

Draft Transportation Study for Hesperia General Plan

Prepared for:
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FEHR  PEERS

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1 Introduction

Fehr & Peers has completed the transportation study for the proposed Hesperia General Plan Update in the City of Hesperia, California. This report summarizes the methodology, findings, and conclusions of the study, including identification of recommended mitigation measures necessary to maintain consistency with the goals and policies of the proposed General Plan.

This chapter outlines the geographic scope of the transportation impact analysis, including the study area.

1.1 Project Description

The proposed City of Hesperia General Plan Update consists of an approximate 26-year absorption of land use and associated planned infrastructure within the City and Sphere of Influence (SOI). The General Plan Update Buildout assumes a growth of 29,844 households and 24,333 jobs.

1.2 Study Area

The study area of this analysis includes intersections and roadway segments in the City of Hesperia that are anticipated to be affected by the proposed General Plan.

Intersections:

1. Cataba Road & Main Street
2. Key Pointe Avenue & Main Street
3. I-15 Southbound Ramps & Main Street
4. I-15 Northbound Ramps & Main Street
5. Mariposa Street & Main Street
6. US-395 & Joshua Street
7. I-15 Northbound Ramps & Bear Valley Road
8. Mariposa Road & Bear Valley Road

Roadway Segments:

1. Bear Valley Road between 2nd Avenue and Hesperia Road
2. Bear Valley Road east of Mojave Fish Hatchery Road
3. Escondido Avenue south of Main Street
4. Eucalyptus Street between Mariposa Road and Maple Avenue
5. Mesquite Street between Fuente Avenue and Bandicoot Trail
6. Maple Avenue between Willow Street and Main Street
7. Ranchero Road between Lyons Avenue and Oxford Avenue
8. Lemon Street between Santa Fe Avenue and E Avenue
9. Lemon Street east of Choiceana Avenue

10. Cottonwood Avenue between Sequoia Street and Bear Valley Road
11. Cottonwood Avenue between Willow Street and Main Street
12. Muscatel Street between Malibu Avenue and Escondido Avenue

1.3 Analysis Scenarios

To identify potential significant project impacts, Fehr & Peers analyzed the effects of traffic under the following three scenarios:

- Existing Year (2024) Conditions – Intersection and roadway traffic counts were collected in May of 2024 on a Tuesday while schools were in session. The traffic counts represent the average daily and peak hour traffic volumes on typical weekdays (Tuesday through Thursday).
- Cumulative Year (2050) No Project Conditions – Consists of forecasted volumes based on growth and travel forecasts contained in the Future Year San Bernardino Transportation Analysis Model Plus (SBTAM+). No Project Conditions is consistent with the City's current General Plan.
- Cumulative Year (2050) Plus Project Conditions – Consists of forecasted volumes based on growth and travel forecasts contained in the Future Year SBTAM+ outside the City of Hesperia and SOI, and projected land use and planned infrastructure within the City of Hesperia as proposed in the General Plan Update.

Intersection and roadway segment Level of Service (LOS) is required by the City for planning purposes, but it is not used to identify significant project impacts pursuant to the California Environmental Quality Act (CEQA). The City of Hesperia adopted California Environmental Quality Act (CEQA) thresholds consistent with Senate Bill 743, which identified that Vehicle Miles Traveled (VMT) would be used to evaluate significant transportation impacts under CEQA.



2 Analysis Methodology

The transportation study methodology includes a combination of quantitative and qualitative evaluations of the roadway, bicycle, pedestrian, and transit components of the transportation system.

2.1 VMT Methodology

The City of Hesperia Traffic Impact Analysis (TIA) Guidelines (July 2020) (City's TIA Guidelines) adopted project VMT Impacts are based on the origin-destination (OD) method using VMT per service population. Given this Project is a citywide General Plan update, the Project will have impact on VMT if there is a net increase in VMT per service population under the plus project condition compared to the no project condition. The City's TIA Guidelines also adopted cumulative VMT threshold based on link-level boundary VMT method. The proposed General Plan will have a cumulative impact on VMT if the boundary VMT per service population within County of San Bernardino increases under the plus project condition compared to the no project condition. **Table 1** summarizes VMT thresholds.

Table 1: VMT Thresholds

Impact Categories	Significance Thresholds
Project VMT Threshold	➤ The cumulative year OD VMT per service population within the City and SOI increases under the plus project condition compared to the no project condition.
Cumulative VMT Threshold	➤ The cumulative year link-level boundary VMT per service population within the County of San Bernardino increases under the plus project condition compared to the no project condition.

Note(s):

1. Service population is defined as population plus employment.

Source: City of Hesperia, 2020 and Fehr & Peers, 2025.

2.2 Traffic Forecasts

SBTAM+ was used to forecast intersection and roadway segment volumes, estimate existing and future VMT, and to perform an evacuation assessment. SBTAM+ is consistent with the 2024 Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategies (SCAG RTP/SCS); it has a base year of 2019 and a forecast year of 2050.

Roadway network and land use inputs developed in collaboration with the City were used to update the base year model to Existing Year 2024 Conditions and the future year models to represent the Cumulative Year 2050 Conditions.

The Base Year and Future Year models can produce link and intersection volume forecasts. National Cooperative Highway Research Program (NCHRP) Report 255 prescribes a variety of methods for developing intersection turning movement volume forecasts from travel demand model outputs. For typical applications, the Base Year and Future Year model outputs are compared to one another and are used in conjunction with existing traffic counts to develop future traffic forecasts. In this study, the absolute difference between the Existing Year (2024) and Future Year (2050) model outputs were utilized to develop the 2050 volume forecasts. This method is known as the difference method and is a state-of-the-practice approach consistent with NCHRP Report 255.

2.3 Intersection Analysis

Intersection operations were evaluated using methodologies consistent with the Highway Capacity Manual (HCM) 7th Edition (Transportation Research Board (TRB), 2022). The HCM 7 Edition methodology for signalized intersections estimates the average control delay for vehicles at the intersection. After the quantitative delay estimates are complete, the methodology assigns a qualitative letter grade that represents the operations of the intersection. These grades range from level of service (LOS) A (minimal delay) to LOS F (congested conditions). LOS E represents at-capacity operations. Descriptions of the LOS letter grades for both signalized and unsignalized intersections are provided in **Table 2**.

Consistent with the City's General Plan policies, intersections should operate at LOS D or better. Caltrans no longer defines acceptable LOS standards with their latest adoption of the Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG), May 2020. This study assumes City of Hesperia LOS "D" minimum acceptable standard at Caltrans locations.

Table 2: Intersection Level of Service Criteria

Level of Service	Description	Signalized
		Delay (seconds/vehicle)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0



F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80.0
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3 Source: *Highway Capacity Manual*, 7th Edition. (Transportation Research Board, 2022)

1.3 Roadway Segment Analysis

LOS was evaluated for roadway segments in the City of Hesperia to ensure consistency with adopted General Plan policies. The Average Daily Traffic (ADT) is reported for each roadway. General daily service volume thresholds from the HCM 7 Edition (TRB, 2022) were used to assign LOS letter grades based on the ADT. Consistent with intersection analysis, roadway segment LOS letter grades range from LOS A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations, as presented in **Table 3**. The City strives to maintain a citywide LOS standard not exceeding D for roadway segments.

Table 3: Roadway Segments LOS Threshold Based on ADT

Number of Lanes		LOS B	LOS C	LOS D	LOS E	LOS F
Arterial						
2	1 lane in each direction	-	< 7,000	7,000 – 14,300	14,300 – 16,500	> 16,500
4	2 lanes in the other direction	-	< 14,900	14,900 – 30,200	30,200 – 33,100	> 33,100
6	3 lanes in each direction	-	< 23,000	23,000 – 46,500	46,500 – 49,700	> 49,700

Source: *Highway Capacity Manual*, 7th Edition (TRB, 2022) Exhibits 12-39 and 16-16, Fehr & Peers, 2025.

2.4 Regulatory Setting and Significance Criteria

The criteria used to evaluate the project impacts to transportation are described in the *2023 California Environmental Quality Act Statute & Guidelines* (Association of Environmental Professionals, 2023). Specific criteria to be used for identifying potential transportation impacts are presented in **Table 4**.

Table 4: Transportation Significance Criteria

Impact Categories	CEQA Significance Criteria
Plan Conflict	The project would conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.
VMT Impacts	The project would result in a VMT-related impact as described in Table 1.
Hazard Impact	The project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
Emergency Access Impact	The project would result in inadequate emergency access.

Source: *2023 California Environmental Quality Act Statute & Guidelines* (Association of Environmental Professionals, 2023).

3 Vehicle Miles Traveled

This chapter evaluates potential VMT impacts of the City of Hesperia General Plan Update.

3.1 Land Use

Land use inputs in SBTAM+ City of Hesperia and SOI were updated through coordination with City of Hesperia staff to develop Existing Year (2024) Conditions, Cumulative Year (2050) No Project Conditions, and Cumulative Year (2050) Plus Project Conditions. The land use assumptions for each scenario are summarized in **Table 5**.

Table 5: Land Use Inputs for Hesperia General Plan

Land Use	Existing Year (2024)	Cumulative Year (2050) No Project	Cumulative Year (2050) Plus Project
Households	31,727	54,430	61,570
Population	110,369	144,538	162,832
Total Employment	24,169	48,545	48,502
Agriculture Employment	49	97	90
Construction Employment	1,483	2,361	2,367
Manufacturing Employment	650	1,632	1,472
Wholesale Employment	589	2,173	1,753
Retail Employment	4,966	7,736	7,925
Transportation, Warehousing and Utility Employment	3,432	10,863	10,778
Information Employment	105	306	166
Financial Employment	637	1,047	1,007
Professional Employment	1,579	3,242	3,333
Educational Employment	6,286	12,560	11,225
Hospitality Employment	2,085	2,614	4,045
Service Employment	1,223	2,775	3,145
Public Administration Employment	1,084	1,121	1,195

Source: Fehr & Peers, 2025.

The proposed General Plan assumes a growth of 29,844 households and 24,333 jobs - an increase of 7,140 households and a decrease of 25 jobs compared to the current General Plan.



3.2 Vehicle Miles Traveled

The City of Hesperia adopted VMT thresholds in July 2020. VMT Impacts are based on the OD method using VMT per service population within the County of San Bernardino jurisdictional boundary.

Project VMT Threshold

Project VMT was estimated using the Half Accounting and Full Accounting Origin/Destination (OD) Methods. There are three types of trips that were considered for this analysis; trips that simply pass-through the City are not included in the Project VMT analysis.

- I-I: Trips that start within the City of Hesperia SOI and end within the City of Hesperia SOI.
- I-X: Trips that start within the City of Hesperia SOI and end outside the City of Hesperia SOI.
- X-I: Trips that start outside the City of Hesperia SOI and end within the City of Hesperia SOI.

Half Accounting Method

The Half Accounting Method is referred to as the Regional Targets Advisory Committee (RTAC) method. Using this methodology, 100 percent of the trip length with two trip ends within a jurisdiction is attributed to that agency, and 50 percent of the trip length with only one trip end within a jurisdiction is allocated to the jurisdiction (the other 50 percent is allocated to the jurisdiction where the other trip end is located). The Half Accounting Method is used to evaluate Greenhouse Gas (GHG) Emissions for General Plan documents (especially when looking at GHG as it relates to Climate Action Plans) and is provided in **Table 6** for informational purposes only.

Full Accounting Method

The Full Accounting Method evaluates 100 percent of the trip length with one or both trip ends within a jurisdiction. The Full Accounting Method was used to determine the Project VMT Threshold. A Project VMT Impact would occur if the proposed City of Hesperia General Plan Update (i.e., Cumulative Year (2050) Plus Project) OD VMT per Service Population (SP) exceeds the current City of Hesperia General Plan Buildout (i.e., Cumulative Year (2050) No Project) OD VMT/SP.

As shown in **Table 7**, the OD VMT/SP under the Cumulative Year (2050) Plus Project Conditions does not exceed the OD VMT/SP under Cumulative Year (2050) No Project Conditions. The OD VMT/SP is projected to decrease under the proposed General Plan (42.6 miles of travel per person) as compared to the current General Plan (44.5 miles of travel per person), indicating that the population is expected to travel in a more efficient manner.

The improvement in travel efficiency is the result of people making fewer trips and/or traveling shorter distances due to increased availability of active modes of transportation and/or better accessibility to destinations by all modes of transportation. Projects such as the proposed Hesperia Commerce Center II provide local jobs and reduce the distance residents travel to similar employment opportunities. The proposed Brightline high-speed rail station also increases opportunities for commuters to shift to transit.

Table 6: VMT by Vehicle Class (Half-Accounting OD VMT/RTAC Methodology)

Year	Auto ¹		LHDT ²		MHDT ³		HHDT ⁴		Total VMT		RTAC VMT	
	I	X	I	X	I	X	I	X	I	X	100% ii +50% ix & xi	
City of Hesperia and Sphere of Influence												
Existing (2024)	I	517,818	1,603,416	3,117	19,382	2,565	15,506	1,427	108,428	524,927	1,746,731	2,300,665
	X	1,662,010	-	19,324	-	15,454	-	107,958	-	1,804,746	-	
Cumulative Year No Project (2050)	I	948,327	2,887,069	9,194	40,908	8,549	35,534	7,010	276,445	973,080	3,239,956	4,296,171
	X	3,053,260	-	40,955	-	35,584	-	276,428	-	3,406,227	-	
Proposed General Plan (2050)	I	1,079,367	2,982,179	8,916	39,431	7,936	33,443	6,660	266,525	1,102,879	3,321,578	4,504,819
	X	3,144,089		39,371		33,387		265,454		3,482,300	-	

Note:

1. Auto = Passenger Cars.
2. LHDT = Light heavy-duty trucks.
3. MHDT = Might heavy-duty trucks.
4. HHDT = Heavy heavy-duty trucks.

Source: SBTAM+ & Fehr & Peers, 2025.



Table 7: Project-Level VMT Assessment (Full Accounting OD VMT)

Metric	Existing Year (2023)	Cumulative Year (2050) No Project	Cumulative Year (2050) Plus Project
City of Hesperia SOI OD VMT (Daily total)	4,601,330	8,592,343	9,009,637
City of Hesperia SOI Service population	134,538	193,083	211,334
OD VMT per Service Population (OD VMT/SP)	34.2	44.5	42.6

Note(s):

1. Service population is defined as population plus employment.

Source: SBTAM & Fehr & Peers, 2025.

Cumulative VMT Threshold

A Cumulative VMT Impact was identified if the cumulative year link-level boundary VMT/SP within the County of San Bernardino boundary increases under proposed City of Hesperia General Plan Update (i.e., Cumulative Year (2050) Plus Project) as compared to the current City of Hesperia General Plan Buildout (i.e., Cumulative Year (2050) No Project).

The boundary VMT was completed by selecting all roadway segments in the SBTAM+ model within the San Bernardino County boundary and multiplying the number of trips on each roadway segment by the length of that roadway segment. As presented in **Table 8**, the County of San Bernardino VMT/SP under the Cumulative Year (2050) Plus Project Conditions does not exceed the County of San Bernardino VMT/SP under the Cumulative Year (2050) No Project Conditions.

Table 8: Cumulative-Level VMT Assessment

Metric	Adopted General Plan (2045)	Proposed General Plan (2045)
County of San Bernardino VMT (Daily total)	92,225,013	89,432,182
County of San Bernardino Service Population	3,761,191	3,779,442
VMT per Service Population (VMT/SP)	24.5	23.7

Note(s):

1. Service population is defined as population plus employment.

Source: Fehr & Peers, 2025.

VMT Impact Conclusion

The results of the VMT assessment indicate that, with implementation of the land use and circulation element in the proposed General Plan, VMT/SP would be reduced by approximately four (4) percent at the Project-Level and three (3) percent at the Cumulative-Level (i.e., improves) compared to the current General Plan.

4 Intersection Analysis

4.1 Existing Year (2024) Conditions

Traffic Counts

Traffic counts were collected in May of 2024 during morning peak period (7AM – 9AM) and evening peak period (4 PM - 6 PM) at the eight existing study intersections listed in Chapter One. Counts were collected during fair weather, while school was in session, and during a typical (non-holiday) Tuesday. The turning movement counts are provided in **Appendix A**. Existing (2024) traffic volumes are provided in **Figure 1** along with existing lane configurations and traffic control.

Existing Year (2024) Intersection Operations

Existing lane configurations and traffic volumes were used to evaluate operations at the study intersections under peak hour conditions. Signal timing was obtained for signalized intersections from the City of Hesperia, Caltrans, and through field investigations, as needed. The LOS results are summarized in **Table 9** and detailed LOS worksheets are provided in **Appendix B**. As shown in **Table 9**, all studied intersections operate better than acceptable standards in the AM and PM peak hours.

Table 9: Existing (2024) Intersection Level of Service

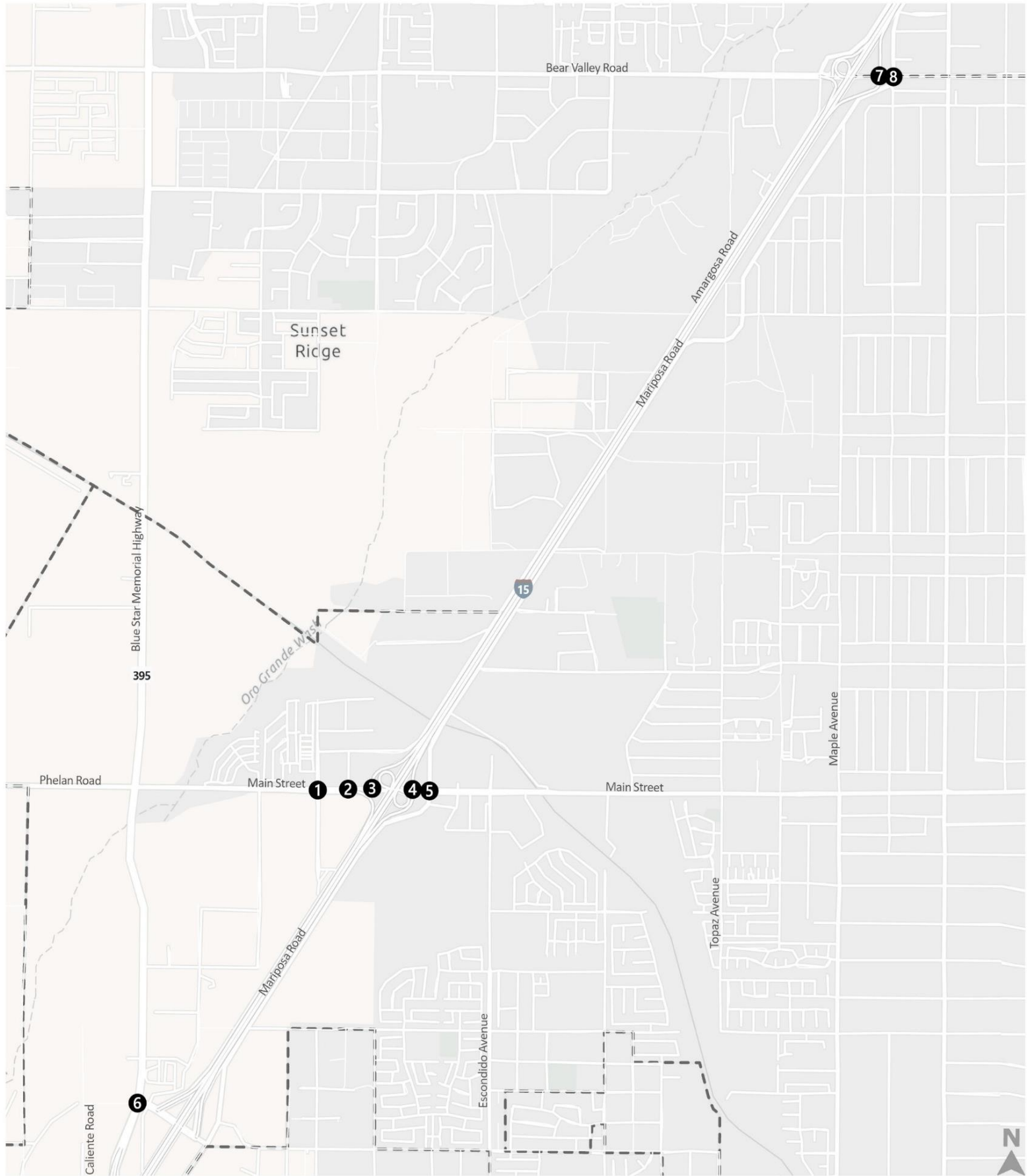
Intersection Name	Control	Jurisdiction	LOS Threshold	Peak Hour	Existing (2024)
					LOS / Average Delay
1 - Cataba Road & Main Street	Signal	Hesperia	D	AM PM	B / 16.4 B / 17.7
2 - Key Pointe Driveway/Key Pointe Avenue & Main Street	Signal	Hesperia	D	AM PM	B / 16.2 C / 19.9
3 - I-15 Southbound Ramps & Main Street	Signal	Caltrans/Hesperia	D	AM PM	A / 8.7 B / 10.5
4 - I-15 Northbound Ramps & Main St	Signal	Caltrans/Hesperia	D	AM PM	A / 8.3 B / 11.7
5 - Mariposa Road & Main Street	Signal	Hesperia	D	AM PM	B / 16.3 C / 21.5
6 - US-395 & Joshua Street	Signal	Hesperia	D	AM PM	B / 15.6 C / 24.5
7 - I-15 Northbound Ramps and Bear Valley Road	Signal	Caltrans/Hesperia	D	AM PM	D / 37.9 D / 52.5
8 - Mariposa Road & Bear Valley Road	Signal	Hesperia	D	AM PM	C / 32.1 C / 34.7



Notes:

1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized intersections.
2. Delay operations were calculated using HCM 7th methodologies.
3. **Bold** symbolizes below acceptable operations.

Source: Fehr & Peers, 2025.



LEGEND

- Existing Intersections
- City Boundary
- 🚦 Signalized
- AM (PM) Peak Hour Traffic Volume
- ↔ Lane Configuration

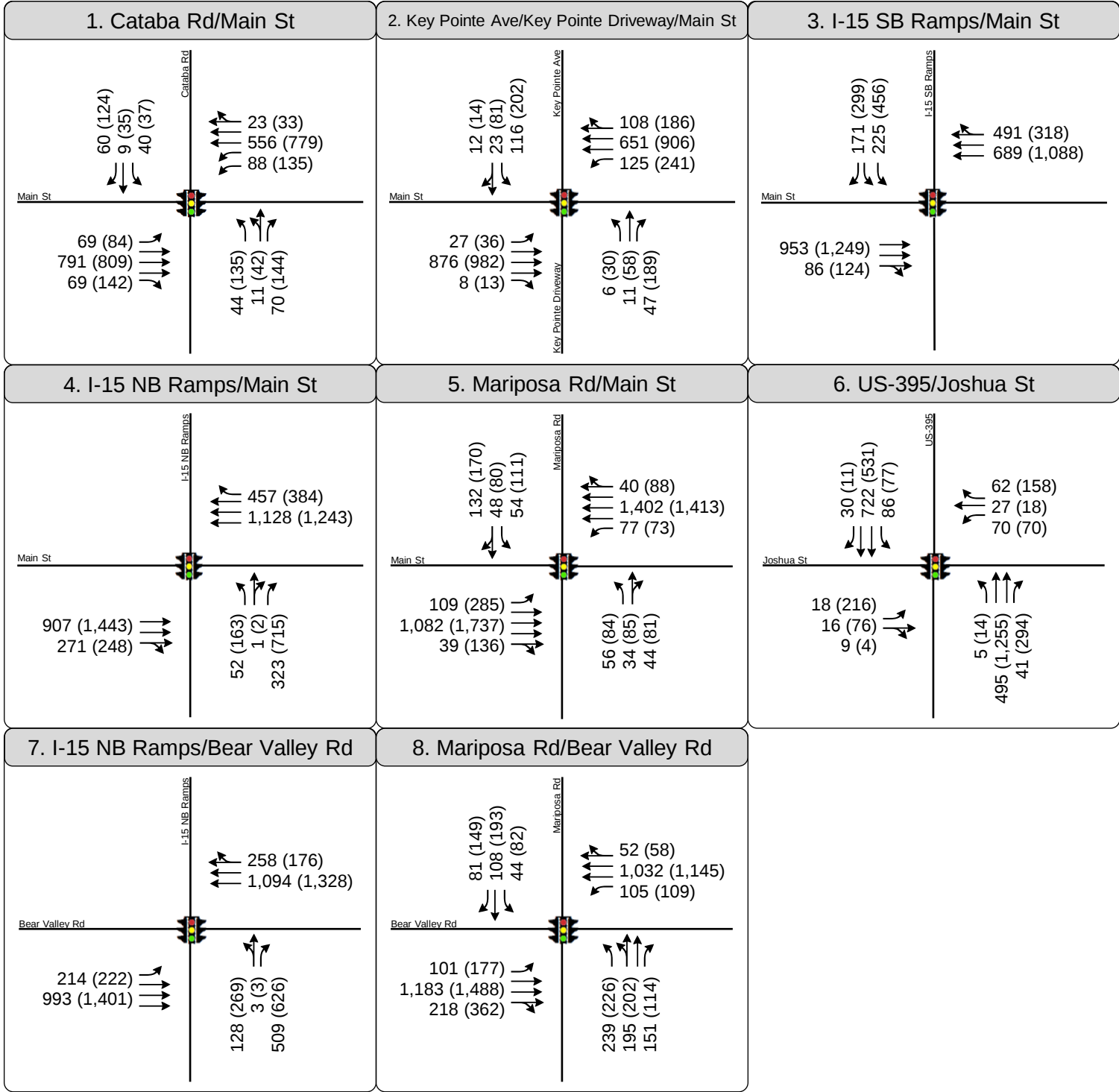


Figure 1
Peak Hour Traffic Volumes and Lane Configurations
Existing (2024)



4.2 Cumulative Year (2050) Conditions

Traffic Forecasts

The traffic volumes for this scenario consist of existing counts plus the growth derived from the SBTAM+ model. The Cumulative Year (2050) Plus Project traffic forecasts are shown on **Figure 2**.

Cumulative Year (2050) Plus Project Intersection Operations

Cumulative Year (2050) Plus Project peak hour traffic volumes, existing lane configurations, and optimized signal timings were used to evaluate operations at the study intersections under AM and PM peak hour conditions. Traffic signal timing adjustments are considered standard maintenance for local and state agencies, and it is assumed that the owner/operators of the study intersections would regularly reoptimize the traffic signals depending on the traffic volumes in the study area.

Fehr & Peers optimized signal timings at all study intersections, except for intersections that are part of a coordinated system whereby, the existing coordinated cycle length was maintained. The LOS results are summarized in **Table 10** and detailed LOS worksheets are provided in **Appendix B**. As shown in **Table 10**, no intersections are forecast to operate below acceptable standards in the AM peak hour. During the PM peak hour, four of the eight study intersections are forecast to operate at LOS E or F.

Table 10: Cumulative Year (2050) Plus Project Intersection Level of Service

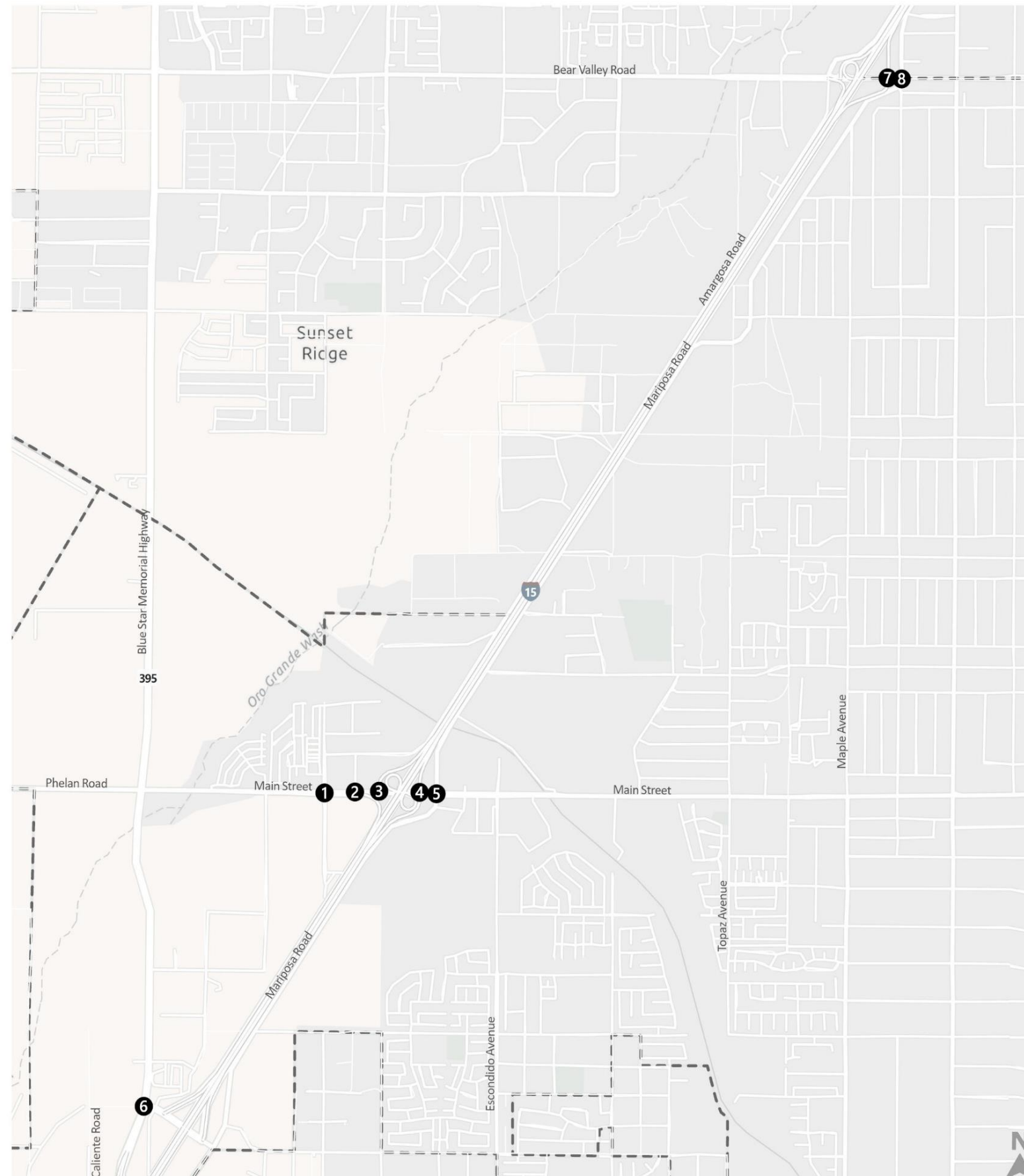
Intersection Name	Control	Jurisdiction	LOS Threshold	Peak Hour	Cumulative Year (2050) Plus Project
					LOS / Average Delay
1 - Cataba Road & Main Street	Signal	Hesperia	D	AM PM	B / 19.4 D / 47.7
2 - Key Pointe Driveway/Key Pointe Avenue & Main Street	Signal	Hesperia	D	AM PM	C / 21.3 E / 75.5
3 - I-15 Southbound Ramps & Main Street	Signal	Caltrans/Hesperia	D	AM PM	B / 13.2 B / 17.7
4 - I-15 Northbound Ramps & Main St	Signal	Caltrans/Hesperia	D	AM PM	A / 10.0 C / 25.4
5 - Mariposa Road & Main Street	Signal	Hesperia	D	AM PM	D / 41.7 F / 82.7
6 - US-395 & Joshua Street	Signal	Hesperia	D	AM PM	C / 33.4 F / >120
7 - I-15 Northbound Ramps and Bear Valley Road	Signal	Caltrans/Hesperia	D	AM PM	D / 51.9 E / 76.9
8 - Mariposa Road & Bear Valley Road	Signal	Hesperia	D	AM PM	D / 39.2 D / 52.5

Notes:

1. Whole intersection weighted average stopped delay expressed in seconds per vehicle for signalized intersections.

2. Delay operations were calculated using HCM 7th methodologies.
 3. **Bold** symbolizes below acceptable operations.
- Source: Fehr & Peers, 2025.





LEGEND

- Existing Intersections
- City Boundary
- 🚦 Signalized
- AM (PM) Peak Hour Traffic Volume
- ↔ Lane Configuration

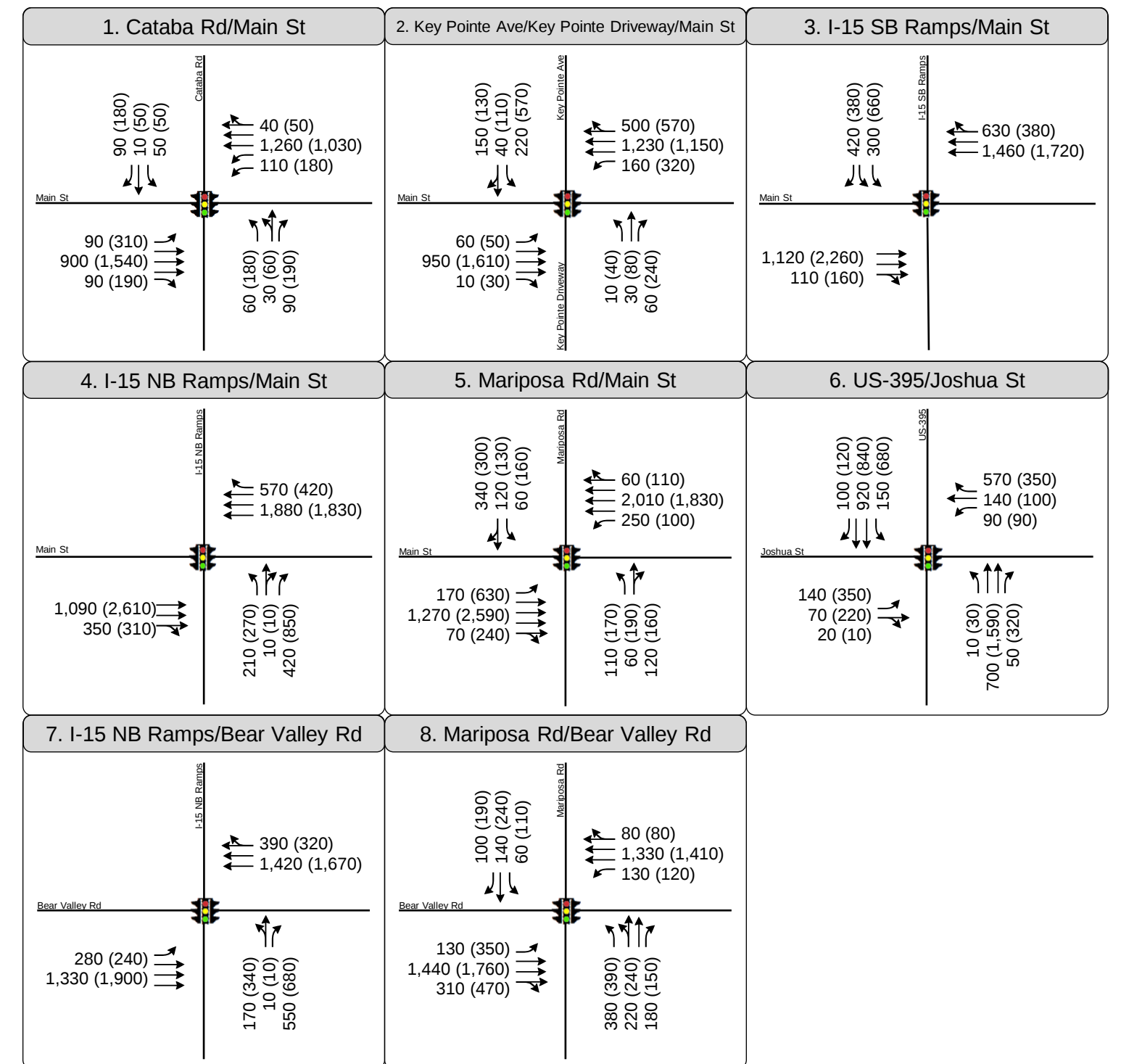


Figure 2
Peak Hour Traffic Volumes and Lane Configurations
General Plan Buildout (2050)



Improvements Discussion

The following findings and improvements are observed and discussed based on the LOS results:

Intersection 2 – Key Pointe Driveway/Key Pointe Avenue & Main Street

- Under Cumulative Year (2050) Plus Project conditions, this intersection is forecast to operate at LOS E during PM peak hour.
- This intersection is projected to carry more than 500 southbound left-turn vehicles during the PM peak hour which need a second southbound left-turn pocket to achieve LOS D. However, the existing right-of-way (ROW) lacks sufficient width to accommodate a new lane.

Intersection 5 – Mariposa Avenue & Main Street

- Under Cumulative Year (2050) Plus Project conditions, this intersection is forecast to operate at LOS F during PM peak hour.
- This intersection is projected to carry more than 600 eastbound left-turn vehicles during the PM peak hour which need a second eastbound left-turn pocket to achieve LOS D. However, the existing right-of-way (ROW) lacks sufficient width to accommodate a new lane.

Intersection 6- US-395 and Joshua Street

- Under Cumulative Year (2050) Plus Project conditions, this intersection is forecast to operate at LOS F during the PM peak hour.
- This intersection is projected to carry 680 southbound left-turn and 1,590 northbound through movements during the PM peak hour which need a second southbound left-turn pocket and a third northbound through lane to achieve LOS D. The existing ROW is sufficient to accommodate these improvements.

Intersection 7 – I-15 Northbound Ramps & Bear Valley Ramps

- Under Cumulative Year (2050) Plus Project conditions, this intersection is forecast to operate at LOS E during PM peak hour.
- This intersection is projected to carry 680 northbound right-turn vehicle movements and needs a second northbound right-turn lane to achieve LOS D. The existing ROW is sufficient to accommodate these improvements.



5 Roadway Segment Analysis

This chapter covers the evaluation of roadway operations and vehicle delay measured through an analysis of level of service (LOS). Roadway segment LOS analysis is used for planning purposes, and to document consistency with General Plan policies. The LOS analysis assists the City with planning decisions, such as where to increase or decrease land use densities or improve intersections to accommodate growth without generating high levels of roadway congestion.

Some roadways or intersections may be projected to perform at unacceptable levels of service. Residents, businesses, and visitors view congestion and extended travel times as an impact to their quality of life and economic viability, and for this reason, the General Plan contains strategies pertaining to acceptable levels of service; however, CEQA no longer considers congestion to be an environmental impact.

5.1 Existing Year (2024) Conditions

Roadway traffic counts and vehicle classification information were collected in May of 2024. The traffic counts represent the Average Daily Traffic (ADT) volume on a typical weekday (Tuesday through Thursday) while schools are in session.

Roadway segment LOS under Existing Year (2024) Conditions is presented in **Table 11**. Only one segment, Bear Valley Road between 2nd Avenue and Hesperia Road, is operating below the City's adopted LOS standard.

5.2 Cumulative Year (2050) Conditions

SBTAM+ was used to develop the cumulative year volume forecasts. To develop Cumulative scenarios forecasts, the Cumulative No Project and Plus Project Models were compared to the Existing Year Model outputs using the difference method. The difference method was conducted using standard techniques consistent with National Cooperative Highway Research Program (NCHRP) Report 765.

The arithmetic difference between the future year and base year model outputs was used to forecast traffic volume growth on roadway links. The forecasted traffic volume growth was then added to the existing roadway volumes. Negative growth was not allowed in the General Plan scenarios. If the model predicted negative growth over existing conditions, the existing conditions volumes were retained. Roadway segment LOS under Cumulative Year conditions is presented in **Table 12**.

Under the Cumulative Year No Project conditions, Bear Valley Road between 2nd Avenue and Hesperia Road is projected to operate at LOS F which is inconsistent with the City's adopted LOS D or better standard.

Under the Cumulative Year With Project conditions, both Bear Valley Road segments are projected to operate at E or F, which is inconsistent with the City's adopted LOS D or better standard.

Table 2: Existing Year (2024) Conditions – Roadway Segment LOS

	Roadway	Between		ADT	Lanes	Classification	LOS
1	Bear Valley Road	2nd Avenue	Hesperia Road	44,203	6	Arterial	D
2	Bear Valley Road	East of Mojave Fish Hatchery Road		53,251	6	Arterial	F
3	Escondido Avenue	South of Main Street		22,057	4	Arterial	D
4	Eucalyptus Street	Mariposa Road	Maple Avenue	2,019	2	Arterial	C
5	Mesquite Street	Fuente Avenue	Bandicoot Trail	4,790	2	Arterial	C
6	Maple Avenue	Willow Street	Main Street	6,197	4	Arterial	C
7	Ranchero Road	Lyons Avenue	Oxford Avenue	7,368	2	Arterial	D
8	Lemon Street	Santa Fe Avenue	E Avenue	2,965	2	Arterial	C
9	Lemon Street	East of Choiceana Avenue		63	2	Arterial	C
10	Cottonwood Avenue	Sequoia Street	Bear Valley Road	8,774	2	Arterial	D
11	Cottonwood Avenue	Willow Street	Main Street	7,653	2	Arterial	D
12	Muscatel Street	Malibu Avenue	Escondido Avenue	5,316	4	Arterial	C

Notes:

1. **Bold** symbolizes below acceptable operations.

Source: Fehr & Peers, 2025.



Table 3: Cumulative Year (2050) Conditions – Roadway Segment LOS

	Roadway	Between		Current General Plan (No Project)				Proposed General Plan (Plus Project)			
				ADT	Lanes	Classification	LOS	ADT	Lanes	Classification	LOS
1	Bear Valley Road	2nd Avenue	Hesperia Road	45,200	6	Arterial	D	47,600	6	Arterial	E
2	Bear Valley Road	East of Mojave Fish Hatchery Road		60,200	6	Arterial	F	61,400	6	Arterial	F
3	Escondido Avenue	South of Main Street		28,900	4	Arterial	D	28,700	4	Arterial	D
4	Eucalyptus Street	Mariposa Road	Maple Avenue	3,200	2	Arterial	C	3,700	2	Arterial	C
5	Mesquite Street	Fuente Avenue	Bandicoot Trail	6,000	2	Arterial	C	8,200	2	Arterial	D
6	Maple Avenue	Willow Street	Main Street	8,400	4	Arterial	C	9,600	4	Arterial	C
7	Ranchero Road	Lyons Avenue	Oxford Avenue	11,900	2	Arterial	D	13,100	2	Arterial	D
8	Lemon Street	Santa Fe Avenue	E Avenue	4,600	2	Arterial	C	4,600	2	Arterial	C
9	Lemon Street	East of Choiceana Avenue		100	2	Arterial	C	100	2	Arterial	C
10	Cottonwood Avenue	Sequoia Street	Bear Valley Road	12,300	2	Arterial	D	12,300	2	Arterial	D
11	Cottonwood Avenue	Willow Street	Main Street	9,500	2	Arterial	D	10,200	2	Arterial	D
12	Muscatel Street	Malibu Avenue	Escondido Avenue	5,500	4	Arterial	C	5,500	4	Arterial	C

Notes:

1. **Bold** symbolizes below acceptable operations.

Source: Fehr & Peers, 2025.

5.3 Recommendations

Based on the findings of the roadway segment analysis, the following policies and implementation actions are recommended for inclusion in the City's Circulation Element.

- To release the traffic pressure on Bear Valley Road:
 - Build a new I-15 and Eucalyptus Street interchange;
 - Build a new I-15 and Mojave Street interchange.
- To close the gaps on east-west corridors:
 - Connect Muscatel Street with a grade separation over California Aqueduct;
 - Connect Lemon Street from Hesperia Road to Santa Fe Avenue with a grade separation over the railroad; connect Lemon Street from Riverview Avenue to Lakeshore Drive;

With the above recommendations, the roadway segment LOS under Cumulative Year conditions is presented in **Table 13**. Although Bear Valley Road east of Mojave Fish Hatchery Road is still projected to operate at LOS F, all other segments are expected to maintain the same level of service as under the Cumulative Year No Project conditions.

Table 13: Cumulative Year (2050) Conditions With Improvements – Roadway Segment LOS

Roadway		Between		Current General Plan (No Project)				Proposed General Plan (Plus Project) With Improvements			
				ADT	Lanes	Classification	LOS	ADT	Lanes	Classification	LOS
1	Bear Valley Road	2nd Avenue	Hesperia Road	45,200	6	Arterial	D	45,600	6	Arterial	D
2	Bear Valley Road	East of Mojave Fish Hatchery Road		60,200	6	Arterial	F	64,300	6	Arterial	F
3	Escondido Avenue	South of Main Street		28,900	4	Arterial	D	25,200	4	Arterial	D
4	Eucalyptus Street	Mariposa Road	Maple Avenue	3,200	2	Arterial	C	13,200	2	Arterial	C
5	Mesquite Street	Fuente Avenue	Bandicoot Trail	6,000	2	Arterial	C	6,200	2	Arterial	D
6	Maple Avenue	Willow Street	Main Street	8,400	4	Arterial	C	11,500	4	Arterial	C
7	Ranchero Road	Lyons Avenue	Oxford Avenue	11,900	2	Arterial	D	11,700	2	Arterial	D
8	Lemon Street	Santa Fe Avenue	E Avenue	4,600	2	Arterial	C	15,200	2	Arterial	C
9	Lemon Street	East of Choiceana Avenue		100	2	Arterial	C	100	2	Arterial	C
10	Cottonwood Avenue	Sequoia Street	Bear Valley Road	12,300	2	Arterial	D	10,500	2	Arterial	D
11	Cottonwood Avenue	Willow Street	Main Street	9,500	2	Arterial	D	10,900	2	Arterial	D
12	Muscatel Street	Malibu Avenue	Escondido Avenue	5,500	4	Arterial	C	5,400	4	Arterial	C

Notes:

1. **Bold** symbolizes below acceptable operations.

Source: Fehr & Peers, 2025.

6 Collision Analysis

This section reviews the historical collision trends in the Project area to help develop strategies to enhance local travel safety with the Project.

6.1 Collision Data Analysis

This analysis considers collisions from 2018 through 2022 acquired from the Transportation Injury Mapping System (TIMS), which is a collision database that includes details, such as collision location, type, severity, parties involved, and contributing factors. The full collision dataset includes collisions of all severity levels but does not include Property Damage-Only (PDO) collisions. For this analysis, all collisions occurring on State routes were not included.

Severe injuries resulting from a traffic collision can result in several catastrophic impacts, including permanent disability, lost productivity and wages, and ongoing healthcare costs. The acronym KSI is used throughout the report to denote a killed or severely injured collision record.

From 2018 to 2022, a total of 1848 collisions occurred within the City (**Figure 3**), which excluded collisions occurring on the State Highway System. Collisions in Hesperia are clustered along major arterial streets including Main Street and Bear Valley Road as well as near the I-15 interchange. Main Street is a major corridor providing the main retail centers for the City and stretches for roughly eight miles, connecting east/west direction. It has 2 lanes in each direction and is a major artery providing central I-15 interchange access and is the closest arterial street to the local Juniper Elementary School. Between 2018 and 2022, Main Street experienced the greatest number of collisions and dense cluster compared to other corridors in the City.

Bear Valley Road has the second highest concentration of collisions. It has 3 lanes in each direction and stretches for roughly five miles within city limits, connecting east/west direction. In particular, the intersection on Bear Valley Road and Hesperia Road had a high cluster of collisions. This intersection is the closest to the Victor Valley Town Center, a large retail shopping center and provides Hesperia residents and visitors with direct access north to Downtown Victorville.

A total of 174 KSI collisions occurred, 63 of which were fatal collisions. **Table 14** summarizes all collisions, KSI collisions, pedestrian and bicycle collisions. Vehicle only collisions account for approximately 93% of the total collisions. Almost 71% of vehicle only collisions occurred at an intersection.

Table 14: Collision Counts by Type (2018-2022)

Area	All Collisions	KSI Collisions	Vehicle Only Collisions	Bicycle and Pedestrian Collisions
City of Hesperia	1,848	170	1,724	124

Source: TIMS, 2018-2022; Fehr & Peers, 2025

The primary cause of a collision, or Primary Collision Factor (PCF), is identified by the patrol officer on duty at the scene of the crash. **Figure 4** below shows the different categories of PCFs for all injury collisions and KSI collisions.

For all injury collisions, the PCF with the largest share of collisions was vehicle right-of-way violation and unsafe speed, representing nearly a third of all injury collisions and approximately 13% of KSI collisions. Looking at KSI collisions, pedestrian violation is the top PCF and constitutes 62% of pedestrian involved collisions. None of the collisions happened under drug or alcohol influence.

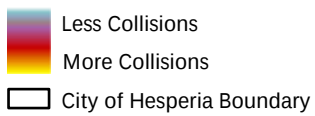
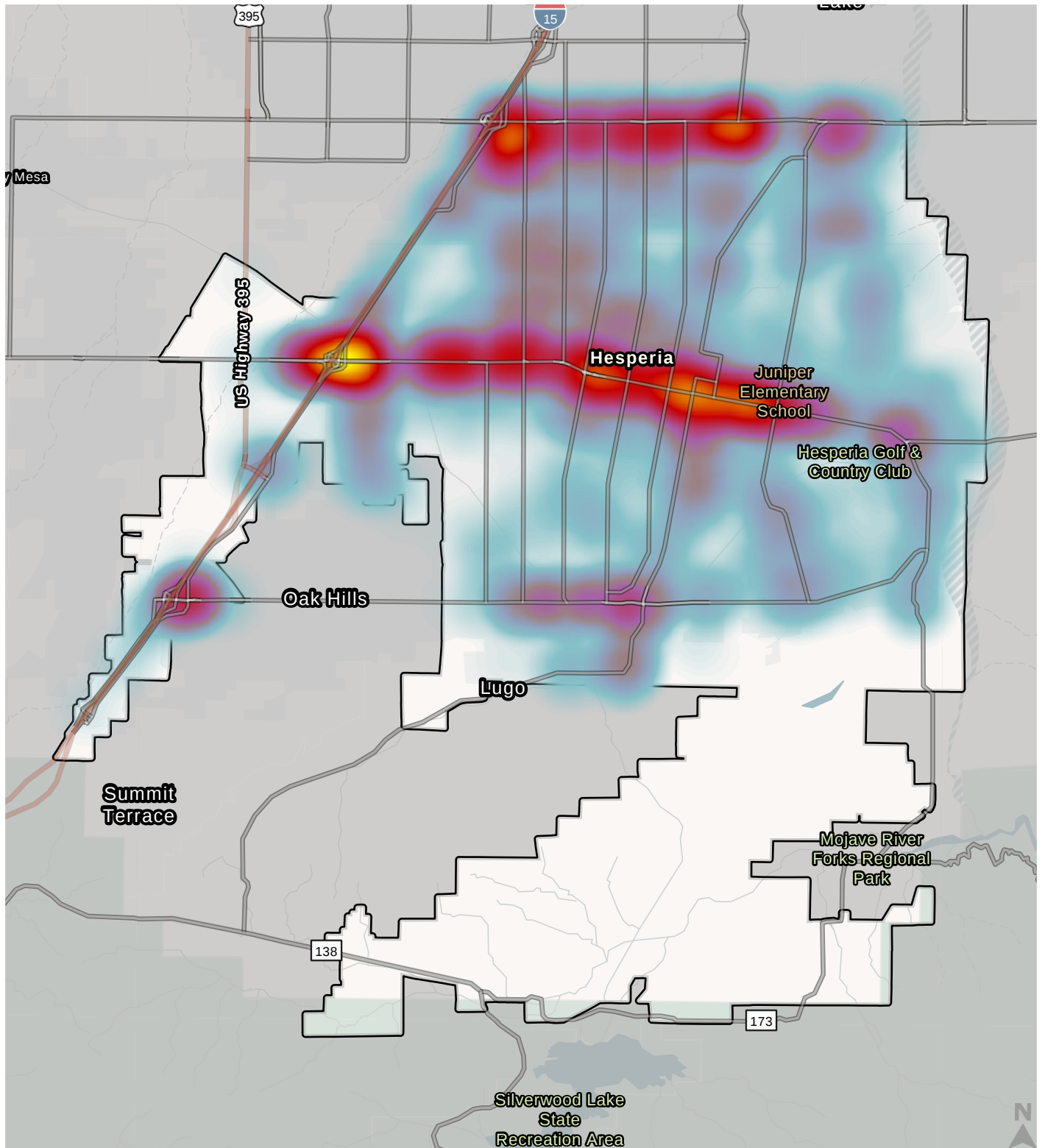
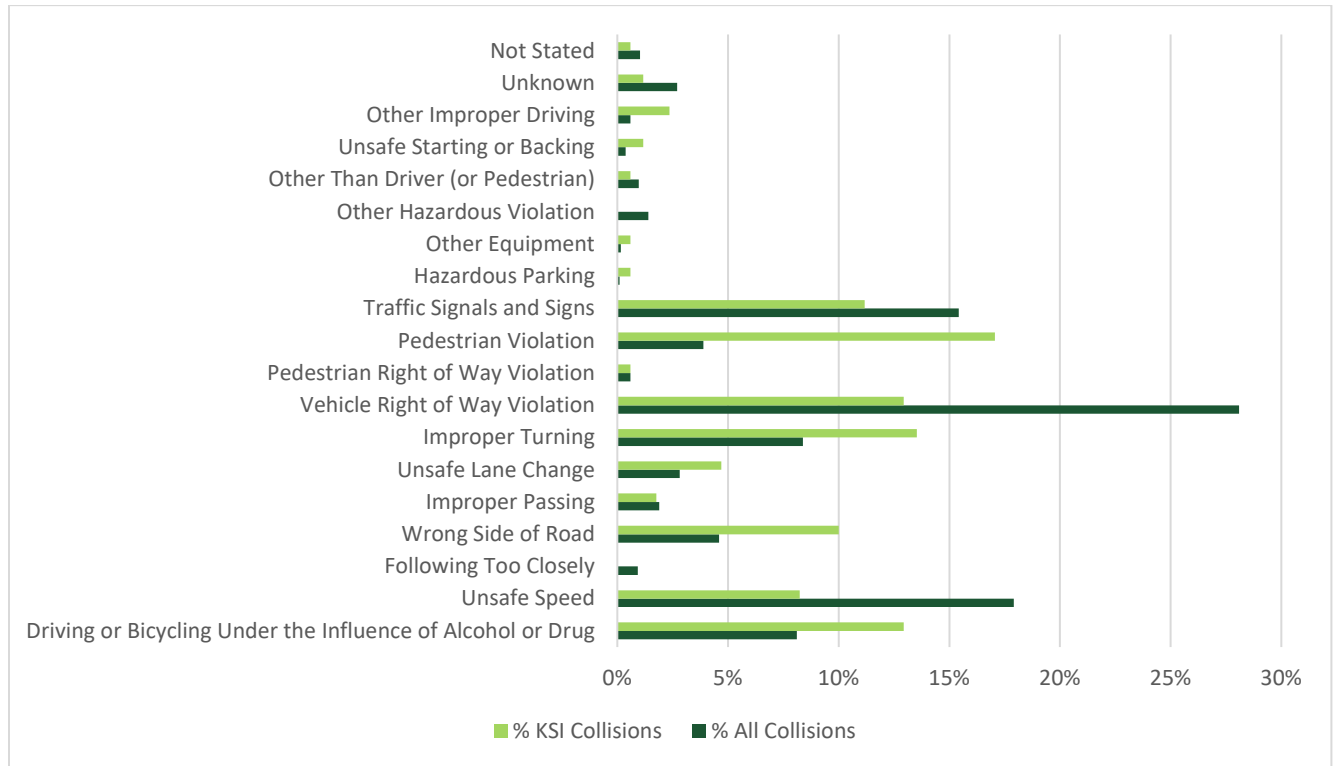


Figure 3



Hesperia Collision Heatmap (2018 - 2022)

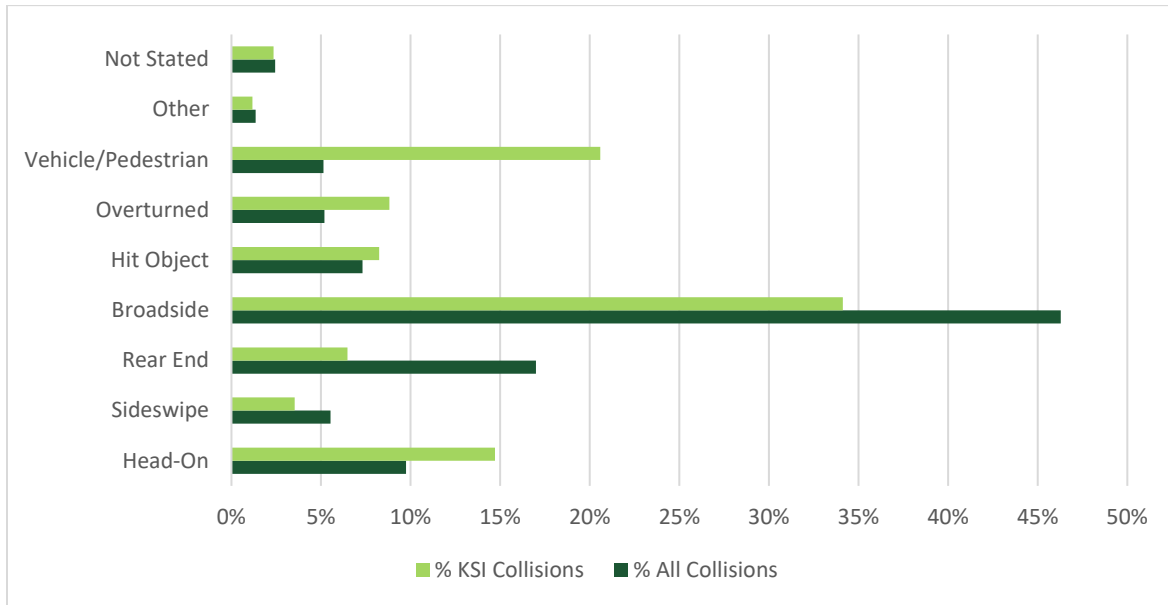
Figure 4: PCF for All Injury and KSI Collisions



Source: TIMS, 2018-2022; Fehr & Peers, 2025

For types of collisions, as shown in **Figure 5**, broadside collisions, also known as “T-bone” collisions, represent the largest share of collision types for both all collisions and KSI collisions (46% and 34%, respectively). Broadside collisions happened mostly at intersections without protected left-turn phase in the Project area. Rear end type collisions represent the second largest share of all injury collisions at 18%. For KSI collisions, collisions involving pedestrians represent the second largest share, with approximately one fifth of collision types.

Figure 5: Collision Type for All Injury and KSI Collisions



Source: TIMS, 2018-2022; Fehr & Peers, 2025

6.2 Observations

Based on the historical collision trends, key issues and potential strategies for the Project area are discussed below:

- Right-of-way violation and speeding are the top PCFs for collisions and have a higher possibility of causing KSI collisions than other PCFs.
 - Speeding for conditions often contributes to right-of-way violations.
 - Potential strategies to reduce speeding include signal timing coordination to limit through travel and implementing speed monitors to remind drivers of the unsafe speed.
- Pedestrian account for approximately one fifth of total KSI collisions.
 - Potential strategies to improve pedestrian travel safety include high-visibility or raised crosswalks and sidewalks.
 - Leading pedestrian intervals and extended pedestrian interval is another option to minimize vehicle-pedestrian conflicts and can result in safer operation. Upon detection of a pedestrian in the crosswalk, the pedestrian has the opportunity to enter the crosswalk at an intersection during an extended interval before vehicles are given a green indication to allow more time for the pedestrian or bicyclist to cross.
- Broadside collision is the top collision type.
 - To reduce broadside collisions, an effective option is to add protected turn phases at intersections with high broadside collisions.

Appendix A – Existing (2024) Turning Movement Counts

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024**CITY:** Hesperia**JOB #:** SC4583**LOCATION:** CLASS1 Bear Valley Rd between 2nd Ave and Hesperia Rd

AM TIME	COMBINED							TOTAL	PM Time	COMBINED							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	94	3	2	6	0	0		105	12:00	648	22	5	16	0	1		692
0:15	86	1	0	7	0	0		94	12:15	682	21	2	21	0	1		727
0:30	71	1	1	9	0	0		82	12:30	732	26	7	12	0	3		780
0:45	58	1	0	6	0	0		65	12:45	651	24	7	15	0	7		704
1:00	61	2	0	8	0	0		71	13:00	709	23	8	11	0	1		752
1:15	50	1	0	7	0	0		58	13:15	687	22	7	22	0	2		740
1:30	41	1	0	1	0	0		43	13:30	698	19	2	17	1	1		738
1:45	52	1	2	5	0	0		60	13:45	686	33	2	19	0	4		744
2:00	48	3	0	10	0	0		61	14:00	737	31	3	20	0	4		795
2:15	39	0	0	6	0	0		45	14:15	696	22	7	14	0	2		741
2:30	41	4	0	4	0	0		49	14:30	683	19	4	10	0	6		722
2:45	70	2	2	10	0	0		84	14:45	713	32	10	15	1	7		778
3:00	77	7	0	4	0	0		88	15:00	685	29	3	17	0	9		743
3:15	104	2	4	11	0	0		121	15:15	736	29	4	11	0	5		785
3:30	99	6	0	13	0	0		118	15:30	768	24	6	11	0	10		819
3:45	133	6	0	6	0	0		145	15:45	718	28	3	9	0	8		766
4:00	138	15	4	6	0	0		163	16:00	694	25	3	16	0	2		740
4:15	139	8	1	16	0	0		164	16:15	781	24	4	17	0	2		828
4:30	164	8	1	19	0	0		192	16:30	702	30	4	11	0	2		749
4:45	168	11	3	13	0	0		195	16:45	719	18	5	13	0	1		756
5:00	162	10	2	6	0	0		180	17:00	799	25	3	14	1	1		843
5:15	178	15	6	11	0	0		210	17:15	727	24	4	22	1	2		780
5:30	218	11	3	12	0	3		247	17:30	690	16	1	11	0	0		718
5:45	275	15	4	9	0	1		304	17:45	646	17	0	5	0	4		672
6:00	240	22	6	15	0	9		292	18:00	642	18	2	7	0	3		672
6:15	287	27	6	22	0	8		350	18:15	585	11	1	12	0	0		609
6:30	326	23	3	15	0	11		378	18:30	536	11	1	5	0	2		555
6:45	402	34	8	20	0	7		471	18:45	553	27	3	8	0	3		594
7:00	399	41	4	24	0	4		472	19:00	610	12	4	7	0	0		633
7:15	495	24	2	16	0	1		538	19:15	497	14	1	8	0	4		524
7:30	563	50	6	17	0	8		644	19:30	494	18	2	10	0	0		524
7:45	673	43	11	21	0	6		754	19:45	470	14	3	4	0	2		493
8:00	593	32	5	21	0	8		659	20:00	415	5	1	2	0	0		423
8:15	578	34	12	15	0	8		647	20:15	426	8	1	6	0	0		441
8:30	625	44	4	15	2	8		698	20:30	370	5	2	12	0	0		389
8:45	638	38	7	18	0	9		710	20:45	395	5	2	8	1	1		412
9:00	563	25	7	19	1	3		618	21:00	294	7	2	8	0	1		312
9:15	604	38	9	17	0	2		670	21:15	297	3	1	5	0	0		306
9:30	644	29	11	15	1	1		701	21:30	222	2	0	5	0	0		229
9:45	670	33	8	18	0	1		730	21:45	221	1	0	3	0	0		225
10:00	537	28	8	20	0	1		594	22:00	199	4	2	5	0	0		210
10:15	552	30	9	16	1	0		608	22:15	161	2	0	4	0	0		167
10:30	567	28	6	20	0	2		623	22:30	178	4	0	2	0	0		184
10:45	640	33	4	14	0	1		692	22:45	117	1	1	4	0	0		123
11:00	631	42	4	21	1	4		703	23:00	124	4	1	7	0	0		136
11:15	674	43	11	13	1	0		742	23:15	88	0	0	11	0	0		99
11:30	595	47	6	16	1	2		667	23:30	93	1	2	8	0	0		104
11:45	661	28	7	22	0	3		721	23:45	94	1	1	5	0	0		101
TOTAL	15,723	950	199	635	8	111		17,626	TOTAL	25,068	761	137	505	5	101		26,577
AM PEAK HOUR								11:00 AM	AM PEAK HOUR								4:15 PM
AM PEAK VOLUME								2,833	AM PEAK VOLUME								3,176

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	40,791	1,711	336	1,140	13	212	44,203
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	92.3%	3.9%	0.8%	2.6%	0.0%	0.5%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024**CITY:** Hesperia**JOB #:** SC4583**LOCATION:** CLASS2 Bear Valley Rd east of Mojave Fish Hatchery Rd

AM TIME	COMBINED							PM Time	COMBINED								
	1	2	3	4	5	6	TOTAL		1	2	3	4	5	6	TOTAL		
0:00	103	1	2	5	0	0	111	12:00	856	33	6	10	0	4	909		
0:15	85	0	0	7	0	0	92	12:15	911	32	5	18	0	5	971		
0:30	74	1	0	6	0	0	81	12:30	898	35	5	16	0	3	957		
0:45	56	1	0	4	0	0	61	12:45	894	30	10	12	1	3	950		
1:00	59	1	0	4	0	0	64	13:00	875	39	12	15	0	5	946		
1:15	61	0	0	4	0	0	65	13:15	887	28	6	20	1	3	945		
1:30	42	0	0	2	0	0	44	13:30	886	26	6	21	1	5	945		
1:45	58	0	0	6	0	0	64	13:45	922	41	7	18	0	5	993		
2:00	50	1	0	3	0	0	54	14:00	870	38	1	22	0	0	931		
2:15	42	0	0	8	0	0	50	14:15	860	37	3	19	0	4	923		
2:30	59	1	0	6	0	0	66	14:30	905	35	9	10	0	6	965		
2:45	44	1	2	4	0	0	51	14:45	914	32	6	15	1	5	973		
3:00	70	5	0	5	0	0	80	15:00	883	38	5	18	1	2	947		
3:15	84	5	2	6	0	0	97	15:15	899	41	3	16	0	4	963		
3:30	94	6	0	7	0	0	107	15:30	961	29	4	9	1	4	1,008		
3:45	126	6	1	5	0	0	138	15:45	919	31	4	14	0	3	971		
4:00	136	4	2	8	0	0	150	16:00	965	41	6	25	0	3	1,040		
4:15	119	4	2	6	0	0	131	16:15	935	40	6	10	0	3	994		
4:30	177	10	2	16	0	0	205	16:30	914	26	5	17	0	1	963		
4:45	184	8	3	11	0	1	207	16:45	801	26	6	5	0	2	840		
5:00	153	11	1	4	0	0	169	17:00	919	17	3	12	1	0	952		
5:15	169	13	5	14	0	0	201	17:15	985	21	1	16	0	3	1,026		
5:30	205	16	2	10	0	3	236	17:30	917	26	2	11	0	2	958		
5:45	285	14	3	11	0	2	315	17:45	774	21	2	5	1	2	805		
6:00	296	26	2	17	0	1	342	18:00	716	17	2	6	1	0	742		
6:15	297	20	2	21	0	4	344	18:15	777	19	3	11	0	2	812		
6:30	414	25	3	21	0	2	465	18:30	706	22	0	7	0	3	738		
6:45	465	27	1	24	0	1	518	18:45	746	28	2	2	0	0	778		
7:00	425	30	4	21	0	1	481	19:00	646	18	3	5	0	0	672		
7:15	522	24	4	14	0	7	571	19:15	684	17	4	6	0	2	713		
7:30	662	33	4	23	0	2	724	19:30	602	18	1	13	0	6	640		
7:45	741	59	3	24	0	2	829	19:45	587	16	1	6	0	0	610		
8:00	655	37	9	17	0	3	721	20:00	539	9	1	5	0	2	556		
8:15	596	38	7	9	0	8	658	20:15	532	12	0	8	0	2	554		
8:30	665	39	6	15	0	3	728	20:30	505	3	1	7	0	1	517		
8:45	755	31	7	13	0	3	809	20:45	444	4	1	7	0	0	456		
9:00	662	48	7	18	0	4	739	21:00	400	9	0	7	0	4	420		
9:15	690	33	5	19	1	3	751	21:15	342	2	0	4	0	3	351		
9:30	759	55	8	23	0	4	849	21:30	306	5	0	5	0	0	316		
9:45	717	36	5	24	0	3	785	21:45	292	5	1	4	0	1	303		
10:00	730	28	6	12	0	1	777	22:00	275	1	1	3	0	0	280		
10:15	711	27	5	15	0	4	762	22:15	225	3	0	5	0	0	233		
10:30	782	43	5	15	0	2	847	22:30	211	3	1	4	0	0	219		
10:45	803	38	5	19	0	4	869	22:45	145	1	0	3	0	0	149		
11:00	762	53	8	18	1	2	844	23:00	154	2	0	7	0	0	163		
11:15	771	34	8	18	0	5	836	23:15	129	1	1	6	0	0	137		
11:30	769	47	6	17	0	6	845	23:30	103	3	0	10	0	0	116		
11:45	804	31	4	21	1	1	862	23:45	103	2	0	1	0	0	106		
TOTAL	17,988	971	151	600	3	82	19,795	TOTAL	31,719	983	146	496	9	103	33,456		
				AM PEAK HOUR				10:30 AM					AM PEAK HOUR				3:30 PM
				AM PEAK VOLUME				3,396					AM PEAK VOLUME				4,013

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	49,707	1,954	297	1,096	12	185	53,251
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	93.3%	3.7%	0.6%	2.1%	0.0%	0.3%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024
JOB #: SC4583

CITY: Hesperia
LOCATION: CLASS3 Escondido Ave south of Main St.

AM TIME	COMBINED							TOTAL	PM Time	COMBINED							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	29	4	0	0	0	0	0	33	12:00	258	35	1	0	0	0	0	294
0:15	27	0	0	0	0	0	0	27	12:15	302	37	3	1	0	0	0	343
0:30	41	0	0	0	0	0	0	41	12:30	289	34	3	0	0	0	0	326
0:45	22	3	0	0	0	0	1	26	12:45	331	27	1	1	0	0	1	361
1:00	18	1	0	0	0	0	0	19	13:00	400	36	5	2	0	0	1	444
1:15	17	2	0	0	0	0	0	19	13:15	368	43	3	4	0	0	2	420
1:30	17	1	0	0	0	0	0	18	13:30	331	30	6	2	0	0	1	370
1:45	17	2	0	0	0	0	0	19	13:45	351	45	1	4	0	0	5	406
2:00	15	2	0	0	0	0	0	17	14:00	335	41	0	2	2	0	0	378
2:15	18	1	0	0	0	0	0	19	14:15	345	32	1	0	0	0	1	379
2:30	19	0	0	0	0	0	0	19	14:30	365	37	1	1	0	0	0	404
2:45	16	2	0	0	0	0	0	18	14:45	325	30	2	3	0	0	1	361
3:00	26	3	0	0	0	0	0	29	15:00	323	36	2	1	0	0	3	365
3:15	23	5	0	0	0	0	0	28	15:15	374	37	3	1	0	0	1	416
3:30	38	6	0	0	0	0	0	44	15:30	335	33	5	3	0	0	1	377
3:45	42	7	0	0	0	0	1	50	15:45	364	34	2	2	0	0	0	402
4:00	56	8	0	0	0	0	0	64	16:00	357	27	1	4	0	0	2	391
4:15	53	11	0	2	0	0	0	66	16:15	336	23	4	0	0	0	0	363
4:30	62	11	0	0	0	0	0	73	16:30	352	33	2	1	0	0	1	389
4:45	67	14	0	0	0	0	0	81	16:45	376	36	4	2	0	0	0	418
5:00	49	11	0	0	0	0	1	61	17:00	353	34	7	1	0	0	0	395
5:15	62	17	1	0	0	0	0	80	17:15	381	42	1	1	0	0	0	425
5:30	74	12	1	0	0	0	0	87	17:30	407	25	2	1	0	0	0	435
5:45	80	12	0	1	0	0	0	93	17:45	344	33	4	0	0	0	0	381
6:00	118	18	0	0	0	0	0	136	18:00	322	34	1	1	0	0	1	359
6:15	114	16	1	1	0	0	0	132	18:15	317	38	2	0	0	0	0	357
6:30	162	24	0	1	0	0	0	187	18:30	316	43	1	1	0	0	0	361
6:45	254	36	1	0	0	0	3	294	18:45	295	28	1	1	0	0	1	326
7:00	300	54	5	0	0	0	4	363	19:00	280	21	2	1	0	0	0	304
7:15	406	56	1	2	0	0	7	472	19:15	271	22	1	1	0	0	0	295
7:30	410	34	5	1	0	0	2	452	19:30	280	24	0	1	0	0	0	305
7:45	342	32	5	1	0	0	0	380	19:45	275	18	3	0	0	0	0	296
8:00	269	32	4	3	0	0	1	309	20:00	292	14	3	1	0	0	0	310
8:15	293	34	5	2	0	0	3	337	20:15	264	23	3	0	0	0	0	290
8:30	254	30	1	0	0	0	2	287	20:30	198	18	0	0	0	0	0	216
8:45	213	42	0	1	0	0	3	259	20:45	202	13	3	3	0	0	0	221
9:00	202	38	0	1	0	0	0	241	21:00	165	16	0	0	0	0	0	181
9:15	228	23	2	0	0	0	0	253	21:15	171	8	0	0	0	0	0	179
9:30	248	29	4	1	0	0	0	282	21:30	139	11	1	0	0	0	0	151
9:45	236	33	0	1	0	0	0	270	21:45	136	5	0	1	0	0	0	142
10:00	240	34	1	1	0	0	0	276	22:00	104	5	0	0	0	0	0	109
10:15	215	32	1	0	0	0	0	248	22:15	98	8	0	0	0	0	0	106
10:30	241	26	2	1	0	0	1	271	22:30	72	8	0	0	0	0	0	80
10:45	258	27	1	3	0	0	0	289	22:45	70	1	1	0	0	0	0	72
11:00	242	29	1	3	0	0	0	275	23:00	70	4	0	0	1	0	0	75
11:15	255	31	4	1	0	0	0	291	23:15	64	0	0	0	0	0	0	64
11:30	249	37	1	1	0	0	0	288	23:30	54	7	0	1	0	0	0	62
11:45	235	34	6	0	0	0	0	275	23:45	53	2	0	0	0	0	0	55
TOTAL	6,872	916	53	28	0	29		7,898	TOTAL	12,810	1,191	86	50	0	22		14,159

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 1,667

AM PEAK HOUR 4:45 PM
AM PEAK VOLUME 1,673

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	19,682	2,107	139	78	0	51	22,057
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	89.2%	9.6%	0.6%	0.4%	0.0%	0.2%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024
JOB #: SC4583

CITY: Hesperia
LOCATION: CLASS4 Eucalyptus St between Mariposa Rd and Maple Ave

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	1	1	0	0	0	0	2	12:00	19	7	0	0	0	0	26
0:15	2	1	0	0	0	0	3	12:15	18	4	0	0	0	0	22
0:30	5	0	0	0	0	0	5	12:30	26	3	0	0	0	0	29
0:45	2	2	0	1	0	0	5	12:45	15	1	0	0	0	0	16
1:00	7	2	0	0	0	0	9	13:00	23	6	0	0	0	0	29
1:15	7	3	0	0	0	0	10	13:15	26	7	0	0	0	1	34
1:30	4	1	0	0	0	0	5	13:30	23	7	0	0	0	1	31
1:45	4	0	0	0	0	0	4	13:45	28	3	0	0	0	0	31
2:00	5	2	0	0	0	0	7	14:00	30	7	0	0	0	0	37
2:15	1	1	0	0	0	0	2	14:15	29	7	0	1	0	1	38
2:30	1	0	0	0	0	0	1	14:30	25	9	0	2	0	0	36
2:45	4	1	0	0	0	0	5	14:45	29	4	0	0	0	0	33
3:00	6	1	0	0	0	0	7	15:00	23	8	0	0	0	1	32
3:15	7	1	0	0	0	0	8	15:15	29	5	0	0	0	1	35
3:30	10	0	0	0	0	0	10	15:30	24	5	0	1	0	0	30
3:45	14	2	0	0	0	0	16	15:45	27	11	0	1	0	0	39
4:00	12	13	0	0	0	0	25	16:00	37	10	0	0	0	0	47
4:15	8	3	0	0	0	0	11	16:15	24	5	0	1	0	1	31
4:30	15	5	0	0	0	0	20	16:30	25	11	0	0	0	0	36
4:45	15	6	0	0	0	0	21	16:45	22	13	0	0	0	0	35
5:00	13	5	0	0	0	0	18	17:00	40	7	0	0	0	0	47
5:15	13	2	0	0	0	0	15	17:15	21	14	0	0	0	0	35
5:30	19	1	0	0	0	0	20	17:30	29	11	0	0	0	0	40
5:45	18	5	0	0	0	0	23	17:45	27	5	0	0	0	0	32
6:00	11	4	0	0	0	0	15	18:00	30	9	0	0	0	0	39
6:15	12	1	0	0	0	1	14	18:15	22	7	0	0	0	0	29
6:30	16	8	0	0	0	0	24	18:30	29	5	0	0	0	0	34
6:45	17	8	0	0	0	0	25	18:45	27	8	0	0	0	0	35
7:00	20	7	0	0	0	0	27	19:00	23	7	0	0	0	0	30
7:15	23	7	0	0	0	1	31	19:15	16	6	0	0	0	0	22
7:30	23	3	0	0	0	0	26	19:30	20	3	0	0	0	0	23
7:45	18	8	0	1	0	3	30	19:45	14	5	0	1	0	0	20
8:00	13	9	0	0	0	0	22	20:00	21	3	0	0	0	1	25
8:15	21	8	0	1	0	0	30	20:15	11	5	0	0	0	0	16
8:30	19	5	0	0	0	1	25	20:30	17	8	0	0	0	0	25
8:45	19	5	0	0	0	0	24	20:45	11	7	0	0	0	0	18
9:00	18	1	0	0	0	0	19	21:00	12	1	0	0	0	0	13
9:15	18	5	0	0	0	0	23	21:15	15	9	0	0	0	0	24
9:30	15	3	0	0	0	0	18	21:30	3	2	0	0	0	0	5
9:45	15	0	0	1	0	0	16	21:45	8	1	0	1	0	0	10
10:00	16	2	0	0	0	0	18	22:00	8	3	0	0	0	0	11
10:15	16	4	0	0	0	0	20	22:15	5	0	0	0	0	0	5
10:30	13	3	0	0	0	0	16	22:30	9	2	0	0	0	0	11
10:45	13	3	0	1	0	0	17	22:45	6	1	0	0	0	0	7
11:00	12	4	0	0	0	1	17	23:00	1	6	0	0	0	0	7
11:15	17	4	0	0	0	0	21	23:15	1	3	0	0	0	0	4
11:30	21	7	0	2	0	0	30	23:30	2	3	0	0	0	0	5
11:45	20	7	1	0	0	0	28	23:45	8	4	0	0	0	0	12
TOTAL	599	174	1	7	0	7	788	TOTAL	938	278	0	8	0	7	1,231
AM PEAK HOUR							7:00 AM	AM PEAK HOUR							4:45 PM
AM PEAK VOLUME							114	AM PEAK VOLUME							157

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	1,537	452	1	15	0	14	2,019
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	76.1%	22.4%	0.0%	0.7%	0.0%	0.7%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024**CITY:** Hesperia**JOB #:** SC4583**LOCATION:** CLASS5 Mesquite St between Fuente Ave and Bandicoot Trail.

AM TIME	COMBINED							TOTAL	PM Time	COMBINED							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	3	0	0	0	0	0	0	3	12:00	35	13	0	0	0	0	0	48
0:15	3	0	0	0	0	0	0	3	12:15	55	10	0	0	0	0	1	66
0:30	0	0	0	0	0	0	1	1	12:30	67	13	0	0	0	0	0	80
0:45	0	1	0	0	0	0	0	1	12:45	77	17	0	0	0	0	0	94
1:00	0	0	0	0	0	0	0	0	13:00	93	22	1	0	0	0	2	118
1:15	0	0	0	0	0	0	0	0	13:15	58	25	0	0	0	0	1	84
1:30	3	0	0	0	0	0	0	3	13:30	84	23	0	0	0	0	1	108
1:45	2	0	0	0	0	0	0	2	13:45	67	22	0	0	0	0	2	91
2:00	0	0	0	0	0	0	0	0	14:00	79	34	0	1	0	0	3	117
2:15	0	0	0	0	0	0	0	0	14:15	92	34	0	0	0	0	4	130
2:30	1	0	0	0	0	0	0	1	14:30	94	34	0	0	0	0	5	133
2:45	2	1	0	0	0	0	0	3	14:45	65	33	0	0	0	0	2	100
3:00	3	4	0	0	0	0	0	7	15:00	57	20	0	0	0	0	0	77
3:15	4	1	0	0	0	0	0	5	15:15	58	17	0	0	0	0	0	75
3:30	0	1	0	0	0	0	0	1	15:30	65	28	0	1	0	0	0	94
3:45	8	1	0	0	0	0	0	9	15:45	60	19	0	0	0	0	0	79
4:00	13	2	0	1	0	0	1	17	16:00	54	27	0	0	0	0	1	82
4:15	3	8	0	0	0	0	0	11	16:15	60	27	0	1	0	0	0	88
4:30	11	4	0	0	0	0	0	15	16:30	64	25	0	0	0	0	0	89
4:45	12	4	0	0	0	0	0	16	16:45	54	26	0	0	0	0	1	81
5:00	10	6	0	0	0	0	0	16	17:00	49	25	0	1	0	0	0	75
5:15	8	7	0	0	0	0	0	15	17:15	48	36	0	1	0	0	0	85
5:30	8	6	0	0	0	0	0	14	17:30	69	41	0	0	0	0	0	110
5:45	6	11	0	0	0	0	1	18	17:45	51	25	0	0	0	0	0	76
6:00	15	10	1	0	0	0	0	26	18:00	44	16	0	0	0	0	0	60
6:15	17	10	0	0	0	0	0	27	18:15	54	19	0	0	0	0	0	73
6:30	31	7	0	0	0	0	0	38	18:30	59	16	0	0	0	0	1	76
6:45	55	37	0	0	0	0	3	95	18:45	33	15	0	0	0	0	0	48
7:00	127	52	1	0	0	0	2	182	19:00	38	11	0	0	0	0	0	49
7:15	147	59	2	0	0	0	0	208	19:15	35	14	0	0	0	0	0	49
7:30	95	31	0	0	0	0	1	127	19:30	37	16	0	0	0	0	0	53
7:45	56	23	1	1	0	0	3	84	19:45	29	13	0	0	0	0	0	42
8:00	77	30	0	0	0	0	5	112	20:00	31	16	0	0	0	0	0	47
8:15	96	40	0	0	0	0	0	136	20:15	26	9	0	1	0	0	0	36
8:30	35	24	0	0	0	0	0	59	20:30	24	5	0	0	0	0	0	29
8:45	23	20	0	0	0	0	0	43	20:45	27	5	0	0	0	0	0	32
9:00	29	15	0	0	0	0	1	45	21:00	13	13	0	0	0	0	0	26
9:15	34	17	0	0	0	0	0	51	21:15	14	4	0	0	0	0	0	18
9:30	30	15	0	0	0	0	0	45	21:30	8	2	0	0	0	0	0	10
9:45	32	14	0	0	0	0	0	46	21:45	12	3	0	0	0	0	0	15
10:00	37	27	0	0	0	0	0	64	22:00	13	2	0	0	0	0	0	15
10:15	33	11	0	0	0	0	0	44	22:15	6	0	0	0	0	0	0	6
10:30	24	13	0	0	0	0	0	37	22:30	7	2	0	0	0	0	0	9
10:45	43	19	1	0	0	0	0	63	22:45	3	3	0	0	0	0	0	6
11:00	24	15	0	0	0	0	0	39	23:00	1	2	0	0	0	0	0	3
11:15	37	17	0	0	0	0	0	54	23:15	1	1	0	0	0	0	0	2
11:30	28	27	0	0	0	0	0	55	23:30	5	0	0	0	0	0	0	5
11:45	31	22	0	0	0	0	0	53	23:45	6	0	0	1	0	0	0	7
TOTAL	1,256	612	6	2	0	18		1,894	TOTAL	2,081	783	1	7	0	24		2,896
AM PEAK HOUR								6:45 AM	AM PEAK HOUR								2:00 PM
AM PEAK VOLUME								612	AM PEAK VOLUME								480

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	3,337	1,395	7	9	0	42	4,790
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	69.7%	29.1%	0.1%	0.2%	0.0%	0.9%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024

CITY: Hesperia

JOB #: SC4583

LOCATION: CLASS6 Maple Ave between Willow St to Main St

AM TIME	COMBINED							TOTAL	PM Time	COMBINED							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	7	0	1	0	0	0	0	8	12:00	66	16	0	0	0	0	0	82
0:15	9	0	0	0	0	0	0	9	12:15	50	11	1	0	0	0	0	62
0:30	3	0	0	0	0	0	0	3	12:30	51	21	2	0	0	0	0	74
0:45	4	1	0	0	0	0	0	5	12:45	98	22	0	0	0	0	3	123
1:00	5	0	0	0	0	0	0	5	13:00	105	24	1	0	0	0	0	130
1:15	5	2	0	0	0	0	0	7	13:15	92	27	1	1	0	0	2	123
1:30	3	0	0	0	0	0	0	3	13:30	87	16	1	1	0	0	3	108
1:45	1	2	0	0	0	0	0	3	13:45	79	15	3	3	0	0	1	101
2:00	3	1	0	0	0	0	0	4	14:00	85	15	1	0	0	0	0	101
2:15	1	1	0	0	0	0	0	2	14:15	111	24	3	1	0	0	1	140
2:30	6	0	0	0	0	0	0	6	14:30	75	17	0	0	0	0	0	92
2:45	6	1	0	0	0	0	0	7	14:45	67	17	0	1	0	0	0	85
3:00	8	1	0	0	0	0	1	10	15:00	77	19	0	0	0	0	2	98
3:15	5	3	0	0	0	0	0	8	15:15	89	22	0	0	0	0	0	111
3:30	3	0	0	0	0	0	0	3	15:30	88	24	1	1	0	0	0	114
3:45	4	4	0	1	0	0	0	9	15:45	79	15	0	0	0	0	0	94
4:00	11	3	0	0	0	0	0	14	16:00	81	13	0	1	0	0	0	95
4:15	14	1	0	0	0	0	0	15	16:15	76	18	0	1	0	0	0	95
4:30	6	3	0	0	0	0	0	9	16:30	88	22	0	0	0	0	0	110
4:45	6	6	0	0	0	0	0	12	16:45	90	12	0	0	0	0	0	102
5:00	12	6	0	0	0	0	0	18	17:00	102	25	1	0	0	0	0	128
5:15	8	5	0	0	0	0	0	13	17:15	74	20	0	0	0	0	0	94
5:30	8	5	0	0	0	0	0	13	17:30	144	24	0	2	0	0	0	170
5:45	21	5	0	0	0	0	0	26	17:45	153	39	0	0	0	0	0	192
6:00	14	6	0	0	0	0	0	20	18:00	130	36	0	1	0	0	0	167
6:15	16	12	1	1	0	0	0	30	18:15	124	31	0	1	0	0	0	156
6:30	40	11	0	0	0	0	1	52	18:30	103	23	0	0	0	0	0	126
6:45	87	17	1	0	0	0	1	106	18:45	88	17	0	0	0	0	0	105
7:00	128	17	0	0	0	0	0	145	19:00	76	26	0	0	0	0	0	102
7:15	68	7	0	0	0	0	0	75	19:15	87	14	0	0	0	0	0	101
7:30	71	23	0	2	0	0	1	97	19:30	83	21	0	0	0	0	0	104
7:45	72	25	0	0	0	0	0	97	19:45	86	8	0	0	0	0	0	94
8:00	82	23	0	0	0	0	3	108	20:00	76	17	0	0	0	0	0	93
8:15	90	19	1	0	0	0	3	113	20:15	63	18	0	1	0	0	0	82
8:30	53	11	0	0	0	0	0	64	20:30	69	16	0	1	0	0	0	86
8:45	43	17	0	1	0	0	0	61	20:45	56	8	0	0	0	0	0	64
9:00	44	13	1	1	0	0	0	59	21:00	47	7	0	0	0	0	0	54
9:15	76	18	1	2	0	0	1	98	21:15	39	4	0	0	0	0	0	43
9:30	46	16	1	0	0	0	1	64	21:30	33	5	0	0	0	0	0	38
9:45	31	9	1	0	0	0	0	41	21:45	22	3	0	0	0	0	0	25
10:00	48	9	1	0	0	0	1	59	22:00	27	5	0	0	0	0	0	32
10:15	37	14	2	1	0	0	0	54	22:15	20	9	0	0	0	0	0	29
10:30	43	14	0	0	0	0	0	57	22:30	24	1	0	0	0	0	0	25
10:45	43	11	2	0	0	0	0	56	22:45	14	2	0	0	0	0	0	16
11:00	59	12	1	0	0	0	0	72	23:00	17	2	0	0	0	0	0	19
11:15	59	17	1	1	0	0	0	78	23:15	9	3	0	0	0	0	1	13
11:30	69	16	1	0	0	0	0	86	23:30	9	1	0	0	0	0	0	10
11:45	64	9	1	3	0	0	0	77	23:45	8	0	0	0	0	0	0	8
TOTAL	1,542	396	17	13	0	13		1,981	TOTAL	3,417	755	15	16	0	13		4,216
AM PEAK HOUR								6:45 AM	AM PEAK HOUR								5:30 PM
AM PEAK VOLUME								423	AM PEAK VOLUME								685

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	4,959	1,151	32	29	0	26	6,197
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	80.0%	18.6%	0.5%	0.5%	0.0%	0.4%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024
JOB #: SC4583

CITY: Hesperia
LOCATION: CLASS7 Ranchero Rd between Lyons Ave and Oxford Ave

AM TIME	COMBINED							TOTAL	PM Time	COMBINED							TOTAL
	1	2	3	4	5	6	1			2	3	4	5	6			
0:00	5	9	0	0	0	0	0	14	12:00	60	20	1	2	0	0	83	
0:15	9	2	0	0	0	0	0	11	12:15	57	21	1	0	0	0	79	
0:30	7	4	0	0	0	0	0	11	12:30	60	28	1	4	0	0	93	
0:45	10	6	0	0	0	0	0	16	12:45	53	17	1	3	0	0	74	
1:00	11	6	0	0	0	0	0	17	13:00	56	34	0	4	0	0	94	
1:15	6	3	0	0	0	0	0	9	13:15	68	37	0	4	0	0	109	
1:30	7	3	0	0	0	0	0	10	13:30	69	25	0	4	0	0	98	
1:45	7	3	0	1	0	0	0	11	13:45	73	25	0	2	0	1	101	
2:00	7	3	0	0	0	0	0	10	14:00	94	51	0	1	0	0	148	
2:15	12	2	0	0	0	0	0	14	14:15	120	53	2	4	0	7	186	
2:30	9	2	0	0	0	0	0	11	14:30	139	52	2	2	0	4	199	
2:45	8	7	0	0	0	0	0	15	14:45	120	37	0	0	0	2	159	
3:00	20	2	0	0	0	0	0	22	15:00	83	40	0	1	0	0	124	
3:15	19	3	0	0	0	0	0	22	15:15	79	23	0	2	0	1	105	
3:30	27	6	0	0	0	0	0	33	15:30	86	36	0	0	0	0	122	
3:45	26	10	0	0	0	0	0	36	15:45	84	43	0	0	0	1	128	
4:00	39	15	0	0	0	0	0	54	16:00	81	43	0	1	0	0	125	
4:15	48	18	0	0	0	0	0	66	16:15	72	48	1	0	0	0	121	
4:30	40	22	0	0	0	1	63	63	16:30	104	32	1	1	0	0	138	
4:45	51	17	0	0	0	0	68	68	16:45	83	52	0	1	0	0	136	
5:00	50	22	0	0	0	0	72	72	17:00	81	41	0	1	0	1	124	
5:15	57	21	0	0	0	0	78	78	17:15	91	54	0	0	0	0	145	
5:30	54	22	0	0	0	0	76	76	17:30	87	46	0	1	0	1	135	
5:45	49	16	0	0	0	0	65	65	17:45	76	23	1	0	0	0	100	
6:00	55	22	0	1	0	0	78	78	18:00	64	41	0	2	0	0	107	
6:15	58	25	0	0	0	0	83	83	18:15	72	43	0	1	0	1	117	
6:30	87	30	0	0	0	1	118	118	18:30	64	46	1	3	0	0	114	
6:45	52	25	1	2	0	0	80	80	18:45	72	41	0	1	0	1	115	
7:00	49	25	0	0	0	0	74	74	19:00	52	31	0	1	0	0	84	
7:15	69	31	0	4	0	1	105	105	19:15	42	24	1	0	0	0	67	
7:30	68	27	0	3	0	1	99	99	19:30	54	26	0	0	0	0	80	
7:45	77	33	0	0	0	1	111	111	19:45	40	15	0	0	0	0	55	
8:00	105	48	5	4	0	4	166	166	20:00	35	16	0	0	0	0	51	
8:15	110	35	2	1	0	7	155	155	20:15	39	26	0	0	0	1	66	
8:30	113	39	2	5	0	2	161	161	20:30	36	19	0	0	0	0	55	
8:45	130	46	1	1	0	0	178	178	20:45	45	20	0	1	0	0	66	
9:00	88	45	1	2	0	0	136	136	21:00	37	15	0	0	0	0	52	
9:15	50	28	0	1	0	1	80	80	21:15	39	17	1	0	0	0	57	
9:30	45	16	1	3	0	0	65	65	21:30	25	10	0	0	0	0	35	
9:45	56	21	1	3	0	0	81	81	21:45	20	10	0	0	0	0	30	
10:00	46	21	1	1	0	1	70	70	22:00	24	14	0	0	0	0	38	
10:15	39	22	0	3	0	0	64	64	22:15	25	8	0	1	0	0	34	
10:30	44	12	0	2	0	0	58	58	22:30	16	9	0	0	0	0	25	
10:45	37	25	0	1	0	0	63	63	22:45	13	1	0	0	0	0	14	
11:00	54	24	1	4	0	1	84	84	23:00	23	6	0	0	0	0	29	
11:15	41	18	2	0	0	0	61	61	23:15	9	5	0	0	0	0	14	
11:30	40	13	1	1	0	0	55	55	23:30	10	2	0	0	0	0	12	
11:45	53	25	2	4	0	0	84	84	23:45	7	5	0	0	0	0	12	
TOTAL	2,144	880	21	47	0	21	3,113	3,113	TOTAL	2,839	1,331	14	48	0	23	4,255	
AM PEAK HOUR				8:00 AM				AM PEAK HOUR				2:00 PM					
AM PEAK VOLUME				660				AM PEAK VOLUME				692					

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	4,983	2,211	35	95	0	44	7,368
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	67.6%	30.0%	0.5%	1.3%	0.0%	0.6%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024

CITY: Hesperia

JOB #: SC4583

LOCATION: CLASS8 Lemon St between Santa Fe Ave and E Ave

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	0	0	0	1	0	0	1	12:00	24	13	0	0	0	16	53
0:15	2	1	0	0	0	0	3	12:15	31	17	0	1	0	6	55
0:30	0	0	0	1	0	0	1	12:30	29	17	0	1	0	7	54
0:45	0	1	0	0	0	0	1	12:45	20	21	1	0	0	6	48
1:00	0	0	0	0	0	0	1	13:00	27	18	0	1	0	11	57
1:15	1	1	0	0	0	0	2	13:15	25	16	0	1	0	9	51
1:30	0	1	0	0	0	0	1	13:30	18	20	1	2	0	0	41
1:45	3	0	0	0	0	0	3	13:45	21	19	0	2	0	1	43
2:00	1	0	0	0	0	0	1	14:00	17	15	0	1	0	1	34
2:15	1	1	0	0	0	0	2	14:15	18	23	0	4	0	2	47
2:30	1	1	0	0	0	0	2	14:30	31	36	0	1	0	3	71
2:45	2	0	0	0	0	0	2	14:45	32	32	0	1	0	2	67
3:00	1	0	0	0	0	0	1	15:00	45	25	1	1	0	8	80
3:15	1	0	0	0	0	0	1	15:15	61	29	0	0	0	13	103
3:30	3	1	0	0	0	0	4	15:30	135	35	0	0	0	8	178
3:45	5	0	0	1	0	0	6	15:45	52	20	0	0	0	7	79
4:00	2	2	0	0	0	0	4	16:00	48	15	0	1	0	4	68
4:15	2	1	0	0	0	0	3	16:15	32	18	0	2	0	1	53
4:30	3	2	0	0	0	0	5	16:30	32	10	0	0	0	1	43
4:45	10	4	0	0	0	0	14	16:45	23	3	0	0	0	1	27
5:00	5	7	0	0	0	1	13	17:00	22	11	0	0	0	0	33
5:15	6	6	0	0	0	0	12	17:15	20	9	0	0	0	1	30
5:30	18	6	0	0	0	4	28	17:30	23	7	0	0	0	1	31
5:45	18	16	0	0	0	5	39	17:45	14	9	0	0	0	1	24
6:00	16	20	0	0	0	5	41	18:00	14	9	0	0	0	1	24
6:15	14	15	0	0	0	13	42	18:15	10	1	0	1	0	0	12
6:30	11	11	0	0	0	13	35	18:30	6	5	0	0	0	0	11
6:45	15	10	1	0	0	3	29	18:45	10	8	0	0	0	0	18
7:00	10	9	0	0	0	0	19	19:00	7	1	0	0	0	0	8
7:15	12	24	0	0	0	4	40	19:15	6	4	0	0	0	0	10
7:30	34	15	0	1	0	0	50	19:30	4	1	0	0	0	2	7
7:45	52	16	1	1	0	3	73	19:45	3	2	0	0	0	1	6
8:00	84	30	0	1	0	0	115	20:00	3	4	0	0	0	0	7
8:15	90	28	0	0	0	7	125	20:15	3	3	0	0	0	0	6
8:30	37	23	1	2	0	16	79	20:30	1	4	0	0	0	0	5
8:45	37	32	0	0	0	1	70	20:45	4	0	0	0	0	0	4
9:00	25	13	0	0	0	10	48	21:00	2	0	0	0	0	0	2
9:15	23	20	0	1	0	8	52	21:15	0	2	0	0	0	0	2
9:30	19	21	0	1	0	10	51	21:30	1	2	0	0	0	0	3
9:45	35	19	1	2	0	0	57	21:45	2	1	0	0	0	0	3
10:00	20	12	0	0	0	4	36	22:00	1	0	0	0	0	0	1
10:15	25	21	0	0	0	4	50	22:15	0	0	0	0	0	0	0
10:30	22	17	0	0	0	1	40	22:30	1	3	0	0	0	0	4
10:45	22	21	1	0	0	0	44	22:45	2	0	0	0	0	0	2
11:00	15	20	0	2	0	1	38	23:00	0	0	0	0	0	0	0
11:15	28	20	0	2	0	1	51	23:15	2	0	0	0	0	0	2
11:30	39	18	0	0	0	1	58	23:30	1	0	0	0	0	0	1
11:45	36	19	0	1	0	5	61	23:45	2	1	0	0	0	0	3
TOTAL	806	505	5	17	0	121	1,454	TOTAL	885	489	3	20	0	114	1,511
AM PEAK HOUR							7:45 AM	AM PEAK HOUR							3:00 PM
AM PEAK VOLUME							392	AM PEAK VOLUME							440

CLASS 1 PASSENGER VEHICLES
CLASS 2 2-AXLE TRUCKS
CLASS 3 3-AXLE TRUCKS
CLASS 4 4 OR MORE AXLE TRUCKS
CLASS 5 RV
CLASS 6 Buses

TOTAL: AM+PM	1,691	994	8	37	0	235	2,965
% OF TOTAL	57.0%	33.5%	0.3%	1.2%	0.0%	7.9%	100.0%

31124

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024

CITY: Hesperia

JOB #: SC4583

LOCATION: CLASS9 Lemon St east of Choiceana Ave

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	0	0	0	0	0	0	0	12:00	0	0	0	0	0	0	0
0:15	0	0	0	0	0	0	0	12:15	1	0	0	0	0	0	1
0:30	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0
0:45	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	13:00	1	0	0	0	0	0	1
1:15	0	0	0	0	0	0	0	13:15	0	1	0	0	0	0	1
1:30	0	0	0	0	0	0	0	13:30	0	0	0	0	0	0	0
1:45	0	0	0	0	0	0	0	13:45	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	14:00	0	0	0	0	0	0	0
2:15	0	0	0	0	0	0	0	14:15	1	0	0	0	0	0	1
2:30	0	0	0	0	0	0	0	14:30	2	0	0	0	0	0	2
2:45	0	0	0	0	0	0	0	14:45	1	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	15:00	0	2	0	0	0	0	2
3:15	0	0	0	0	0	0	0	15:15	2	0	0	0	0	0	2
3:30	0	0	0	0	0	0	0	15:30	1	0	0	0	0	0	1
3:45	0	0	0	0	0	0	0	15:45	1	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	16:00	2	1	0	0	0	0	3
4:15	0	0	0	0	0	0	0	16:15	0	1	0	0	0	0	1
4:30	0	0	0	0	0	0	0	16:30	0	0	0	0	0	0	0
4:45	0	0	0	0	0	0	0	16:45	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	17:00	1	2	0	0	0	0	3
5:15	0	0	0	0	0	0	0	17:15	1	0	0	0	0	0	1
5:30	0	0	0	0	0	0	0	17:30	0	0	0	0	0	0	0
5:45	0	0	0	0	0	0	0	17:45	2	1	0	0	0	0	3
6:00	0	0	0	0	0	0	0	18:00	1	0	0	0	0	0	1
6:15	0	0	0	0	0	0	0	18:15	1	1	0	0	0	0	2
6:30	0	0	0	0	0	0	0	18:30	0	0	0	0	0	0	0
6:45	3	0	0	0	0	0	3	18:45	1	0	0	0	0	0	1
7:00	0	1	0	0	0	0	1	19:00	0	1	0	0	0	0	1
7:15	1	2	0	0	0	0	3	19:15	0	1	0	0	0	0	1
7:30	2	2	0	0	0	0	4	19:30	1	0	0	0	0	0	1
7:45	4	0	0	0	0	0	4	19:45	1	1	0	0	0	0	2
8:00	0	0	0	0	0	0	0	20:00	1	0	0	0	0	0	1
8:15	2	0	0	0	0	0	2	20:15	0	0	0	0	0	0	0
8:30	0	1	0	0	0	1	2	20:30	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	20:45	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	21:00	0	0	0	0	0	0	0
9:15	0	1	0	0	0	0	1	21:15	0	0	0	0	0	0	0
9:30	0	1	0	0	0	0	1	21:30	0	0	0	0	0	0	0
9:45	1	0	0	0	0	0	1	21:45	0	0	0	0	0	0	0
10:00	1	0	0	0	0	0	1	22:00	0	0	0	0	0	0	0
10:15	0	1	0	0	0	0	1	22:15	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	22:45	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	23:00	0	0	0	0	0	0	0
11:15	1	0	0	0	0	0	1	23:15	0	0	0	0	0	0	0
11:30	3	0	0	1	0	0	4	23:30	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	23:45	0	0	0	0	0	0	0
TOTAL	18	9	0	1	0	1	29	TOTAL	22	12	0	0	0	0	34
AM PEAK HOUR							7:00 AM	AM PEAK HOUR							5:00 PM
AM PEAK VOLUME							12	AM PEAK VOLUME							7

CLASS 1 PASSENGER VEHICLES
CLASS 2 2-AXLE TRUCKS
CLASS 3 3-AXLE TRUCKS
CLASS 4 4 OR MORE AXLE TRUCKS
CLASS 5 RV
CLASS 6 Buses

TOTAL: AM+PM	40	21	0	1	0	1	63
% OF TOTAL	63.5%	33.3%	0.0%	1.6%	0.0%	1.6%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024**CITY:** Hesperia**JOB #:** SC4583**LOCATION:** CLASS10 Cottonwood Ave between Sequoia St and Bear Valley Rd.

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	9	2	0	0	0	0	11	12:00	102	29	1	0	0	1	133
0:15	12	1	0	0	0	0	13	12:15	103	20	1	0	0	0	124
0:30	8	4	1	0	0	0	13	12:30	122	30	1	1	0	0	154
0:45	8	0	0	0	0	0	8	12:45	96	30	0	1	0	1	128
1:00	4	0	0	0	0	0	4	13:00	115	31	1	1	1	0	149
1:15	5	1	0	0	0	0	6	13:15	142	34	2	2	0	1	181
1:30	8	1	0	0	0	0	9	13:30	121	27	1	0	0	0	149
1:45	1	1	0	0	0	0	2	13:45	122	21	3	2	0	1	149
2:00	5	3	0	0	0	0	8	14:00	142	22	4	0	0	1	169
2:15	8	1	0	0	0	0	9	14:15	134	27	0	1	1	0	163
2:30	8	2	0	0	0	0	10	14:30	146	32	2	1	0	0	181
2:45	6	2	0	0	0	0	8	14:45	142	29	3	0	0	2	176
3:00	5	1	0	0	0	0	6	15:00	132	25	0	0	0	2	159
3:15	10	1	0	0	0	0	11	15:15	136	28	1	0	0	2	167
3:30	11	2	0	0	0	0	13	15:30	135	26	4	0	0	0	165
3:45	10	5	0	1	0	0	16	15:45	130	28	2	1	0	0	161
4:00	13	3	0	0	0	0	16	16:00	122	28	1	1	0	2	154
4:15	14	2	0	0	0	0	16	16:15	139	26	2	0	0	0	167
4:30	14	6	0	0	0	0	20	16:30	138	28	1	0	0	0	167
4:45	20	5	0	0	0	0	25	16:45	124	29	4	0	0	1	158
5:00	18	3	0	1	0	0	22	17:00	163	29	3	1	0	1	197
5:15	21	6	0	0	0	0	27	17:15	150	25	2	2	0	0	179
5:30	33	7	0	0	0	0	40	17:30	126	26	0	0	0	0	152
5:45	33	13	0	1	0	0	47	17:45	107	35	0	1	0	0	143
6:00	32	13	0	0	0	0	45	18:00	118	24	1	0	0	2	145
6:15	40	12	0	0	0	2	54	18:15	124	25	3	1	0	0	153
6:30	54	23	0	0	0	1	78	18:30	107	23	0	0	0	1	131
6:45	78	22	0	1	0	3	104	18:45	114	20	0	0	0	0	134
7:00	70	20	0	1	0	2	93	19:00	115	20	0	0	0	1	136
7:15	86	23	0	0	0	0	109	19:15	84	16	0	0	0	0	100
7:30	88	28	0	0	0	3	119	19:30	83	15	1	0	0	0	99
7:45	122	26	1	0	0	2	151	19:45	84	15	1	0	0	1	101
8:00	112	20	1	0	0	2	135	20:00	74	14	0	0	0	1	89
8:15	97	30	0	0	0	0	127	20:15	91	10	1	0	0	0	102
8:30	111	21	0	2	0	1	135	20:30	61	15	0	1	0	0	77
8:45	101	19	0	1	0	2	123	20:45	73	9	0	0	0	0	82
9:00	91	13	0	1	0	2	107	21:00	52	9	2	0	0	1	64
9:15	89	27	0	3	0	0	119	21:15	65	9	1	0	0	1	76
9:30	107	27	2	0	0	1	137	21:30	52	6	0	0	0	0	58
9:45	93	27	1	0	0	1	122	21:45	43	5	0	0	0	0	48
10:00	82	15	0	1	0	0	98	22:00	43	6	0	0	0	0	49
10:15	85	16	3	1	0	0	105	22:15	26	2	0	1	0	0	29
10:30	114	20	1	2	0	0	137	22:30	36	3	0	0	0	0	39
10:45	105	16	0	0	0	0	121	22:45	28	3	0	0	0	0	31
11:00	106	18	3	1	0	1	129	23:00	21	7	0	0	0	0	28
11:15	106	17	1	0	0	1	125	23:15	16	2	0	0	0	0	18
11:30	106	25	1	0	0	1	133	23:30	10	4	0	0	0	0	14
11:45	132	27	2	0	0	0	161	23:45	17	2	0	0	0	0	19
TOTAL	2,491	577	17	17	0	25	3,127	TOTAL	4,626	929	49	18	0	25	5,647
AM PEAK HOUR							11:00 AM	AM PEAK HOUR							4:30 PM
AM PEAK VOLUME							548	AM PEAK VOLUME							701

CLASS 1 PASSENGER VEHICLES
CLASS 2 2-AXLE TRUCKS
CLASS 3 3-AXLE TRUCKS
CLASS 4 4 OR MORE AXLE TRUCKS
CLASS 5 RV
CLASS 6 Buses

TOTAL: AM+PM	7,117	1,506	66	35	0	50	8,774
% OF TOTAL	81.1%	17.2%	0.8%	0.4%	0.0%	0.6%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024

CITY: Hesperia

JOB #: SC4583

LOCATION: CLASS11 Cottonwood Ave between Willow St and Main St.

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	6	1	0	0	0	0	7	12:00	83	19	0	0	0	1	103
0:15	8	3	0	0	0	0	11	12:15	91	18	0	0	0	0	109
0:30	7	0	0	0	0	0	7	12:30	110	19	0	0	0	1	130
0:45	12	0	0	0	0	0	12	12:45	88	19	1	4	0	1	113
1:00	4	0	0	0	0	0	4	13:00	99	18	0	0	0	0	117
1:15	6	1	0	0	0	0	7	13:15	113	20	0	0	0	0	133
1:30	6	1	0	0	0	0	7	13:30	115	16	0	1	0	3	135
1:45	5	0	0	0	0	0	5	13:45	146	19	0	0	0	0	165
2:00	4	1	0	0	0	0	5	14:00	149	17	0	1	0	2	169
2:15	7	2	0	0	0	0	9	14:15	115	14	0	1	0	1	131
2:30	6	1	0	0	0	0	7	14:30	131	19	0	0	0	3	153
2:45	11	2	0	0	0	0	13	14:45	100	15	0	0	0	0	115
3:00	10	1	0	0	0	0	11	15:00	115	18	0	0	0	2	135
3:15	9	2	0	0	0	0	11	15:15	121	15	0	0	0	2	138
3:30	20	3	0	0	0	0	23	15:30	111	17	0	2	0	0	130
3:45	16	5	0	0	0	0	21	15:45	107	15	0	0	0	0	122
4:00	16	3	0	0	0	0	19	16:00	114	14	0	0	0	1	129
4:15	21	2	0	0	0	0	23	16:15	123	19	0	0	0	0	142
4:30	17	3	1	0	0	0	21	16:30	112	23	0	1	0	0	136
4:45	27	2	0	0	0	0	29	16:45	100	14	0	0	0	0	114
5:00	24	5	1	1	0	0	31	17:00	119	17	0	1	0	1	138
5:15	21	5	0	0	0	0	26	17:15	114	19	1	2	0	0	136
5:30	32	5	0	0	0	0	37	17:30	91	18	0	0	0	1	110
5:45	39	9	0	1	0	0	49	17:45	110	22	0	0	0	0	132
6:00	37	7	0	0	0	0	44	18:00	100	16	1	0	0	1	118
6:15	42	9	0	0	0	0	51	18:15	116	19	0	0	0	0	135
6:30	60	11	1	0	0	2	74	18:30	96	17	0	0	0	1	114
6:45	94	14	1	0	0	3	112	18:45	102	14	0	0	0	0	116
7:00	85	17	0	0	0	5	107	19:00	97	16	1	0	0	1	115
7:15	149	17	1	0	0	2	169	19:15	76	17	0	0	0	0	93
7:30	111	14	0	0	0	2	127	19:30	73	12	0	0	0	2	87
7:45	123	19	0	1	0	0	143	19:45	83	10	0	0	0	0	93
8:00	109	18	0	0	0	1	128	20:00	67	7	0	0	0	1	75
8:15	125	11	0	0	0	3	139	20:15	64	8	0	0	0	0	72
8:30	96	12	0	1	0	1	110	20:30	72	11	0	2	0	0	85
8:45	91	11	0	0	0	0	102	20:45	57	9	0	0	0	1	67
9:00	79	11	0	2	0	1	93	21:00	57	8	0	0	0	0	65
9:15	95	18	0	1	0	0	114	21:15	54	8	0	0	0	1	63
9:30	76	14	0	0	0	0	90	21:30	33	7	0	0	0	0	40
9:45	80	13	0	2	0	1	96	21:45	44	6	0	0	0	0	50
10:00	84	12	0	1	0	3	100	22:00	37	4	0	0	0	0	41
10:15	63	11	1	0	0	2	77	22:15	22	2	0	1	0	0	25
10:30	86	17	1	0	0	0	104	22:30	34	4	0	0	0	0	38
10:45	87	10	0	0	0	0	97	22:45	25	2	0	0	0	0	27
11:00	90	13	0	0	0	1	104	23:00	23	2	0	1	0	0	26
11:15	100	12	1	1	0	2	116	23:15	12	1	0	0	0	0	13
11:30	101	15	0	0	0	0	116	23:30	11	5	0	1	0	0	17
11:45	101	17	0	0	0	0	118	23:45	14	3	0	0	0	0	17
TOTAL	2,498	380	8	11	0	29	2,926	TOTAL	4,046	632	4	18	0	27	4,727
AM PEAK HOUR							7:15 AM	AM PEAK HOUR							1:45 PM
AM PEAK VOLUME							567	AM PEAK VOLUME							618

CLASS 1 PASSENGER VEHICLES
CLASS 2 2-AXLE TRUCKS
CLASS 3 3-AXLE TRUCKS
CLASS 4 4 OR MORE AXLE TRUCKS
CLASS 5 RV
CLASS 6 Buses

TOTAL: AM+PM	6,544	1,012	12	29	0	56	7,653
% OF TOTAL	85.5%	13.2%	0.2%	0.4%	0.0%	0.7%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, April 24, 2024

CITY: Hesperia

JOB #: SC4583

LOCATION: CLASS12 Muscatel St between Malibu Ave and Escondido Ave.

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	5	4	0	0	0	0	9	12:00	54	7	0	0	0	0	61
0:15	10	0	0	0	0	0	10	12:15	67	18	2	0	0	0	87
0:30	9	1	0	0	0	0	10	12:30	82	15	1	0	0	0	104
0:45	6	0	0	0	0	0	6	12:45	156	19	1	0	0	0	178
1:00	1	0	0	0	0	0	1	13:00	134	18	1	0	0	0	157
1:15	2	0	0	0	0	0	2	13:15	102	24	0	0	0	0	128
1:30	3	1	0	0	0	0	4	13:30	67	17	1	0	0	0	86
1:45	4	0	0	0	0	0	4	13:45	89	11	1	0	0	0	103
2:00	1	0	0	0	0	0	1	14:00	71	18	0	1	0	0	91
2:15	4	0	0	0	0	0	4	14:15	67	22	1	1	0	0	92
2:30	6	0	0	0	0	0	6	14:30	64	21	1	0	0	0	86
2:45	4	0	0	0	0	0	4	14:45	89	16	1	1	0	0	107
3:00	5	1	0	0	0	0	6	15:00	112	31	1	0	0	0	150
3:15	6	0	0	0	0	0	6	15:15	101	21	0	0	0	0	122
3:30	5	1	0	0	0	0	7	15:30	66	12	1	1	0	0	81
3:45	7	4	0	0	0	0	11	15:45	54	16	0	0	0	0	70
4:00	10	3	0	0	0	0	13	16:00	55	15	0	0	0	0	70
4:15	8	6	0	0	0	0	14	16:15	60	12	2	0	0	0	74
4:30	6	2	0	0	0	0	8	16:30	57	17	1	0	0	0	75
4:45	18	1	0	0	0	0	19	16:45	71	12	0	0	0	0	83
5:00	14	0	0	0	0	0	14	17:00	57	8	1	0	0	0	66
5:15	13	3	0	0	0	0	16	17:15	56	11	1	1	0	0	69
5:30	15	5	0	0	0	0	20	17:30	60	20	1	0	0	0	81
5:45	18	3	0	0	0	0	21	17:45	53	21	0	1	0	0	75
6:00	27	2	0	0	0	0	29	18:00	45	14	0	1	0	0	60
6:15	20	7	0	0	0	0	28	18:15	47	15	0	0	0	0	63
6:30	36	8	0	0	0	0	44	18:30	62	22	0	0	0	0	84
6:45	73	18	0	0	0	0	91	18:45	52	8	0	1	0	0	61
7:00	106	29	1	1	0	0	141	19:00	40	7	0	1	0	0	48
7:15	219	35	3	4	0	0	264	19:15	45	18	0	0	0	0	63
7:30	176	24	1	1	0	0	204	19:30	48	11	0	0	0	0	59
7:45	105	20	1	0	0	0	126	19:45	45	10	0	0	0	0	55
8:00	67	14	1	1	0	0	84	20:00	34	10	1	0	0	0	45
8:15	69	12	0	0	0	0	83	20:15	31	10	2	0	0	0	43
8:30	56	5	0	0	0	0	64	20:30	25	7	0	0	0	0	32
8:45	47	15	0	0	0	0	63	20:45	26	4	0	0	0	0	30
9:00	32	8	0	0	0	0	40	21:00	26	8	0	0	0	0	34
9:15	44	12	0	0	0	0	57	21:15	31	7	0	0	0	0	38
9:30	43	12	0	0	0	0	55	21:30	24	7	0	0	0	0	31
9:45	46	14	0	0	0	0	60	21:45	16	6	0	0	0	0	22
10:00	33	11	0	0	0	0	44	22:00	7	3	0	0	0	0	10
10:15	33	11	0	0	0	0	44	22:15	14	3	0	0	0	0	17
10:30	55	9	0	1	0	0	66	22:30	10	2	0	0	0	0	12
10:45	52	10	0	0	0	0	63	22:45	8	2	0	0	0	0	10
11:00	56	26	0	1	0	0	83	23:00	16	1	2	0	0	0	19
11:15	67	18	0	0	0	0	85	23:15	9	2	0	0	0	0	11
11:30	51	7	1	0	0	0	60	23:30	9	2	0	0	0	0	11
11:45	48	9	1	0	0	0	59	23:45	8	0	0	1	0	0	9
TOTAL	1,741	371	9	9	0	23	2,153	TOTAL	2,522	581	23	10	0	27	3,163
AM PEAK HOUR							7:00 AM	AM PEAK HOUR							12:30 PM
AM PEAK VOLUME							735	AM PEAK VOLUME							567

CLASS 1 PASSENGER VEHICLES
CLASS 2 2-AXLE TRUCKS
CLASS 3 3-AXLE TRUCKS
CLASS 4 4 OR MORE AXLE TRUCKS
CLASS 5 RV
CLASS 6 Buses

TOTAL: AM+PM	4,263	952	32	19	0	50	5,316
% OF TOTAL	80.2%	17.9%	0.6%	0.4%	0.0%	0.9%	100.0%

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

Hesperia
Cataba Rd
Main St

PROJECT #: SC4583
LOCATION #: 1
CONTROL: SIGNAL

DATE:
d, Apr 24, 24

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Hesperia
Cataba Rd
Main St

PROJECT #:
LOCATION #:
CONTROL:

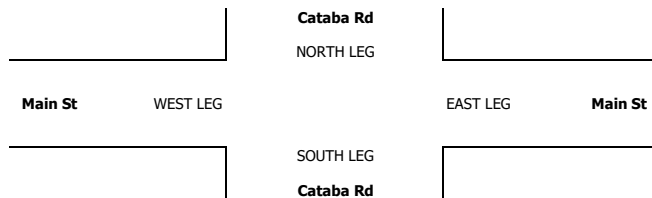
SC4583
1
SIGNAL

AM		▲	
PM		N	
MD	◀ W		E ▶
OTHER		S	
OTHER		▼	

U-TURNS				
NB 0	SB 0	EB 0	WB 0	TTL

0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	1	1
0	0	0	4	4

0	0	0	2	2
0	0	0	1	1
0	0	0	0	0
0	0	0	2	2
0	0	0	1	1
0	0	0	2	2
0	0	0	3	3
0	0	0	2	2
0	0	0	13	13



ALL PED + BIKE & SCOOTER				
N LEG	S LEG	E LEG	W LEG	TOTAL
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
1	0	0	0	1
2	2	0	0	4
0	0	1	1	2
0	1	6	0	7
0	1	0	0	1
0	0	2	0	2
0	1	1	0	2
0	0	0	0	0
0	0	2	0	2
0	0	0	0	0
0	3	12	1	16

PEDESTRIAN CROSSINGS				
N LEG	S LEG	E LEG	W LEG	TOTAL
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
1	2	0	0	3
0	0	1	1	2
0	1	6	0	7
0	1	0	0	1
0	0	2	0	2
0	1	1	0	2
0	0	0	0	0
0	0	2	0	2
0	0	0	0	0
0	3	12	1	16

[illegible]

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

Hesperia
Key Pointe Ave
Main St

PROJECT #: SC4583
LOCATION #: 2
CONTROL: SIGNAL

DATE:
d, Apr 24, 24

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Hesperia
Key Pointe Ave
Main St

PROJECT #:
LOCATION #:
CONTROL:

SC4583
2
SIGNAL

AM		▲	
PM		N	
MD	◀ W		E ▶
OTHER		S	
OTHER		▼	

U-TURNS				
NB 0	SB 0	EB 0	WB 0	TTL

0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	0	0	1	1
0	0	0	1	1
0	0	1	2	3
0	0	0	0	0
0	0	0	0	0
0	0	2	5	7

0	0	4	3	7
0	0	3	4	7
0	0	0	0	0
0	0	1	1	2
0	0	0	1	1
0	0	1	1	2
0	0	0	0	0
0	0	2	1	3
0	0	11	11	22

The diagram illustrates a four-legged roundabout. The central island is labeled "Key Pointe Ave". The four legs are labeled "NORTH LEG", "SOUTH LEG", "EAST LEG", and "WEST LEG". The main street, "Main St", is shown at the top and bottom of the roundabout, with the roundabout itself being a section of Main St. The roundabout is a square shape with rounded corners, and the legs are the four sides of the square. The central island is a small square in the middle of the roundabout.

ALL PED + BIKE & SCOOTER				
N LEG	S LEG	E LEG	W LEG	TOTAL
1	0	0	1	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
1	0	0	4	5
0	0	0	0	0
2	0	0	2	4
0	0	2	0	2
0	1	1	0	2
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	1	0	0	1
3	2	3	2	10

PEDESTRIAN CROSSINGS				
N LEG	S LEG	E LEG	W LEG	TOTAL
1	0	0	1	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
1	0	0	4	5
0	0	0	0	0
2	0	0	2	4
0	0	2	0	2
0	1	1	0	2
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	1	0	0	1
3	2	3	2	10

[illegible]

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

Hesperia

SC4583
3
SIGNAL

Hesperia
I-15 SB Ramps
Main St

AM		▲	
PM		N	
MD	◀ W		E ▶
OTHER		S	
OTHER		▼	

0	0	0	0
---	---	---	---



NORTH LEG

Main St

WEST LEG

EAST LEG

Main St

SOUTH LEG

I-15 SB Ramps

[illegible]

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

Hesperia

SC4583
4
SIGNAL

Hesperia
I-15 NB Ramps
Main St

AM
PM
MD
OTHER
OTHER

▲
N
S
▼

E ▶

[illegible][illegible]

N LEG	S LEG	E LEG	W LEG	TOTAL
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	4	0	0	4
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	0	0	0
0	1	0	0	1
1	0	0	0	1
0	0	0	0	0
0	1	0	0	1
3	2	0	0	5

N LEG	S LEG	E LEG	W LEG	TOTAL
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	3	0	0	3
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	0	0	0
0	1	0	0	1
1	0	0	0	1
0	0	0	0	0
0	1	0	0	1
3	2	0	0	5

[illegible]

	AM	7:00 AM
		7:15 AM
		7:30 AM
		7:45 AM
		8:00 AM
		8:15 AM
		8:30 AM
		8:45 AM
		TOTAL
	PM	4:00 PM
		4:15 PM
		4:30 PM
		4:45 PM
		5:00 PM
		5:15 PM
		5:30 PM
		5:45 PM
		TOTAL

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 24, 24	LOCATION: NORTH & SOUTH: EAST & WEST:	Hesperia Mariposa St Main St	PROJECT #: LOCATION #: CONTROL:	SC4583 5 SIGNAL
NOTES:			PM	▲ N ◀ W S ▼ E ▶
			PM	
			MD	
			OTHER	
			OTHER	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Mariposa St			Mariposa St			Main St			Main St			
LANES:	NL 1	NT 0.5	NR 0.5	SL 1	ST 1	SR 0	EL 1	ET 4	ER 0	WL 1	WT 4	WR 0	TOTAL

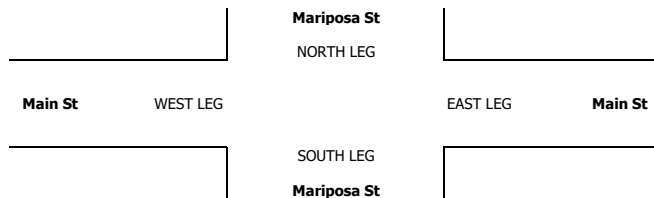
U-TURNS				
NB 0	SB 0	EB 0	WB 0	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	2	0	2

AM	7:00 AM	12	8	9	13	9	28	27	308	15	12	283	8	732
	7:15 AM	15	10	11	14	13	38	18	296	6	26	368	11	826
	7:30 AM	18	7	10	12	15	33	25	263	8	22	415	13	841
	7:45 AM	11	9	14	15	11	33	39	309	10	17	336	8	812
	8:00 AM	19	11	18	20	12	29	33	238	7	16	321	6	730
	8:15 AM	13	16	11	16	18	25	31	243	11	20	361	10	775
	8:30 AM	16	12	9	17	15	22	29	251	9	15	337	7	739
	8:45 AM	17	15	6	21	19	20	25	235	13	19	297	5	692
	VOLUMES	121	88	88	128	112	228	227	2,143	79	147	2,718	68	6,149
	APPROACH %	41%	30%	30%	27%	24%	49%	9%	87%	3%	5%	93%	2%	
APP/DEPART	297	/	383	468	/	338	2,451	/	2,359	2,933	/	3,069	0	
BEGIN PEAK HR														
VOLUMES	56	34	44	54	48	132	109	1,176	39	77	1,402	40	3,212	
APPROACH %	42%	25%	33%	23%	21%	56%	8%	89%	3%	5%	92%	39%		
PEAK HR FACTOR	0.931													0.955
APP/DEPART	134	/	183	234	/	164	1,325	/	1,274	1,519	/	1,591	0	
P.M	4:00 PM	17	13	18	35	22	45	66	438	17	18	368	19	1,076
	4:15 PM	20	18	16	29	17	38	71	459	22	14	374	20	1,098
	4:30 PM	23	27	18	33	20	43	78	426	28	16	314	26	1,052
	4:45 PM	19	22	23	25	22	40	68	409	30	22	336	23	1,039
	5:00 PM	22	19	17	32	18	47	72	427	33	17	353	21	1,078
	5:15 PM	18	21	20	28	23	42	76	441	39	15	363	25	1,111
	5:30 PM	25	23	21	26	17	41	69	422	34	19	361	19	1,077
	5:45 PM	28	26	19	31	15	46	71	355	28	23	345	14	1,001
	VOLUMES	172	169	152	239	154	342	571	3,377	231	144	2,814	167	8,564
	APPROACH %	35%	34%	31%	33%	21%	47%	14%	80%	5%	5%	90%	5%	
APP/DEPART	493	/	907	735	/	529	4,207	/	3,772	3,129	/	3,356	0	
BEGIN PEAK HR														
VOLUMES	84	85	81	111	80	170	285	1,699	136	73	1,413	88	4,320	
APPROACH %	34%	34%	32%	31%	22%	47%	13%	80%	6%	5%	90%	6%		
PEAK HR FACTOR	0.906													0.968
APP/DEPART	250	/	458	361	/	289	2,134	/	1,892	1,575	/	1,681	0	

0 0 1 0

0	0	4	1	5
0	0	3	0	3
0	0	4	2	6
0	0	3	1	4
0	0	2	0	2
0	0	5	0	5
0	0	4	0	4
0	0	3	0	3
0	0	28	4	32

0	0	14	1
---	---	----	---



AM	7:00 AM
	7:15 AM
	7:30 AM
	7:45 AM
	8:00 AM
	8:15 AM
	8:30 AM
	8:45 AM
PM	TOTAL
	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
	5:00 PM
	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL

ALL PED + BIKE & SCOOTER				
N LEG	S LEG	E LEG	W LEG	TOTAL
0	1	0	0	1
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	1	0	0	1
0	2	0	2	4
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	1	0	1
1	0	0	0	1
1	0	2	0	3
0	0	0	0	0
1	0	0	1	2
5	0	3	1	9

PEDESTRIAN CROSSINGS				
N LEG	S LEG	E LEG	W LEG	TOTAL
0	1	0	0	1
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	1	0	2	3
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	1	0	1
1	0	0	0	1
1	0	2	0	3
0	0	0	0	0
1	0	0	1	2
5	0	3	1	9

[illegible]

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

Hesperia

SC4583
6
SIGNAL

Hesperia
US-395
Joshua St

AM
PM
MD
OTHER
OTHER

◀ W

U-TURNS				
NB 0	SB 0	EB 0	WB 0	TTL

[illegible][illegible]

The diagram illustrates the intersection of Joshua St and US-395. It is a four-way intersection with the following layout:

- North Leg:** Labeled "NORTH LEG" and "US-395". It features a left-turn lane, a through lane, and a right-turn lane.
- South Leg:** Labeled "SOUTH LEG" and "US-395". It features a left-turn lane, a through lane, and a right-turn lane.
- West Leg:** Labeled "WEST LEG" and "Joshua St". It features a left-turn lane, a through lane, and a right-turn lane.
- East Leg:** Labeled "EAST LEG" and "Joshua St". It features a left-turn lane, a through lane, and a right-turn lane.

The intersection is marked with a central cross and four T-junctions. The approach to the intersection from the north is labeled "US-395" and the approach from the south is labeled "US-395". The approach from the west is labeled "Joshua St" and the approach from the east is labeled "Joshua St".

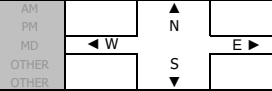
[illegible][illegible][illegible]

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Apr 24, 24LOCATION:
NORTH & SOUTH:
EAST & WEST:Hesperia
I-15 NB Ramps
Bear Valley RdPROJECT #:
LOCATION #:
CONTROL:SC4583
7
SIGNAL

NOTES:



LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0.5	0.5	1	X	X	X	1	3	X	X	3	0	
7:00 AM	24	0	86	0	0	0	38	222	0	0	226	50	646
7:15 AM	23	0	107	0	0	0	44	257	0	0	243	69	743
7:30 AM	43	1	142	0	0	0	53	238	0	0	254	70	801
7:45 AM	25	0	145	0	0	0	58	278	0	0	278	61	845
8:00 AM	35	0	112	0	0	0	46	245	0	0	284	61	783
8:15 AM	25	2	110	0	0	0	57	232	0	0	279	66	771
8:30 AM	31	0	100	0	0	0	37	237	0	0	273	63	741
8:45 AM	35	0	120	0	0	0	33	256	0	0	291	52	787
VOLUMES	241	3	922	0	0	0	366	1,965	0	0	2,128	492	6,117
APPROACH %	21%	0%	79%	0%	0%	0%	16%	84%	0%	0%	81%	19%	
APP/DEPART	1,166	/	861	0	/	0	2,331	/	2,887	2,620	/	2,369	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	128	3	509	0	0	0	214	993	0	0	1,095	258	3,200
APPROACH %	20%	0%	80%	0%	0%	0%	18%	82%	0%	0%	81%	19%	
PEAK HR FACTOR	0.860			0.000			0.898			0.980			0.947
APP/DEPART	640	/	475	0	/	0	1,207	/	1,502	1,353	/	1,223	0
4:00 PM	58	2	154	0	0	0	54	312	0	0	339	40	959
4:15 PM	64	1	139	0	0	0	69	329	0	0	343	57	1,002
4:30 PM	67	1	153	0	0	0	57	321	0	0	337	45	981
4:45 PM	63	0	153	0	0	0	60	381	0	0	298	46	1,001
5:00 PM	68	2	163	0	0	0	60	346	0	0	350	44	1,033
5:15 PM	71	0	157	0	0	0	45	353	0	0	343	41	1,010
5:30 PM	65	0	146	0	0	0	49	286	0	0	364	37	947
5:45 PM	70	0	151	0	0	0	50	293	0	0	291	45	900
VOLUMES	526	6	1,216	0	0	0	444	2,621	0	0	2,665	355	7,833
APPROACH %	30%	0%	70%	0%	0%	0%	14%	86%	0%	0%	88%	12%	
APP/DEPART	1,748	/	805	0	/	0	3,065	/	3,837	3,020	/	3,191	0
BEGIN PEAK HR	4:30 PM												
VOLUMES	269	3	626	0	0	0	222	1,401	0	0	1,328	176	4,025
APPROACH %	30%	0%	70%	0%	0%	0%	14%	86%	0%	0%	88%	12%	
PEAK HR FACTOR	0.964			0.000			0.920			0.954			0.974
APP/DEPART	898	/	401	0	/	0	1,623	/	2,027	1,504	/	1,597	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0 0 0 0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0 0 0 0

I-15 NB Ramps

NORTH LEG

Bear Valley Rd

WEST LEG

EAST LEG

Bear Valley Rd

SOUTH LEG

I-15 NB Ramps

AM	PM
7:00 AM	4:00 PM
7:15 AM	4:15 PM
7:30 AM	4:30 PM
7:45 AM	4:45 PM
8:00 AM	5:00 PM
8:15 AM	5:15 PM
8:30 AM	5:30 PM
8:45 AM	5:45 PM
TOTAL	TOTAL

ALL PED + BIKE & SCOOTER				
N LEG	S LEG	E LEG	W LEG	TOTAL
1	1	0	0	2
0	1	0	0	1
1	1	0	0	2
1	0	0	0	1
2	0	0	0	2
0	0	0	0	0
2	1	0	0	3
1	2	0	0	3
8	6	0	0	14
1	0	0	0	1
0	1	0	0	1
1	4	0	0	5
1	3	0	0	4
3	2	0	0	5
2	0	0	0	2
4	2	0	0	6
0	2	0	0	2
12	14	0	0	26

PEDESTRIAN CROSSINGS				
N LEG	S LEG	E LEG	W LEG	TOTAL
1	1	0	0	2
0	1	0	0	1
1	0	0	0	1
1	0	0	0	1
2	0	0	0	2
0	0	0	0	0
1	1	0	0	2
1	2	0	0	3
7	5	0	0	12
1	0	0	0	1
0	1	0	0	1
0	3	0	0	3
0	3	0	0	3
3	2	0	0	5
2	0	0	0	2
1	1	0	0	2
0	1	0	0	1
7	11	0	0	18

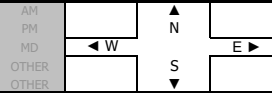
BICYCLE & SCOOTER CROSSINGS				
NL	SL	EL	WL	TOTAL
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
1	1	0	0	2
1	0	0	0	1
0	0	0	0	0
3	1	0	0	4
0	1	0	0	1
5	3	0	0	8

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, Apr 24, 24LOCATION:
NORTH & SOUTH:
EAST & WEST:Hesperia
Mariposa Rd
Bear Valley RdPROJECT #:
LOCATION #:
CONTROL:SC4583
8
SIGNAL

NOTES:



LANES:	NORTHBOUND Mariposa Rd			SOUTHBOUND Mariposa Rd			EASTBOUND Bear Valley Rd			WESTBOUND Bear Valley Rd			TOTAL
	NL 1.5	NT 1.5	NR 1	SL 1	ST 1	SR 1	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	
7:00 AM	45	27	28	1	35	10	10	189	104	35	207	5	696
7:15 AM	74	35	29	11	25	16	17	262	90	40	233	10	842
7:30 AM	63	64	35	9	25	17	18	318	43	27	238	6	863
7:45 AM	57	36	43	12	27	16	28	320	75	23	269	11	917
8:00 AM	48	45	30	10	30	24	24	270	63	22	274	15	855
8:15 AM	71	50	43	13	26	24	31	274	37	33	251	20	873
8:30 AM	41	33	36	12	26	21	23	258	42	33	270	14	809
8:45 AM	59	34	23	12	31	20	37	296	55	19	262	22	870
VOLUMES	458	324	267	80	225	148	188	2,187	509	232	2,004	103	6,725
APPROACH %	44%	31%	25%	18%	50%	33%	7%	76%	18%	10%	86%	4%	
APP/DEPART	1,049	/	615	453	/	966	2,884	/	2,534	2,339	/	2,610	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	239	195	151	44	108	81	101	1,182	218	105	1,032	52	3,508
APPROACH %	41%	33%	26%	19%	46%	35%	7%	79%	15%	9%	87%	4%	
PEAK HR FACTOR	0.892			0.910			0.887			0.956			0.956
APP/DEPART	585	/	348	233	/	431	1,501	/	1,377	1,189	/	1,352	0
4:00 PM	59	52	35	24	41	39	46	361	56	30	285	17	1,045
4:15 PM	70	34	29	22	38	31	41	337	94	31	292	17	1,036
4:30 PM	48	42	32	15	48	34	35	342	96	24	300	9	1,025
4:45 PM	44	42	33	14	40	33	33	404	97	25	262	11	1,038
5:00 PM	62	52	31	27	46	35	55	360	94	29	295	16	1,102
5:15 PM	58	51	26	26	51	37	53	366	89	25	285	14	1,081
5:30 PM	62	57	24	15	56	44	36	307	82	30	303	17	1,033
5:45 PM	51	45	19	16	42	38	44	323	82	36	246	10	952
VOLUMES	454	375	229	159	362	291	343	2,800	690	230	2,268	111	8,314
APPROACH %	43%	35%	22%	20%	45%	36%	9%	73%	18%	9%	87%	4%	
APP/DEPART	1,058	/	829	812	/	1,282	3,834	/	3,189	2,610	/	3,014	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	226	202	114	82	193	149	177	1,437	362	109	1,145	58	4,256
APPROACH %	42%	37%	21%	19%	46%	35%	9%	73%	18%	8%	87%	4%	
PEAK HR FACTOR	0.934			0.922			0.926			0.938			0.966
APP/DEPART	542	/	437	424	/	664	1,977	/	1,634	1,313	/	1,521	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0 0 0 0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2

0 0 1 1



	AM	PM
7:00 AM		
7:15 AM		
7:30 AM		
7:45 AM		
8:00 AM		
8:15 AM		
8:30 AM		
8:45 AM		
TOTAL		
4:00 PM		
4:15 PM		
4:30 PM		
4:45 PM		
5:00 PM		
5:15 PM		
5:30 PM		
5:45 PM		
TOTAL		

ALL PED + BIKE & SCOOTER				
N LEG	S LEG	E LEG	W LEG	TOTAL
0	0	0	0	0
0	0	0	0	0
2	2	1	0	5
0	0	0	0	0
1	0	0	0	1
0	0	1	0	1
0	1	1	0	2
0	4	4	0	8
3	7	7	0	17
1	0	1	0	2
0	0	0	0	0
2	3	4	0	9
2	2	1	0	5
2	1	3	0	6
0	0	0	0	0
3	1	0	0	4
0	2	1	0	3
10	9	10	0	29

PEDESTRIAN CROSSINGS				
N LEG	S LEG	E LEG	W LEG	TOTAL
0	0	0	0	0
0	0	0	0	0
2	1	1	0	4
0	0	0	0	0
1	0	0	0	1
0	0	1	0	1
0	1	1	0	2
0	3	3	0	6
3	5	6	0	14
1	0	1	0	2
0	0	0	0	0
1	3	4	0	8
1	1	1	0	3
2	1	3	0	6
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
5	6	9	0	20

BICYCLE & SCOOTER CROSSINGS				
NL	SL	EL	WL	TOTAL
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	1	0	2
0	2	1	0	3
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
1	1	0	0	2
0	0	0	0	0
3	1	0	0	4
0	1	1	0	2
5	3	1	0	9

Appendix B – LOS Report

HCM 7th Signalized Intersection Summary

1: Cataba Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  			 		 		
Traffic Volume (veh/h)	69	791	69	88	556	23	44	11	70	40	9	60
Future Volume (veh/h)	69	791	69	88	556	23	44	11	70	40	9	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	71	815	71	91	573	24	28	35	72	41	9	62
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	113	1457	452	251	1482	62	154	162	137	120	126	107
Arrive On Green	0.06	0.29	0.29	0.07	0.30	0.30	0.09	0.09	0.09	0.07	0.07	0.07
Sat Flow, veh/h	1767	5066	1571	3428	4987	208	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	71	815	71	91	387	210	28	35	72	41	9	62
Grp Sat Flow(s),veh/h/ln	1767	1689	1571	1714	1689	1818	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	1.9	6.5	1.6	1.2	4.4	4.4	0.7	0.8	2.1	1.1	0.2	1.8
Cycle Q Clear(g_c), s	1.9	6.5	1.6	1.2	4.4	4.4	0.7	0.8	2.1	1.1	0.2	1.8
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	1457	452	251	1003	540	154	162	137	120	126	107
V/C Ratio(X)	0.63	0.56	0.16	0.36	0.39	0.39	0.18	0.22	0.53	0.34	0.07	0.58
Avail Cap(c_a), veh/h	310	3172	984	558	2072	1116	1549	1627	1378	1549	1627	1378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	14.5	12.7	21.1	13.4	13.4	20.3	20.4	20.9	21.3	20.9	21.7
Incr Delay (d2), s/veh	5.7	0.3	0.2	0.9	0.2	0.5	0.6	0.7	3.1	1.7	0.2	4.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.8	0.4	0.4	1.2	1.4	0.3	0.4	0.8	0.5	0.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.6	14.8	12.9	22.0	13.6	13.8	20.9	21.0	24.0	23.0	21.2	26.6
LnGrp LOS	C	B	B	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h	957			688			135			112		
Approach Delay, s/veh	15.6			14.8			22.6			24.8		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	21.4		8.8	8.5	21.0		9.7				
Change Period (Y+Rc), s	5.0	7.2		5.5	5.0	7.2		5.5				
Max Green Setting (Gmax), s	8.4	29.4		42.0	7.8	30.0		42.0				
Max Q Clear Time (g_c+I1), s	3.9	6.4		3.8	3.2	8.5		4.1				
Green Ext Time (p_c), s	0.0	3.3		0.4	0.1	5.1		0.5				

Intersection Summary

HCM 7th Control Delay, s/veh	16.4
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

HCM 7th Signalized Intersection Summary

2: Key Pointe Driveway/Key Pointe Ave & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	27	876	8	125	651	108	6	11	47	116	23	12
Future Volume (veh/h)	27	876	8	125	651	108	6	11	47	116	23	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	28	903	2	129	671	82	6	11	21	120	24	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	322	1405	436	322	1242	150	357	312	264	369	250	52
Arrive On Green	0.18	0.28	0.28	0.18	0.27	0.27	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1767	5066	1572	1767	4579	554	1370	1856	1572	1366	1489	310
Grp Volume(v), veh/h	28	903	2	129	493	260	6	11	21	120	0	29
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1767	1689	1756	1370	1856	1572	1366	0	1800
Q Serve(g_s), s	0.7	7.7	0.0	3.2	6.2	6.3	0.2	0.2	0.6	4.0	0.0	0.7
Cycle Q Clear(g_c), s	0.7	7.7	0.0	3.2	6.2	6.3	0.9	0.2	0.6	4.2	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	322	1405	436	322	916	476	357	312	264	369	0	303
V/C Ratio(X)	0.09	0.64	0.00	0.40	0.54	0.55	0.02	0.04	0.08	0.33	0.00	0.10
Avail Cap(c_a), veh/h	536	6151	1909	536	4100	2132	1236	1502	1273	1245	0	1457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.8	15.7	12.9	17.8	15.4	15.4	17.7	17.2	17.3	19.0	0.0	17.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.3	0.2	0.4	0.0	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.3	0.0	1.1	1.8	1.9	0.1	0.1	0.2	1.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.8	15.9	12.9	18.1	15.5	15.8	17.7	17.2	17.4	19.2	0.0	17.4
LnGrp LOS	B	B	B	B	B	B	B	B	B	B		B
Approach Vol, veh/h					882			38			149	
Approach Delay, s/veh					16.0			17.4			18.8	
Approach LOS	B				B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.7	20.9		14.8	14.0	20.6		14.8				
Change Period (Y+Rc), s	4.7	7.2		* 6.5	5.0	7.2		6.5				
Max Green Setting (Gmax), s	15.0	60.0		* 40	15.0	60.0		40.0				
Max Q Clear Time (g_c+I1), s	5.2	9.7		2.9	2.7	8.3		6.2				
Green Ext Time (p_c), s	0.1	4.0		0.1	0.0	2.8		0.3				

Intersection Summary

HCM 7th Control Delay, s/veh	16.2
HCM 7th LOS	B

Notes

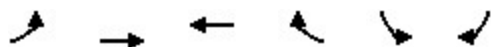
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary

3: Main St & I-15 SB Ramps

09/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑↑	↑
Traffic Volume (veh/h)	0	953	689	0	225	171
Future Volume (veh/h)	0	953	689	0	225	171
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856
Adj Flow Rate, veh/h	0	982	710	0	232	176
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	2003	2003	0	934	428
Arrive On Green	0.00	0.40	0.40	0.00	0.27	0.27
Sat Flow, veh/h	0	5400	5400	0	3428	1572
Grp Volume(v), veh/h	0	982	710	0	232	176
Grp Sat Flow(s),veh/h/ln	0	1689	1689	0	1714	1572
Q Serve(g_s), s	0.0	5.3	3.6	0.0	1.9	3.3
Cycle Q Clear(g_c), s	0.0	5.3	3.6	0.0	1.9	3.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2003	2003	0	934	428
V/C Ratio(X)	0.00	0.49	0.35	0.00	0.25	0.41
Avail Cap(c_a), veh/h	0	5611	5611	0	2848	1306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.2	7.7	0.0	10.3	10.8
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.0	0.1	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.6	0.0	0.6	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	8.4	7.8	0.0	10.4	11.4
LnGrp LOS		A	A		B	B
Approach Vol, veh/h		982	710		408	
Approach Delay, s/veh		8.4	7.8		10.8	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		20.3		15.8		20.3
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		40.0		30.0		40.0
Max Q Clear Time (g_c+I1), s		7.3		5.3		5.6
Green Ext Time (p_c), s		7.0		1.4		4.8
Intersection Summary						
HCM 7th Control Delay, s/veh			8.7			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

4: I-15 NB Ramps & Main St

09/20/2024

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations		↑↑↑↑			↑↑↑↑	↑	↑	↑	↑					
Traffic Volume (veh/h)	0	907	0	0	1128	457	52	1	323	0	0	0		
Future Volume (veh/h)	0	907	0	0	1128	457	52	1	323	0	0	0		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0					
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00					
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Work Zone On Approach		No			No			No						
Adj Sat Flow, veh/h/ln	0	1856	0	0	1856	1856	1856	1856	1856					
Adj Flow Rate, veh/h	0	935	0	0	1163	471	54	0	334					
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97					
Percent Heavy Veh, %	0	3	0	0	3	3	3	3	3					
Cap, veh/h	0	2553	0	0	2553	793	396	0	706					
Arrive On Green	0.00	0.50	0.00	0.00	0.50	0.50	0.22	0.00	0.22					
Sat Flow, veh/h	0	5400	0	0	5233	1572	1767	0	3145					
Grp Volume(v), veh/h	0	935	0	0	1163	471	54	0	334					
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572	1767	0	1572					
Q Serve(g_s), s	0.0	5.0	0.0	0.0	6.5	9.4	1.1	0.0	4.1					
Cycle Q Clear(g_c), s	0.0	5.0	0.0	0.0	6.5	9.4	1.1	0.0	4.1					
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00					
Lane Grp Cap(c), veh/h	0	2553	0	0	2553	793	396	0	706					
V/C Ratio(X)	0.00	0.37	0.00	0.00	0.46	0.59	0.14	0.00	0.47					
Avail Cap(c_a), veh/h	0	4585	0	0	4585	1423	1000	0	1779					
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00					
Uniform Delay (d), s/veh	0.0	6.7	0.0	0.0	7.1	7.8	13.7	0.0	14.9					
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.1	0.7	0.2	0.0	0.5					
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.0	0.0	1.2	1.7	0.4	0.0	1.3					
Unsig. Movement Delay, s/veh														
LnGrp Delay(d), s/veh	0.0	6.8	0.0	0.0	7.2	8.5	13.9	0.0	15.4					
LnGrp LOS	A			A			B	B						
Approach Vol, veh/h	935			1634			388							
Approach Delay, s/veh	6.8			7.6			15.2							
Approach LOS	A			A			B							
Timer - Assigned Phs	2			6			8							
Phs Duration (G+Y+Rc), s	28.3			28.3			15.9							
Change Period (Y+Rc), s	6.0			6.0			6.0							
Max Green Setting (Gmax), s	40.0			40.0			25.0							
Max Q Clear Time (g_c+I1), s	7.0			11.4			6.1							
Green Ext Time (p_c), s	6.6			10.9			1.4							
Intersection Summary														
HCM 7th Control Delay, s/veh	8.3													
HCM 7th LOS	A													
Notes														
User approved volume balancing among the lanes for turning movement.														

HCM 7th Signalized Intersection Summary

5: Mariposa Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	1082	39	77	1402	40	56	34	44	54	48	132
Future Volume (veh/h)	109	1082	39	77	1402	40	56	34	44	54	48	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	115	1139	41	81	1476	42	59	36	46	57	51	139
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	232	2385	86	201	2268	64	230	144	184	325	86	233
Arrive On Green	0.13	0.37	0.37	0.11	0.35	0.35	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1767	6373	229	1767	6427	183	1184	740	945	1306	440	1200
Grp Volume(v), veh/h	115	855	325	81	1099	419	59	0	82	57	0	190
Grp Sat Flow(s),veh/h/ln	1767	1596	1814	1767	1596	1823	1184	0	1685	1306	0	1640
Q Serve(g_s), s	3.5	7.8	7.9	2.5	11.1	11.1	2.8	0.0	2.4	2.2	0.0	6.1
Cycle Q Clear(g_c), s	3.5	7.8	7.9	2.5	11.1	11.1	8.8	0.0	2.4	4.6	0.0	6.1
Prop In Lane	1.00		0.13	1.00		0.10	1.00		0.56	1.00		0.73
Lane Grp Cap(c), veh/h	232	1792	679	201	1689	643	230	0	328	325	0	319
V/C Ratio(X)	0.50	0.48	0.48	0.40	0.65	0.65	0.26	0.00	0.25	0.18	0.00	0.60
Avail Cap(c_a), veh/h	921	4996	1893	460	4988	1899	822	0	1171	978	0	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	13.7	13.7	23.7	15.7	15.7	25.2	0.0	19.6	21.6	0.0	21.1
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.5	0.2	0.4	0.2	0.0	0.1	0.1	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.2	2.5	0.9	3.1	3.6	0.7	0.0	0.9	0.6	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.8	13.8	13.9	24.2	15.8	16.1	25.4	0.0	19.8	21.7	0.0	21.8
LnGrp LOS	C	B	B	C	B	B	C		B	C		C
Approach Vol, veh/h	1295			1599			141			247		
Approach Delay, s/veh	14.7			16.3			22.1			21.8		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	28.8		18.1	12.0	27.5		18.1				
Change Period (Y+Rc), s	4.2	7.2		* 6.9	4.4	* 7.2		6.9				
Max Green Setting (Gmax), s	15.0	60.1		* 40	30.0	* 60		40.0				
Max Q Clear Time (g_c+I1), s	4.5	9.9		10.8	5.5	13.1		8.1				
Green Ext Time (p_c), s	0.1	5.1		0.4	0.1	7.2		0.7				

Intersection Summary

HCM 7th Control Delay, s/veh	16.3
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary

6: US-395 & Joshua St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	16	9	70	27	62	5	495	41	86	722	30
Future Volume (veh/h)	18	16	9	70	27	62	5	495	41	86	722	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	19	17	1	73	28	6	5	516	17	90	752	15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	340	285	17	349	305	258	24	982	438	243	1419	633
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.28	0.28	0.14	0.40	0.40
Sat Flow, veh/h	1364	1735	102	1384	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	19	0	18	73	28	6	5	516	17	90	752	15
Grp Sat Flow(s),veh/h/ln	1364	0	1837	1384	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	0.6	0.0	0.4	2.5	0.7	0.2	0.2	6.7	0.4	2.5	8.7	0.3
Cycle Q Clear(g_c), s	1.3	0.0	0.4	3.0	0.7	0.2	0.2	6.7	0.4	2.5	8.7	0.3
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	340	0	302	349	305	258	24	982	438	243	1419	633
V/C Ratio(X)	0.06	0.00	0.06	0.21	0.09	0.02	0.21	0.53	0.04	0.37	0.53	0.02
Avail Cap(c_a), veh/h	1003	0	1194	1022	1206	1022	657	2620	1168	657	2620	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	19.0	20.2	19.1	18.9	26.3	16.4	14.2	21.1	12.2	9.7
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.3	0.1	0.0	4.4	0.9	0.1	0.9	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.8	0.3	0.1	0.1	2.2	0.1	0.9	2.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.7	0.0	19.1	20.5	19.2	18.9	30.6	17.3	14.2	22.0	12.9	9.7
LnGrp LOS	B		B	C	B	B	C	B	B	C	B	A
Approach Vol, veh/h	37			107			538			857		
Approach Delay, s/veh	19.4			20.1			17.4			13.8		
Approach LOS	B			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.1	23.5		16.2	7.4	30.2		16.2				
Change Period (Y+Rc), s	6.7	8.5		7.4	6.7	8.5		7.4				
Max Green Setting (Gmax), s	20.0	40.0		35.0	20.0	40.0		35.0				
Max Q Clear Time (g_c+I1), s	4.5	8.7		3.3	2.2	10.7		5.0				
Green Ext Time (p_c), s	0.2	6.3		0.1	0.0	9.6		0.3				

Intersection Summary

HCM 7th Control Delay, s/veh	15.6
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary

7: Bear Valley Rd & I-15 NB Ramps

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	214	993	0	0	1094	258	128	3	509	0	0	0
Future Volume (veh/h)	214	993	0	0	1094	258	128	3	509	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	225	1045	0	0	1152	221	135	3	442			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	257	2989	0	0	1697	325	433	10	393			
Arrive On Green	0.15	0.59	0.00	0.00	0.40	0.40	0.25	0.25	0.25			
Sat Flow, veh/h	1767	5233	0	0	4433	818	1731	38	1572			
Grp Volume(v), veh/h	225	1045	0	0	912	461	138	0	442			
Grp Sat Flow(s),veh/h/ln	1767	1689	0	0	1689	1708	1769	0	1572			
Q Serve(g_s), s	12.5	10.7	0.0	0.0	22.3	22.3	6.3	0.0	25.0			
Cycle Q Clear(g_c), s	12.5	10.7	0.0	0.0	22.3	22.3	6.3	0.0	25.0			
Prop In Lane	1.00		0.00	0.00		0.48	0.98		1.00			
Lane Grp Cap(c), veh/h	257	2989	0	0	1343	679	442	0	393			
V/C Ratio(X)	0.88	0.35	0.00	0.00	0.68	0.68	0.31	0.00	1.12			
Avail Cap(c_a), veh/h	283	2989	0	0	1343	679	442	0	393			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.86	0.86	1.00	0.00	1.00			
Uniform Delay (d), s/veh	41.9	10.6	0.0	0.0	24.8	24.8	30.5	0.0	37.5			
Incr Delay (d2), s/veh	22.2	0.3	0.0	0.0	2.4	4.7	1.8	0.0	83.6			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.8	3.6	0.0	0.0	8.8	9.3	2.9	0.0	18.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.1	10.9	0.0	0.0	27.2	29.5	32.3	0.0	121.1			
LnGrp LOS	E	B			C	C	C		F			
Approach Vol, veh/h	1270			1373			580					
Approach Delay, s/veh	20.3			28.0			100.0					
Approach LOS	C			C			F					
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	69.0			19.2			49.8			31.0		
Change Period (Y+Rc), s	10.0			4.7			10.0			6.0		
Max Green Setting (Gmax), s	41.0			16.0			38.0			25.0		
Max Q Clear Time (g_c+I1), s	12.7			14.5			24.3			27.0		
Green Ext Time (p_c), s	5.1			0.1			5.3			0.0		
Intersection Summary												
HCM 7th Control Delay, s/veh	37.9											
HCM 7th LOS	D											

HCM 7th Signalized Intersection Summary

8: Mariposa Rd & Bear Valley Rd

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	1183	218	105	1032	52	239	195	151	44	108	81
Future Volume (veh/h)	101	1183	218	105	1032	52	239	195	151	44	108	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	105	1232	227	109	1075	54	251	200	157	46	112	84
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	131	2033	375	135	2344	118	450	236	200	237	249	211
Arrive On Green	0.07	0.47	0.47	0.08	0.47	0.47	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1767	4298	792	1767	4939	248	3534	1856	1569	1767	1856	1572
Grp Volume(v), veh/h	105	968	491	109	735	394	251	200	157	46	112	84
Grp Sat Flow(s),veh/h/ln	1767	1689	1712	1767	1689	1810	1767	1856	1569	1767	1856	1572
Q Serve(g_s), s	6.3	22.9	22.9	6.6	15.8	15.8	7.2	11.4	10.5	2.5	6.0	5.3
Cycle Q Clear(g_c), s	6.3	22.9	22.9	6.6	15.8	15.8	7.2	11.4	10.5	2.5	6.0	5.3
Prop In Lane	1.00		0.46	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	1598	810	135	1603	859	450	236	200	237	249	211
V/C Ratio(X)	0.80	0.61	0.61	0.81	0.46	0.46	0.56	0.85	0.79	0.19	0.45	0.40
Avail Cap(c_a), veh/h	154	1598	810	155	1603	859	478	251	212	237	249	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	21.0	21.0	49.1	19.0	19.1	44.3	46.1	45.7	41.6	43.1	42.8
Incr Delay (d2), s/veh	17.9	1.3	2.6	23.4	0.9	1.8	1.3	21.8	16.7	1.8	5.8	5.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	8.7	9.2	3.7	6.0	6.7	3.1	6.5	4.9	1.2	3.1	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.2	22.3	23.6	72.5	20.0	20.8	45.5	67.8	62.4	43.4	48.8	48.3
LnGrp LOS	E	C	C	E	B	C	D	E	E	D	D	D
Approach Vol, veh/h	1564			1238			608			242		
Approach Delay, s/veh	25.7			24.9			57.2			47.6		
Approach LOS	C			C			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.8	56.1		19.2	12.6	56.3		20.0				
Change Period (Y+Rc), s	4.5	5.0		5.4	4.6	5.0		5.5				
Max Green Setting (Gmax), s	9.5	49.0		14.6	9.4	49.0		14.5				
Max Q Clear Time (g_c+I1), s	8.6	24.9		13.4	8.3	17.8		8.0				
Green Ext Time (p_c), s	0.0	10.8		0.4	0.0	8.4		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	32.1											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												

HCM 7th Signalized Intersection Summary

1: Cataba Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  			 			 	
Traffic Volume (veh/h)	84	809	142	135	779	33	135	42	144	37	35	124
Future Volume (veh/h)	84	809	142	135	779	33	135	42	144	37	35	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	87	834	40	139	803	32	91	110	26	38	36	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	1431	444	291	1488	59	205	215	182	100	105	88
Arrive On Green	0.07	0.28	0.28	0.09	0.30	0.30	0.12	0.12	0.12	0.06	0.06	0.06
Sat Flow, veh/h	1767	5066	1572	3428	4998	199	1767	1856	1568	1767	1856	1566
Grp Volume(v), veh/h	87	834	40	139	542	293	91	110	26	38	36	20
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1820	1767	1856	1568	1767	1856	1566
Q Serve(g_s), s	2.4	7.1	0.9	1.9	6.8	6.8	2.4	2.8	0.8	1.0	0.9	0.6
Cycle Q Clear(g_c), s	2.4	7.1	0.9	1.9	6.8	6.8	2.4	2.8	0.8	1.0	0.9	0.6
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	123	1431	444	291	1005	542	205	215	182	100	105	88
V/C Ratio(X)	0.70	0.58	0.09	0.48	0.54	0.54	0.44	0.51	0.14	0.38	0.34	0.23
Avail Cap(c_a), veh/h	294	3014	936	530	1969	1061	1472	1546	1306	1472	1546	1304
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	15.5	13.3	22.0	14.8	14.8	20.8	20.9	20.0	22.9	22.9	22.7
Incr Delay (d2), s/veh	7.1	0.4	0.1	1.2	0.5	0.8	1.5	1.9	0.4	2.4	1.9	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.1	0.3	0.7	2.0	2.2	1.0	1.2	0.3	0.5	0.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.1	15.9	13.4	23.2	15.3	15.7	22.3	22.8	20.4	25.3	24.8	24.0
LnGrp LOS	C	B	B	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h	961			974			227			94		
Approach Delay, s/veh	17.1			16.5			22.3			24.9		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	22.2		8.3	9.3	21.4		11.3				
Change Period (Y+Rc), s	5.0	7.2		5.5	5.0	7.2		5.5				
Max Green Setting (Gmax), s	8.4	29.4		42.0	7.8	30.0		42.0				
Max Q Clear Time (g_c+l1), s	4.4	8.8		3.0	3.9	9.1		4.8				
Green Ext Time (p_c), s	0.1	4.7		0.4	0.1	5.1		1.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	17.7											
HCM 7th LOS	B											
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												

HCM 7th Signalized Intersection Summary

2: Key Pointe Driveway/Key Pointe Ave & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	36	982	13	241	906	186	30	58	189	202	81	14
Future Volume (veh/h)	36	982	13	241	906	186	30	58	189	202	81	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	37	1012	5	248	934	165	31	60	49	208	84	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	269	1467	456	303	1317	232	361	421	357	378	369	44
Arrive On Green	0.15	0.29	0.29	0.17	0.30	0.30	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1767	5066	1572	1767	4333	763	1292	1856	1572	1274	1627	194
Grp Volume(v), veh/h	37	1012	5	248	727	372	31	60	49	208	0	94
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1767	1689	1718	1292	1856	1572	1274	0	1821
Q Serve(g_s), s	1.1	10.5	0.1	8.0	11.3	11.3	1.2	1.5	1.5	9.2	0.0	2.5
Cycle Q Clear(g_c), s	1.1	10.5	0.1	8.0	11.3	11.3	3.7	1.5	1.5	10.7	0.0	2.5
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	269	1467	456	303	1026	522	361	421	357	378	0	413
V/C Ratio(X)	0.14	0.69	0.01	0.82	0.71	0.71	0.09	0.14	0.14	0.55	0.00	0.23
Avail Cap(c_a), veh/h	449	5148	1598	449	3432	1746	943	1257	1065	952	0	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	18.6	14.9	23.6	18.2	18.3	20.1	18.2	18.2	22.5	0.0	18.6
Incr Delay (d2), s/veh	0.1	0.2	0.0	4.4	0.3	0.7	0.0	0.1	0.1	0.5	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.3	0.0	3.2	3.6	3.7	0.3	0.6	0.5	2.6	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.7	18.8	14.9	28.0	18.6	18.9	20.1	18.3	18.3	23.0	0.0	18.7
LnGrp LOS	C	B	B	C	B	B	C	B	B	C		B
Approach Vol, veh/h	1054			1347			140			302		
Approach Delay, s/veh	18.9			20.4			18.7			21.7		
Approach LOS	B			C			B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	24.3		19.9	14.0	25.1		19.9				
Change Period (Y+Rc), s	4.7	7.2		* 6.5	5.0	7.2		6.5				
Max Green Setting (Gmax), s	15.0	60.0		* 40	15.0	60.0		40.0				
Max Q Clear Time (g_c+I1), s	10.0	12.5		5.7	3.1	13.3		12.7				
Green Ext Time (p_c), s	0.2	4.6		0.3	0.0	4.6		0.7				

Intersection Summary

HCM 7th Control Delay, s/veh 19.9
 HCM 7th LOS B

Notes

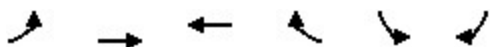
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary

3: Main St & I-15 SB Ramps

09/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑↑	↑
Traffic Volume (veh/h)	0	1235	1088	0	456	299
Future Volume (veh/h)	0	1235	1088	0	456	299
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856
Adj Flow Rate, veh/h	0	1273	1122	0	470	308
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	2264	2264	0	971	445
Arrive On Green	0.00	0.45	0.45	0.00	0.28	0.28
Sat Flow, veh/h	0	5400	5400	0	3428	1572
Grp Volume(v), veh/h	0	1273	1122	0	470	308
Grp Sat Flow(s),veh/h/ln	0	1689	1689	0	1714	1572
Q Serve(g_s), s	0.0	8.3	7.0	0.0	5.1	7.8
Cycle Q Clear(g_c), s	0.0	8.3	7.0	0.0	5.1	7.8
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2264	2264	0	971	445
V/C Ratio(X)	0.00	0.56	0.50	0.00	0.48	0.69
Avail Cap(c_a), veh/h	0	4557	4557	0	2313	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.1	8.7	0.0	13.2	14.2
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.4	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.8	1.5	0.0	1.7	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.3	8.9	0.0	13.6	16.1
LnGrp LOS		A	A		B	B
Approach Vol, veh/h		1273	1122		778	
Approach Delay, s/veh		9.3	8.9		14.6	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		25.9		18.6		25.9
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		40.0		30.0		40.0
Max Q Clear Time (g_c+I1), s		10.3		9.8		9.0
Green Ext Time (p_c), s		9.6		2.8		8.2
Intersection Summary						
HCM 7th Control Delay, s/veh			10.5			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

4: I-15 NB Ramps & Main St

09/20/2024

																										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR														
Lane Configurations		↑↑↑↑			↑↑↑↑	↑	↑	↑	↑																	
Traffic Volume (veh/h)	0	1443	0	0	1243	384	163	2	715	0	0	0														
Future Volume (veh/h)	0	1443	0	0	1243	384	163	2	715	0	0	0														
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0																	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00																	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																	
Work Zone On Approach		No			No			No																		
Adj Sat Flow, veh/h/ln	0	1856	0	0	1856	1856	1856	1856	1856																	
Adj Flow Rate, veh/h	0	1488	0	0	1281	199	168	0	694																	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97																	
Percent Heavy Veh, %	0	3	0	0	3	3	3	3	3																	
Cap, veh/h	0	2403	0	0	2403	746	522	0	929																	
Arrive On Green	0.00	0.47	0.00	0.00	0.47	0.47	0.30	0.00	0.30																	
Sat Flow, veh/h	0	5400	0	0	5233	1572	1767	0	3145																	
Grp Volume(v), veh/h	0	1488	0	0	1281	199	168	0	694																	
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572	1767	0	1572																	
Q Serve(g_s), s	0.0	11.4	0.0	0.0	9.3	4.0	3.9	0.0	10.4																	
Cycle Q Clear(g_c), s	0.0	11.4	0.0	0.0	9.3	4.0	3.9	0.0	10.4																	
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00																	
Lane Grp Cap(c), veh/h	0	2403	0	0	2403	746	522	0	929																	
V/C Ratio(X)	0.00	0.62	0.00	0.00	0.53	0.27	0.32	0.00	0.75																	
Avail Cap(c_a), veh/h	0	3888	0	0	3888	1207	848	0	1509																	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																	
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00																	
Uniform Delay (d), s/veh	0.0	10.2	0.0	0.0	9.6	8.2	14.3	0.0	16.6																	
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.2	0.2	0.4	0.0	1.2																	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																	
%ile BackOfQ(50%),veh/ln	0.0	2.7	0.0	0.0	2.2	0.9	1.4	0.0	3.4																	
Unsig. Movement Delay, s/veh																										
LnGrp Delay(d), s/veh	0.0	10.5	0.0	0.0	9.8	8.4	14.6	0.0	17.8																	
LnGrp LOS	B			A			B	B																		
Approach Vol, veh/h	1488			1480			862																			
Approach Delay, s/veh	10.5			9.6			17.2																			
Approach LOS	B			A			B																			
Timer - Assigned Phs	2			6			8																			
Phs Duration (G+Y+Rc), s	30.7			30.7			21.4																			
Change Period (Y+Rc), s	6.0			6.0			6.0																			
Max Green Setting (Gmax), s	40.0			40.0			25.0																			
Max Q Clear Time (g_c+I1), s	13.4			11.3			12.4																			
Green Ext Time (p_c), s	11.3			10.5			3.0																			
Intersection Summary																										
HCM 7th Control Delay, s/veh				11.7																						
HCM 7th LOS	B																									
Notes																										
User approved volume balancing among the lanes for turning movement.																										

HCM 7th Signalized Intersection Summary

5: Mariposa Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	285	1737	136	73	1413	88	84	85	81	111	80	170
Future Volume (veh/h)	285	1737	136	73	1413	88	84	85	81	111	80	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	300	1828	136	77	1487	88	88	89	60	117	84	122
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	345	2681	199	169	2090	124	228	230	155	279	152	221
Arrive On Green	0.20	0.44	0.44	0.10	0.34	0.34	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1767	6107	454	1767	6210	367	1166	1033	696	1228	683	992
Grp Volume(v), veh/h	300	1433	531	77	1146	429	88	0	149	117	0	206
Grp Sat Flow(s),veh/h/ln	1767	1596	1774	1767	1596	1789	1166	0	1729	1228	0	1675
Q Serve(g_s), s	12.4	18.1	18.1	3.1	15.8	15.8	5.5	0.0	5.5	6.8	0.0	8.2
Cycle Q Clear(g_c), s	12.4	18.1	18.1	3.1	15.8	15.8	13.7	0.0	5.5	12.3	0.0	8.2
Prop In Lane	1.00		0.26	1.00		0.21	1.00		0.40	1.00		0.59
Lane Grp Cap(c), veh/h	345	2102	779	169	1612	602	228	0	385	279	0	373
V/C Ratio(X)	0.87	0.68	0.68	0.46	0.71	0.71	0.39	0.00	0.39	0.42	0.00	0.55
Avail Cap(c_a), veh/h	703	3813	1413	351	3806	1423	586	0	917	656	0	888
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.4	16.9	16.9	32.3	21.8	21.8	32.0	0.0	24.9	30.2	0.0	26.0
Incr Delay (d2), s/veh	2.7	0.1	0.4	0.7	0.2	0.6	0.4	0.0	0.2	0.4	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	5.5	6.1	1.3	5.1	5.8	1.5	0.0	2.2	1.8	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.1	17.1	17.3	33.0	22.1	22.4	32.4	0.0	25.2	30.5	0.0	26.5
LnGrp LOS	C	B	B	C	C	C	C		C	C		C
Approach Vol, veh/h	2264		1652				237		323			
Approach Delay, s/veh	19.1		22.7				27.9		27.9			
Approach LOS	B		C				C		C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	40.3		23.7	19.1	32.6		23.7				
Change Period (Y+Rc), s	4.2	7.2		* 6.9	4.4	* 7.2		6.9				
Max Green Setting (Gmax), s	15.0	60.1		* 40	30.0	* 60		40.0				
Max Q Clear Time (g_c+I1), s	5.1	20.1		15.7	14.4	17.8		14.3				
Green Ext Time (p_c), s	0.0	10.8		0.7	0.3	7.6		0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh				21.5								
HCM 7th LOS				C								
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 7th Signalized Intersection Summary

6: US-395 & Joshua St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	76	4	70	18	158	14	1255	294	77	531	11
Future Volume (veh/h)	216	76	4	70	18	158	14	1255	294	77	531	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	225	79	3	73	19	35	15	1307	185	80	553	7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	346	364	14	301	380	322	62	1548	690	173	1770	789
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.44	0.44	0.10	0.50	0.50
Sat Flow, veh/h	1339	1776	67	1306	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	225	0	82	73	19	35	15	1307	185	80	553	7
Grp Sat Flow(s),veh/h/ln	1339	0	1843	1306	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	14.2	0.0	3.2	4.3	0.7	1.6	0.7	28.9	6.5	3.7	8.1	0.2
Cycle Q Clear(g_c), s	14.9	0.0	3.2	7.6	0.7	1.6	0.7	28.9	6.5	3.7	8.1	0.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	0	378	301	380	322	62	1548	690	173	1770	789
V/C Ratio(X)	0.65	0.00	0.22	0.24	0.05	0.11	0.24	0.84	0.27	0.46	0.31	0.01
Avail Cap(c_a), veh/h	607	0	737	556	742	629	404	1611	719	404	1770	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	0.0	29.0	32.1	28.0	28.3	41.1	21.9	15.6	37.3	12.9	10.9
Incr Delay (d2), s/veh	2.1	0.0	0.3	0.4	0.1	0.1	2.0	4.7	0.4	1.9	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	1.4	1.4	0.3	0.6	0.3	11.0	2.1	1.6	2.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.0	0.0	29.2	32.5	28.0	28.4	43.1	26.6	16.1	39.2	13.1	10.9
LnGrp LOS	D		C	C	C	C	D	C	B	D	B	B
Approach Vol, veh/h	307			127			1507			640		
Approach Delay, s/veh	34.2			30.7			25.5			16.3		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.3	46.9		25.3	9.8	52.4		25.3				
Change Period (Y+Rc), s	6.7	8.5		7.4	6.7	8.5		7.4				
Max Green Setting (Gmax), s	20.0	40.0		35.0	20.0	40.0		35.0				
Max Q Clear Time (g_c+I1), s	5.7	30.9		16.9	2.7	10.1		9.6				
Green Ext Time (p_c), s	0.1	7.5		1.0	0.0	6.7		0.4				

Intersection Summary

HCM 7th Control Delay, s/veh	24.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary

7: Bear Valley Rd & I-15 NB Ramps

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	222	1401	0	0	1328	176	269	3	626	0	0	0
Future Volume (veh/h)	222	1401	0	0	1328	176	269	3	626	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	234	1475	0	0	1398	169	283	3	570			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	264	2902	0	0	1727	209	476	5	427			
Arrive On Green	0.15	0.57	0.00	0.00	0.38	0.38	0.27	0.27	0.27			
Sat Flow, veh/h	1767	5233	0	0	4739	553	1750	19	1572			
Grp Volume(v), veh/h	234	1475	0	0	1032	535	286	0	570			
Grp Sat Flow(s),veh/h/ln	1767	1689	0	0	1689	1748	1768	0	1572			
Q Serve(g_s), s	13.4	18.1	0.0	0.0	28.2	28.2	14.5	0.0	28.0			
Cycle Q Clear(g_c), s	13.4	18.1	0.0	0.0	28.2	28.2	14.5	0.0	28.0			
Prop In Lane	1.00		0.00	0.00		0.32	0.99		1.00			
Lane Grp Cap(c), veh/h	264	2902	0	0	1276	660	481	0	427			
V/C Ratio(X)	0.89	0.51	0.00	0.00	0.81	0.81	0.60	0.00	1.33			
Avail Cap(c_a), veh/h	275	2902	0	0	1276	660	481	0	427			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.77	0.77	1.00	0.00	1.00			
Uniform Delay (d), s/veh	42.9	13.3	0.0	0.0	28.7	28.7	32.6	0.0	37.5			
Incr Delay (d2), s/veh	25.7	0.6	0.0	0.0	4.4	8.2	5.3	0.0	165.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.5	6.3	0.0	0.0	11.5	12.6	6.8	0.0	30.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.6	13.9	0.0	0.0	33.1	36.9	37.9	0.0	202.8			
LnGrp LOS	E	B			C	D	D		F			
Approach Vol, veh/h	1709			1567			856					
Approach Delay, s/veh	21.4			34.4			147.7					
Approach LOS	C			C			F					
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	69.0			20.1			48.9			34.0		
Change Period (Y+Rc), s	10.0			4.7			10.0			6.0		
Max Green Setting (Gmax), s	38.0			16.0			38.0			28.0		
Max Q Clear Time (g_c+I1), s	20.1			15.4			30.2			30.0		
Green Ext Time (p_c), s	6.9			0.0			4.3			0.0		
Intersection Summary												
HCM 7th Control Delay, s/veh	52.5											
HCM 7th LOS	D											

HCM 7th Signalized Intersection Summary

8: Mariposa Rd & Bear Valley Rd

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	177	1488	362	109	1145	58	226	202	114	82	193	149
Future Volume (veh/h)	177	1488	362	109	1145	58	226	202	114	82	193	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	184	1550	333	114	1193	56	248	192	14	85	201	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	219	2126	454	133	2279	107	375	197	164	186	195	165
Arrive On Green	0.12	0.51	0.51	0.08	0.46	0.46	0.11	0.11	0.11	0.10	0.10	0.10
Sat Flow, veh/h	1767	4169	890	1767	4952	232	3534	1856	1546	1767	1856	1572
Grp Volume(v), veh/h	184	1254	629	114	813	436	248	192	14	85	201	16
Grp Sat Flow(s),veh/h/ln	1767	1689	1682	1767	1689	1808	1767	1856	1546	1767	1856	1572
Q Serve(g_s), s	10.2	28.9	29.3	6.4	17.1	17.1	6.7	10.3	0.8	4.5	10.5	0.9
Cycle Q Clear(g_c), s	10.2	28.9	29.3	6.4	17.1	17.1	6.7	10.3	0.8	4.5	10.5	0.9
Prop In Lane	1.00		0.53	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	1722	858	133	1554	832	375	197	164	186	195	165
V/C Ratio(X)	0.84	0.73	0.73	0.86	0.52	0.52	0.66	0.98	0.09	0.46	1.03	0.10
Avail Cap(c_a), veh/h	343	1722	858	133	1554	832	375	197	164	186	195	165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	19.1	19.2	45.7	19.2	19.2	43.0	44.6	40.3	42.1	44.8	40.5
Incr Delay (d2), s/veh	6.4	1.6	3.3	39.9	1.3	2.4	4.3	57.1	0.2	7.9	73.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	10.6	11.1	4.2	6.5	7.2	3.1	7.7	0.3	2.3	8.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.2	20.7	22.4	85.6	20.5	21.5	47.3	101.7	40.5	50.0	117.8	41.6
LnGrp LOS	D	C	C	F	C	C	D	F	D	D	F	D
Approach Vol, veh/h	2067			1363			454			302		
Approach Delay, s/veh	23.8			26.3			70.1			94.7		
Approach LOS	C			C			E			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	56.0		16.0	17.0	51.0		16.0				
Change Period (Y+Rc), s	4.5	5.0		5.4	4.6	5.0		5.5				
Max Green Setting (Gmax), s	7.5	51.0		10.6	19.4	39.0		10.5				
Max Q Clear Time (g_c+I1), s	8.4	31.3		12.3	12.2	19.1		12.5				
Green Ext Time (p_c), s	0.0	12.9		0.0	0.3	8.1		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	34.7											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												

HCM 7th Signalized Intersection Summary

1: Cataba Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  							
Traffic Volume (veh/h)	90	900	90	110	1260	40	60	30	90	50	10	90
Future Volume (veh/h)	90	900	90	110	1260	40	60	30	90	50	10	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	93	928	93	113	1299	41	47	53	93	52	10	93
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	120	1836	569	239	1839	58	173	182	154	161	169	143
Arrive On Green	0.07	0.36	0.36	0.07	0.36	0.36	0.10	0.10	0.10	0.09	0.09	0.09
Sat Flow, veh/h	1767	5066	1571	3428	5045	159	1767	1856	1572	1767	1856	1572
Grp Volume(v), veh/h	93	928	93	113	870	470	47	53	93	52	10	93
Grp Sat Flow(s),veh/h/ln	1767	1689	1571	1714	1689	1827	1767	1856	1572	1767	1856	1572
Q Serve(g_s), s	3.2	8.8	2.5	1.9	13.5	13.5	1.5	1.6	3.5	1.7	0.3	3.5
Cycle Q Clear(g_c), s	3.2	8.8	2.5	1.9	13.5	13.5	1.5	1.6	3.5	1.7	0.3	3.5
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1836	569	239	1231	666	173	182	154	161	169	143
V/C Ratio(X)	0.78	0.51	0.16	0.47	0.71	0.71	0.27	0.29	0.60	0.32	0.06	0.65
Avail Cap(c_a), veh/h	242	2481	769	437	1621	877	1212	1272	1078	1212	1272	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	15.2	13.2	27.4	16.7	16.7	25.6	25.7	26.5	26.1	25.4	26.9
Incr Delay (d2), s/veh	10.3	0.2	0.1	1.5	1.0	1.8	0.8	0.9	3.8	1.1	0.1	4.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.6	0.7	0.7	4.3	4.8	0.7	0.7	1.4	0.7	0.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.4	15.5	13.4	28.9	17.6	18.4	26.4	26.5	30.3	27.2	25.6	31.8
LnGrp LOS	D	B	B	C	B	B	C	C	C	C	C	C
Approach Vol, veh/h	1114			1453			193			155		
Approach Delay, s/veh	17.2			18.8			28.3			29.8		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	29.5		11.1	9.3	29.4		11.5				
Change Period (Y+Rc), s	5.0	7.2		5.5	5.0	7.2		5.5				
Max Green Setting (Gmax), s	8.4	29.4		42.0	7.8	30.0		42.0				
Max Q Clear Time (g_c+I1), s	5.2	15.5		5.5	3.9	10.8		5.5				
Green Ext Time (p_c), s	0.0	6.8		0.5	0.1	5.8		0.8				

Intersection Summary

HCM 7th Control Delay, s/veh 19.4

HCM 7th LOS B

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

HCM 7th Signalized Intersection Summary

2: Key Pointe Driveway/Key Pointe Ave & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	60	950	10	160	1230	500	10	30	60	220	40	150
Future Volume (veh/h)	60	950	10	160	1230	500	10	30	60	220	40	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	62	979	4	165	1268	486	10	31	35	227	41	148
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	196	2229	692	206	1596	608	223	401	340	358	76	276
Arrive On Green	0.11	0.44	0.44	0.12	0.44	0.44	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1767	5066	1572	1767	3609	1376	1185	1856	1572	1325	353	1274
Grp Volume(v), veh/h	62	979	4	165	1186	568	10	31	35	227	0	189
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1767	1689	1608	1185	1856	1572	1325	0	1626
Q Serve(g_s), s	2.6	10.9	0.1	7.4	24.5	24.7	0.6	1.1	1.4	13.4	0.0	8.4
Cycle Q Clear(g_c), s	2.6	10.9	0.1	7.4	24.5	24.7	9.0	1.1	1.4	14.4	0.0	8.4
Prop In Lane	1.00		1.00	1.00		0.86	1.00		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	196	2229	692	206	1493	711	223	401	340	358	0	352
V/C Ratio(X)	0.32	0.44	0.01	0.80	0.79	0.80	0.04	0.08	0.10	0.63	0.00	0.54
Avail Cap(c_a), veh/h	327	3747	1163	327	2498	1189	551	915	775	724	0	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.2	15.8	12.7	34.9	19.5	19.5	32.2	25.3	25.5	31.1	0.0	28.2
Incr Delay (d2), s/veh	0.3	0.1	0.0	3.0	0.4	0.8	0.0	0.0	0.0	0.7	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.6	0.0	3.1	8.1	7.9	0.2	0.5	0.5	4.2	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.6	15.8	12.8	37.9	19.8	20.3	32.2	25.4	25.5	31.8	0.0	28.7
LnGrp LOS	C	B	B	D	B	C	C	C	C	C		C
Approach Vol, veh/h	1045			1919			76			416		
Approach Delay, s/veh	16.9			21.5			26.3			30.4		
Approach LOS	B			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	42.9		24.0	14.0	43.1		24.0				
Change Period (Y+Rc), s	4.7	7.2		* 6.5	5.0	7.2		6.5				
Max Green Setting (Gmax), s	15.0	60.0		* 40	15.0	60.0		40.0				
Max Q Clear Time (g_c+I1), s	9.4	12.9		11.0	4.6	26.7		16.4				
Green Ext Time (p_c), s	0.1	4.4		0.2	0.0	9.2		1.1				

Intersection Summary

HCM 7th Control Delay, s/veh 21.3
 HCM 7th LOS C

Notes

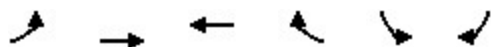
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary

3: Main St & I-15 SB Ramps

09/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑↑	↑
Traffic Volume (veh/h)	0	1140	1460	0	300	420
Future Volume (veh/h)	0	1140	1460	0	300	420
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856
Adj Flow Rate, veh/h	0	1175	1505	0	309	433
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	2324	2324	0	1136	521
Arrive On Green	0.00	0.46	0.46	0.00	0.33	0.33
Sat Flow, veh/h	0	5400	5400	0	3428	1572
Grp Volume(v), veh/h	0	1175	1505	0	309	433
Grp Sat Flow(s),veh/h/ln	0	1689	1689	0	1714	1572
Q Serve(g_s), s	0.0	9.3	13.1	0.0	3.8	14.5
Cycle Q Clear(g_c), s	0.0	9.3	13.1	0.0	3.8	14.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2324	2324	0	1136	521
V/C Ratio(X)	0.00	0.51	0.65	0.00	0.27	0.83
Avail Cap(c_a), veh/h	0	3544	3544	0	1799	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.9	11.9	0.0	14.0	17.6
Incr Delay (d2), s/veh	0.0	0.2	0.3	0.0	0.1	4.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	3.5	0.0	1.3	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	11.1	12.2	0.0	14.2	21.8
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1175	1505		742	
Approach Delay, s/veh		11.1	12.2		18.6	
Approach LOS		B	B		B	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		32.2		24.9		32.2
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		40.0		30.0		40.0
Max Q Clear Time (g_c+I1), s		11.3		16.5		15.1
Green Ext Time (p_c), s		8.6		2.4		11.2
Intersection Summary						
HCM 7th Control Delay, s/veh			13.2			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

4: I-15 NB Ramps & Main St

09/20/2024

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations		↑↑↑↑			↑↑↑↑	↗	↖	↗	↗					
Traffic Volume (veh/h)	0	1090	0	0	1880	570	210	10	420	0	0	0		
Future Volume (veh/h)	0	1090	0	0	1880	570	210	10	420	0	0	0		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0					
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00					
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Work Zone On Approach		No			No			No						
Adj Sat Flow, veh/h/ln	0	1856	0	0	1856	1856	1856	1856	1856					
Adj Flow Rate, veh/h	0	1124	0	0	1938	588	216	0	440					
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97					
Percent Heavy Veh, %	0	3	0	0	3	3	3	3	3					
Cap, veh/h	0	2970	0	0	2970	922	361	0	642					
Arrive On Green	0.00	0.59	0.00	0.00	0.59	0.59	0.20	0.00	0.20					
Sat Flow, veh/h	0	5400	0	0	5233	1572	1767	0	3145					
Grp Volume(v), veh/h	0	1124	0	0	1938	588	216	0	440					
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572	1767	0	1572					
Q Serve(g_s), s	0.0	6.8	0.0	0.0	14.7	14.1	6.3	0.0	7.4					
Cycle Q Clear(g_c), s	0.0	6.8	0.0	0.0	14.7	14.1	6.3	0.0	7.4					
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00					
Lane Grp Cap(c), veh/h	0	2970	0	0	2970	922	361	0	642					
V/C Ratio(X)	0.00	0.38	0.00	0.00	0.65	0.64	0.60	0.00	0.69					
Avail Cap(c_a), veh/h	0	3540	0	0	3540	1099	772	0	1374					
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00					
Uniform Delay (d), s/veh	0.0	6.3	0.0	0.0	7.9	7.8	20.7	0.0	21.1					
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.3	0.9	1.6	0.0	1.3					
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
%ile BackOfQ(50%),veh/ln	0.0	1.4	0.0	0.0	3.0	2.9	2.6	0.0	2.6					
Unsig. Movement Delay, s/veh														
LnGrp Delay(d), s/veh	0.0	6.4	0.0	0.0	8.3	8.8	22.3	0.0	22.4					
LnGrp LOS	A			A			C	C						
Approach Vol, veh/h	1124			2526			656							
Approach Delay, s/veh	6.4			8.4			22.3							
Approach LOS	A			A			C							
Timer - Assigned Phs	2			6			8							
Phs Duration (G+Y+Rc), s	39.6			39.6			17.7							
Change Period (Y+Rc), s	6.0			6.0			6.0							
Max Green Setting (Gmax), s	40.0			40.0			25.0							
Max Q Clear Time (g_c+I1), s	8.8			16.7			9.4							
Green Ext Time (p_c), s	8.3			16.9			2.3							
Intersection Summary														
HCM 7th Control Delay, s/veh				10.0										
HCM 7th LOS				A										
Notes														
User approved volume balancing among the lanes for turning movement.														

HCM 7th Signalized Intersection Summary

5: Mariposa Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1270	70	250	2010	60	110	60	120	60	120	340
Future Volume (veh/h)	170	1270	70	250	2010	60	110	60	120	60	120	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	179	1337	74	263	2116	63	116	63	126	63	126	358
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	207	2200	122	291	2558	76	105	183	366	350	141	401
Arrive On Green	0.12	0.35	0.35	0.16	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1767	6236	344	1767	6417	191	904	552	1104	1185	426	1211
Grp Volume(v), veh/h	179	1026	385	263	1578	601	116	0	189	63	0	484
Grp Sat Flow(s),veh/h/ln	1767	1596	1793	1767	1596	1821	904	0	1657	1185	0	1638
Q Serve(g_s), s	12.0	21.3	21.4	17.6	35.7	35.8	6.1	0.0	10.4	5.1	0.0	33.9
Cycle Q Clear(g_c), s	12.0	21.3	21.4	17.6	35.7	35.8	40.0	0.0	10.4	15.5	0.0	33.9
Prop In Lane	1.00		0.19	1.00		0.10	1.00		0.67	1.00		0.74
Lane Grp Cap(c), veh/h	207	1689	633	291	1908	726	105	0	548	350	0	542
V/C Ratio(X)	0.86	0.61	0.61	0.90	0.83	0.83	1.10	0.00	0.34	0.18	0.00	0.89
Avail Cap(c_a), veh/h	439	2365	886	436	2377	904	105	0	548	350	0	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.4	32.2	32.2	49.5	32.6	32.6	59.1	0.0	30.5	36.4	0.0	38.4
Incr Delay (d2), s/veh	4.1	0.1	0.4	12.2	1.7	4.3	118.5	0.0	0.1	0.1	0.0	16.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	7.8	8.9	8.5	13.2	15.5	6.7	0.0	4.1	1.4	0.0	15.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.5	32.3	32.6	61.8	34.3	36.9	177.6	0.0	30.7	36.5	0.0	54.9
LnGrp LOS	E	C	C	E	C	D	F		C	D		D
Approach Vol, veh/h	1590			2442			305			547		
Approach Delay, s/veh	35.1			37.9			86.6			52.8		
Approach LOS	D			D			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.1	49.8		46.9	18.6	55.4		46.9				
Change Period (Y+Rc), s	4.2	7.2		* 6.9	4.4	* 7.2		6.9				
Max Green Setting (Gmax), s	29.8	59.7		* 40	30.0	* 60		40.0				
Max Q Clear Time (g_c+I1), s	19.6	23.4		42.0	14.0	37.8		35.9				
Green Ext Time (p_c), s	0.3	6.4		0.0	0.2	10.4		0.8				

Intersection Summary

HCM 7th Control Delay, s/veh	41.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary

6: US-395 & Joshua St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	70	20	90	140	570	10	700	50	150	920	100
Future Volume (veh/h)	140	70	20	90	140	570	10	700	50	150	920	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	146	73	13	94	146	535	10	729	26	156	958	88
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	307	551	98	503	667	565	43	1026	458	192	1322	590
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.02	0.29	0.29	0.11	0.37	0.37
Sat Flow, veh/h	753	1533	273	1301	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	146	0	86	94	146	535	10	729	26	156	958	88
Grp Sat Flow(s),veh/h/ln	753	0	1806	1301	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	15.7	0.0	3.0	4.9	5.1	31.0	0.5	17.3	1.1	8.1	21.9	3.5
Cycle Q Clear(g_c), s	20.8	0.0	3.0	7.9	5.1	31.0	0.5	17.3	1.1	8.1	21.9	3.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	0	650	503	667	565	43	1026	458	192	1322	590
V/C Ratio(X)	0.48	0.00	0.13	0.19	0.22	0.95	0.23	0.71	0.06	0.81	0.72	0.15
Avail Cap(c_a), veh/h	317	0	674	521	693	587	377	1504	671	377	1504	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	20.2	22.8	20.9	29.1	44.9	29.7	24.0	40.9	25.2	19.4
Incr Delay (d2), s/veh	1.1	0.0	0.1	0.2	0.2	24.1	2.7	2.0	0.1	8.1	2.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	1.2	1.5	2.2	14.8	0.2	6.9	0.4	3.7	8.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.2	0.0	20.3	23.0	21.0	53.3	47.6	31.7	24.1	49.0	27.3	19.7
LnGrp LOS	C		C	C	C	D	D	C	C	D	C	B
Approach Vol, veh/h	232		775			765			1202			
Approach Delay, s/veh	25.9		43.5			31.6			29.6			
Approach LOS	C		D			C			C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.9	35.8		41.1	9.0	43.7		41.1				
Change Period (Y+Rc), s	6.7	8.5		7.4	6.7	8.5		7.4				
Max Green Setting (Gmax), s	20.0	40.0		35.0	20.0	40.0		35.0				
Max Q Clear Time (g_c+I1), s	10.1	19.3		22.8	2.5	23.9		33.0				
Green Ext Time (p_c), s	0.2	8.0		1.1	0.0	9.3		0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	33.4											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

HCM 7th Signalized Intersection Summary

7: Bear Valley Rd & I-15 NB Ramps

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 				
Traffic Volume (veh/h)	280	1330	0	0	1420	390	170	10	550	0	0	0
Future Volume (veh/h)	280	1330	0	0	1420	390	170	10	550	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	295	1400	0	0	1495	360	179	11	485			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	283	2989	0	0	1562	374	417	26	393			
Arrive On Green	0.16	0.59	0.00	0.00	0.38	0.38	0.25	0.25	0.25			
Sat Flow, veh/h	1767	5233	0	0	4246	977	1669	103	1572			
Grp Volume(v), veh/h	295	1400	0	0	1236	619	190	0	485			
Grp Sat Flow(s),veh/h/ln	1767	1689	0	0	1689	1679	1772	0	1572			
Q Serve(g_s), s	16.0	15.7	0.0	0.0	35.6	36.0	9.0	0.0	25.0			
Cycle Q Clear(g_c), s	16.0	15.7	0.0	0.0	35.6	36.0	9.0	0.0	25.0			
Prop In Lane	1.00		0.00	0.00		0.58	0.94		1.00			
Lane Grp Cap(c), veh/h	283	2989	0	0	1293	643	443	0	393			
V/C Ratio(X)	1.04	0.47	0.00	0.00	0.96	0.96	0.43	0.00	1.23			
Avail Cap(c_a), veh/h	283	2989	0	0	1293	643	443	0	393			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.70	0.70	1.00	0.00	1.00			
Uniform Delay (d), s/veh	42.0	11.6	0.0	0.0	30.0	30.1	31.5	0.0	37.5			
Incr Delay (d2), s/veh	65.3	0.5	0.0	0.0	12.8	21.9	3.0	0.0	125.4			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	11.9	5.3	0.0	0.0	15.8	17.4	4.2	0.0	23.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	107.3	12.1	0.0	0.0	42.8	52.0	34.5	0.0	162.9			
LnGrp LOS	F	B			D	D	C		F			
Approach Vol, veh/h	1695			1855			675					
Approach Delay, s/veh	28.7			45.9			126.8					
Approach LOS	C			D			F					
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	69.0			20.7			48.3			31.0		
Change Period (Y+Rc), s	10.0			4.7			10.0			6.0		
Max Green Setting (Gmax), s	41.0			16.0			38.0			25.0		
Max Q Clear Time (g_c+I1), s	17.7			18.0			38.0			27.0		
Green Ext Time (p_c), s	7.1			0.0			0.0			0.0		
Intersection Summary												
HCM 7th Control Delay, s/veh	51.9											
HCM 7th LOS	D											

HCM 7th Signalized Intersection Summary

8: Mariposa Rd & Bear Valley Rd

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	130	1440	310	130	1330	80	380	220	180	60	140	100
Future Volume (veh/h)	130	1440	310	130	1330	80	380	220	180	60	140	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	135	1500	323	135	1385	83	396	229	188	62	146	104
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	154	1894	406	155	2217	133	478	251	212	237	249	211
Arrive On Green	0.09	0.45	0.45	0.09	0.45	0.45	0.14	0.14	0.14	0.13	0.13	0.13
Sat Flow, veh/h	1767	4176	895	1767	4886	293	3534	1856	1569	1767	1856	1572
Grp Volume(v), veh/h	135	1212	611	135	957	511	396	229	188	62	146	104
Grp Sat Flow(s),veh/h/ln	1767	1689	1694	1767	1689	1802	1767	1856	1569	1767	1856	1572
Q Serve(g_s), s	8.2	33.0	33.3	8.1	23.3	23.3	11.8	13.1	12.7	3.4	8.0	6.6
Cycle Q Clear(g_c), s	8.2	33.0	33.3	8.1	23.3	23.3	11.8	13.1	12.7	3.4	8.0	6.6
Prop In Lane	1.00		0.53	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	1532	768	155	1532	818	478	251	212	237	249	211
V/C Ratio(X)	0.88	0.79	0.80	0.87	0.62	0.62	0.83	0.91	0.89	0.26	0.59	0.49
Avail Cap(c_a), veh/h	154	1532	768	155	1532	818	478	251	212	237	249	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	25.1	25.2	48.6	22.5	22.5	45.5	46.1	45.9	41.9	43.9	43.3
Incr Delay (d2), s/veh	29.9	2.9	5.8	37.2	1.9	3.6	11.6	34.5	33.0	2.7	9.7	8.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	12.9	13.7	5.1	9.1	10.1	5.8	8.2	6.7	1.6	4.2	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.6	28.1	31.0	85.9	24.4	26.1	57.1	80.6	78.9	44.6	53.7	51.3
LnGrp LOS	E	C	C	F	C	C	E	F	E	D	D	D
Approach Vol, veh/h	1958			1603			813			312		
Approach Delay, s/veh	32.5			30.1			68.8			51.1		
Approach LOS	C			C			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	54.0		20.0	14.0	54.0		20.0				
Change Period (Y+Rc), s	4.5	5.0		5.4	4.6	5.0		5.5				
Max Green Setting (Gmax), s	9.5	49.0		14.6	9.4	49.0		14.5				
Max Q Clear Time (g_c+I1), s	10.1	35.3		15.1	10.2	25.3		10.0				
Green Ext Time (p_c), s	0.0	9.6		0.0	0.0	10.7		0.5				

Intersection Summary

HCM 7th Control Delay, s/veh 39.2

HCM 7th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

HCM 7th Signalized Intersection Summary

1: Cataba Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  							
Traffic Volume (veh/h)	310	1540	190	180	1030	50	180	60	190	50	50	180
Future Volume (veh/h)	310	1540	190	180	1030	50	180	60	190	50	50	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	320	1588	90	186	1062	50	124	149	74	52	52	78
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	205	1939	602	274	1719	81	229	240	203	156	163	138
Arrive On Green	0.12	0.38	0.38	0.08	0.35	0.35	0.13	0.13	0.13	0.09	0.09	0.09
Sat Flow, veh/h	1767	5066	1572	3428	4957	233	1767	1856	1569	1767	1856	1567
Grp Volume(v), veh/h	320	1588	90	186	723	389	124	149	74	52	52	78
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1714	1689	1814	1767	1856	1569	1767	1856	1567
Q Serve(g_s), s	8.4	20.4	2.7	3.8	12.9	12.9	4.8	5.5	3.1	2.0	1.9	3.5
Cycle Q Clear(g_c), s	8.4	20.4	2.7	3.8	12.9	12.9	4.8	5.5	3.1	2.0	1.9	3.5
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	1939	602	274	1171	629	229	240	203	156	163	138
V/C Ratio(X)	1.56	0.82	0.15	0.68	0.62	0.62	0.54	0.62	0.36	0.33	0.32	0.57
Avail Cap(c_a), veh/h	205	2095	650	369	1369	735	1023	1074	908	1023	1074	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	20.1	14.7	32.5	19.7	19.7	29.6	29.9	28.8	31.1	31.0	31.7
Incr Delay (d2), s/veh	276.2	2.5	0.1	3.0	0.6	1.2	2.0	2.6	1.1	1.2	1.1	3.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	6.9	0.8	1.6	4.4	4.8	2.1	2.6	1.2	0.9	0.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	308.3	22.7	14.8	35.5	20.3	20.9	31.5	32.5	29.9	32.3	32.1	35.3
LnGrp LOS	F	C	B	D	C	C	C	C	C	C	C	D
Approach Vol, veh/h	1998			1298			347			182		
Approach Delay, s/veh	68.0			22.7			31.6			33.6		
Approach LOS	E			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	32.4		11.9	10.8	35.0		14.9				
Change Period (Y+Rc), s	5.0	7.2		5.5	5.0	7.2		5.5				
Max Green Setting (Gmax), s	8.4	29.4		42.0	7.8	30.0		42.0				
Max Q Clear Time (g_c+I1), s	10.4	14.9		5.5	5.8	22.4		7.5				
Green Ext Time (p_c), s	0.0	5.7		0.7	0.1	5.3		1.6				

Intersection Summary

HCM 7th Control Delay, s/veh 47.7

HCM 7th LOS D

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

HCM 7th Signalized Intersection Summary

2: Key Pointe Driveway/Key Pointe Ave & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	50	1610	30	320	1150	570	40	80	240	570	110	130
Future Volume (veh/h)	50	1610	30	320	1150	570	40	80	240	570	110	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	52	1660	23	330	1186	561	41	82	101	588	113	130
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	133	1947	604	222	1459	679	313	623	528	424	264	304
Arrive On Green	0.08	0.38	0.38	0.13	0.43	0.43	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	5066	1572	1767	3377	1572	1128	1856	1572	1191	787	905
Grp Volume(v), veh/h	52	1660	23	330	1186	561	41	82	101	588	0	243
Grp Sat Flow(s),veh/h/ln	1767	1689	1572	1767	1689	1572	1128	1856	1572	1191	0	1693
Q Serve(g_s), s	3.3	35.8	1.1	15.0	36.6	37.5	3.5	3.7	5.4	36.3	0.0	13.3
Cycle Q Clear(g_c), s	3.3	35.8	1.1	15.0	36.6	37.5	16.8	3.7	5.4	40.0	0.0	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	133	1947	604	222	1459	679	313	623	528	424	0	568
V/C Ratio(X)	0.39	0.85	0.04	1.48	0.81	0.83	0.13	0.13	0.19	1.39	0.00	0.43
Avail Cap(c_a), veh/h	222	2550	791	222	1700	791	313	623	528	424	0	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.5	33.6	22.9	52.1	29.6	29.9	37.2	27.5	28.1	44.0	0.0	30.7
Incr Delay (d2), s/veh	0.7	1.9	0.0	240.3	2.3	5.4	0.1	0.0	0.1	188.8	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	14.0	0.4	21.2	14.2	14.1	1.0	1.6	2.1	35.0	0.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.2	35.5	22.9	292.5	31.9	35.3	37.3	27.6	28.2	232.8	0.0	30.9
LnGrp LOS	D	D	C	F	C	D	D	C	C	F		C
Approach Vol, veh/h	1735			2077			224			831		
Approach Delay, s/veh	35.8			74.2			29.6			173.8		
Approach LOS	D			E			C			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.7	53.0		46.5	14.0	58.7		46.5				
Change Period (Y+Rc), s	4.7	7.2		* 6.5	5.0	7.2		6.5				
Max Green Setting (Gmax), s	15.0	60.0		* 40	15.0	60.0		40.0				
Max Q Clear Time (g_c+I1), s	17.0	37.8		18.8	5.3	39.5		42.0				
Green Ext Time (p_c), s	0.0	8.0		0.5	0.0	7.9		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 75.5
 HCM 7th LOS E

Notes

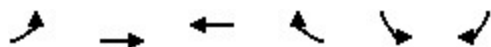
User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 7th Signalized Intersection Summary

3: Main St & I-15 SB Ramps

09/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↑↑	↑
Traffic Volume (veh/h)	0	2260	1720	0	660	380
Future Volume (veh/h)	0	2260	1720	0	660	380
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856
Adj Flow Rate, veh/h	0	2330	1773	0	680	392
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	2693	2693	0	1043	478
Arrive On Green	0.00	0.53	0.53	0.00	0.30	0.30
Sat Flow, veh/h	0	5400	5400	0	3428	1572
Grp Volume(v), veh/h	0	2330	1773	0	680	392
Grp Sat Flow(s),veh/h/ln	0	1689	1689	0	1714	1572
Q Serve(g_s), s	0.0	29.2	18.4	0.0	12.6	16.9
Cycle Q Clear(g_c), s	0.0	29.2	18.4	0.0	12.6	16.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2693	2693	0	1043	478
V/C Ratio(X)	0.00	0.87	0.66	0.00	0.65	0.82
Avail Cap(c_a), veh/h	0	2773	2773	0	1408	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.8	12.3	0.0	22.1	23.6
Incr Delay (d2), s/veh	0.0	3.1	0.6	0.0	0.7	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.0	5.3	0.0	4.9	6.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	17.9	12.9	0.0	22.8	29.7
LnGrp LOS		B	B		C	C
Approach Vol, veh/h		2330	1773		1072	
Approach Delay, s/veh		17.9	12.9		25.3	
Approach LOS		B	B		C	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		44.8		28.2		44.8
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		40.0		30.0		40.0
Max Q Clear Time (g_c+I1), s		31.2		18.9		20.4
Green Ext Time (p_c), s		7.7		3.3		11.8
Intersection Summary						
HCM 7th Control Delay, s/veh			17.7			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

4: I-15 NB Ramps & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑			↑↑↑↑	↑	↑	↑	↑			
Traffic Volume (veh/h)	0	2610	0	0	1830	420	270	10	850	0	0	0
Future Volume (veh/h)	0	2610	0	0	1830	420	270	10	850	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	0	2691	0	0	1887	236	278	0	838			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	3	0	0	3	3	3	3	3			
Cap, veh/h	0	2709	0	0	2709	841	539	0	959			
Arrive On Green	0.00	0.53	0.00	0.00	0.53	0.53	0.30	0.00	0.30			
Sat Flow, veh/h	0	5400	0	0	5233	1572	1767	0	3145			
Grp Volume(v), veh/h	0	2691	0	0	1887	236	278	0	838			
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572	1767	0	1572			
Q Serve(g_s), s	0.0	39.4	0.0	0.0	20.7	6.1	9.7	0.0	18.9			
Cycle Q Clear(g_c), s	0.0	39.4	0.0	0.0	20.7	6.1	9.7	0.0	18.9			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2709	0	0	2709	841	539	0	959			
V/C Ratio(X)	0.00	0.99	0.00	0.00	0.70	0.28	0.52	0.00	0.87			
Avail Cap(c_a), veh/h	0	2709	0	0	2709	841	591	0	1051			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	17.3	0.0	0.0	12.9	9.5	21.4	0.0	24.6			
Incr Delay (d2), s/veh	0.0	15.7	0.0	0.0	0.8	0.2	0.8	0.0	7.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	15.2	0.0	0.0	6.1	1.7	3.9	0.0	7.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	33.0	0.0	0.0	13.7	9.7	22.2	0.0	32.4			
LnGrp LOS	C			B			A	C	C			
Approach Vol, veh/h	2691			2123			1116					
Approach Delay, s/veh	33.0			13.3			29.9					
Approach LOS	C			B			C					
Timer - Assigned Phs	2			6			8					
Phs Duration (G+Y+Rc), s	46.0			46.0			28.8					
Change Period (Y+Rc), s	6.0			6.0			6.0					
Max Green Setting (Gmax), s	40.0			40.0			25.0					
Max Q Clear Time (g_c+I1), s	41.4			22.7			20.9					
Green Ext Time (p_c), s	0.0			12.2			1.9					
Intersection Summary												
HCM 7th Control Delay, s/veh	25.4											
HCM 7th LOS	C											
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 7th Signalized Intersection Summary

5: Mariposa Rd & Main St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	630	2590	240	100	1830	110	170	190	160	160	130	300
Future Volume (veh/h)	630	2590	240	100	1830	110	170	190	160	160	130	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	663	2726	246	105	1926	111	179	200	143	168	137	259
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	465	3189	284	127	2102	121	93	274	196	144	157	296
Arrive On Green	0.26	0.53	0.53	0.07	0.34	0.34	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1767	6010	536	1767	6220	358	980	1006	719	1029	574	1085
Grp Volume(v), veh/h	663	2165	807	105	1482	555	179	0	343	168	0	396
Grp Sat Flow(s),veh/h/ln	1767	1596	1759	1767	1596	1791	980	0	1725	1029	0	1659
Q Serve(g_s), s	38.6	56.8	58.4	8.6	43.6	43.6	6.5	0.0	26.5	13.5	0.0	33.5
Cycle Q Clear(g_c), s	38.6	56.8	58.4	8.6	43.6	43.6	40.0	0.0	26.5	40.0	0.0	33.5
Prop In Lane	1.00		0.30	1.00		0.20	1.00		0.42	1.00		0.65
Lane Grp Cap(c), veh/h	465	2540	933	127	1618	605	93	0	470	144	0	452
V/C Ratio(X)	1.43	0.85	0.86	0.83	0.92	0.92	1.93	0.00	0.73	1.17	0.00	0.88
Avail Cap(c_a), veh/h	465	2540	933	371	1678	628	93	0	470	144	0	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.0	29.5	29.9	67.2	46.6	46.6	71.8	0.0	48.4	68.9	0.0	51.0
Incr Delay (d2), s/veh	203.7	2.9	8.2	5.1	7.9	17.5	454.6	0.0	5.0	126.9	0.0	16.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	42.9	20.9	25.0	4.0	17.8	21.6	15.2	0.0	12.0	10.4	0.0	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	257.8	32.4	38.0	72.2	54.5	64.0	526.4	0.0	53.4	195.7	0.0	67.6
LnGrp LOS	F	C	D	E	D	E	F		D	F		E
Approach Vol, veh/h	3635			2142			522			564		
Approach Delay, s/veh	74.7			57.8			215.6			105.8		
Approach LOS	E			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	85.0		46.9	43.0	56.8		46.9				
Change Period (Y+Rc), s	4.2	7.2		* 6.9	4.4	* 7.2		6.9				
Max Green Setting (Gmax), s	30.8	58.7		* 40	38.6	* 51		40.0				
Max Q Clear Time (g_c+I1), s	10.6	60.4		42.0	40.6	45.6		42.0				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	4.0		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	82.7											
HCM 7th LOS	F											
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 7th Signalized Intersection Summary

6: US-395 & Joshua St

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	220	10	90	100	350	30	1590	320	680	840	120
Future Volume (veh/h)	350	220	10	90	100	350	30	1590	320	680	840	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	365	229	9	94	104	235	31	1656	212	708	875	121
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	326	528	21	280	552	468	96	1199	535	301	1608	717
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.34	0.34	0.17	0.46	0.46
Sat Flow, veh/h	1033	1773	70	1133	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	365	0	238	94	104	235	31	1656	212	708	875	121
Grp Sat Flow(s),veh/h/ln	1033	0	1843	1133	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	30.1	0.0	12.2	8.6	4.9	14.5	2.0	40.0	12.1	20.0	21.1	5.3
Cycle Q Clear(g_c), s	35.0	0.0	12.2	20.8	4.9	14.5	2.0	40.0	12.1	20.0	21.1	5.3
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	549	280	552	468	96	1199	535	301	1608	717
V/C Ratio(X)	1.12	0.00	0.43	0.34	0.19	0.50	0.32	1.38	0.40	2.36	0.54	0.17
Avail Cap(c_a), veh/h	326	0	549	280	552	468	301	1199	535	301	1608	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	0.0	33.3	41.7	30.7	34.1	53.5	38.8	29.6	48.8	23.1	18.8
Incr Delay (d2), s/veh	86.6	0.0	0.5	0.7	0.2	0.8	1.9	176.7	1.0	620.3	0.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.4	0.0	5.5	2.4	2.2	5.6	0.9	45.4	4.5	60.2	8.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	133.2	0.0	33.9	42.4	30.9	35.0	55.5	215.5	30.6	669.1	23.8	19.1
LnGrp LOS	F		C	D	C	C	E	F	C	F	C	B
Approach Vol, veh/h	603			433			1899			1704		
Approach Delay, s/veh	94.0			35.6			192.3			291.6		
Approach LOS	F			D			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.7	48.5		42.4	13.1	62.1		42.4				
Change Period (Y+Rc), s	6.7	8.5		7.4	6.7	8.5		7.4				
Max Green Setting (Gmax), s	20.0	40.0		35.0	20.0	40.0		35.0				
Max Q Clear Time (g_c+I1), s	22.0	42.0		37.0	4.0	23.1		22.8				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.1		1.4				

Intersection Summary

HCM 7th Control Delay, s/veh 201.4

HCM 7th LOS F

Notes

User approved pedestrian interval to be less than phase max green.

HCM 7th Signalized Intersection Summary

7: Bear Valley Rd & I-15 NB Ramps

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	240	1900	0	0	1670	320	340	10	680	0	0	0
Future Volume (veh/h)	240	1900	0	0	1670	320	340	10	680	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No					
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	253	2000	0	0	1758	321	358	11	627			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	275	2902	0	0	1601	289	467	14	427			
Arrive On Green	0.16	0.57	0.00	0.00	0.37	0.37	0.27	0.27	0.27			
Sat Flow, veh/h	1767	5233	0	0	4471	777	1717	53	1572			
Grp Volume(v), veh/h	253	2000	0	0	1375	704	369	0	627			
Grp Sat Flow(s),veh/h/ln	1767	1689	0	0	1689	1704	1770	0	1572			
Q Serve(g_s), s	14.5	28.7	0.0	0.0	38.3	38.3	19.8	0.0	28.0			
Cycle Q Clear(g_c), s	14.5	28.7	0.0	0.0	38.3	38.3	19.8	0.0	28.0			
Prop In Lane	1.00		0.00	0.00		0.46	0.97		1.00			
Lane Grp Cap(c), veh/h	275	2902	0	0	1256	634	481	0	427			
V/C Ratio(X)	0.92	0.69	0.00	0.00	1.09	1.11	0.77	0.00	1.47			
Avail Cap(c_a), veh/h	275	2902	0	0	1256	634	481	0	427			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.42	0.42	1.00	0.00	1.00			
Uniform Delay (d), s/veh	42.9	15.5	0.0	0.0	32.3	32.4	34.5	0.0	37.5			
Incr Delay (d2), s/veh	33.7	1.4	0.0	0.0	48.8	60.0	11.1	0.0	222.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.7	10.1	0.0	0.0	23.1	25.3	9.9	0.0	37.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.6	16.9	0.0	0.0	81.1	92.3	45.6	0.0	260.0			
LnGrp LOS	E	B			F	F	D		F			
Approach Vol, veh/h	2253			2079			996					
Approach Delay, s/veh	23.6			84.9			180.6					
Approach LOS	C			F			F					
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	69.0			20.7			48.3			34.0		
Change Period (Y+Rc), s	10.0			4.7			10.0			6.0		
Max Green Setting (Gmax), s	38.0			16.0			38.0			28.0		
Max Q Clear Time (g_c+I1), s	30.7			16.5			40.3			30.0		
Green Ext Time (p_c), s	5.2			0.0			0.0			0.0		
Intersection Summary												
HCM 7th Control Delay, s/veh	76.9											
HCM 7th LOS	E											

HCM 7th Signalized Intersection Summary

8: Mariposa Rd & Bear Valley Rd

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1760	470	120	1410	80	390	240	150	110	240	190
Future Volume (veh/h)	350	1760	470	120	1410	80	390	240	150	110	240	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	365	1833	446	125	1469	79	406	250	51	115	250	59
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	343	1957	464	133	1769	95	481	252	210	186	195	165
Arrive On Green	0.19	0.48	0.48	0.08	0.36	0.36	0.14	0.14	0.14	0.10	0.10	0.10
Sat Flow, veh/h	1767	4078	966	1767	4914	264	3534	1856	1548	1767	1856	1572
Grp Volume(v), veh/h	365	1509	770	125	1010	538	406	250	51	115	250	59
Grp Sat Flow(s),veh/h/ln	1767	1689	1667	1767	1689	1801	1767	1856	1548	1767	1856	1572
Q Serve(g_s), s	19.4	42.0	44.6	7.0	27.3	27.3	11.2	13.5	2.9	6.2	10.5	3.5
Cycle Q Clear(g_c), s	19.4	42.0	44.6	7.0	27.3	27.3	11.2	13.5	2.9	6.2	10.5	3.5
Prop In Lane	1.00		0.58	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	343	1621	800	133	1216	648	481	252	210	186	195	165
V/C Ratio(X)	1.06	0.93	0.96	0.94	0.83	0.83	0.84	0.99	0.24	0.62	1.28	0.36
Avail Cap(c_a), veh/h	343	1621	800	133	1216	648	481	252	210	186	195	165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.36	0.36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	24.4	25.1	46.0	29.2	29.2	42.2	43.1	38.6	42.8	44.8	41.6
Incr Delay (d2), s/veh	48.0	4.7	12.0	60.8	6.7	11.8	13.0	53.9	0.6	14.6	160.6	5.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	16.2	18.5	5.2	11.5	13.2	5.6	9.7	1.1	3.4	13.3	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	88.3	29.1	37.2	106.8	35.9	41.0	55.2	97.1	39.2	57.4	205.4	47.6
LnGrp LOS	F	C	D	F	D	D	E	F	D	E	F	D
Approach Vol, veh/h	2644		1673				707				424	
Approach Delay, s/veh	39.6		42.8				68.8				143.3	
Approach LOS	D		D				E				F	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	12.0	53.0	19.0		24.0	41.0	16.0					
Change Period (Y+Rc), s	4.5	5.0	5.4		4.6	5.0	5.5					
Max Green Setting (Gmax), s	7.5	48.0	13.6		19.4	36.0	10.5					
Max Q Clear Time (g_c+I1), s	9.0	46.6	15.5		21.4	29.3	12.5					
Green Ext Time (p_c), s	0.0	1.3	0.0		0.0	4.7	0.0					
Intersection Summary												
HCM 7th Control Delay, s/veh	52.5											
HCM 7th LOS	D											
Notes												
User approved pedestrian interval to be less than phase max green.												
User approved volume balancing among the lanes for turning movement.												