	75	75	75	75	75	75	75	75	75	75	75
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	0.00
g_i, Effective Green Time [s]	7	14	28	11	18	18	7	24	35	10	28	43
g / C, Green / Cycle	0.09	0.18	0.37	0.15	0.24	0.24	0.09	0.32	0.47	0.14	0.37	0.57
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.29	0.13	0.20	0.20	0.04	0.29	0.07	0.11	0.27	0.18
s, saturation flow rate [veh/h]	3514	3618	1615	3514	1900	1772	3514	5176	1615	3514	5176	1615
c, Capacity [veh/h]	320	653	599	516	448	418	316	1670	754	482	1914	920
d1, Uniform Delay [s]	32.62	29.11	20.96	31.47	27.51	27.54	32.54	24.25	11.43	31.50	20.44	8.42
k, delay calibration	0.11	0.11	0.25	0.11	0.11	0.11	0.11	0.50	0.11	0.11	0.50	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]	1.45	1.70	5.23	5.86	5.07	5.55	1.21	8.09	0.09	3.58	2.52	0.19
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	0.55	0.74	0.79	0.90	0.86	0.87	0.50	0.90	0.14	0.82	0.73	0.31
d, Delay for Lane Group [s/veh]	34.07	30.81	26.20	37.32	32.59	33.10	33.76	32.34	11.52	35.08	22.95	8.60
Lane Group LOS	C	C	C	D	C	C	C	C	B	D	C	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.46	3.88	7.04	4.27	6.75	6.39	1.30	8.53	0.88	3.45	6.57	1.90
50th-Percentile Queue Length [ft/ln]	36.49	96.91	175.93	106.79	168.86	159.65	32.51	213.37	21.89	86.30	164.28	47.49
95th-Percentile Queue Length [veh/ln]	2.63	6.98	11.39	7.66	11.02	10.53	2.34	13.33	1.58	6.21	10.78	3.42
95th-Percentile Queue Length [ft/ln]	65.69	174.44	284.69	191.52	275.41	263.26	58.51	333.15	39.41	155.34	269.38	85.48

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.07	30.81	26.20	37.32	32.77	33.10	33.76	32.34	11.52	35.08	22.95	8.60
Movement LOS	C	C	C	D	C	C	C	C	B	D	C	A
d_A, Approach Delay [s/veh]	29.40			34.55			31.18			23.31		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	28.87											
Intersection LOS	C											
Intersection V/C	0.860											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	27.31	27.31	27.31	27.31
I_p,int, Pedestrian LOS Score for Intersection	3.103	2.906	3.469	3.573
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	453	533	640	640
d_b, Bicycle Delay [s]	22.43	20.17	17.34	17.34
I_b,int, Bicycle LOS Score for Intersection	2.492	2.560	2.531	2.704
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 2: Ridgecrest Rd (NS) at Chinquapin Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	3.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.275

Intersection Setup

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Approach	Northbound		Southbound		Westbound	
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	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00		55.00		25.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Ridgecrest Rd		Ridgecrest Rd		Chinquapin Dr	
Base Volume Input [veh/h]	651	45	110	656	21	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	0	0	61	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]	679	45	110	717	21	55
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	179	12	29	189	6	14
Total Analysis Volume [veh/h]	715	47	116	755	22	58
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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 Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	2	0	0	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	45	0	0	45	15	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60
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	2.00	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]	47	47	47	47	5
g / C, Green / Cycle	0.78	0.78	0.78	0.78	0.09
(v / s)_i Volume / Saturation Flow Rate	0.20	0.20	0.16	0.21	0.05
s, saturation flow rate [veh/h]	1900	1860	715	3618	1664
c, Capacity [veh/h]	1480	1449	608	2818	146
d1, Uniform Delay [s]	1.83	1.84	3.62	1.85	26.25
k, delay calibration	0.50	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.42	0.44	0.70	0.23	3.19
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	0.26	0.26	0.19	0.27	0.55
d, Delay for Lane Group [s/veh]	2.25	2.28	4.31	2.08	29.44
Lane Group LOS	A	A	A	A	C
Critical Lane Group	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	0.17	0.18	0.34	0.09	1.19
50th-Percentile Queue Length [ft/ln]	4.33	4.45	8.53	2.29	29.63
95th-Percentile Queue Length [veh/ln]	0.31	0.32	0.61	0.16	2.13
95th-Percentile Queue Length [ft/ln]	7.79	8.02	15.35	4.11	53.34

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	2.27	2.28	4.31	2.08	29.44	29.44
Movement LOS	A	A	A	A	C	C
d_A, Approach Delay [s/veh]	2.27		2.38		29.44	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.59					
Intersection LOS	A					
Intersection V/C	0.275					

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	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	4.761	4.851	4.264
Bicycle LOS	E	E	E

Sequence

Ring 1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ridgecrest Rd (NS) at Vista Point Dr (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):	0.324

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
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]	163.00	100.00	100.00	102.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	55.00			55.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bluff Crest St			Vista Point Dr		
Base Volume Input [veh/h]	4	674	120	64	664	6	2	0	1	86	1	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	0	0	61	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	702	120	64	725	6	2	0	1	86	1	26
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	185	32	17	191	2	1	0	0	23	0	7
Total Analysis Volume [veh/h]	4	739	126	67	763	6	2	0	1	91	1	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			Yes	Yes
Number of Storage Spaces in Median	0	0	2	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.09	0.01	0.00	0.01	0.00	0.00	0.32	0.00	0.05
d_M, Delay for Movement [s/veh]	9.23	0.00	0.00	10.00	0.00	0.00	19.68	21.14	10.82	23.83	19.76	11.59
Movement LOS	A	A	A	B	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.28	0.00	0.00	0.02	0.00	0.00	1.36	0.16	0.16
95th-Percentile Queue Length [ft/ln]	0.35	0.00	0.00	6.96	0.00	0.00	0.61	0.12	0.12	33.98	4.01	4.01
d_A, Approach Delay [s/veh]	0.04			0.80			16.73			21.02		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	1.78											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: Ridgecrest Rd (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	38.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.083

Intersection Setup

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+rr			rllr			rllr		
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	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	186.00	100.00	100.00	226.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	25.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Ridgecrest Rd			Ridgecrest Rd			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	17	27	17	204	1	788	830	2805	18	2	2118	154
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	35	16	0	0	0	0	8
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]	17	27	17	221	1	823	846	2805	18	2	2118	162
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
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]	4	7	4	56	0	210	216	717	5	1	541	41
Total Analysis Volume [veh/h]	17	28	17	226	1	842	865	2868	18	2	2166	166
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	96
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	2	0	0	6	6	3	8	0	7	4	0
Auxiliary Signal Groups						3,6						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	7	7	7	0	7	7	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	21	21	24	56	0	19	51	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	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	2.0	2.0	2.0	0.0	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	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	96	96	96	96	96	96	96	96	96
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	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	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	17	41	20	67	67	0	47	47
g / C, Green / Cycle	0.18	0.18	0.43	0.21	0.69	0.69	0.00	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.12	0.34	0.29	0.25	0.52	0.52	0.00	0.43	0.43
s, saturation flow rate [veh/h]	529	672	2859	3514	3618	1894	1810	3618	1832
c, Capacity [veh/h]	141	194	1215	724	2508	1313	8	1778	901
d1, Uniform Delay [s]	34.40	42.79	22.49	38.11	9.47	9.50	47.64	21.62	21.83
k, delay calibration	0.11	0.50	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.13	118.19	0.72	90.55	2.16	4.11	15.71	5.99	11.83
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	0.44	1.17	0.69	1.19	0.75	0.76	0.25	0.87	0.88
d, Delay for Lane Group [s/veh]	36.53	160.98	23.21	128.66	11.63	13.61	63.35	27.61	33.67
Lane Group LOS	D	F	C	F	B	B	E	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.32	10.85	7.13	17.13	9.88	11.13	0.08	14.93	16.89
50th-Percentile Queue Length [ft/ln]	33.04	271.14	178.24	428.27	247.11	278.13	2.02	373.20	422.37
95th-Percentile Queue Length [veh/ln]	2.38	17.44	11.51	26.13	15.04	16.60	0.15	21.26	23.64
95th-Percentile Queue Length [ft/ln]	59.47	436.10	287.71	653.34	376.01	414.88	3.63	531.62	590.90

Movement, Approach, & Intersection Results

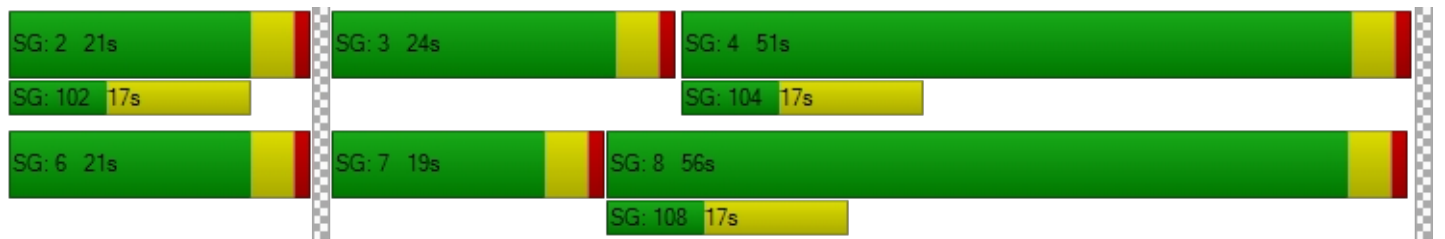
d_M, Delay for Movement [s/veh]	36.53	36.53	36.53	160.98	160.98	23.21	128.66	12.31	13.61	63.35	29.36	33.67
Movement LOS	D	D	D	F	F	C	F	B	B	E	C	C
d_A, Approach Delay [s/veh]	36.53			52.46			39.14			29.69		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	38.04											
Intersection LOS	D											
Intersection V/C	1.083											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	37.63	37.63	0.00	37.63
I_p,int, Pedestrian LOS Score for Intersection	1.751	2.925	0.000	4.056
Crosswalk LOS	A	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	354	354	1083	979
d_b, Bicycle Delay [s]	32.51	32.51	10.08	12.51
I_b,int, Bicycle LOS Score for Intersection	1.662	3.323	3.623	2.843
Bicycle LOS	A	C	D	C

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

Intersection 8: Apple Valley Rd (NS) at Yucca Loma Rd (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):	0.913

Intersection Setup

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	188.00	147.00	100.00	45.00	280.00	100.00	95.00	200.00	100.00	48.00
Speed [mph]	55.00			55.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Apple Valley Rd			Apple Valley Rd			Yucca Loma Rd			Yucca Loma Rd		
Base Volume Input [veh/h]	370	1101	217	258	1197	499	386	822	394	207	831	116
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	0	0	0	12	26	17	17	0	8	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]	378	1101	217	258	1197	511	412	839	411	207	839	116
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	290	57	68	315	134	108	221	108	54	221	31
Total Analysis Volume [veh/h]	398	1159	228	272	1260	538	434	883	433	218	883	122
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	98
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	6	3	8	8	7	4	0
Auxiliary Signal Groups						3,6			5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	7	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	30	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0
Split [s]	15	35	0	19	39	39	16	28	28	16	28	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	7	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	10	0	10	10	0	10	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	2.0	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	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	R
C, Cycle Length [s]	98	98	98	98	98	98	98	98	98	98	98	98
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	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	31	31	15	35	51	12	24	39	12	24	24
g / C, Green / Cycle	0.11	0.32	0.32	0.15	0.36	0.52	0.12	0.24	0.40	0.12	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.11	0.32	0.14	0.15	0.35	0.33	0.12	0.24	0.27	0.12	0.24	0.08
s, saturation flow rate [veh/h]	3514	3618	1615	1810	3618	1615	3514	3618	1615	1810	3618	1615
c, Capacity [veh/h]	395	1152	514	277	1299	844	431	878	639	222	878	392
d1, Uniform Delay [s]	43.51	33.41	26.52	41.37	30.90	16.76	43.01	37.12	24.44	42.91	37.12	30.41
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.36	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]	22.94	28.09	2.76	21.07	18.74	3.67	21.99	15.47	4.13	24.24	15.47	0.45
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	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	1.01	1.01	0.44	0.98	0.97	0.64	1.01	1.01	0.68	0.98	1.01	0.31
d, Delay for Lane Group [s/veh]	66.45	61.50	29.28	62.45	49.63	20.43	65.00	52.59	28.57	67.15	52.59	30.86
Lane Group LOS	F	F	C	E	D	C	F	F	C	E	F	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.74	16.79	4.26	7.72	16.39	8.13	6.31	11.76	8.34	6.53	11.76	2.30
50th-Percentile Queue Length [ft/ln]	143.52	419.87	106.51	192.92	409.66	203.16	157.63	293.96	208.52	163.30	293.96	57.39
95th-Percentile Queue Length [veh/ln]	9.70	23.61	7.65	12.27	23.03	12.80	10.46	17.44	13.08	10.72	17.44	4.13
95th-Percentile Queue Length [ft/ln]	242.48	590.37	191.14	306.81	575.63	320.04	261.38	435.94	326.93	268.09	435.94	103.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.45	61.50	29.28	62.45	49.63	20.43	65.00	52.59	28.57	67.15	52.59	30.86
Movement LOS	F	F	C	E	D	C	F	F	C	E	F	C
d_A, Approach Delay [s/veh]	58.49			43.73			49.73			53.02		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	50.79											
Intersection LOS	D											
Intersection V/C	0.913											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	38.62	38.62	38.62	38.62
I_p,int, Pedestrian LOS Score for Intersection	3.542	3.584	3.382	3.092
Crosswalk LOS	D	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	714	490	490
d_b, Bicycle Delay [s]	22.90	20.25	27.94	27.94
I_b,int, Bicycle LOS Score for Intersection	3.032	3.267	3.003	2.569
Bicycle LOS	C	C	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 9: Apatite Ave (NS) at Bear Valley Rd (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):	0.525

Intersection Setup

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵			↵↵↵			↵↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in 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	152.00	100.00	100.00	144.00	100.00	100.00
Speed [mph]	30.00			30.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Apatite Ave			Apatite Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	2	0	78	76	0	58	33	2175	23	66	2012	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	16	0	0	35	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	0	78	76	0	58	33	2191	23	66	2047	57
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	21	20	0	15	9	577	6	17	539	15
Total Analysis Volume [veh/h]	2	0	82	80	0	61	35	2306	24	69	2155	60
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	74
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	34	0	0	34	0	0	40	0	0	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
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	C	L	C	R
C, Cycle Length [s]	74	74	74	74	74	74	74	74	74	74
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]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	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	57	57	57	57	57	57
g / C, Green / Cycle	0.11	0.11	0.11	0.11	0.78	0.78	0.78	0.78	0.78	0.78
(v / s)_i Volume / Saturation Flow Rate	0.00	0.05	0.06	0.04	0.19	0.42	0.42	0.44	0.42	0.04
s, saturation flow rate [veh/h]	1363	1615	1337	1615	188	3618	1890	158	5176	1615
c, Capacity [veh/h]	220	184	205	184	190	2812	1469	174	4024	1256
d1, Uniform Delay [s]	30.57	30.45	33.12	30.04	11.78	3.16	3.16	17.51	3.13	1.89
k, delay calibration	0.11	0.11	0.11	0.11	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.02	1.69	1.21	1.04	2.13	0.76	1.46	6.64	0.51	0.07
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	0.01	0.45	0.39	0.33	0.18	0.54	0.54	0.40	0.54	0.05
d, Delay for Lane Group [s/veh]	30.59	32.14	34.32	31.08	13.91	3.92	4.62	24.15	3.64	1.97
Lane Group LOS	C	C	C	C	B	A	A	C	A	A
Critical Lane Group	No	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	1.40	1.43	1.02	0.40	1.34	1.69	1.18	1.44	0.09
50th-Percentile Queue Length [ft/ln]	0.81	35.12	35.65	25.53	9.98	33.43	42.13	29.60	35.96	2.21
95th-Percentile Queue Length [veh/ln]	0.06	2.53	2.57	1.84	0.72	2.41	3.03	2.13	2.59	0.16
95th-Percentile Queue Length [ft/ln]	1.47	63.22	64.17	45.95	17.97	60.17	75.84	53.29	64.73	3.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.59	32.14	32.14	34.32	31.08	31.08	13.91	4.16	4.62	24.15	3.64	1.97
Movement LOS	C	C	C	C	C	C	B	A	A	C	A	A
d_A, Approach Delay [s/veh]	32.10			32.92			4.31			4.22		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	5.57											
Intersection LOS	A											
Intersection V/C	0.525											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			0.000			0.000		
Crosswalk LOS	F			F			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	811			811			973			973		
d_b, Bicycle Delay [s]	13.08			13.08			9.76			9.76		
I_b,int, Bicycle LOS Score for Intersection	1.698			1.792			2.860			2.816		
Bicycle LOS	A			A			C			C		

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Project East Dwy (NS) at Yates Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	5.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.587

Intersection Setup

Name	Project East Dwy		Yates Rd		Yates Rd	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Project East Dwy		Yates Rd		Yates Rd	
Base Volume Input [veh/h]	0	0	0	1647	1614	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	112	52	0	0	28
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]	60	112	52	1647	1614	28
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	29	14	433	425	7
Total Analysis Volume [veh/h]	63	118	55	1734	1699	29
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	67
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	1	0	0	8	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	7	7	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	56	0	0	11	11	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
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	L	C	C	R
C, Cycle Length [s]	67	67	67	67	67	67
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	2.00	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]	7	7	52	52	52	52
g / C, Green / Cycle	0.10	0.10	0.78	0.78	0.78	0.78
(v / s)_i Volume / Saturation Flow Rate	0.03	0.07	0.19	0.48	0.47	0.02
s, saturation flow rate [veh/h]	1810	1615	293	3618	3618	1615
c, Capacity [veh/h]	191	170	262	2804	2804	1252
d1, Uniform Delay [s]	27.77	28.92	9.29	3.26	3.20	1.73
k, delay calibration	0.11	0.11	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]	1.00	4.96	1.82	1.03	0.98	0.03
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	0.33	0.69	0.21	0.62	0.61	0.02
d, Delay for Lane Group [s/veh]	28.77	33.87	11.11	4.29	4.18	1.76
Lane Group LOS	C	C	B	A	A	A
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.97	2.02	0.46	0.65	0.62	0.02
50th-Percentile Queue Length [ft/ln]	24.18	50.45	11.43	16.19	15.45	0.41
95th-Percentile Queue Length [veh/ln]	1.74	3.63	0.82	1.17	1.11	0.03
95th-Percentile Queue Length [ft/ln]	43.53	90.81	20.57	29.14	27.80	0.73

Movement, Approach, & Intersection Results

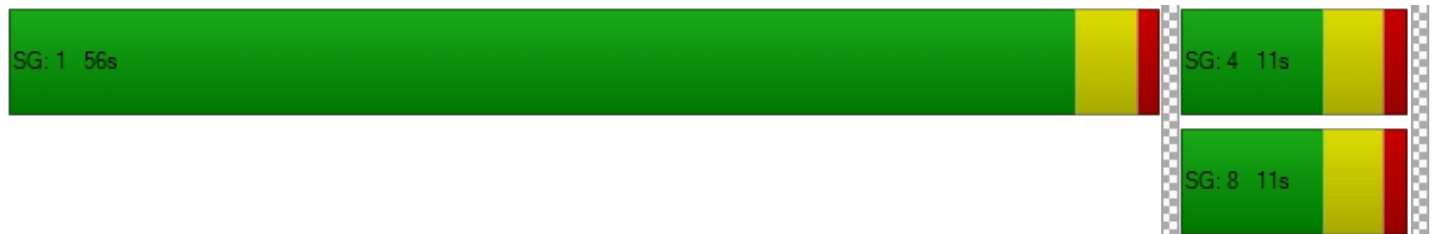
d_M, Delay for Movement [s/veh]	28.77	33.87	11.11	4.29	4.18	1.76
Movement LOS	C	C	B	A	A	A
d_A, Approach Delay [s/veh]	32.10		4.50		4.14	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	5.68					
Intersection LOS	A					
Intersection V/C	0.587					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	33.50	33.50	33.50
I_b,int, Bicycle LOS Score for Intersection	4.132	5.608	5.558
Bicycle LOS	D	F	F

Sequence

Ring 1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Ridgecrest Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	21.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

Intersection Setup

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐⇐		⇐⇐		⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	1	0
Pocket Length [ft]	150.00	100.00	100.00	100.00	150.00	100.00
Speed [mph]	55.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Ridgecrest Rd		Green Tree Blvd		Green Tree Blvd	
Base Volume Input [veh/h]	554	152	1495	594	172	1442
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	24	0	61	51
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]	554	180	1519	594	233	1493
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	146	47	400	156	61	393
Total Analysis Volume [veh/h]	583	189	1599	625	245	1572
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing	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]	81
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	39	60
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	C	R	C	R	L	C
C, Cycle Length [s]	81	81	81	81	81	81	81
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	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
g_i, Effective Green Time [s]	15	15	15	41	41	13	58
g / C, Green / Cycle	0.19	0.19	0.19	0.50	0.50	0.16	0.71
(v / s)_i Volume / Saturation Flow Rate	0.16	0.16	0.12	0.44	0.39	0.14	0.43
s, saturation flow rate [veh/h]	1810	1810	1615	3618	1615	1810	3618
c, Capacity [veh/h]	342	342	305	1812	809	294	2578
d1, Uniform Delay [s]	31.80	31.80	30.21	18.11	16.48	32.89	5.92
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.06	6.06	2.06	6.64	7.08	6.13	1.08
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	0.85	0.85	0.62	0.88	0.77	0.83	0.61
d, Delay for Lane Group [s/veh]	37.87	37.87	32.27	24.74	23.56	39.02	7.01
Lane Group LOS	D	D	C	C	C	D	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.53	5.53	3.22	11.99	8.93	4.71	3.78
50th-Percentile Queue Length [ft/ln]	138.16	138.16	80.60	299.75	223.35	117.65	94.62
95th-Percentile Queue Length [veh/ln]	9.38	9.38	5.80	17.67	13.84	8.26	6.81
95th-Percentile Queue Length [ft/ln]	234.55	234.55	145.08	441.72	345.90	206.59	170.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	37.87	32.27	24.74	23.56	39.02	7.01
Movement LOS	D	C	C	C	D	A
d_A, Approach Delay [s/veh]	36.50		24.41		11.33	
Approach LOS	D		C		B	
d_I, Intersection Delay [s/veh]	21.41					
Intersection LOS	C					
Intersection V/C	0.798					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0
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]	30.25	30.25	30.25
I_p,int, Pedestrian LOS Score for Intersection	2.936	3.706	3.521
Crosswalk LOS	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	40.50	40.50	40.50
I_b,int, Bicycle LOS Score for Intersection	5.406	5.967	5.631
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 13: Hesperia Rd (NS) at Green Tree Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	45.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.985

Intersection Setup

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]			[Diagram]			[Diagram]			[Diagram]		
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	2	0	0	2	0	0	1	0	0	1	0	0
Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00	150.00	100.00	100.00
Speed [mph]	50.00			50.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hesperia Rd			Hesperia Rd			Green Tree Blvd			Green Tree Blvd		
Base Volume Input [veh/h]	294	1150	472	340	1230	250	187	1282	357	413	1182	394
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	8	0	0	0	12	0	9	25	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]	294	1150	476	348	1230	250	187	1294	357	422	1207	411
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	303	125	92	324	66	49	341	94	111	318	108
Total Analysis Volume [veh/h]	309	1211	501	366	1295	263	197	1362	376	444	1271	433
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	92
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap
Signal group	5	2	2	1	6	0	3	8	0	7	4	4
Auxiliary Signal Groups			2,7									1,4
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	7	7	7	0	7	7	0	7	7	7
Maximum Green [s]	30	30	30	30	30	0	30	30	0	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0
Split [s]	12	28	28	12	28	0	18	37	0	15	34	34
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	0	0	7	0	0	7	7
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	0	0	10	10
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	0.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0
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	R
C, Cycle Length [s]	92	92	92	92	92	92	92	92	92	92	92	92
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	0.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	8	24	39	36	24	24	48	33	33	11	37	49
g / C, Green / Cycle	0.09	0.26	0.42	0.39	0.26	0.26	0.52	0.36	0.36	0.12	0.40	0.53
(v / s)_i Volume / Saturation Flow Rate	0.09	0.23	0.31	0.44	0.25	0.16	0.15	0.38	0.23	0.13	0.35	0.27
s, saturation flow rate [veh/h]	3514	5176	1615	840	5176	1615	1357	3618	1615	3514	3618	1615
c, Capacity [veh/h]	306	1357	687	344	1357	423	577	1293	577	420	1451	859
d1, Uniform Delay [s]	42.01	32.70	22.03	38.47	33.41	29.92	17.72	29.57	24.77	40.51	25.43	13.78
k, delay calibration	0.11	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.20	0.11	0.11	0.32
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]	26.42	9.25	6.70	66.78	15.73	6.71	0.35	29.09	2.26	37.09	1.83	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	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	1.01	0.89	0.73	1.06	0.95	0.62	0.34	1.05	0.65	1.06	0.88	0.50
d, Delay for Lane Group [s/veh]	68.42	41.95	28.73	105.24	49.14	36.63	18.07	58.66	27.03	77.60	27.26	15.14
Lane Group LOS	F	D	C	F	D	D	B	F	C	F	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.40	9.11	9.20	11.36	10.66	5.53	0.91	17.91	6.55	6.63	11.63	5.15
50th-Percentile Queue Length [ft/ln]	109.91	227.73	230.10	283.97	266.47	138.17	22.74	447.72	163.64	165.83	290.72	128.77
95th-Percentile Queue Length [veh/ln]	7.86	14.06	14.18	17.57	16.01	9.38	1.64	25.73	10.74	11.09	17.22	8.87
95th-Percentile Queue Length [ft/ln]	196.54	351.48	354.49	439.30	400.33	234.56	40.94	643.20	268.53	277.32	430.54	221.83

Movement, Approach, & Intersection Results

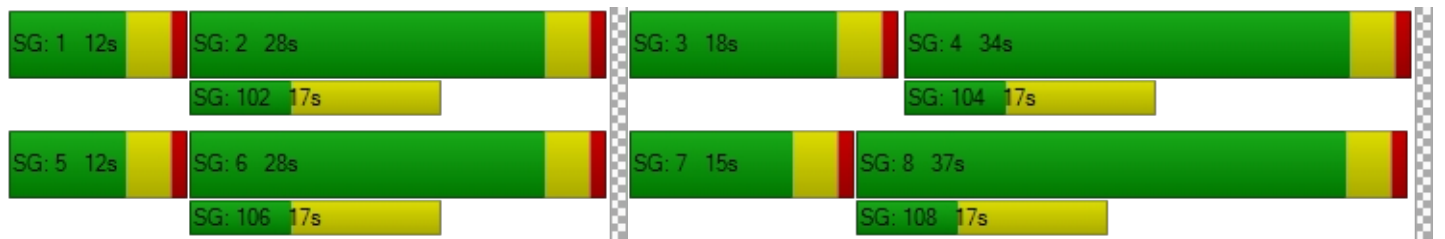
d_M, Delay for Movement [s/veh]	68.42	41.95	28.73	105.24	49.14	36.63	18.07	58.66	27.03	77.60	27.26	15.14
Movement LOS	F	D	C	F	D	D	B	F	C	F	C	B
d_A, Approach Delay [s/veh]	42.72			58.10			48.38			35.22		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	45.77											
Intersection LOS	D											
Intersection V/C	0.985											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	35.66	35.66	35.66	35.66
I_p,int, Pedestrian LOS Score for Intersection	3.597	3.610	3.472	3.800
Crosswalk LOS	D	D	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	522	522	717	652
d_b, Bicycle Delay [s]	25.13	25.13	18.92	20.89
I_b,int, Bicycle LOS Score for Intersection	2.671	2.618	3.156	3.332
Bicycle LOS	B	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 14: Tamarisk Ave/I Ave (NS) at Bear Valley Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	36.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.802

Intersection Setup

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐			⇐⇐⇐⇐⇐			⇐⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0	1	0	1	2	0	0
Pocket Length [ft]	375.00	100.00	390.00	100.00	100.00	100.00	285.00	100.00	250.00	325.00	100.00	100.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	I Ave			Tamarisk Ave			Bear Valley Rd			Bear Valley Rd		
Base Volume Input [veh/h]	489	88	197	87	36	132	184	2339	505	156	1649	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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	17	0	0	8	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]	489	88	197	87	36	132	184	2356	505	156	1657	62
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	130	23	53	23	10	35	49	628	135	42	442	17
Total Analysis Volume [veh/h]	521	94	210	93	38	141	196	2512	538	166	1767	66
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									5,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	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	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	22	21	0	20	19	0	25	63	63	11	49	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	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	2.0	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	115	115	115	115	115	115	115	115	115	115
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]	18	28	8	17	14	57	79	7	49	49
g / C, Green / Cycle	0.16	0.24	0.07	0.15	0.13	0.49	0.69	0.06	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.15	0.18	0.05	0.11	0.11	0.49	0.33	0.05	0.33	0.33
s, saturation flow rate [veh/h]	3514	1694	1810	1668	1810	5176	1615	3514	3618	1865
c, Capacity [veh/h]	550	407	118	249	227	2558	1107	214	1555	802
d1, Uniform Delay [s]	48.03	40.44	52.96	46.63	49.33	28.58	8.52	53.22	28.08	28.11
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.50	0.11	0.11	0.28
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.15	11.81	10.90	16.41	9.42	5.09	1.53	5.93	0.87	4.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.95	0.75	0.79	0.72	0.86	0.98	0.49	0.78	0.78	0.78
d, Delay for Lane Group [s/veh]	57.17	52.25	63.86	63.04	58.75	33.67	10.05	59.15	28.94	32.36
Lane Group LOS	E	D	E	E	E	C	B	E	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.06	9.26	2.96	5.92	5.95	21.69	5.70	2.48	13.48	14.70
50th-Percentile Queue Length [ft/ln]	201.44	231.45	73.95	147.88	148.79	542.22	142.38	61.98	336.93	367.56
95th-Percentile Queue Length [veh/ln]	12.71	14.25	5.32	9.90	9.95	29.33	9.61	4.46	19.50	20.99
95th-Percentile Queue Length [ft/ln]	317.82	356.20	133.12	247.60	248.82	733.17	240.23	111.56	487.44	524.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.17	52.25	52.25	63.86	63.04	63.04	58.75	33.67	10.05	59.15	30.02	32.36
Movement LOS	E	D	D	E	E	E	E	C	B	E	C	C
d_A, Approach Delay [s/veh]	55.36			63.32			31.27			32.52		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	36.17											
Intersection LOS	D											
Intersection V/C	0.802											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
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]	47.03	47.03	0.00	47.03
I_p,int, Pedestrian LOS Score for Intersection	2.617	2.224	0.000	3.643
Crosswalk LOS	B	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	296	261	1026	783
d_b, Bicycle Delay [s]	41.76	43.48	13.63	21.30
I_b,int, Bicycle LOS Score for Intersection	2.921	2.008	3.345	2.659
Bicycle LOS	C	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 15: Peach Ave (NS) at Bear Valley Rd (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):	0.667

Intersection Setup

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵		↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Peach Ave		Bear Valley Rd		Bear Valley Rd	
Base Volume Input [veh/h]	141	138	2325	296	126	1731
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	8
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]	141	138	2342	296	126	1739
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	37	625	79	34	464
Total Analysis Volume [veh/h]	150	147	2499	316	134	1856
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	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	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]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
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]	13	0	11	0	46	57
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	7
Pedestrian Clearance [s]	10	0	10	0	0	10
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	L	R	C	R	L	C
C, Cycle Length [s]	70	70	70	70	70	70
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	43	43	7	54
g / C, Green / Cycle	0.12	0.12	0.61	0.61	0.10	0.77
(v / s)_i Volume / Saturation Flow Rate	0.08	0.09	0.48	0.20	0.07	0.36
s, saturation flow rate [veh/h]	1810	1615	5176	1615	1810	5176
c, Capacity [veh/h]	215	192	3165	987	178	3970
d1, Uniform Delay [s]	29.68	29.95	10.24	6.58	30.77	2.97
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.05	6.25	2.09	0.86	6.24	0.40
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	0.77	0.79	0.32	0.75	0.47
d, Delay for Lane Group [s/veh]	33.73	36.20	12.33	7.44	37.01	3.36
Lane Group LOS	C	D	B	A	D	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.47	2.53	7.01	1.80	2.33	1.07
50th-Percentile Queue Length [ft/ln]	61.63	63.30	175.31	44.89	58.35	26.76
95th-Percentile Queue Length [veh/ln]	4.44	4.56	11.36	3.23	4.20	1.93
95th-Percentile Queue Length [ft/ln]	110.94	113.94	283.88	80.81	105.04	48.17

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.73	36.20	12.33	7.44	37.01	3.36
Movement LOS	C	D	B	A	D	A
d_A, Approach Delay [s/veh]	34.95		11.78		5.63	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	10.73					
Intersection LOS	B					
Intersection V/C	0.667					

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	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	35.00	35.00	35.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.681	5.227
Bicycle LOS	D	F	F

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX E

TRAFFIC MODEL FORECASTING WORKSHEETS

HESPERIA ROAD (NS) / BEAR VALLEY ROAD (EW) - #1
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS											
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA						
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL		
NORTH BOUND	LEFT	110	SOUTH LEG	980	NORTH BOUND	LEFT	157	SOUTH LEG	1,010		
	THRU	502				THRU	435			IN ...	1,000
	RIGHT	358				OUT ...	740			RIGHT	418
SOUTH BOUND	LEFT	263	NORTH LEG	670	SOUTH BOUND	LEFT	407	NORTH LEG	1,090		
	THRU	320				THRU	540			IN ...	800
	RIGHT	79				OUT ...	930			RIGHT	133
EAST BOUND	LEFT	196	WEST LEG	1,590	EAST BOUND	LEFT	130	WEST LEG	1,590		
	THRU	1,267				THRU	1,340			IN ...	1,540
	RIGHT	101				OUT ...	1,500			RIGHT	98
WEST BOUND	LEFT	315	EAST LEG	1,850	WEST BOUND	LEFT	347	EAST LEG	1,840		
	THRU	1,305				THRU	1,243			IN ...	2,190
	RIGHT	218				OUT ...	1,910			RIGHT	227

YEAR 2020 TRAFFIC CONDITIONS										
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS					
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	
NORTH BOUND	LEFT	110	111	NORTH LEG RATIO 6.7% ADT 23,700	NORTH BOUND	LEFT	157	158	NORTH LEG RATIO - ADT 0	
	THRU	502	508			THRU	435	439		-
	RIGHT	358	361			RIGHT	418	422		0
SOUTH BOUND	LEFT	263	266	SOUTH LEG RATIO 6.8% ADT 25,200	SOUTH BOUND	LEFT	407	412	SOUTH LEG RATIO - ADT 0	
	THRU	320	323			THRU	540	546		-
	RIGHT	79	80			RIGHT	133	134		0
EAST BOUND	LEFT	196	200	EAST LEG RATIO 7.5% ADT 50,400	EAST BOUND	LEFT	130	132	EAST LEG RATIO - ADT 0	
	THRU	1,267	1,284			THRU	1,340	1,359		-
	RIGHT	101	102			RIGHT	98	99		0
WEST BOUND	LEFT	315	318	WEST LEG RATIO 7.9% ADT 39,300	WEST BOUND	LEFT	347	355	WEST LEG RATIO - ADT 0	
	THRU	1,305	1,317			THRU	1,243	1,254		-
	RIGHT	218	221			RIGHT	227	232		0

Forecasted Intersection Traffic Volumes 2040nP

Hesperia Road at Bear Valley Road														
Adj.	↓	1,194	8.3%	PM					PM	8.3%	905	↑	DATE	
Flow	↓	731	7.0%	AM					AM	7.0%	1,026	↑	Flow	
←	←	Origin	ADT	25,200	PM	146	595	453	PM	25,200	ADT	Origin	←	←
1,686	1,647	ADT			AM	90	352	289	AM			ADT	2,023	2,020
8.3%	8.5%	41,100			PM	146	595	453	PM		52,900	7.9%	8.3%	
PM	AM	PM	AM	PM	AM	90	352	289	AM	PM	AM	PM	AM	PM
		155	234	155	234	↑		SB		↑	240	271	240	271
		1,474	1,491	1,474	1,491	⇒	EB	1	WB	⇐	1,436	1,367	1,436	1,367
		108	115	108	115	↓		NB		↓	347	382	347	382
						⇐		↑		⇒				
PM	AM	PM	AM	PM	AM	121	552	394	AM	PM	AM	PM	AM	PM
8.3%	8.5%	41,100				173	479	460	PM		52,900	7.9%	8.3%	
1,737	1,840	ADT			AM	121	552	394	AM		ADT	2,174	2,387	
⇒	⇒	Origin	ADT	26,400	PM	173	479	460	PM	26,400	ADT	Origin	⇒	⇒
Flow	↓	814	7.1%	AM					AM	7.1%	1,067	↑	Flow	
Adj.	↓	1,085	8.3%	PM					PM	8.3%	1,112	↑	Adj.	

RIDGECREST ROAD (NS) / CHINQUAPIN DRIVE (EW) - #2
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG		NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	241	IN ...	290	NORTH BOUND	THRU	363	IN ...	420
	RIGHT	28	OUT ...	710	NORTH BOUND	RIGHT	41	OUT ...	420
SOUTH BOUND	LEFT	22	NORTH LEG		SOUTH BOUND	LEFT	54	NORTH LEG	
	THRU	629	IN ...	700	SOUTH BOUND	THRU	372	IN ...	480
	RIGHT	0	OUT ...	310	SOUTH BOUND	RIGHT	0	OUT ...	450
EAST BOUND	LEFT	0	WEST LEG		EAST BOUND	LEFT	0	WEST LEG	
	THRU	0	IN ...	80	EAST BOUND	THRU	0	IN ...	100
	RIGHT	0	OUT ...	70	EAST BOUND	RIGHT	0	OUT ...	70
WEST BOUND	LEFT	59	EAST LEG		WEST BOUND	LEFT	19	EAST LEG	
	THRU	0	IN ...	70	WEST BOUND	THRU	0	IN ...	30
	RIGHT	9	OUT ...	50	WEST BOUND	RIGHT	8	OUT ...	100

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	0	0	NORTH LEG	NORTH BOUND	LEFT	0	0	NORTH LEG
	THRU	241	291	RATIO 4.0%	NORTH BOUND	THRU	363	433	RATIO -
	RIGHT	28	28	ADT 24,900	NORTH BOUND	RIGHT	41	41	ADT 0
SOUTH BOUND	LEFT	22	31	SOUTH LEG	SOUTH BOUND	LEFT	54	76	SOUTH LEG
	THRU	629	659	RATIO 6.9%	SOUTH BOUND	THRU	372	405	RATIO -
	RIGHT	0	0	ADT 15,100	SOUTH BOUND	RIGHT	0	0	ADT 0
EAST BOUND	LEFT	0	0	EAST LEG	EAST BOUND	LEFT	0	0	EAST LEG
	THRU	0	0	RATIO 9.2%	EAST BOUND	THRU	0	0	RATIO -
	RIGHT	0	0	ADT 1,500	EAST BOUND	RIGHT	0	0	ADT 0
WEST BOUND	LEFT	59	60	WEST LEG	WEST BOUND	LEFT	19	19	WEST LEG
	THRU	0	0	RATIO -	WEST BOUND	THRU	0	0	RATIO -
	RIGHT	9	19	ADT 20,800	WEST BOUND	RIGHT	8	17	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Ridgecrest Road at Chinquapin Drive														
Adj.	↓	766	6.2%	PM		-24			PM	6.2%	706	↑	DATE	
	Flow	↓	738	5.4%	AM		-250		AM	5.4%	559	↑	Flow	
←	←	Origin	ADT	23,900	PM	0	680	110	PM	23,900	ADT	Origin	←	←
0	0	ADT			AM	0	928	60	AM			ADT	195	76
#DIV/0!	#DIV/0!	0			PM	0	656	110	PM			2,800	10.2%	8.3%
PM	AM	PM	AM	PM	AM	0	678	60	AM	PM	AM	PM	AM	PM
		0	0	0	0	↑	SB		↑	130	55	130	55	
		0	0	0	0	⇒	EB	2	WB	←	0	0	0	0
		0	0	0	0	↓	NB		↓	65	21	65	21	
						←			↑					
PM	AM	PM	AM	PM	AM	0	429	31	AM	PM	AM	PM	AM	PM
#DIV/0!	#DIV/0!	0				PM	0	651	45	PM		2,800	10.2%	8.3%
0	0	ADT			AM	0	740	31	AM			ADT	91	155
⇒	⇒	Origin	ADT	22,700	PM	0	1,145	45	PM	22,700	ADT	Origin	⇒	⇒
		Flow	↓	743	5.3%	AM		-311	AM	5.3%	460	↑	Flow	
Adj.	↓	677	6.0%	PM		-494			PM	6.0%	696	↑	Adj.	

RIDGECREST ROAD (NS) / BLUFF CREST STREET/VISTA POINT DRIVE (EW) - #3
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	1	SOUTH LEG		NORTH BOUND	LEFT	3	SOUTH LEG	
	THRU	266	IN ...	350	NORTH BOUND	THRU	450	IN ...	590
	RIGHT	58	OUT ...	890	NORTH BOUND	RIGHT	109	OUT ...	490
SOUTH BOUND	LEFT	35	NORTH LEG		SOUTH BOUND	LEFT	51	NORTH LEG	
	THRU	760	IN ...	820	SOUTH BOUND	THRU	378	IN ...	470
	RIGHT	0	OUT ...	320	SOUTH BOUND	RIGHT	4	OUT ...	500
EAST BOUND	LEFT	1	WEST LEG		EAST BOUND	LEFT	2	WEST LEG	
	THRU	0	IN ...	10	EAST BOUND	THRU	0	IN ...	0
	RIGHT	5	OUT ...	0	EAST BOUND	RIGHT	1	OUT ...	10
WEST BOUND	LEFT	95	EAST LEG		WEST BOUND	LEFT	77	EAST LEG	
	THRU	1	IN ...	130	WEST BOUND	THRU	1	IN ...	100
	RIGHT	29	OUT ...	90	WEST BOUND	RIGHT	23	OUT ...	160

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	1	1	NORTH LEG	NORTH BOUND	LEFT	3	4	NORTH LEG
	THRU	266	289	RATIO 6.9%		THRU	450	477	RATIO -
	RIGHT	58	59	ADT 16,400		RIGHT	109	110	ADT 0
SOUTH BOUND	LEFT	35	35	SOUTH LEG	SOUTH BOUND	LEFT	51	52	SOUTH LEG
	THRU	760	782	RATIO 7.0%		THRU	378	414	RATIO -
	RIGHT	0	0	ADT 17,700		RIGHT	4	5	ADT 0
EAST BOUND	LEFT	1	2	EAST LEG	EAST BOUND	LEFT	2	2	EAST LEG
	THRU	0	0	RATIO 6.8%		THRU	0	0	RATIO -
	RIGHT	5	8	ADT 3,300		RIGHT	1	1	ADT 0
WEST BOUND	LEFT	95	99	WEST LEG	WEST BOUND	LEFT	77	78	WEST LEG
	THRU	1	1	RATIO 12.0%		THRU	1	1	RATIO -
	RIGHT	29	30	ADT 100		RIGHT	23	23	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Ridgecrest Road at Vista Point Drive															
Adj.	↓	734	8.3%	PM						PM	8.3%	702	↑	DATE	
Flow	↓	880	7.8%	AM						AM	7.8%	470	↑	Flow	
←	←	Origin	ADT	17,200	PM	6	664	64	PM	17,200	ADT	Origin	←	←	
11	3	ADT	AM		0	990	39	AM			ADT	142	113		
7.0%	6.5%	200	PM		6	664	64	PM			3,600	6.8%	8.3%		
PM	AM	PM	AM	PM	AM	1	840	39	AM	PM	AM	PM	AM	PM	
		2	2	PM	AM	2	2	↑	SB	↑	36	26			
		0	0	⇒	EB	3	WB	←	1	1	1	1			
		1	8	↓	NB	↓	105	86	105	86					
PM	AM	PM	AM	PM	AM	1	432	64	AM	PM	AM	PM	AM	PM	
7.0%	6.5%	200			PM	AM	4	674	120	PM	3,600	6.8%	8.3%		
3	10	ADT	AM		1	432	64	AM			ADT	103	184		
⇒	⇒	Origin	ADT	18,600	PM	4	674	120	PM	18,600	ADT	Origin	⇒	⇒	
Adj.	↓	953	7.8%	AM						AM	7.8%	497	↑	Flow	
Adj.	↓	751	8.3%	PM						PM	8.3%	798	↑	Adj.	

RIDGECREST ROAD (NS) / HIGH CREST STREET/PEBBLE BEACH DRIVE (EW) - #4
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	4	SOUTH LEG		NORTH BOUND	LEFT	7	SOUTH LEG	
	THRU	307	IN ...	370	NORTH BOUND	THRU	554	IN ...	670
	RIGHT	50	OUT ...	960	NORTH BOUND	RIGHT	85	OUT ...	540
SOUTH BOUND	LEFT	28	NORTH LEG		SOUTH BOUND	LEFT	40	NORTH LEG	
	THRU	788	IN ...	830	SOUTH BOUND	THRU	447	IN ...	510
	RIGHT	2	OUT ...	350	SOUTH BOUND	RIGHT	5	OUT ...	580
EAST BOUND	LEFT	4	WEST LEG		EAST BOUND	LEFT	3	WEST LEG	
	THRU	1	IN ...	30	EAST BOUND	THRU	3	IN ...	10
	RIGHT	21	OUT ...	10	EAST BOUND	RIGHT	8	OUT ...	20
WEST BOUND	LEFT	130	EAST LEG		WEST BOUND	LEFT	62	EAST LEG	
	THRU	6	IN ...	170	WEST BOUND	THRU	4	IN ...	80
	RIGHT	29	OUT ...	80	WEST BOUND	RIGHT	16	OUT ...	130

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	4	4	NORTH LEG	NORTH BOUND	LEFT	7	7	NORTH LEG
	THRU	307	316	RATIO 7.7%	NORTH BOUND	THRU	554	565	RATIO -
	RIGHT	50	51	ADT 15,400	NORTH BOUND	RIGHT	85	91	ADT 0
SOUTH BOUND	LEFT	28	28	SOUTH LEG	SOUTH BOUND	LEFT	40	40	SOUTH LEG
	THRU	788	801	RATIO 8.0%	SOUTH BOUND	THRU	447	471	RATIO -
	RIGHT	2	2	ADT 16,600	SOUTH BOUND	RIGHT	5	6	ADT 0
EAST BOUND	LEFT	4	5	EAST LEG	EAST BOUND	LEFT	3	3	EAST LEG
	THRU	1	1	RATIO 9.7%	EAST BOUND	THRU	3	3	RATIO -
	RIGHT	21	21	ADT 2,600	EAST BOUND	RIGHT	8	8	ADT 0
WEST BOUND	LEFT	130	135	WEST LEG	WEST BOUND	LEFT	62	63	WEST LEG
	THRU	6	6	RATIO 13.0%	WEST BOUND	THRU	4	4	RATIO -
	RIGHT	29	30	ADT 300	WEST BOUND	RIGHT	16	16	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Ridgecrest Road at Pebble Beach Drive														
Adj.	↓	678	8.3%	PM					PM	8.3%	663	↑	DATE	
Flow	↓	946	8.5%	AM					AM	8.5%	420	↑	Flow	
←	←	Origin	ADT	16,100	PM	7	624	47	PM	16,100	ADT	Origin	←	←
20	13	ADT			AM	2	911	33	AM			ADT	190	92
8.8%	10.5%	400			PM	7	624	47	PM			2,800	10.0%	8.4%
PM	AM	PM	AM	PM	AM	2	911	33	AM	PM	AM	PM	AM	PM
		3	5	3	5	↑	↓	⇒	37	18	37	18		
		3	1	3	1	⇒	EB	4	WB	←	7	4	7	4
		9	23	9	23	↓	NB		↓	146	70	146	70	
						←	↑	⇒						
PM	AM	PM	AM	PM	AM	4	378	56	AM	PM	AM	PM	AM	PM
8.8%	10.5%	400				9	642	94	PM			2,800	10.0%	8.4%
15	29	ADT			AM	4	378	56	AM			ADT	90	144
⇒	⇒	Origin	ADT	17,400	PM	9	642	94	PM	17,400	ADT	Origin	⇒	⇒
Flow	↓	1,080	8.7%	AM					AM	8.7%	438	↑	Flow	
Adj.	↓	703	8.3%	PM					PM	8.3%	745	↑	Adj.	

RIDGECREST ROAD (NS) / PAHUTE AVENUE (EW) - #5
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	5	SOUTH LEG		NORTH BOUND	LEFT	11	SOUTH LEG	
	THRU	282	IN ...	390		THRU	615	IN ...	710
	RIGHT	59	OUT ...	1,230		RIGHT	41	OUT ...	630
SOUTH BOUND	LEFT	79	NORTH LEG		SOUTH BOUND	LEFT	24	NORTH LEG	
	THRU	942	IN ...	1,040		THRU	522	IN ...	570
	RIGHT	3	OUT ...	410		RIGHT	3	OUT ...	730
EAST BOUND	LEFT	5	WEST LEG		EAST BOUND	LEFT	4	WEST LEG	
	THRU	6	IN ...	30		THRU	3	IN ...	20
	RIGHT	16	OUT ...	10		RIGHT	11	OUT ...	20
WEST BOUND	LEFT	246	EAST LEG		WEST BOUND	LEFT	77	EAST LEG	
	THRU	6	IN ...	330		THRU	6	IN ...	150
	RIGHT	80	OUT ...	140		RIGHT	65	OUT ...	70

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	5	5	NORTH LEG	NORTH BOUND	LEFT	11	11	NORTH LEG
	THRU	282	325	RATIO 6.7%		THRU	615	658	RATIO -
	RIGHT	59	61	ADT 21,900		RIGHT	41	42	ADT 0
SOUTH BOUND	LEFT	79	80	SOUTH LEG	SOUTH BOUND	LEFT	24	25	SOUTH LEG
	THRU	942	965	RATIO 7.2%		THRU	522	541	RATIO -
	RIGHT	3	3	ADT 22,400		RIGHT	3	3	ADT 0
EAST BOUND	LEFT	5	6	EAST LEG	EAST BOUND	LEFT	4	5	EAST LEG
	THRU	6	6	RATIO 17.2%		THRU	3	3	RATIO -
	RIGHT	16	18	ADT 2,800		RIGHT	11	12	ADT 0
WEST BOUND	LEFT	246	248	WEST LEG	WEST BOUND	LEFT	77	78	WEST LEG
	THRU	6	6	RATIO 11.0%		THRU	6	6	RATIO -
	RIGHT	80	81	ADT 400		RIGHT	65	67	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Ridgecrest Road at Pahute Drive														
Adj.	↓	785	7.0%	PM					PM	7.0%	870	↑	DATE	
Flow	↓	1,117	7.2%	AM	-150				AM	7.2%	570	↑	Flow	
←	←	Origin	ADT	23,500	PM	3	756	26	PM	23,500	ADT	Origin	←	←
23	16	ADT			AM	3	1,177	87	AM		ADT	377	165	
8.8%	9.6%	500			PM	3	756	26	PM		3,000	18.4%	8.2%	
PM	AM	PM	AM	PM	AM	3	1,027	87	AM	PM	AM	PM	AM	PM
		5	7	5	7	↑	SB	↑	99	73	99	73		
		3	7	3	7	⇒	EB	5	WB	←	7	7	7	7
		13	18	13	18	↓	NB	↓	271	85	271	85		
				←	↑	⇒								
PM	AM	PM	AM	PM	AM	6	464	80	AM	PM	AM	PM	AM	PM
8.8%	9.6%	500			PM	13	792	52	PM	3,000	18.4%	8.2%		
21	32	ADT			AM	6	714	80	AM		ADT	174	81	
⇒	⇒	Origin	ADT	24,100	PM	13	1,092	52	PM	24,100	ADT	Origin	⇒	⇒
Flow	↓	1,316	7.7%	AM	-250				AM	7.7%	550	↑	Flow	
Adj.	↓	854	7.1%	PM	-300				PM	7.1%	857	↑	Adj.	

RIDGECREST ROAD (NS) / BEAR VALLEY ROAD (EW) - #6
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	16	SOUTH LEG		NORTH BOUND	LEFT	15	SOUTH LEG	
	THRU	3	IN ...	20	NORTH BOUND	THRU	16	IN ...	50
	RIGHT	3	OUT ...	30	NORTH BOUND	RIGHT	15	OUT ...	20
SOUTH BOUND	LEFT	85	NORTH LEG		SOUTH BOUND	LEFT	93	NORTH LEG	
	THRU	8	IN ...	1,140	SOUTH BOUND	THRU	0	IN ...	760
	RIGHT	1,024	OUT ...	590	SOUTH BOUND	RIGHT	651	OUT ...	760
EAST BOUND	LEFT	517	WEST LEG		EAST BOUND	LEFT	653	WEST LEG	
	THRU	2,204	IN ...	2,760	EAST BOUND	THRU	2,686	IN ...	3,390
	RIGHT	16	OUT ...	3,100	EAST BOUND	RIGHT	16	OUT ...	2,610
WEST BOUND	LEFT	8	EAST LEG		WEST BOUND	LEFT	1	EAST LEG	
	THRU	2,040	IN ...	2,100	WEST BOUND	THRU	1,925	IN ...	2,000
	RIGHT	33	OUT ...	2,310	WEST BOUND	RIGHT	54	OUT ...	2,810

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	16	16	NORTH LEG	NORTH BOUND	LEFT	15	16	NORTH LEG
	THRU	3	3	RATIO 7.0%		THRU	16	18	RATIO -
	RIGHT	3	3	ADT 24,600		RIGHT	15	16	ADT 0
SOUTH BOUND	LEFT	85	93	SOUTH LEG	SOUTH BOUND	LEFT	93	98	SOUTH LEG
	THRU	8	8	RATIO 6.8%		THRU	0	0	RATIO -
	RIGHT	1,024	1,037	ADT 800		RIGHT	651	660	ADT 0
EAST BOUND	LEFT	517	549	EAST LEG	EAST BOUND	LEFT	653	683	EAST LEG
	THRU	2,204	2,224	RATIO 7.3%		THRU	2,686	2,710	RATIO -
	RIGHT	16	16	ADT 60,400		RIGHT	16	16	ADT 0
WEST BOUND	LEFT	8	8	WEST LEG	WEST BOUND	LEFT	1	1	WEST LEG
	THRU	2,040	2,058	RATIO 7.8%		THRU	1,925	1,942	RATIO -
	RIGHT	33	38	ADT 75,200		RIGHT	54	59	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Ridgecrest Road at Bear Valley Road														
Adj.	↓	993	7.6%	PM		1			PM	7.6%	1,011	↑	DATE	
Flow	↓	1,275	7.7%	AM		-100			AM	7.7%	749	↑	Flow	
←	←	Origin	ADT	26,400	PM	788	0	204	PM	26,400	ADT	Origin	←	←
2,923	3,334	ADT			AM	1,172	11	192	AM			ADT	2,366	2,274
7.9%	7.6%	83,100			PM	788	1	204	PM			65,400	7.5%	8.1%
PM	AM	PM	AM	PM	AM	1,072	11	192	AM	PM	AM	PM	AM	PM
						↔	↓	↔						
-200	-250	1,030	881	830	631	↑	SB		↑	112	154	112	154	
-150	-50	2,955	2,424	2,805	2,374	↔	EB	6	WB	↔	2,244	2,118	2,244	2,118
		18	18	18	18	↓	NB		↓	10	2	10	2	
						↔	↑	↔						
PM	AM	PM	AM	PM	AM	18	6	4	AM	PM	AM	PM	AM	PM
7.9%	7.6%	83,100				PM	17	27	17	PM		65,400	7.5%	8.1%
3,653	3,023	ADT			AM	18	6	4	AM			ADT	2,570	3,026
⇒	⇒	Origin	ADT	1,000	PM	17	27	17	PM	1,000	ADT	Origin	⇒	⇒
Flow	↓	39	6.7%	AM					AM	6.7%	28	↑	Flow	
Adj.	↓	21	8.2%	PM					PM	8.2%	61	↑	Adj.	

PARK ROAD (NS) / YATES ROAD (EW) - #7
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG		NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0		THRU	0	IN ...	0
	RIGHT	0	OUT ...	0		RIGHT	0	OUT ...	0
SOUTH BOUND	LEFT	7	NORTH LEG		SOUTH BOUND	LEFT	15	NORTH LEG	
	THRU	0	IN ...	10		THRU	0	IN ...	20
	RIGHT	1	OUT ...	10		RIGHT	9	OUT ...	10
EAST BOUND	LEFT	4	WEST LEG		EAST BOUND	LEFT	6	WEST LEG	
	THRU	262	IN ...	330		THRU	354	IN ...	440
	RIGHT	0	OUT ...	680		RIGHT	0	OUT ...	460
WEST BOUND	LEFT	0	EAST LEG		WEST BOUND	LEFT	0	EAST LEG	
	THRU	620	IN ...	680		THRU	404	IN ...	460
	RIGHT	8	OUT ...	330		RIGHT	8	OUT ...	450

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	0	0	NORTH LEG	NORTH BOUND	LEFT	0	0	NORTH LEG
	THRU	0	0	RATIO 5.3%		THRU	0	0	RATIO -
	RIGHT	0	0	ADT 400		RIGHT	0	0	ADT 0
SOUTH BOUND	LEFT	7	8	SOUTH LEG	SOUTH BOUND	LEFT	15	15	SOUTH LEG
	THRU	0	0	RATIO -		THRU	0	0	RATIO -
	RIGHT	1	1	ADT 0		RIGHT	9	9	ADT 0
EAST BOUND	LEFT	4	4	EAST LEG	EAST BOUND	LEFT	6	6	EAST LEG
	THRU	262	322	RATIO 4.1%		THRU	354	437	RATIO -
	RIGHT	0	0	ADT 24,700		RIGHT	0	0	ADT 0
WEST BOUND	LEFT	0	0	WEST LEG	WEST BOUND	LEFT	0	0	WEST LEG
	THRU	620	679	RATIO 4.1%		THRU	404	453	RATIO -
	RIGHT	8	8	ADT 24,600		RIGHT	8	8	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Park Road at Yates Road																
Adj.	↓	27	8.6%	PM						PM	8.6%	16	↑	DATE		
Flow	↓	10	4.8%	AM						AM	4.8%	14	↑	Flow		
←	←	Origin	ADT	500	PM	10	0	17	PM	500	ADT	Origin	←	←		
1,614	1,544	ADT			AM	1	0	9	AM		ADT	1,552	1,613			
12.3%	10.7%	26,500			PM	10	0	17	PM		26,600	10.7%	12.3%			
PM	AM	PM	AM	PM	AM	1	0	9	AM	PM	AM	PM	AM	PM		
		7	5	7	5	↑	SB	↑	9	9	9	9				
453	409	1,187	881	1,640	1,290	⇒	EB	7	WB	⇐	1,543	1,604	1,209	1,003	334	601
		0	0	0	0	↓	NB	↓	0	0	0	0				
PM	AM	PM	AM	PM	AM	0	0	0	AM	PM	AM	PM	AM	PM		
12.3%	10.7%	26,500			PM	0	0	0	PM	PM	26,600	10.7%	12.3%			
1,647	1,295	ADT			AM	0	0	0	AM		ADT	1,299	1,657			
⇒	⇒	Origin	ADT	0	PM	0	0	0	PM	0	ADT	Origin	⇒	⇒		
Flow	↓	0	#DIV/0!	AM						AM	#DIV/0!	0	↑	Flow		
Adj.	↓	0	#DIV/0!	PM						PM	#DIV/0!	0	↑	Adj.		

APPLE VALLEY ROAD (NS) / YUCCA LOMA ROAD (EW) - #8
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	84	SOUTH LEG		NORTH BOUND	LEFT	81	SOUTH LEG	
	THRU	507	IN ...	670	NORTH BOUND	THRU	548	IN ...	810
	RIGHT	83	OUT ...	800	NORTH BOUND	RIGHT	173	OUT ...	960
SOUTH BOUND	LEFT	83	NORTH LEG		SOUTH BOUND	LEFT	171	NORTH LEG	
	THRU	492	IN ...	860	SOUTH BOUND	THRU	729	IN ...	1,110
	RIGHT	253	OUT ...	840	SOUTH BOUND	RIGHT	177	OUT ...	810
EAST BOUND	LEFT	188	WEST LEG		EAST BOUND	LEFT	160	WEST LEG	
	THRU	249	IN ...	580	EAST BOUND	THRU	256	IN ...	540
	RIGHT	102	OUT ...	790	EAST BOUND	RIGHT	59	OUT ...	510
WEST BOUND	LEFT	196	EAST LEG		WEST BOUND	LEFT	158	EAST LEG	
	THRU	401	IN ...	750	WEST BOUND	THRU	214	IN ...	470
	RIGHT	124	OUT ...	440	WEST BOUND	RIGHT	76	OUT ...	640

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	84	86	NORTH LEG	NORTH BOUND	LEFT	81	85	NORTH LEG
	THRU	507	512	RATIO 6.0%		THRU	548	553	RATIO -
	RIGHT	83	84	ADT 28,500		RIGHT	173	175	ADT 0
SOUTH BOUND	LEFT	83	88	SOUTH LEG	SOUTH BOUND	LEFT	171	177	SOUTH LEG
	THRU	492	499	RATIO 6.6%		THRU	729	736	RATIO -
	RIGHT	253	276	ADT 22,500		RIGHT	177	193	ADT 0
EAST BOUND	LEFT	188	206	EAST LEG	EAST BOUND	LEFT	160	182	EAST LEG
	THRU	249	270	RATIO 5.5%		THRU	256	290	RATIO -
	RIGHT	102	106	ADT 21,700		RIGHT	59	65	ADT 0
WEST BOUND	LEFT	196	198	WEST LEG	WEST BOUND	LEFT	158	159	WEST LEG
	THRU	401	428	RATIO 6.8%		THRU	214	232	RATIO -
	RIGHT	124	129	ADT 20,200		RIGHT	76	78	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Apple Valley Road at Yucca Loma Road (ref)															
Adj.	↓	1,954	8.4%	PM		50			PM	8.4%	1,603	↑	DATE		
	Flow	↓	1,215	6.1%	AM	50			AM	6.1%	1,344	↑	Flow		
←	←	Origin	ADT	42,100	PM	499	1,197	208	PM	42,100	ADT	Origin	←	←	
1,700	1,389	ADT			AM	243	769	153	AM			ADT	1,284	1,154	
8.3%	6.5%	39,600			PM	499	1,197	258	PM			28,200	7.5%	8.7%	
PM	AM	PM	AM	PM	AM	293	769	153	AM	PM	AM	PM	AM	PM	
						↔	↓	↔							
		386	343	386	343	↑	SB		↑	219	116	169	116	50	
		822	592	822	592	↔	EB	15	WB	↔	814	831	814	831	
		394	254	394	254	↓		NB		↓	251	207	151	157	
						↔	↑	↔							
PM	AM	PM	AM	PM	AM	282	782	93	AM	PM	AM	PM	AM	PM	
8.3%	6.5%	39,600				PM	370	1,101	217	PM			28,200	7.5%	8.7%
1,602	1,189	ADT			AM	282	782	83	AM			ADT	838	1,297	
⇒	⇒	Origin	ADT	41,200	PM	370	1,101	217	PM	41,200	ADT	Origin	⇒	⇒	
	Flow	↓	1,274	5.9%	AM			10	AM	5.9%	1,157	↑	Flow		
Adj.	↓	1,798	8.5%	PM					PM	8.5%	1,688	↑	Adj.		

APATITE AVENUE (NS) / BEAR VALLEY ROAD (EW) - #9
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	1	SOUTH LEG		NORTH BOUND	LEFT	2	SOUTH LEG	
	THRU	0	IN ...	40	NORTH BOUND	THRU	0	IN ...	70
	RIGHT	41	OUT ...	40	NORTH BOUND	RIGHT	71	OUT ...	80
SOUTH BOUND	LEFT	19	NORTH LEG		SOUTH BOUND	LEFT	69	NORTH LEG	
	THRU	2	IN ...	40	SOUTH BOUND	THRU	0	IN ...	120
	RIGHT	19	OUT ...	100	SOUTH BOUND	RIGHT	53	OUT ...	80
EAST BOUND	LEFT	53	WEST LEG		EAST BOUND	LEFT	30	WEST LEG	
	THRU	1,745	IN ...	1,830	EAST BOUND	THRU	1,977	IN ...	2,040
	RIGHT	2	OUT ...	1,730	EAST BOUND	RIGHT	21	OUT ...	1,890
WEST BOUND	LEFT	37	EAST LEG		WEST BOUND	LEFT	60	EAST LEG	
	THRU	1,696	IN ...	1,790	WEST BOUND	THRU	1,829	IN ...	1,950
	RIGHT	51	OUT ...	1,840	WEST BOUND	RIGHT	49	OUT ...	2,140

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	1	1	NORTH LEG	NORTH BOUND	LEFT	2	2	NORTH LEG
	THRU	0	0	RATIO 5.8%		THRU	0	0	RATIO -
	RIGHT	41	41	ADT 2,500		RIGHT	71	72	ADT 0
SOUTH BOUND	LEFT	19	19	SOUTH LEG	SOUTH BOUND	LEFT	69	70	SOUTH LEG
	THRU	2	2	RATIO 4.2%		THRU	0	0	RATIO -
	RIGHT	19	19	ADT 2,000		RIGHT	53	53	ADT 0
EAST BOUND	LEFT	53	53	EAST LEG	EAST BOUND	LEFT	30	30	EAST LEG
	THRU	1,745	1,782	RATIO 7.1%		THRU	1,977	2,002	RATIO -
	RIGHT	2	2	ADT 51,300		RIGHT	21	21	ADT 0
WEST BOUND	LEFT	37	37	WEST LEG	WEST BOUND	LEFT	60	61	WEST LEG
	THRU	1,696	1,711	RATIO 7.2%		THRU	1,829	1,845	RATIO -
	RIGHT	51	51	ADT 49,500		RIGHT	49	51	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Apatite Avenue at Bear Valley Road														
Adj.	↓	134	8.3%	PM					PM	8.3%	90	↑	DATE	
Flow	↓	44	5.9%	AM					AM	5.9%	114	↑	Flow	
←	←	Origin	ADT	2,700	PM	58	0	76	PM	2,700	ADT	Origin	←	←
2,072	1,888	ADT			AM	21	2	21	AM		ADT	1,963	2,135	
8.3%	7.8%	51,600			PM	58	0	76	PM		53,600	7.6%	8.3%	
PM	AM	PM	AM	PM	AM	21	2	21	AM	PM	AM	PM	AM	PM
		33	58	33	58	↑	SB	↑	56	57	56	57		
		2,175	2,061	2,175	2,061	⇒	EB	9	WB	←	1,866	2,012	1,866	2,012
		23	2	23	2	↓	NB	↓	41	66	41	66		
PM	AM	PM	AM	PM	AM	1	0	45	AM	PM	AM	PM	AM	PM
8.3%	7.8%	51,600			PM	2	0	78	PM	53,600	7.6%	8.3%		
2,231	2,121	ADT			AM	1	0	45	AM		ADT	2,127	2,329	
⇒	⇒	Origin	ADT	2,000	PM	2	0	78	PM	2,000	ADT	Origin	⇒	⇒
Flow	↓	45	4.6%	AM					AM	4.6%	46	↑	Flow	
Adj.	↓	89	8.5%	PM					PM	8.5%	80	↑	Adj.	

INDUSTRIAL BOULEVARD (NS) / BEAR VALLEY ROAD (EW) - #10
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR INPUT DATA					EVENING PEAK HOUR INPUT DATA				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	APPROACH	YEAR 2020 TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG		NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0		THRU	0	IN ...	0
	RIGHT	0	OUT ...	0		RIGHT	0	OUT ...	0
SOUTH BOUND	LEFT	887	NORTH LEG		SOUTH BOUND	LEFT	1,081	NORTH LEG	
	THRU	0	IN ...	940		THRU	0	IN ...	1,160
	RIGHT	39	OUT ...	1,190		RIGHT	71	OUT ...	1,000
EAST BOUND	LEFT	59	WEST LEG		EAST BOUND	LEFT	36	WEST LEG	
	THRU	1,731	IN ...	1,820		THRU	2,108	IN ...	2,160
	RIGHT	0	OUT ...	1,850		RIGHT	0	OUT ...	1,950
WEST BOUND	LEFT	0	EAST LEG		WEST BOUND	LEFT	0	EAST LEG	
	THRU	1,794	IN ...	2,930		THRU	1,872	IN ...	2,840
	RIGHT	1,120	OUT ...	2,650		RIGHT	949	OUT ...	3,210

YEAR 2020 TRAFFIC CONDITIONS									
MORNING PEAK HOUR RESULTS					EVENING PEAK HOUR RESULTS				
APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP	APPROACH	TURNING MOVEMENT	BASE YEAR COUNT	YEAR 2020 FORECAST	PEAK - DAILY RELATIONSHIP
NORTH BOUND	LEFT	0	0	NORTH LEG	NORTH BOUND	LEFT	0	0	NORTH LEG
	THRU	0	0	RATIO 7.9%		THRU	0	0	RATIO -
	RIGHT	0	0	ADT 27,100		RIGHT	0	0	ADT 0
SOUTH BOUND	LEFT	887	897	SOUTH LEG	SOUTH BOUND	LEFT	1,081	1,091	SOUTH LEG
	THRU	0	0	RATIO -		THRU	0	0	RATIO -
	RIGHT	39	41	ADT 0		RIGHT	71	72	ADT 0
EAST BOUND	LEFT	59	62	EAST LEG	EAST BOUND	LEFT	36	37	EAST LEG
	THRU	1,731	1,753	RATIO 7.4%		THRU	2,108	2,127	RATIO -
	RIGHT	0	0	ADT 76,000		RIGHT	0	0	ADT 0
WEST BOUND	LEFT	0	0	WEST LEG	WEST BOUND	LEFT	0	0	WEST LEG
	THRU	1,794	1,810	RATIO 7.1%		THRU	1,872	1,889	RATIO -
	RIGHT	1,120	1,130	ADT 51,700		RIGHT	949	963	ADT 0

Forecasted Intersection Traffic Volumes 2040nP

Industrial Boulevard at Bear Valley Road														
Adj.	↓	1,267	8.3%	PM					PM	8.3%	1,084	↑	DATE	
Flow	↓	1,030	8.3%	AM					AM	8.3%	1,320	↑	Flow	
←	←	Origin	ADT	28,200	PM	78	0	1,189	PM	28,200	ADT	Origin	←	←
2,137	2,027	ADT			AM	54	0	976	AM		ADT	3,205	3,103	
8.3%	7.5%	54,000			PM	78	0	1,189	PM		79,300	7.7%	8.3%	
PM	AM	PM	AM	PM	AM	54	0	976	AM	PM	AM	PM	AM	PM
		40	88	40	88	↑		SB	↑	1,232	1,044	1,232	1,044	
		2,319	1,918	2,319	1,918	⇒	EB	10	WB	←	1,973	2,059	1,973	2,059
		0	0	0	0	↓		NB	↓	0	0	0	0	
						←		↑	⇒					
PM	AM	PM	AM	PM	AM	0	0	0	AM	PM	AM	PM	AM	PM
8.3%	7.5%	54,000				0	0	0	PM		79,300	7.7%	8.3%	
2,359	2,006	ADT			AM	0	0	0	AM		ADT	2,894	3,508	
⇒	⇒	Origin	ADT	0	PM	0	0	0	PM	0	ADT	Origin	⇒	⇒
Flow	↓	0	#DIV/0!	AM					AM	#DIV/0!	0	↑	Flow	
Adj.	↓	0	#DIV/0!	PM					PM	#DIV/0!	0	↑	Adj.	

Forecasted Intersection Traffic Volumes 2040nP

Project East Driveway at Yates Road															
Adj.	↓	0	#DIV/0!	PM						PM	#DIV/0!	0	↑	DATE	
Flow	↓	0	#DIV/0!	AM						AM	#DIV/0!	0	↑	Flow	
←	←	Origin	ADT	0	PM	0	0	0	PM	0	ADT	Origin	←	←	
1,614	1,544	ADT			AM	0	0	0	AM		ADT	1,544	1,614		
12.3%	10.7%	26,500			PM	0	0	0	PM		26,500	10.7%	12.3%		
PM	AM	PM	AM	PM	AM	0	0	0	AM	PM	AM	PM	AM	PM	
		0	0	0	0	↑	↓	↔	0	0	0	0			
453	409	1,194	886	1,647	1,295	↔	EB	11	WB	↔	1,544	1,614	1,210	1,013	
		0	0	0	0	↓	↔	↑	0	0	0	0		334	
PM	AM	PM	AM	PM	AM	0	0	0	AM	PM	AM	PM	AM	PM	
12.3%	10.7%	26,500		26,500	10.7%	12.3%			26,500	10.7%	12.3%				
1,647	1,295	ADT			AM	0	0	0	AM		ADT	1,295	1,647		
⇒	⇒	Origin	ADT	0	PM	0	0	0	PM	0	ADT	Origin	⇒	⇒	
Flow	↓	0	#DIV/0!	AM						AM	#DIV/0!	0	↑	Flow	
Adj.	↓	0	#DIV/0!	PM						PM	#DIV/0!	0	↑	Adj.	

Forecasted Intersection Traffic Volumes 2040nP

Ridgecrest Road at Green Tree Boulevard														
Adj.	↓	0	#DIV/0!	PM					PM	#DIV/0!	0	↑	DATE	
Flow	↓	0	#DIV/0!	AM					AM	#DIV/0!	0	↑	Flow	
←	←	Origin	ADT	0	PM	0	0	0	PM	0	ADT	Origin	←	←
1,996	1,796	ADT			AM	0	0	0	AM			ADT	1,544	1,614
8.3%	7.2%	49,000			PM	0	0	0	PM			39,100	7.3%	8.3%
PM	AM	PM	AM	PM	AM	0	0	0	AM	PM	AM	PM	AM	PM
		0	0	0	0	↑	↓	↑	0	0	0	0		
		1,495	1,185	1,495	1,185	⇒	EB	12	WB	⇐	1,347	1,442	1,347	1,442
		594	372	594	541	↓		NB		↓	197	172	97	172
						⇐				⇐				
PM	AM	PM	AM	PM	AM	449	0	110	AM	PM	AM	PM	AM	PM
8.3%	7.2%	49,000				554	0	152	PM			39,100	7.3%	8.3%
2,089	1,726	ADT			AM	449	0	110	AM			ADT	1,295	1,647
⇒	⇒	Origin	ADT	17,700	PM	554	0	152	PM	17,700	ADT	Origin	⇒	⇒
Flow	↓	738	7.3%	AM					AM	7.3%	559	↑	Flow	
Adj.	↓	766	8.3%	PM					PM	8.3%	706	↑	Adj.	

Forecasted Intersection Traffic Volumes 2040nP

Hesperia Road at Green Tree Boulevard															
Adj.	↓	1,820	8.6%	PM						PM	8.6%	1,731	↑	DATE	
Flow	↓	1,630	7.3%	AM		10				AM	7.3%	1,373	↑	Flow	
←	←	Origin	ADT	41,400	PM	250	1,230	340		PM	41,400	ADT	Origin	←	←
1,726	1,650	ADT			AM	154	1,150	316		AM		ADT	1,922	1,989	
8.6%	7.4%	41,400			PM	250	1,230	340		PM		49,000	7.0%	8.3%	
PM	AM	PM	AM	PM	AM	164	1,150	316		AM	PM	AM	PM	AM	PM
						↔	↓	↔							
100		87	151	187	151	↑	SB		↑	329	394	329	394		
		1,282	915	1,282	915	↔	EB	13	WB	↔	1,229	1,182	1,229	1,182	
		357	331	357	331	↓	NB		↓	364	413	364	413		
						↔	↑	↔							
PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM
8.6%	7.4%	41,400				257	893	261		AM		49,000	7.0%	8.3%	
1,826	1,397	ADT			AM	257	893	261		AM		ADT	1,492	2,094	
⇒	⇒	Origin	ADT	47,000	PM	294	1,150	472		PM	47,000	ADT	Origin	⇒	⇒
Flow	↓	1,845	6.9%	AM						AM	6.9%	1,411	↑	Flow	
Adj.	↓	2,000	8.3%	PM						PM	8.3%	1,916	↑	Adj.	

Forecasted Intersection Traffic Volumes 2040nP

I Avenue at Bear Valley Road																
Adj.	↓	255	8.3%	PM		20	10	20		PM	8.3%	334	↑	DATE		
	Flow	↓	227	6.4%	AM		20	10	20		AM	6.4%	227	↑	Flow	
←	←	Origin	ADT	7,100	PM		112	26	67		PM	7,100	ADT	Origin	←	←
2,270	2,365	ADT			AM		92	41	44		AM	1,200		ADT	2,030	1,867
8.3%	7.7%	64,200			PM		132	36	87		PM	5,500	54,200	7.8%	8.3%	
PM	AM	PM	AM	PM	AM		112	51	64		AM	PM	AM	PM	AM	PM
							↔	↓	↔							
20	20	164	100	184	120	↑		SB		↑	60	62	40	42	20	20
150	200	2,189	1,782	2,339	1,982	↔	EB	16	WB	↔	1,801	1,649	1,601	1,449	200	200
30	30	475	434	505	464	↓		NB		↓	169	156	149	136	20	20
							↔	↑	↔							
PM	AM	PM	AM	PM	AM		452	47	138		AM	PM	AM	PM	AM	PM
8.3%	7.7%	64,200	6,000				489	88	197		PM	PM	54,200	7.8%	8.3%	
3,028	2,566	ADT			AM		422	37	118		AM	1,500		ADT	2,184	2,623
⇒	⇒	Origin	ADT	17,700	PM		459	78	177		PM	17,700	ADT	Origin	⇒	⇒
	Flow	↓	684	7.5%	AM		30	10	20		AM	7.5%	637	↑	Flow	
Adj.	↓	697	8.3%	PM			30	10	20		PM	8.3%	774	↑	Adj.	

Forecasted Intersection Traffic Volumes 2040nP

Peach Avenue at Bear Valley Road																
Adj.	↓	0	#DIV/0!	PM							PM	#DIV/0!	0	↑	DATE	
Flow	↓	0	#DIV/0!	AM							AM	#DIV/0!	0	↑	Flow	
←	←	Origin	ADT	0	PM	0	0	0	PM	0	ADT	Origin	←	←		
1,872	2,027	ADT			AM	0	0	0	AM		ADT	1,988	1,857			
8.3%	7.8%	54,300			PM	0	0	0	PM	5,100	51,800	7.8%	8.3%			
PM	AM	PM	AM	PM	AM	0	0	0	AM	PM	AM	PM	AM	PM		
		0	0	0	0	↑	SB	↑	0	0	0	0				
170	220	2,155	1,751	2,325	1,971	⇒	EB	17	WB	⇐	1,877	1,731	1,657	1,511	220	220
20	20	276	196	296	216	↓	NB			↓	111	126	91	106	20	20
						⇐		↑		⇒						
PM	AM	PM	AM	PM	AM	150	0	106	AM	PM	AM	PM	AM	PM		
8.3%	7.8%	54,300	5,500			141	0	138	PM		51,800	7.8%	8.3%			
2,621	2,187	ADT			AM	130	0	86	AM	900	ADT	2,077	2,463			
⇒	⇒	Origin	ADT	8,400	PM	121	0	118	PM	8,400	ADT	Origin	⇒	⇒		
Flow	↓	327	6.9%	AM	20		20		AM	6.9%	256	↑	Flow			
Adj.	↓	422	8.3%	PM	20		20		PM	8.3%	279	↑	Adj.			

APPENDIX F
TRAFFIC SIGNAL WARRANT WORKSHEETS

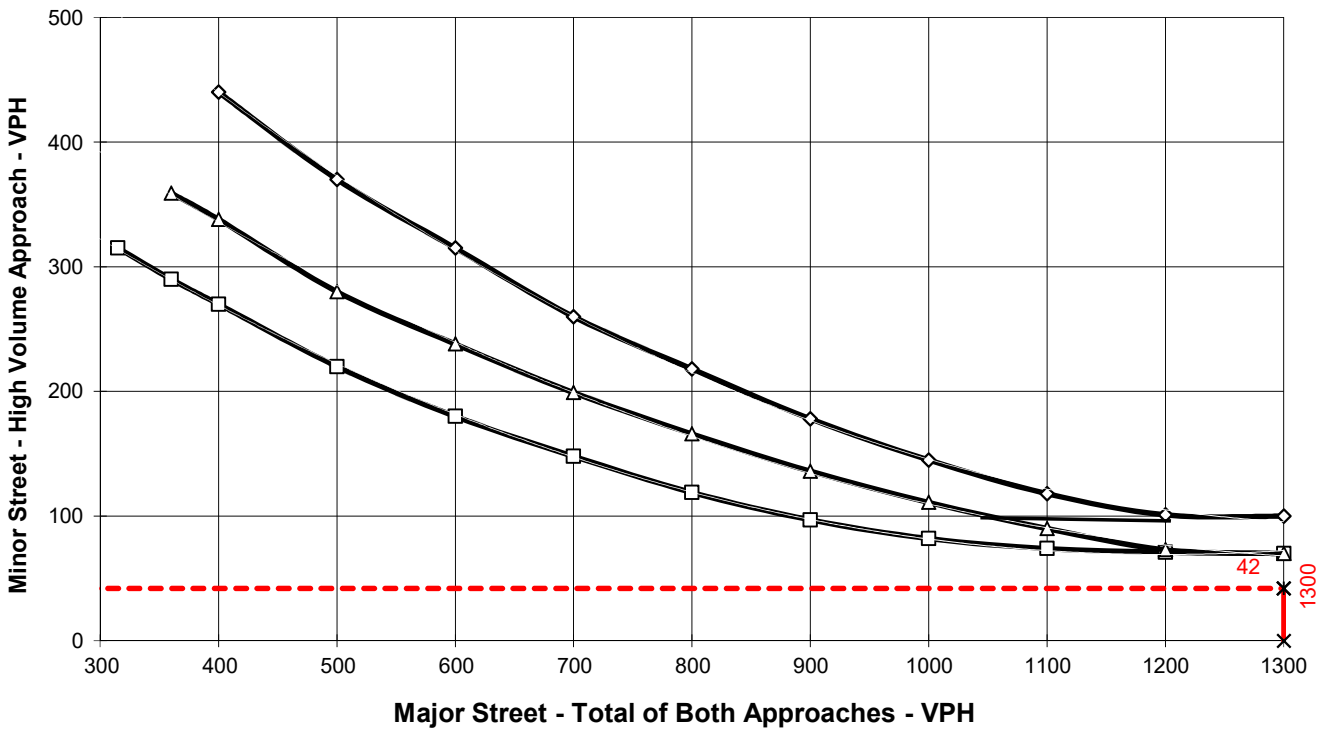
PEAK HOUR VOLUME WARRANT (Rural Areas)

Existing AM

Major Street Name = **Bear Valley Boulevard** Total of Both Approaches (VPH) = **3584**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Apatite Avenue** High Volume Approach (VPH) = **42**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- - - x - - - Minor Street Approaches

**** NOTE:**
 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

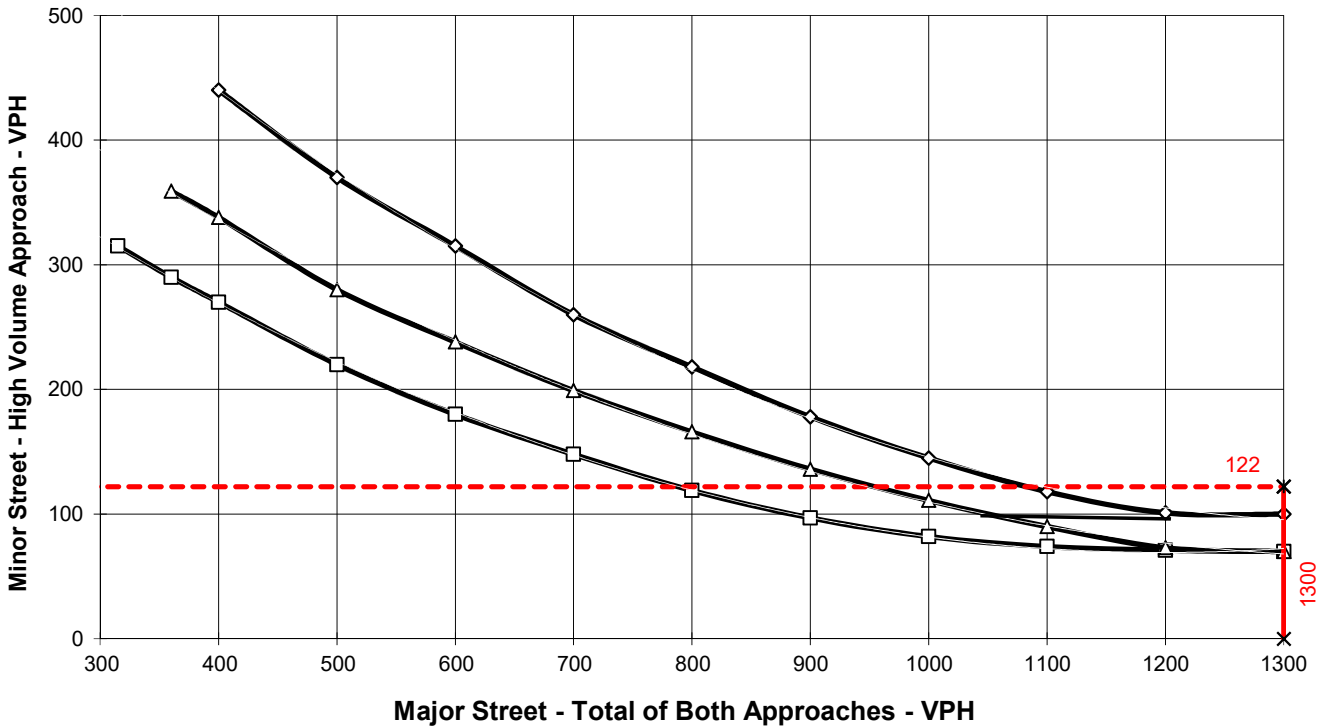
PEAK HOUR VOLUME WARRANT (Rural Areas)

Existing PM

Major Street Name = **Bear Valley Boulevard** Total of Both Approaches (VPH) = **3966**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Apatite Avenue** High Volume Approach (VPH) = **122**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- - - x - - - Minor Street Approaches

**** NOTE:**
 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT (Rural Areas)

Existing AM

Major Street Name = **Bear Valley Road**

Total of Both Approaches (VPH) = **3635**

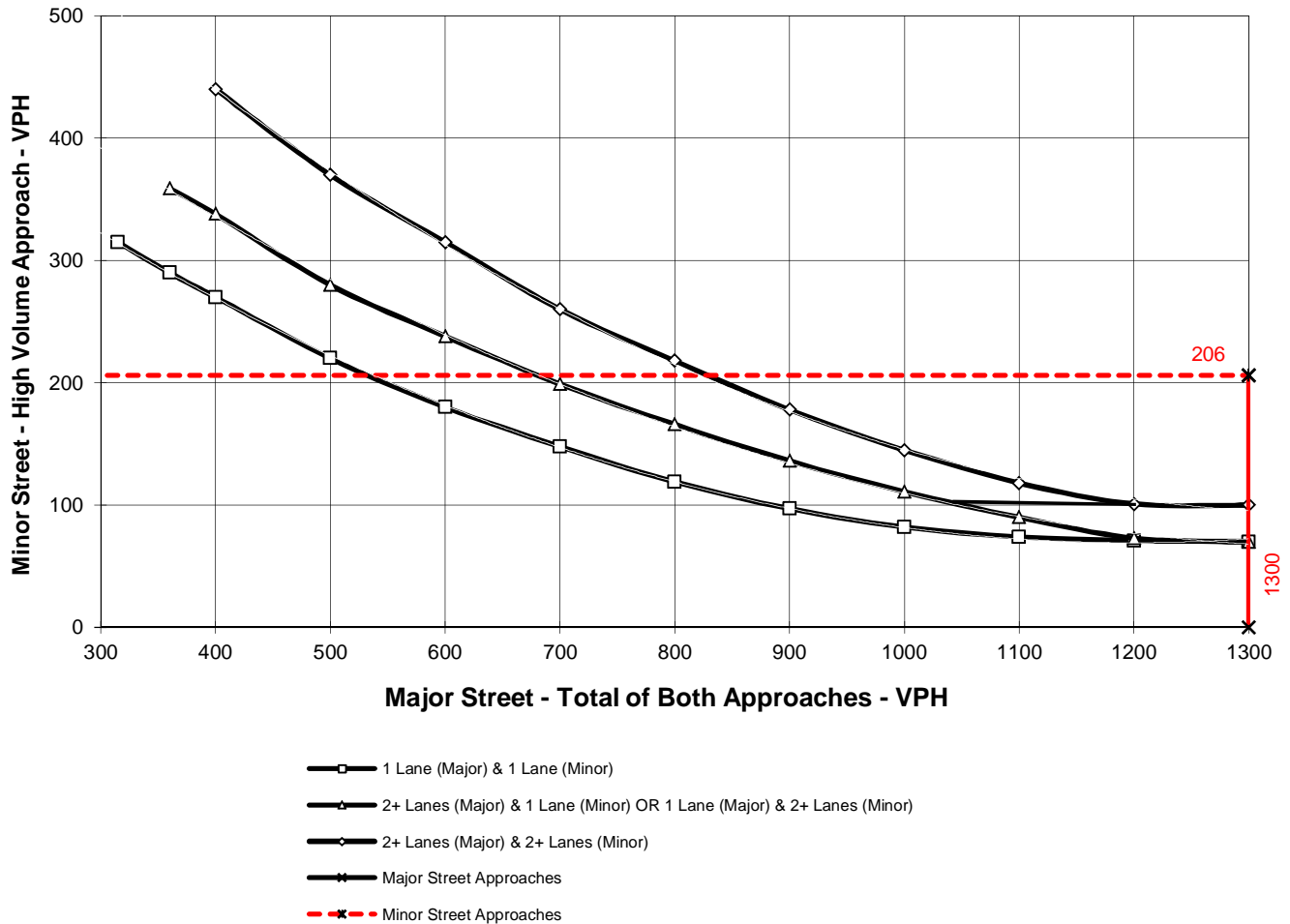
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Peach Avenue**

High Volume Approach (VPH) = **206**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



**** NOTE:**

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT (Rural Areas)

Existing PM

Major Street Name = **Bear Valley Road**

Total of Both Approaches (VPH) = **3978**

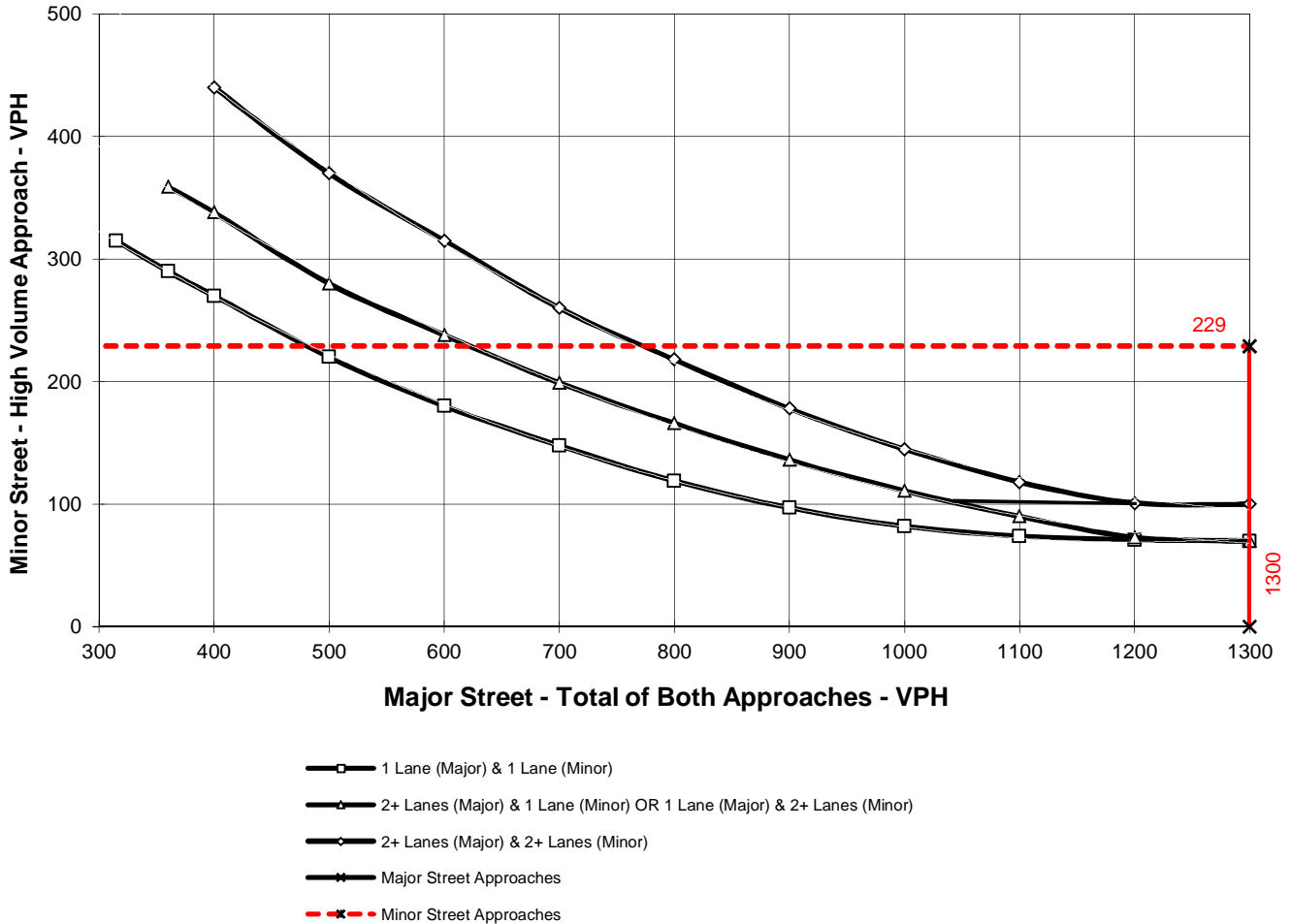
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Peach Avenue**

High Volume Approach (VPH) = **229**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



**** NOTE:**

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT (Rural Areas)

Existing Plus Project AM

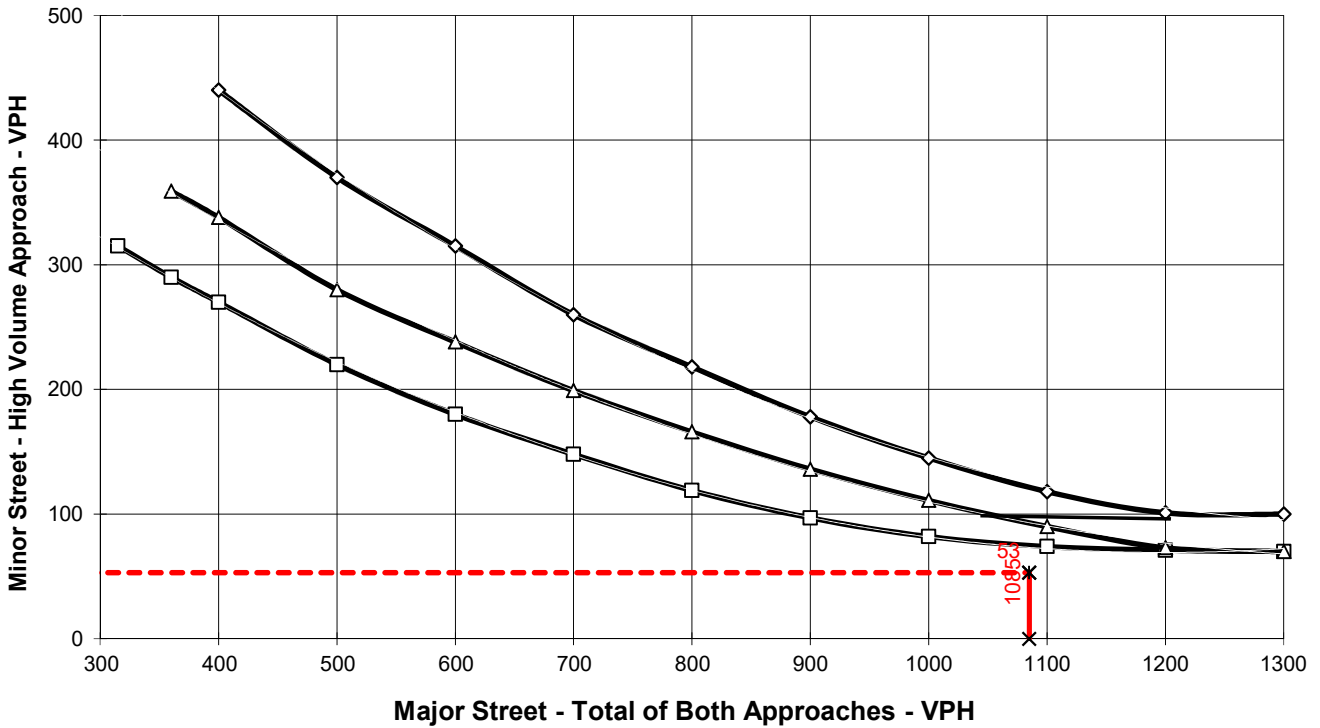
Major Street Name = **Yates Road**

Total of Both Approaches (VPH) = **1085**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Project Driveway**

High Volume Approach (VPH) = **53**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- x— Minor Street Approaches

**** NOTE:**

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT (Rural Areas)

Existing Plus Project PM

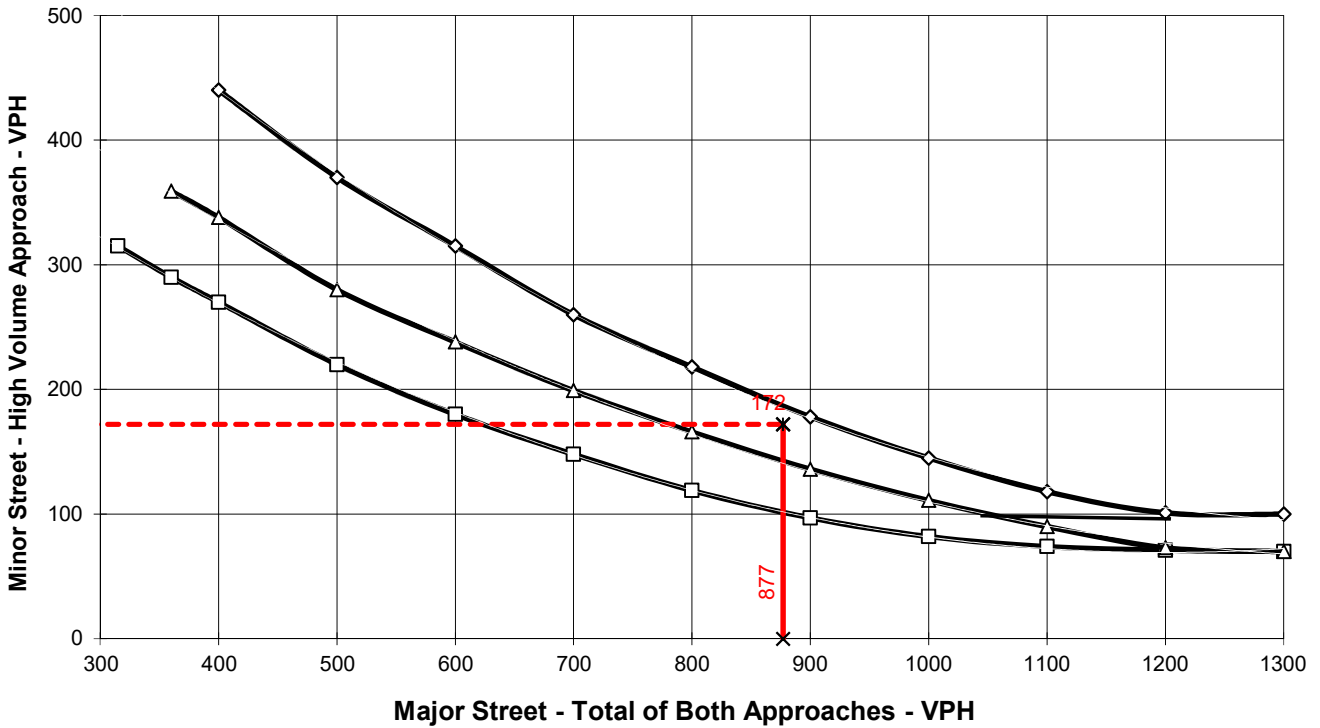
Major Street Name = **Yates Road**

Total of Both Approaches (VPH) = **877**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Project Driveway**

High Volume Approach (VPH) = **172**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



**** NOTE:**

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT (Rural Areas)

Long Range Without Project AM

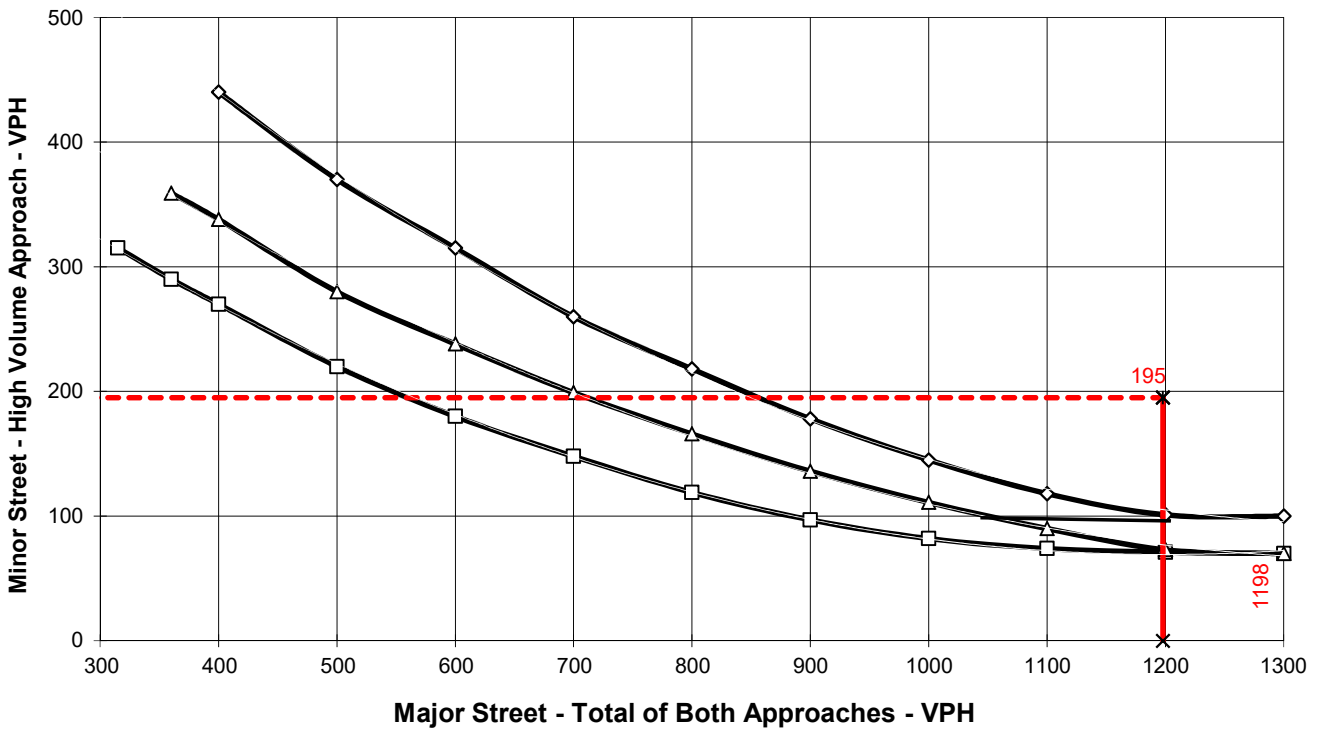
Major Street Name = **Ridgecrest Road**

Total of Both Approaches (VPH) = **1198**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Chinquapin Drive**

High Volume Approach (VPH) = **195**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- x— Minor Street Approaches

**** NOTE:**

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

PEAK HOUR VOLUME WARRANT (Rural Areas)

Long Range Without Project PM

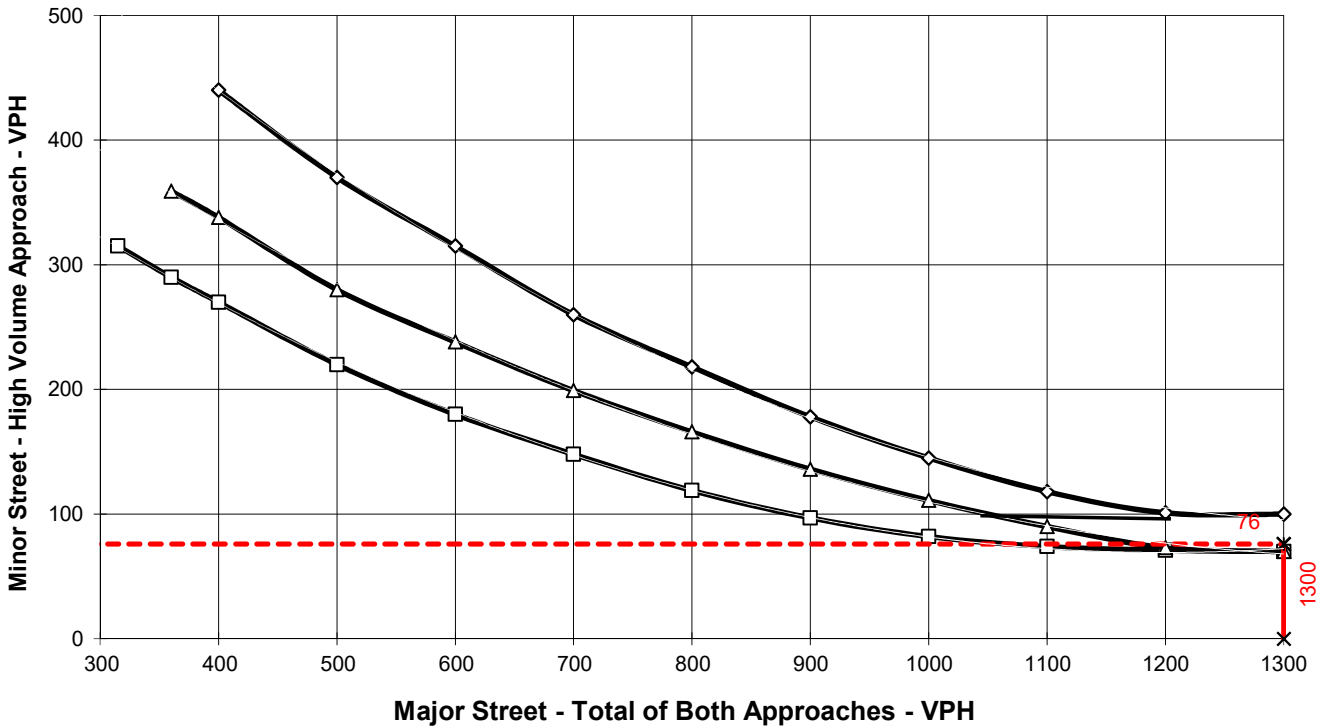
Major Street Name = **Ridgecrest Road**

Total of Both Approaches (VPH) = **1462**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Chinquapin Drive**

High Volume Approach (VPH) = **76**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- - - x - - - Minor Street Approaches

**** NOTE:**

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

APPENDIX G

PRELIMINARY CONSTRUCTION COST ESTIMATES FOR CONGESTION MANAGEMENT PROGRAM

**PRELIMINARY CONSTRUCTION COST ESTIMATES
FOR
CONGESTION MANAGEMENT PLAN**

Add One Lane Each Direction on Freeway			
Asphalt Concrete Pavement		\$2,300,000 Per Mile	
Portland Cement Concrete Pavement		\$2,800,000 Per Mile	
Includes:	Excavation Paving Section Barrier Shoulder Upgrade Drainage System Traffic Control Mobilization @10% Design @11% Construction Mgt. @12.5%	Excludes:	Environmental Costs Right of Way Widening of Bridge Structures Added Retaining Walls Added Sound Walls
Widen Existing UC Structures			
Total Cost =		\$160 Per Square Foot	
Includes:	Structure Mobilization @10% Design @11% Construction Mgt. @12.5%	Excludes:	Environmental Costs Right of Way Traffic Control Ramp Modifications Signal/Lighting Up Grades Drainage Upgrades Added Retaining Walls Added Sound Walls
Diamond Interchanges			
\$10,000,000	EACH	NEW IC	Minimal Row/Environmental
\$15,000,000	EACH	NEW IC	Includes Row/Environmental
\$20,000,000	EACH	EXISTING	Minimal Row/Environmental
\$25,000,000	EACH	EXISTING	Includes Row/ Environmental
Includes:	Structure Retaining Walls Soil Nail Walls Drainage System Ramps Mobilization @ 10% Design @ 11% Construction Mgt. @ 12.5%	Excludes:	As listed

Retaining Walls			
Height Feet	Structure Cost \$/LF	Mobilization Design Constr. Mgt. \$/LF	Total \$/LF
4	\$190	\$70	\$260
6	\$260	\$90	\$350
8	\$380	\$140	\$520
10	\$430	\$150	\$580
12	\$480	\$170	\$650
14	\$590	\$210	\$800
16	\$660	\$240	\$900
	Excludes: Environmental Costs Right of Way		
12' High Sound Walls (Masonry Block on Footing)			
Structure Cost \$/Mile	Mobilization Design Constr. Mgt. \$/Mile	Total \$/Mile	
\$800,000	\$300,000	\$1,100,000	
Widen Conventional Highway			
1. Add one outside lane (Work includes earthwork, modify existing drainage system and construct AC shoulder section.) Asphalt Concrete Pavement		\$1,000,000/Mile	
2. Add one outside lane each direction (Work includes earthwork, modify existing drainage system and construct AC shoulder section) Asphalt Concrete Pavement With Median Concrete Barrier With Median Double Thrie Beam Barrier		\$2,000,000/Mile \$2,200,000/Mile \$2,300,000/Mile	
Local Interchange Improvements			
1. New Interchange Urban Interchange		\$10,000,000 to \$17,000,000	
Partial – Cloverleaf Interchange (Work includes new OC structure, earthwork, signal)		\$6,000,000	
Diamond Interchange (Work includes new OC structure, earthwork, signal)		\$5,000,000	

Local Interchange Improvements CONT...		
2.	Reconstruct Existing Interchange	
	Realign and widen existing ramps (to 2 lanes)	\$750,000/Each Ramp
	Construct Loop on – ramps (Does not include realigning existing ramp)	\$700,000/Each Ramp
	Upgrade existing Diamond IC to Partial – Cloverleaf	\$6,000,000
3.	Improve Existing Interchange	
	Widen ramps (From one to two lanes)	\$350,000/Each Ramp
	Widen existing OC structure	\$110/Sq. Ft.
	Signalize ramp intersection	\$90,000/Location
	Upgrade existing signal at ramp terminal	\$75,000/Intersection
	Upgrade existing signal at ramp terminal (Add lights only)	\$25,000/Each
4.	Ramp Metering System	\$60,000/Each location
Intersection Improvements		
1.	Signalization of local intersection (with some roadwork)	\$250,000
2.	Upgrade existing intersection signalization	\$75,000
3.	Upgrade existing Traffic Controller/Assembles	\$40,000/Each
4.	Install new signal	\$90,000/location
5.	Add signal heads	\$25,000/Intersection
6.	Construct left – turn lane (240' long)	\$50,000/Each Location
7.	Street widening (12' wide) (Pavement only)	\$180,000/Mile
8.	Curb and gutter (Type A2-8)	\$15/LF

Other Improvements	
1. Construct new OC structure (Does not include roadway work)	\$100/Sq. Ft.
2. Construct Retaining Walls (Type 1)	\$285/LF (H=8') \$360/LF (H=10') \$460/LF (H=12') \$560/LF (H=14')
3. Construct Soundwall	\$1,000,000/Mile (H=12')
4. Traffic Management Plan	10% of total construction costs
NOTE:	This cost estimate does not include the following items:
	<ol style="list-style-type: none"> 1. R/W engineering, appraisal, acquisition and utilities relocation costs. 2. Minor items and supplemental work (10%). 3. Mobilization (10%). 4. Contingencies (25%). 5. Landscaping costs.
General Note:	When adding a through lane, the minimum distance is 600' approach and 600' departure to the next intersection.

APPENDIX H
SIGHT DISTANCE STANDARDS

- (4) *Trailer Track* – Semitrailer axle width, measured from outside face of tires.
- (5) *Lock To Lock Time* - The time in seconds that an average driver would take under normal driving conditions to turn the steering wheel of a vehicle from the lock position on one side to the lock position on the other side. The default in AutoTurn software is 6 seconds.
- (6) *Steering Lock Angle* - The maximum angle that the steering wheels can be turned. It is further defined as the average of the maximum angles made by the left and right steering wheels with the longitudinal axis of the vehicle.
- (7) *Articulating Angle* - The maximum angle between the tractor and semitrailer.

Topic 405 - Intersection Design Standards

405.1 Sight Distance

- (1) *Stopping Sight Distance*. See Index 201.1 for minimum stopping sight distance requirements.
- (2) *Corner Sight Distance*.
 - (a) General--At unsignalized intersections a substantially clear line of sight should be maintained between the driver of a vehicle, bicyclist or pedestrian stopped on the minor road and the driver of an approaching vehicle on the major road that has no stop. Line of sight for all users should be included in right of way, in order to preserve sight lines.

Adequate time should be provided for the stopped vehicle on the minor road to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed. The visibility required for these maneuvers form a clear sight triangle with the corner sight distance b and the crossing distance a_1 or a_2 (see Figure 405.1 as an example of corner sight distance at a two-lane, two-way highway). Dimensions a_1 and a_2 are measured from the decision point to the center of the lane. The actual number of lanes will vary on the major and minor roads. There should be no

sight obstruction within the clear sight triangle.

The methodology used for the driver on the minor road that is stopped to complete the necessary maneuver while the approaching vehicle travels at the design speed of the major road is based on gap-acceptance behavior. A 7-1/2 second criterion is applied to a passenger car (including pickup trucks) for a left turn from a stop on the minor road. However, this time gap does not account for a single-unit truck (no semitrailer), a combination truck (see Index 404.4 for truck tractor-semi-trailer guidance), a right-turn from a stop, or for a crossing maneuver. See Table 405.1A for the time gap that addresses these situations for the assumed design vehicle making these maneuvers from the minor road.

In determining corner sight distance, a set back distance for the vehicle waiting on the minor road must be assumed as measured from the edge of traveled way of the major road. Set back for the driver of the vehicle on the minor road should be a minimum of 10 feet plus the shoulder width of the major road but not less than 15 feet. The location of the driver's eye for the set back is the decision point per Figure 405.1. Corner sight distance and the driver's eye set back are also illustrated in Figures 405.7 and 504.3I. Line of sight for corner sight distance for passenger cars is to be determined from a 3 and 1/2-foot height at the location of the driver of the vehicle in the center of the minor road lane to a 3 and 1/2-foot object height in the center of the approaching outside lane of the major road. This provides for reciprocal sight by both vehicles. The passenger car driver's eye height should be applied to all minor roads. In addition, a truck driver's eye height of 7.6 feet should be applied to the minor road where applicable. Additionally, if the major road has a median barrier, a 2-foot object height should be used to determine the median barrier set back. A median that is wide enough to accommodate a stopped vehicle should also provide a clear sight triangle.

The minimum corner sight distance (feet) should be determined by the equation: $1.47V_m T_g$, where V_m is the design speed (mph) of the major road and T_g is the time gap (seconds) for the minor road vehicle to enter the major road. The values given in Table 405.1A should be used to determine T_g based on the design vehicle, the type of maneuver, and whether the stopped vehicle's rear wheels are on an upgrade exceeding 3 percent. The distance from the edge of traveled way to the rear wheels at the minor road stop location should be assumed as: 20 feet for a passenger car, 30 feet for a single-unit truck, and 72 feet for a combination truck.

- (b) Public Road Intersections (Refer to Topic 205)--At unsignalized public road intersections (see Index 405.7) corner sight distance applies.

At signalized intersections the corner sight distances should also be applied whenever possible. Even though traffic flows are designed to move at separate times, unanticipated conflicts can occur due to violation of signal, right turns on red, malfunction of the signal, or use of flashing red/yellow mode.

The minimum value for corner sight distance at signalized intersections should be equal to the stopping sight distance as given in Table 201.1, measured as previously described. This includes an urban driveway that forms a leg of the signalized intersection.

- (c) Private Road Intersections (Refer to Index 205.2) and Rural Driveways (Refer to Index 205.4)--The minimum corner sight distance should be equal to the stopping sight distance as given in Table 201.1, measured as previously described.
- (d) Urban Driveways (Refer to Index 205.3)--Corner sight distance requirements as described above are not applied to urban driveways. If parking is allowed on the major road, parking should be prohibited on

both sides of the driveway per the California MUTCD, 3B.19.

- (3) Decision Sight Distance. At intersections where the State route turns or crosses another State route, the decision sight distance values given in Table 201.7 should be used. In computing and measuring decision sight distance, the 3.5-foot eye height and the 0.5-foot object height should be used, the object being located on the side of the intersection nearest the approaching driver.

The application of the various sight distance requirements for the different types of intersections is summarized in Table 405.1B.

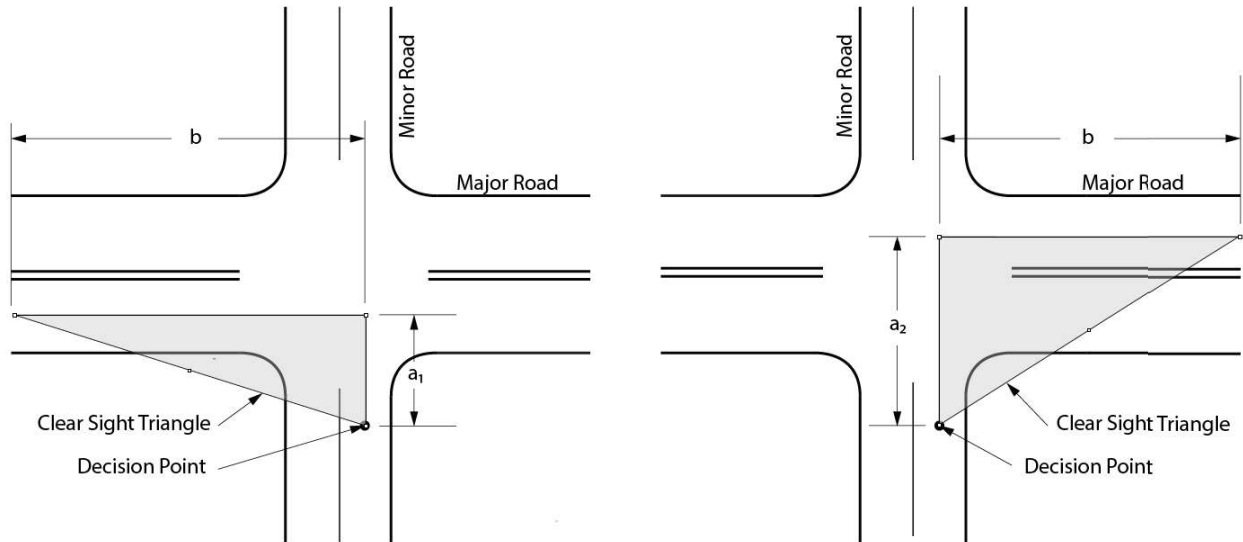
**Table 405.1B
Application of Sight Distance
Requirements**

Intersection Types	Sight Distance		
	Stopping	Corner	Decision
Private Roads	X	X ⁽¹⁾	
Public Streets and Roads	X	X	
Signalized Intersections	X	X ⁽²⁾	
State Route Inter- sections & Route Direction Changes, with or without Signals	X	X	X

NOTES:

- (1) Per Index 405.1(2)(c), the minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1. See Index 405.1(2)(a) for setback requirements.
- (2) Apply corner sight distance requirements at signalized intersections whenever possible due to unanticipated violations of the signals or malfunctions of the signals. See Index 405.1(2)(b).
- (4) *Acceleration Lanes for Turning Moves onto State Highways.* At rural intersections, with "STOP" control on the local cross road, acceleration lanes for left and right turns onto the State facility should be considered. At a minimum, the following features should be

**Figure 405.1
Corner Sight Distance**



**Table 405.1A
Corner Sight Distance Time Gap (T_g)
for Unsignalized Intersections**

Design Vehicle	Left-turn from Stop (s)	Right-turn from Stop and Crossing Maneuver (s)
Passenger Car	7½	6½
Private Road Intersection		
Rural Driveway		
Single-Unit Truck	9½	8½
Public Road Intersection		
Combination Truck	11½	10½
Major and Minor Roads on Routes:		
National Network		
Terminal or Service Access		
California Legal		
KPRA Advisory		

Notes: Time gaps are for a stopped vehicle to turn left, right or cross a two-lane highway with no median and with minor road grades of 3 percent or less. The table values should be adjusted as follows:

- (1) For multilane highways—When crossing or making a left-turn onto a two-way major road with more than two lanes, add 0.5 s for passenger cars or 0.7 s for trucks for each additional lane to be crossed. Median widths should be converted to an equivalent number of lanes in applying the 0.5 s and 0.7 s criteria. For example, an 18-foot wide median is equivalent to 1.5 lanes; this requires an additional 0.75 s for a passenger car to cross or an additional 1.05 s for a truck to cross.
- (2) For minor road approach grades—If the minor road approach grade is an upgrade that exceeds 3 percent and the rear wheels of the design vehicle are on the grade exceeding 3 percent, add 0.2 s for each percent grade for left-turns; or add 0.1 s for each percent grade for right-turns and crossing maneuvers. For example, a passenger car is turning right from a minor road and at the stop location its rear wheels are on a 4 percent upgrade; this requires an additional 0.4 s for the right-turn.
- (3) Unique situations may necessitate a different design vehicle for a particular minor road than those listed here (e.g., predominant combination trucks out of a rural driveway). Additionally, for intersections at skewed angles less than 60 degrees, a further adjustment is needed. See the AASHTO “A Policy on Geometric Design of Highways and Streets” for guidance.

evaluated for both the major highway and the cross road:

- divided versus undivided
- number of lanes
- design speed
- gradient
- lane, shoulder and median width
- traffic volume and composition of highway users, including trucks and transit vehicles
- turning volumes
- horizontal curve radii
- sight distance
- proximity of adjacent intersections
- types of adjacent intersections

For additional information and guidance, refer to AASHTO, A Policy on Geometric Design of Highways and Streets, the District Traffic Engineer or designee, the District Design Liaison, and the Project Delivery Coordinator.

405.2 Left-turn Channelization

- (1) *General.* The purpose of a left-turn lane is to expedite the movement of through traffic by, controlling the movement of turning traffic, increasing the capacity of the intersection, and improving safety characteristics.

The District Traffic Branch normally establishes the need for left-turn lanes.

- (2) *Design Elements.*

- (a) Lane Width – **The lane width for both single and double left-turn lanes on State highways shall be 12 feet.**

For conventional State highways with posted speeds less than or equal to 40 miles per hour and AADTT (truck volume) less than 250 per lane that are in urban, city or town centers (rural main streets), the minimum lane width shall be 11 feet.

When considering lane width reductions adjacent to curbed medians, refer to Index

303.5 for guidance on effective roadway width, which may vary depending on drivers' lateral positioning and shy distance from raised curbs.

- (b) Approach Taper -- On conventional highways without a median, an approach taper provides space for a left-turn lane by moving traffic laterally to the right. The approach taper is unnecessary where a median is available for the full width of the left-turn lane. Length of the approach taper is given by the formula on Figures 405.2A, B and C.

Figure 405.2A shows a standard left-turn channelization design in which all widening is to the right of approaching traffic and the deceleration lane (see below) begins at the end of the approach taper. This design should be used in all situations where space is available, usually in rural and semi-rural areas or in urban areas with high traffic speeds and/or volumes.

Figures 405.2B and 405.2C show alternate designs foreshortened with the deceleration lane beginning at the 2/3 point of the approach taper so that part of the deceleration takes place in the through traffic lane. Figure 405.2C is shortened further by widening half (or other appropriate fraction) on each side. These designs may be used in urban areas where constraints exist, speeds are moderate and traffic volumes are relatively low.

- (c) Bay Taper -- A reversing curve along the left edge of the traveled way directs traffic into the left-turn lane. The length of this bay taper should be short to clearly delineate the left-turn move and to discourage through traffic from drifting into the left-turn lane. Table 405.2A gives offset data for design of bay tapers. In urban areas, lengths of 60 feet and 90 feet are normally used. Where space is restricted and speeds are low, a 60-foot bay taper is appropriate. On rural high-speed highways, a 120-foot length is considered appropriate.
- (d) Deceleration Lane Length -- Design speed of the roadway approaching the intersection

CHAPTER 200 GEOMETRIC DESIGN AND STRUCTURE STANDARDS

Topic 201 - Sight Distance

Index 201.1 - General

Sight distance is the continuous length of highway ahead, visible to the highway user. Four types of sight distance are considered herein: passing, stopping, decision, and corner. Passing sight distance is used where use of an opposing lane can provide passing opportunities (see Index 201.2). Stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads when passing sight distance is not economically obtainable. Stopping sight distance also is to be provided for all users, including motorists and bicyclists, at all elements of interchanges and intersections at grade, including private road connections (see Topic 504, Index 405.1, & Figure 405.7). Decision sight distance is used at major decision points (see Indexes 201.7 and 504.2). Corner sight distance is used at intersections (see Index 405.1, Figure 405.7, and Figure 504.3I).

Table 201.1 shows the minimum standards for stopping sight distance related to design speed for motorists. Stopping sight distances given in the table are suitable for Class II and Class III bikeways. The stopping sight distances are also applicable to roundabout design on the approach roadway, within the circulatory roadway, and on the exits prior to the pedestrian crossings. Also shown in Table 201.1 are the values for use in providing passing sight distance.

See Chapter 1000 for Class I bikeway sight distance guidance.

Chapter 3 of "A Policy on Geometric Design of Highways and Streets," AASHTO, contains a thorough discussion of the derivation of stopping sight distance.

201.2 Passing Sight Distance

Passing sight distance is the minimum sight distance required for the driver of one vehicle to pass another vehicle safely and comfortably. Passing must be

accomplished assuming an oncoming vehicle comes into view and maintains the design speed, without reduction, after the overtaking maneuver is started.

**Table 201.1
Sight Distance Standards**

Design Speed ⁽¹⁾ (mph)	Stopping ⁽²⁾ (ft)	Passing (ft)
10	50	---
15	100	---
20	125	800
25	150	950
30	200	1,100
35	250	1,300
40	300	1,500
45	360	1,650
50	430	1,800
55	500	1,950
60	580	2,100
65	660	2,300
70	750	2,500
75	840	2,600
80	930	2,700

(1) See Topic 101 for selection of design speed.

(2) For sustained downgrades, refer to underlined standard in Index 201.3

The sight distance available for passing at any place is the longest distance at which a driver whose eyes are 3 ½ feet above the pavement surface can see the top of an object 4 ¼ feet high on the road. See Table 201.1 for the calculated values that are associated with various design speeds.

In general, 2-lane highways should be designed to provide for passing where possible, especially those routes with high volumes of trucks or recreational vehicles. Passing should be done on tangent horizontal alignments with constant grades or a slight sag vertical curve. Not only are drivers reluctant to pass on a long crest vertical curve, but it is impracticable to design crest vertical curves to provide for passing sight distance because of high cost where crest cuts are involved. Passing sight

distance for crest vertical curves is 7 to 17 times longer than the stopping sight distance.

Ordinarily, passing sight distance is provided at locations where combinations of alignment and profile do not require the use of crest vertical curves.

Passing sight distance is considered only on 2-lane roads. At critical locations, a stretch of 3- or 4-lane passing section with stopping sight distance is sometimes more economical than two lanes with passing sight distance.

Passing on sag vertical curves can be accomplished both day and night because headlights can be seen through the entire curve.

See Part 3 of the California Manual on Uniform Traffic Control Devices (California MUTCD) for criteria relating to the placement of barrier striping for no-passing zones. Note, that the passing sight distances shown in the California MUTCD are based on traffic operational criteria. Traffic operational criteria are different from the design characteristics used to develop the values provided in Table 201.1 and Chapter 3 of AASHTO, A Policy on Geometric Design of Highways and Streets. The aforementioned table and AASHTO reference are also used to design the vertical profile and horizontal alignment of the highway. Consult the District Traffic Engineer or designee when using the California MUTCD criteria for traffic operating-control needs.

Other means for providing passing opportunities, such as climbing lanes or turnouts, are discussed in Index 204.5. Chapter 3 of AASHTO, A Policy on Geometric Design of Highways and Streets, contains a thorough discussion of the derivation of passing sight distance.

201.3 Stopping Sight Distance

The minimum stopping sight distance is the distance required by the user, traveling at a given speed, to bring the vehicle or bicycle to a stop after an object ½-foot high on the road becomes visible. Stopping sight distance for motorists is measured from the driver's eyes, which are assumed to be 3 ½ feet above the pavement surface, to an object ½-foot high on the road. See Index 1003.1(10) for Class I bikeway stopping sight distance guidance.

The stopping sight distances in Table 201.1 should be increased by 20 percent on sustained downgrades steeper than 3 percent and longer than one mile.

201.4 Stopping Sight Distance at Grade Crests

Figure 201.4 shows graphically the relationships between length of highway crest vertical curve, design speed, and algebraic difference in grades. Any one factor can be determined when the other two are known.

201.5 Stopping Sight Distance at Grade Sags

From the curves in Figure 201.5, the minimum length of vertical curve which provides headlight sight distance in grade sags for a given design speed can be obtained.

If headlight sight distance is not obtainable at grade sags, lighting may be considered. The District approval authority or Project Delivery Coordinator, depending upon the current District Design Delegation Agreement, and the District Traffic Engineer or designee shall be contacted to review proposed grade sag lighting to determine if such use is appropriate.

201.6 Stopping Sight Distance on Horizontal Curves

Where an object off the pavement such as a bridge pier, building, cut slope, or natural growth restricts sight distance, the minimum radius of curvature is determined by the stopping sight distance.

Available stopping sight distance on horizontal curves is obtained from Figure 201.6. It is assumed that the driver's eye is 3 ½ feet above the center of the inside lane (inside with respect to curve) and the object is ½-foot high. The line of sight is assumed to intercept the view obstruction at the midpoint of the sight line and 2 feet above the center of the inside lane when the road profile is flat (i.e. no vertical curve). Crest vertical curves can cause additional reductions in sight distance. The clear distance (*m*) is measured from the center of the inside lane to the obstruction.

The design objective is to determine the required clear distance from centerline of inside lane to a retaining wall, bridge pier, abutment, cut slope, or other obstruction for a given design speed. Using

radius of curvature and minimum sight distance for that design speed, Figure 201.6 gives the clear distance (m) from centerline of inside lane to the obstruction.

See Index 1003.1(13) for bikeway stopping sight distance on horizontal curve guidance.

When the radius of curvature and the clear distance to a fixed obstruction are known, Figure 201.6 also gives the sight distance for these conditions.

See Index 101.1 for technical reductions in design speed caused by partial or momentary horizontal sight distance restrictions. See Index 203.2 for additional comments on glare screens.

Cuts may be widened where vegetation restricting horizontal sight distance is expected to grow on finished slopes. Widening is an economic trade-off that must be evaluated along with other options. See Index 902.2 for sight distance requirements on landscape projects.

201.7 Decision Sight Distance

At certain locations, sight distance greater than stopping sight distance is desirable to allow drivers time for decisions without making last minute erratic maneuvers (see Chapter III of AASHTO, A Policy on Geometric Design of Highways and Streets, for a thorough discussion of the derivation of decision sight distance.)

On freeways and expressways the decision sight distance values in Table 201.7 should be used at lane drops and at off-ramp noses to interchanges, branch connections, roadside rests, vista points, and inspection stations. When determining decision sight distance on horizontal and vertical curves, Figures 201.4, 201.5, and 201.6 can be used. Figure 201.7 is an expanded version of Figure 201.4 and gives the relationship among length of crest vertical curve, design speed, and algebraic difference in grades for much longer vertical curves than Figure 201.4.

Decision sight distance is measured using the 3 ½-foot eye height and ½-foot object height. See Index 504.2 for sight distance at secondary exits on a collector-distributor road.

**Table 201.7
Decision Sight Distance**

Design Speed (mph)	Decision Sight Distance (ft)
30	450
35	525
40	600
45	675
50	750
55	865
60	990
65	1,050
70	1,105
75	1,180
80	1,260

Topic 202 - Superelevation

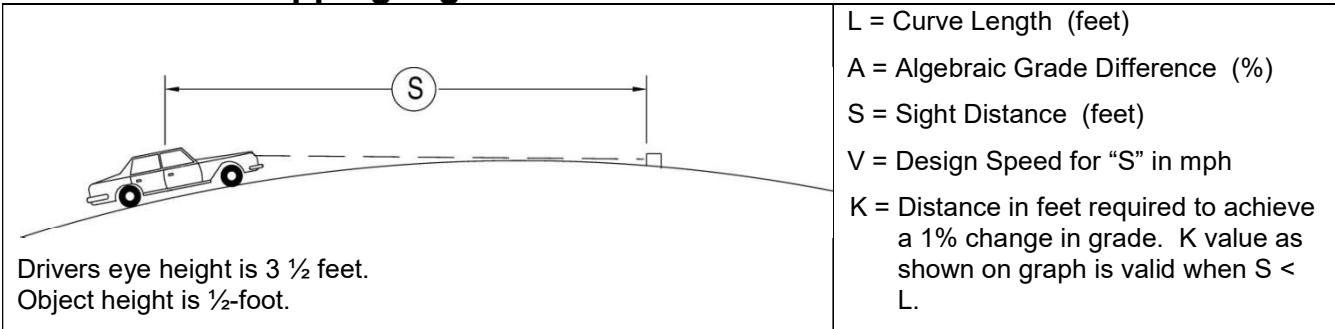
202.1 Basic Criteria

When a vehicle moves in a circular path, it undergoes a centripetal acceleration that acts toward the center of curvature. This force is countered by the perceived centrifugal force experienced by the motorist.

On a superelevated highway, this force is resisted by the vehicle weight component parallel to the superelevated surface and by the side friction developed between the tires and pavement. It is impractical to balance centrifugal force by superelevation alone, because for any given curve radius a certain superelevation rate is exactly correct for only one driving speed. At all other speeds there will be a side thrust either outward or inward, relative to the curve center, which must be offset by side friction.

If the vehicle is not skidding, these forces are in equilibrium as represented by the following simplified curve equation, which is used to design a curve for a comfortable operation at a particular speed:

Figure 201.4
Stopping Sight Distance on Crest Vertical Curves



L = Curve Length (feet)
 A = Algebraic Grade Difference (%)
 S = Sight Distance (feet)
 V = Design Speed for "S" in mph
 K = Distance in feet required to achieve a 1% change in grade. K value as shown on graph is valid when S < L.

Notes:

- Before using this figure for intersections, branch connections and exits, see Indexes 201.7 and 405.1, and Topic 504.
- See Figure 204.4 for vertical curve formulas.
- See Index 204.4 for minimum length of vertical curve

<u>When S > L</u>	<u>When S < L</u>
$L = 2S - 1329/A$	$L = AS^2 / 1329$

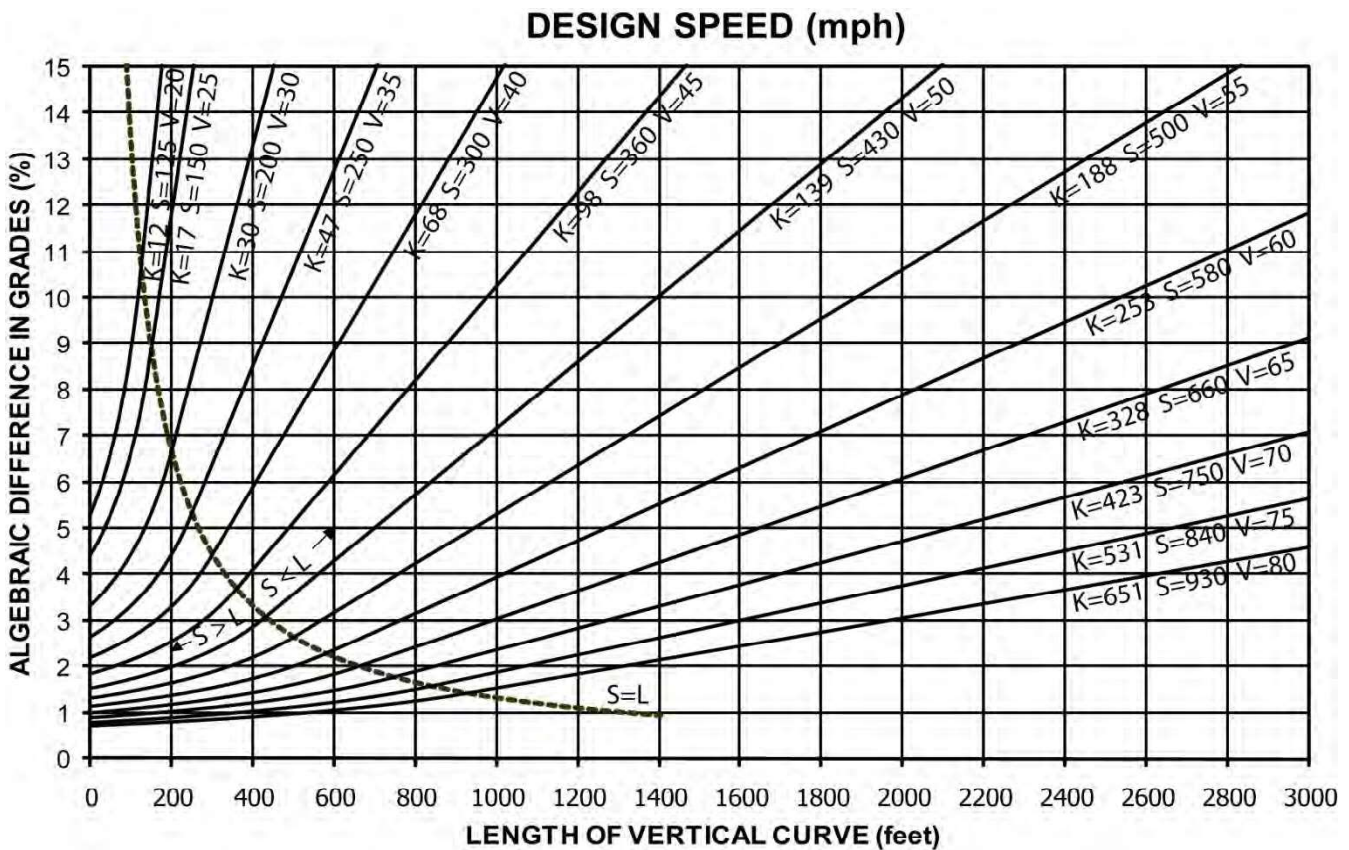
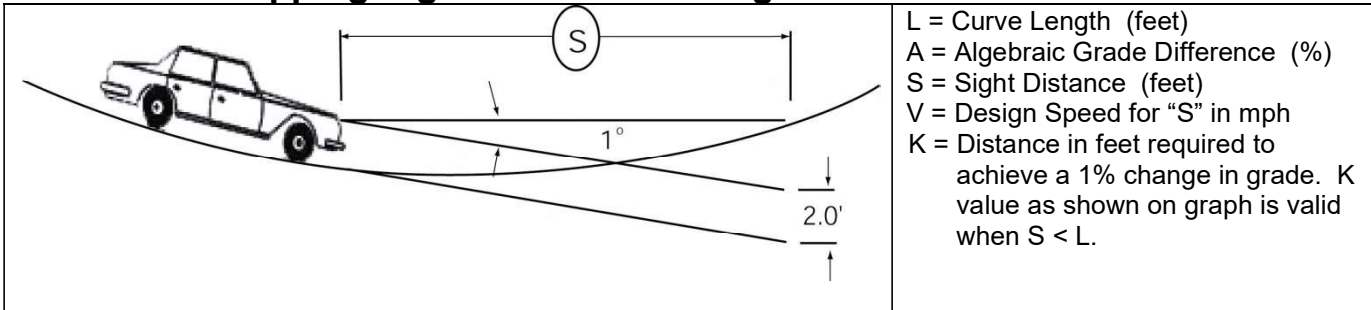


Figure 201.5
Stopping Sight Distance on Sag Vertical Curves



Notes:

- For sustained downgrades, see Index 201.3.
- Before using this figure for intersections, branch connections and exits, see Indexes 201.7 and 405.1, and Topic 504.
- See Figure 204.4 for vertical curve formulas.
- See Index 204.4 for minimum length of vertical curve.

<u>When $S > L$</u>	<u>When $S < L$</u>
$L = 2S - (400 + 3.5S)/A$	$L = AS^2 / (400 + 3.5S)$

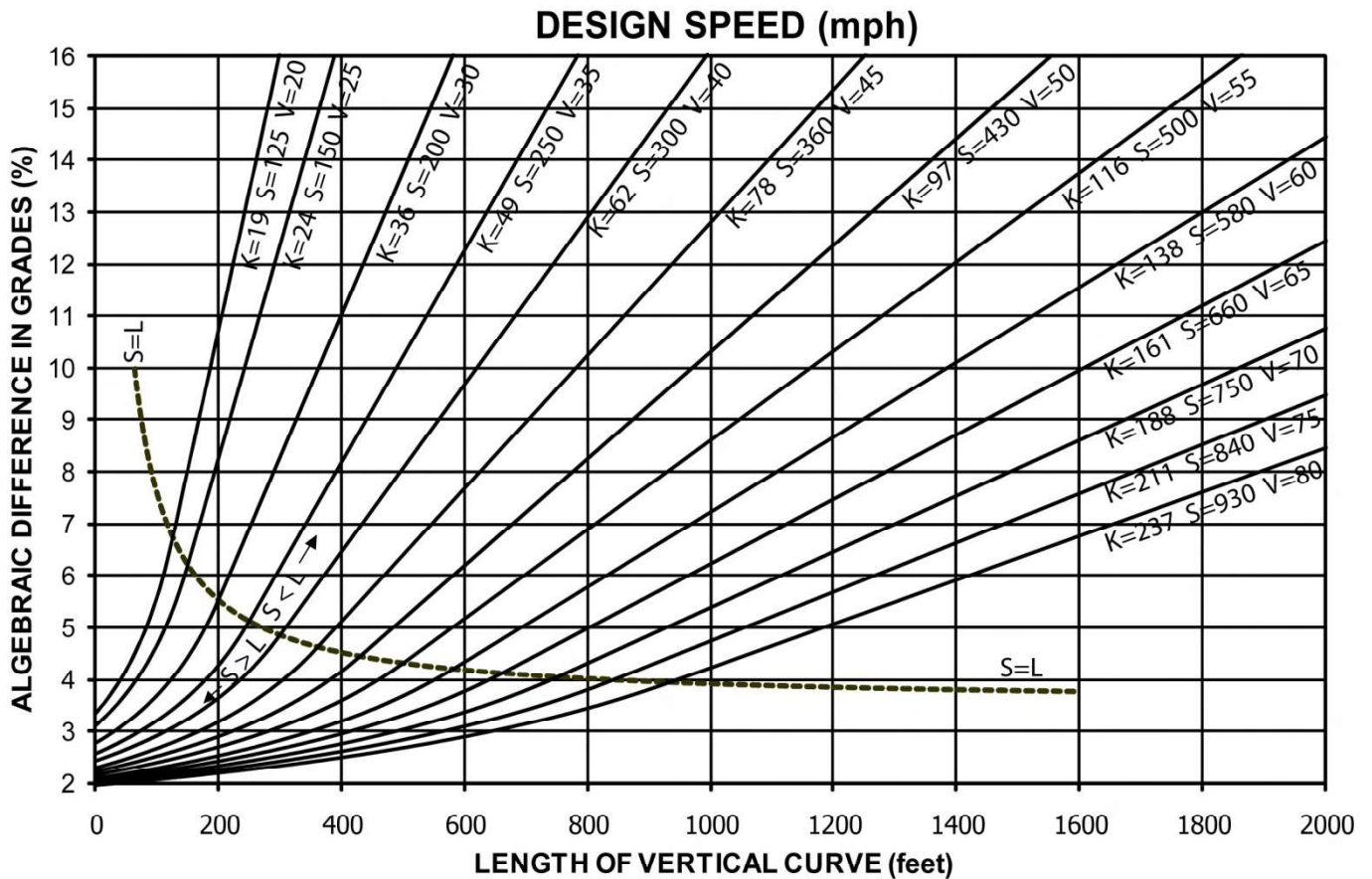
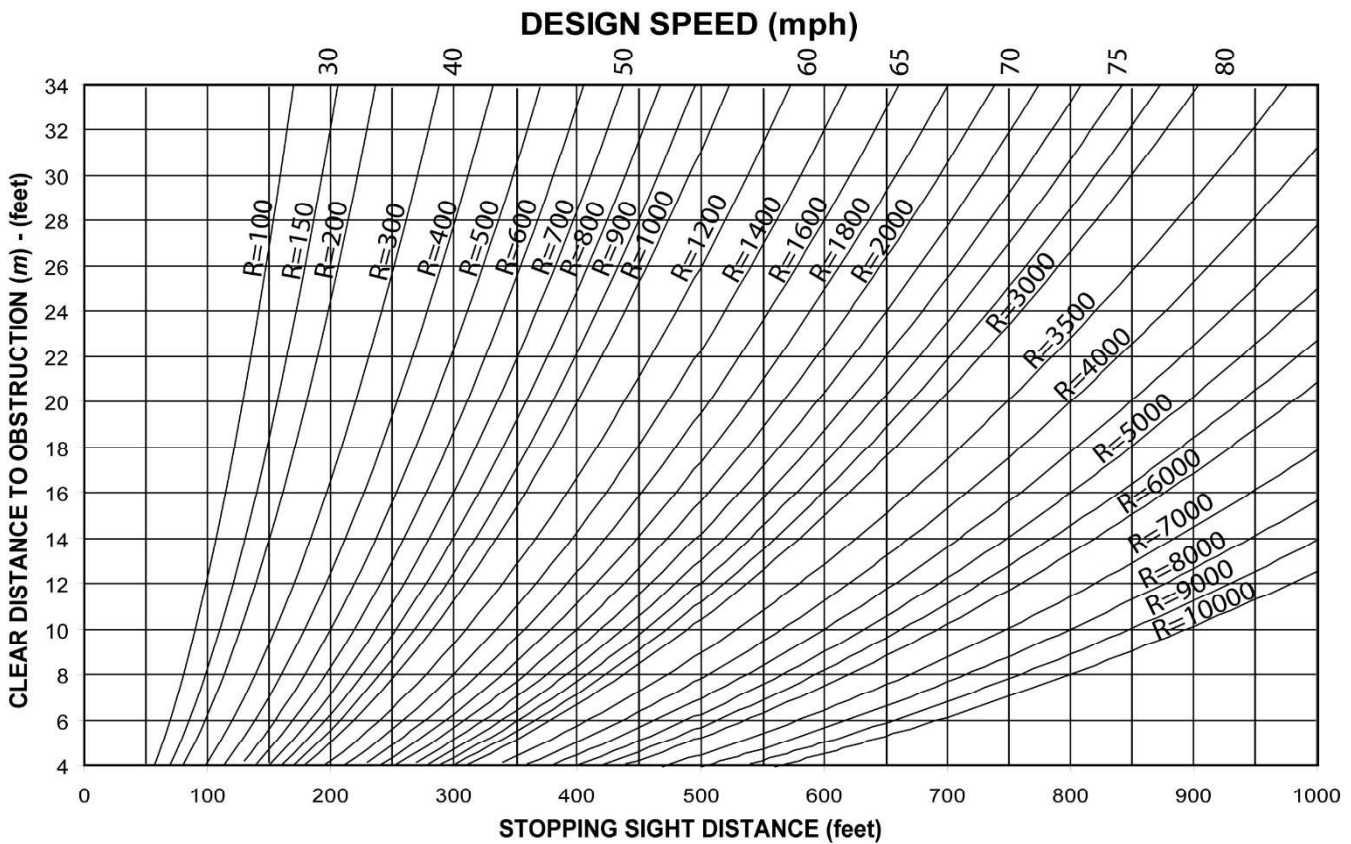
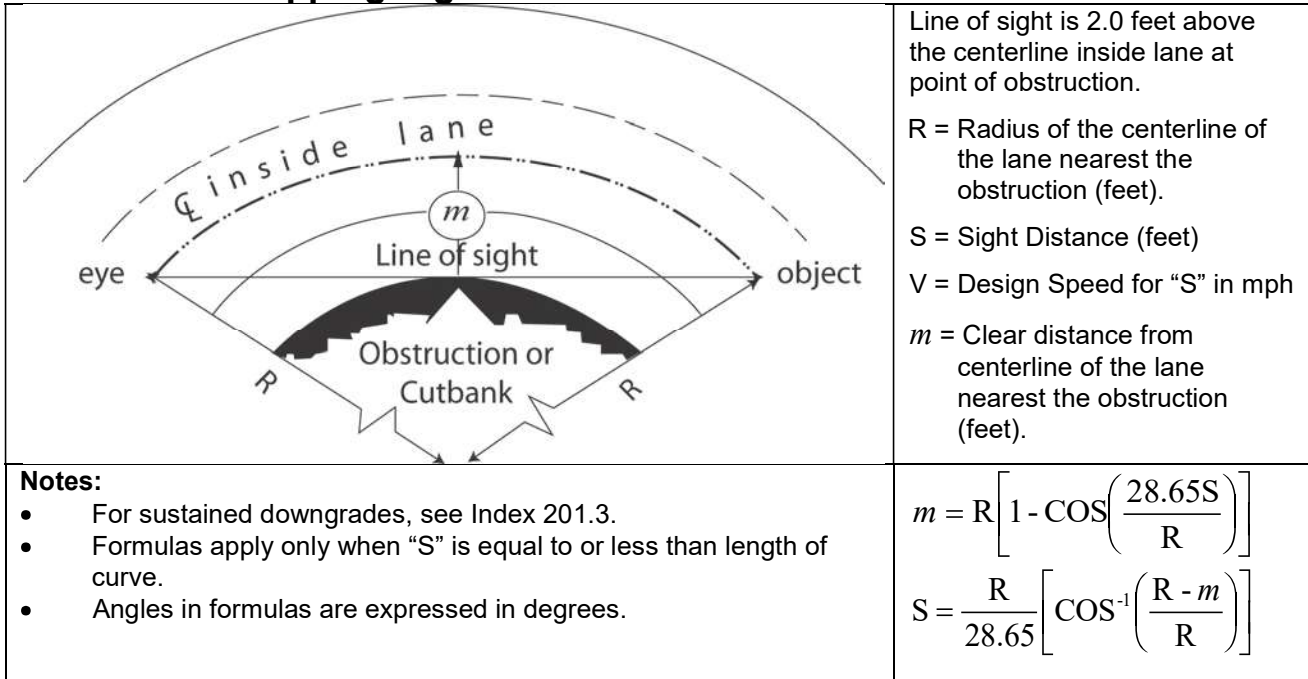
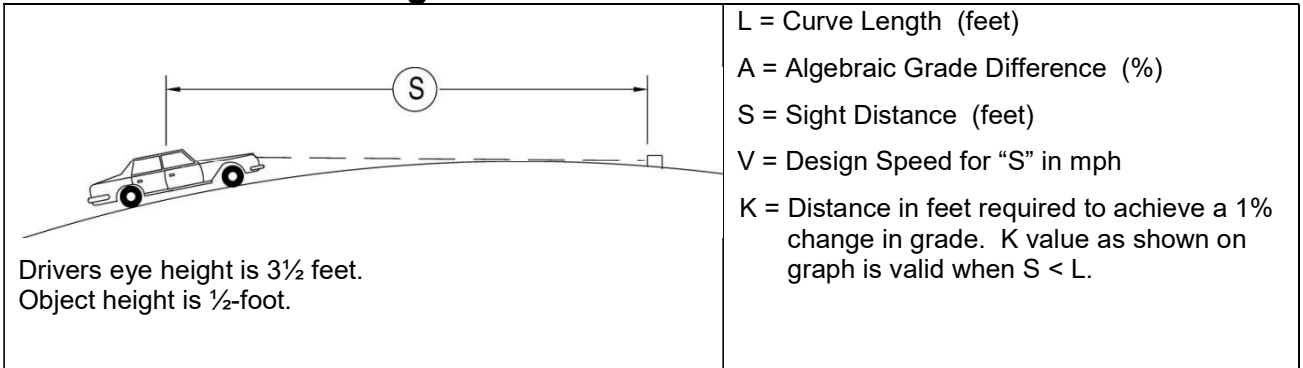


Figure 201.6
Stopping Sight Distance on Horizontal Curves



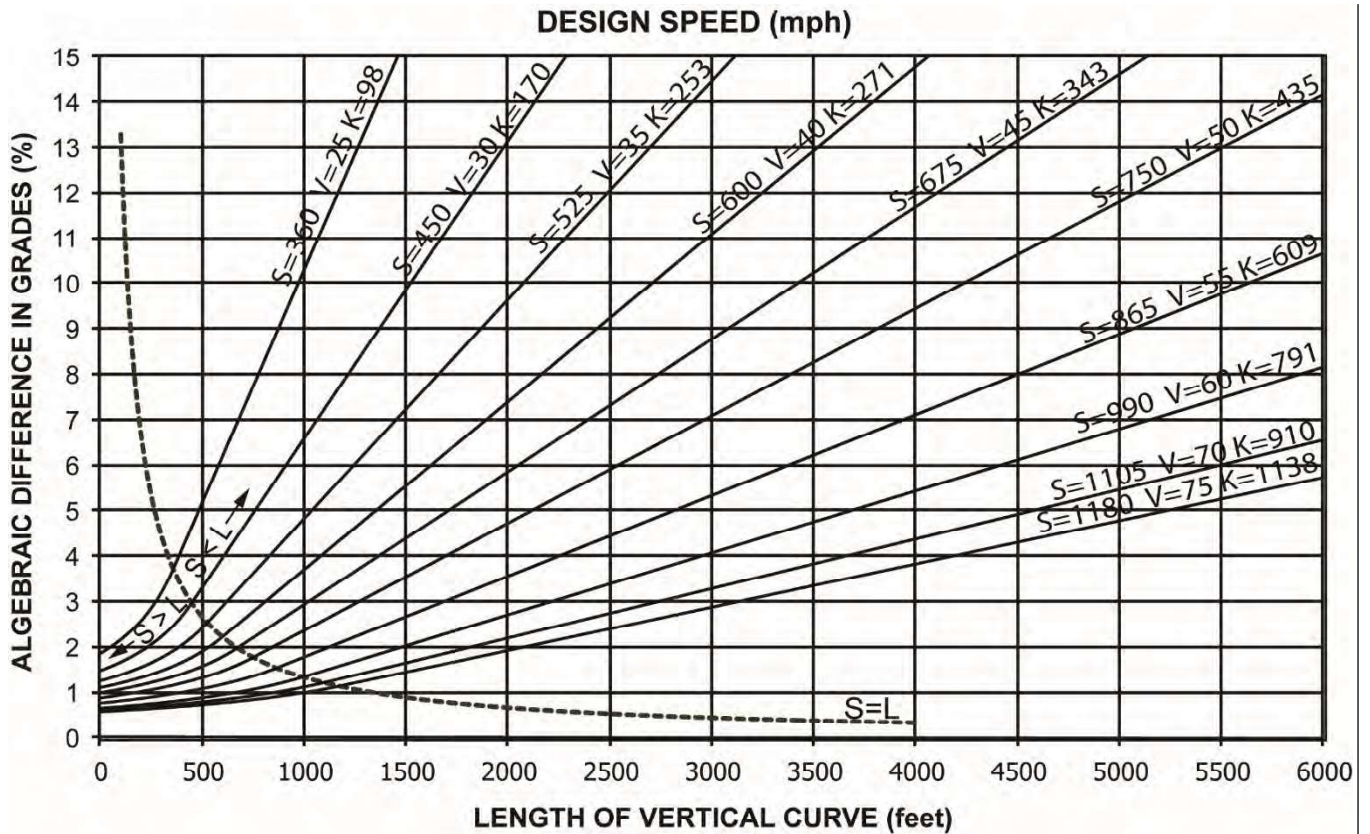
**Figure 201.7
Decision Sight Distance on Crest Vertical Curves**



Notes:

- Before using this figure for intersections, branch connections and exits, see Indexes 201.7 and 405.1, and Topic 504.
- See Figure 204.4 for vertical curve formulas.
- See Index 204.4 for minimum length of vertical curve.

When S > L	When S < L
$L = 2S - 1329/A$	$L = AS^2 / 1329$





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