KISS LOGISTIC CENTER WAREHOUSE

TRAFFIC IMPACT ANALYSIS

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1 EXECUTIVE SUMMARY

This Traffic Impact Analysis (TIA) evaluates the potential traffic and transportation impacts of the proposed 655,468 square foot KISS Logistics Center Warehouse (project). Based on the Institute of Transportation Engineers, *Trip* Generation 11th Edition vehicle trip generation rates, the project would generate 1,357 daily trips including 131 trips during the AM peak hour and 149 trips during the PM peak hour. Passenger Car Equivalent factors were added to truck trips to account for the fact that trucks utilize more roadway capacity due to their size, reduced maneuverability and slower acceleration. When the passenger car equivalent factors are considered, the project would generate 1,941 daily trips including 187 trips during the AM peak hour and 213 trips during the PM peak hour.

The study area intersections listed in Section 2.3 – Study Area and Analysis Scenarios were evaluated during the AM and PM peak hours, which are defined as the hours with the highest traffic volumes during the 7 AM to 9 AM and 4 PM to 6 PM peak commute periods. AM and PM peak hour traffic operations were evaluated for the following scenarios:

- Existing Condition
- Opening Year 2024 Condition
- Opening Year 2024 Plus Project Condition

Opening Year Plus Project Condition – Intersections
An LOS analysis was prepared for all study intersections in the Opening Year plus Project scenario. All study area intersections are forecast to operate with satisfactory LOS in the Opening Year plus Project scenario except for the following intersections which are forecast to operate at a deficient LOS:

- US-395/Phelan Road-Main Street
- US-395/Poplar Street
- Joshua Street/I-15 SB Off-Ramp

When compared to the Opening Year scenario, the project adds more than 5 seconds of delay and therefore would have a negative effect on traffic operations at the intersections of US-395/Phelan Road-Main St, US-395/Poplar Street, and Joshua Street/I-15 SB Off-Ramp in the Opening Year plus Project scenario. The following improvements are recommended to improve the deficient intersections.

<u>US-395/Phelan Road-Main Street Recommended Improvement:</u> Adding a NBL turn lane, a NBT lane, a SBL turn lane, a EBT lane, a WBT lane, a WBR turn lane, and modifying the traffic signal to implement overlap phasing for the WBR turn lane at the intersection of US-395/Phelan Road-Main Street would improve the intersection's operation and the intersection would operate at a satisfactory LOS.

<u>US-395/Poplar Street Recommended Improvement:</u> The CAMUTCD peak hour traffic signal warrant is met for the intersection of US-395/Poplar Street under the Opening Year Plus Project scenario; therefore, installing a traffic signal, changing the NB lane geometry to one NB left-turn lane, one NB through lane, and one NB through-right lane, and changing the SB, EB, & WB lane geometry to one left-turn lane and one shared through-right lane as an improvement would mitigate the project

traffic for the intersection of US-395/Poplar Street in the Opening Year Plus Project scenario. With the implementation of this improvement, the LOS operations at the intersection of US-395/Poplar Street would be improved to a satisfactory LOS.

Joshua Street/I-15 SB Off-Ramp Recommended Improvement: The CAMUTCD peak hour traffic signal warrant is met for the intersection of Joshua Street/I-15 SB Off-Ramp under the Opening Year plus Project scenario during the AM peak hour; therefore, installing a traffic signal would improve the traffic conditions for the intersection of Joshua Street/I-15 SB Off-Ramp in the Opening Year plus Project scenario. With the implementation of this improvement, the intersection of Joshua Street/I-15 SB Off-Ramp would operate at a satisfactory LOS.

Opening Year 2024 Plus Project Intersection Queueing Analysis Results
A queueing analysis was prepared for study intersections on Main Street, US 395 and Joshua Street in the Opening Year Plus Project scenario. The project would cause a queueing deficiency in the Opening Year 2024 Plus Project condition at the following approach:

- US-395/Phelan Road-Main Street
  - Northbound left-turn lane

US-395/Phelan Road-Main Street Recommended Queueing Improvement: The LOS recommended improvement for the US-395/Phelan Road-Main Street intersection also improves the queueing deficiency of the intersection in the Opening Year 2024 Plus Project condition.

Project Fair Share – Intersections
Since the project effect on traffic at the intersections of US-395/Phelan Road-Main Street, US-395/Poplar Street, and Joshua Street/I-15 SB Off-Ramp are cumulative, the project would contribute to a fair share for the implementation of the aforementioned improvements. The project would be responsible for the highest peak hour fair share of 9.81% for US-395/ Phelan Road-Main Street, 9.56% for US-395/Poplar Street, and 6.26% for Joshua Street/I-15 SB.

Opening Year Plus Project Condition – Roadway Segments
A roadway operations analysis was conducted for the study area to evaluate the Opening Year 2024 with-project conditions. All study roadway segments would operate at an unsatisfactory LOS in the Opening Year 2024 plus project condition except for the roadway segment of Joshua Street (from I-15 SB Off-Ramp to Mariposa Road) which is forecast to operate at a satisfactory LOS.

The widening improvements of the study roadways are future projects subject to the City's Development Impact Fee (DIF) consistent with the General Plan Implementation Policy CI-2.5 which aims to "*Maintain the City's development impact fee program for future development which includes improvements to roadways to mitigate the impact of the new development.*" Therefore, the cumulative impacts at the impacted roadway segments would be mitigated by payment of the City's DIF. It is to be noted that roadway segments would already be impacted in the Opening Year 2024 without project. Therefore, the project is committed to make the payment of the DIF, which should be considered adequate mitigation for the impact identified in the Opening Year plus Project condition at the impacted roadway segments.

Phelan Road (from US-395 to Caliente Road) and (from Caliente Road to Los Banos) Recommended Improvement: As per the Circulation Element of the City's General Plan, Phelan Road is classified as a major arterial with a 104 feet curb-to-curb right-of-way. It is currently a 4-

lane road and is forecasted to be built to its general plan buildout of 6 lanes. Widening Phelan Road to 6 lanes would increase its capacity; therefore, both Phelan Road roadway segments would improve and would operate at satisfactory LOS.

US-395 (from Phelan Road to Caliente Road) and (from Phelan Road to Poplar Street) Recommended Improvement: As per the Circulation Element of the City's General Plan, US-395 is classified as a special street with a 106 feet curb-to-curb right-of-way. It is currently a 2-lane highway. The ultimate widening of US-395 is to be determined by Caltrans. It is anticipated that US-395 would be widened to 4 lanes. Therefore, by widening both US-395 highway segments to 4 lanes, its operational capacity would be improved but would still operate at a deficient LOS.

Joshua Street (from US-395 to I-15SB Off-Ramp) Recommended Improvement: Joshua Street is currently built to its general plan buildout of 2 lanes. However, as per the Circulation Element of the City's General Plan, Joshua Street has a 80 feet total right-of-way including a 50 feet curb-to-curb right-of-way which would suffice for Joshua Street to have 4 lanes. Furthermore, improving Joshua Street by widening it to 4 lanes would cause it to operate at a satisfactory LOS.

2 INTRODUCTION

This Traffic Impact Analysis (TIA) has been prepared by EPD Solutions, Inc. (EPD) to analyze the potential traffic and transportation impacts of the proposed KISS Logistics Center Warehouse (project). The scope of work for this TIA was reviewed and approved by the City of Hesperia (City) and is provided in Appendix A. The TIA was prepared according to the approved scope of work using methodologies and significance criteria consistent with the requirements of the City of Hesperia General Plan, City of Hesperia Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment (LOS), the San Bernardino County Transportation Impact Study Guidelines and applicable provisions of the California Environmental Quality Act (CEQA).

2.1 Project Description

The proposed project would be located on a 29.61 acres vacant site, 500 feet north of Phelan Road as it intersects US-395 in the City of Hesperia. The location of the project is shown in Figure 1 - Project Location, and the project site plan is shown in Figure 2 – Project Site Plan. The project proposes to construct a total industrial building area of 655,468 SF comprising 639,468 SF of warehouse and 16,000 SF of office. The project site will be utilized as follows:

- 75% High Cube Transload and Short-Term Storage Warehouse (Land Use 154) Without Cold Storage
- 5% High Cube Transload and Short-Term Storage Warehouse (Land Use 154) With Cold Storage
- 20% Manufacturing (Land Use 140)

The site will provide 374 parking stalls comprising 38 EV charging, 309 standard, 16 accessible, and 11 clean air parking stalls. A total of 83 trailer parking stalls will be provided. Access to the project site will be provided via 2 unsignalized full-access driveways on New Public Road. Both driveways will be used by passenger vehicles and trucks.

Figure 1: Project Location

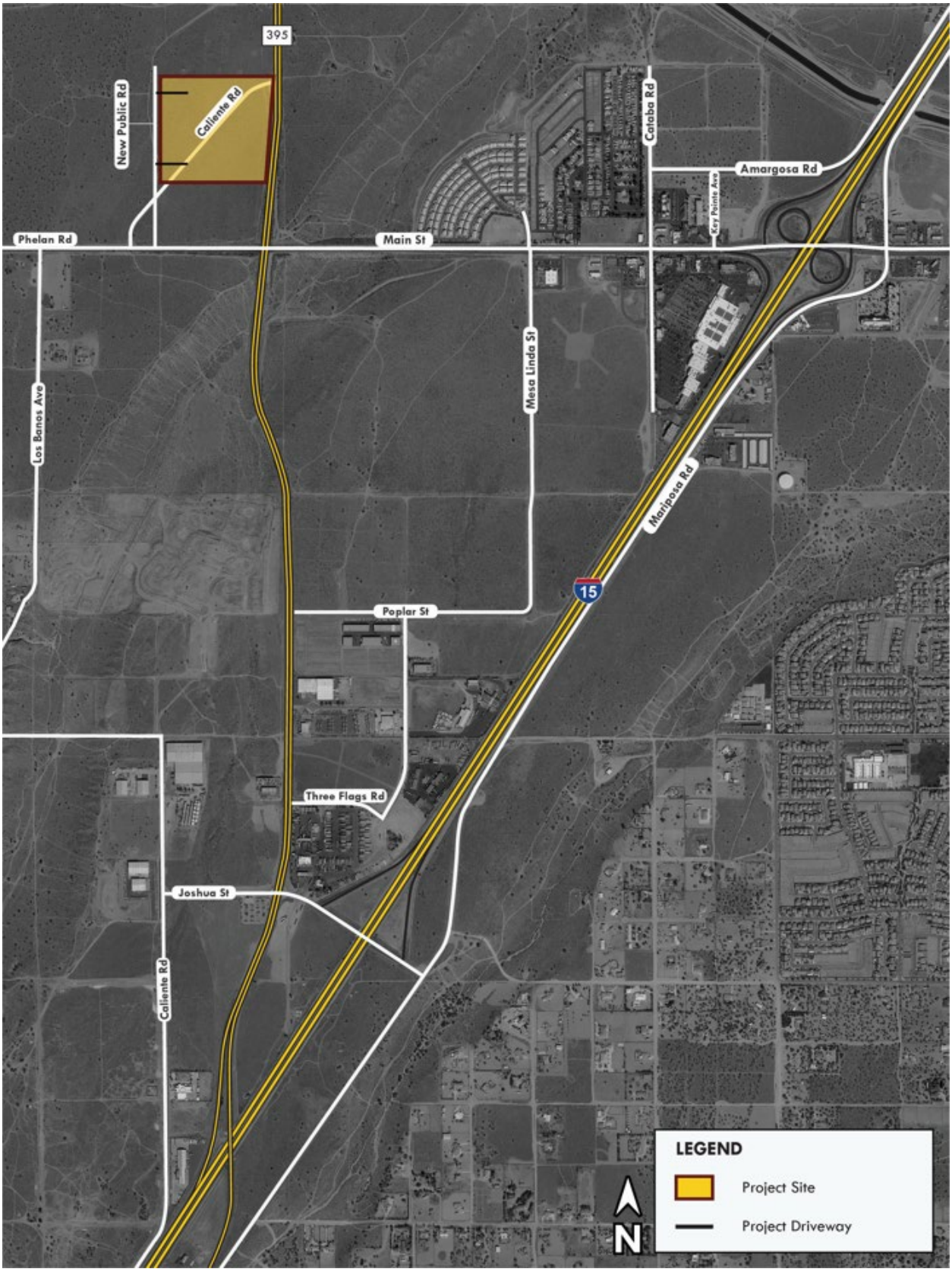
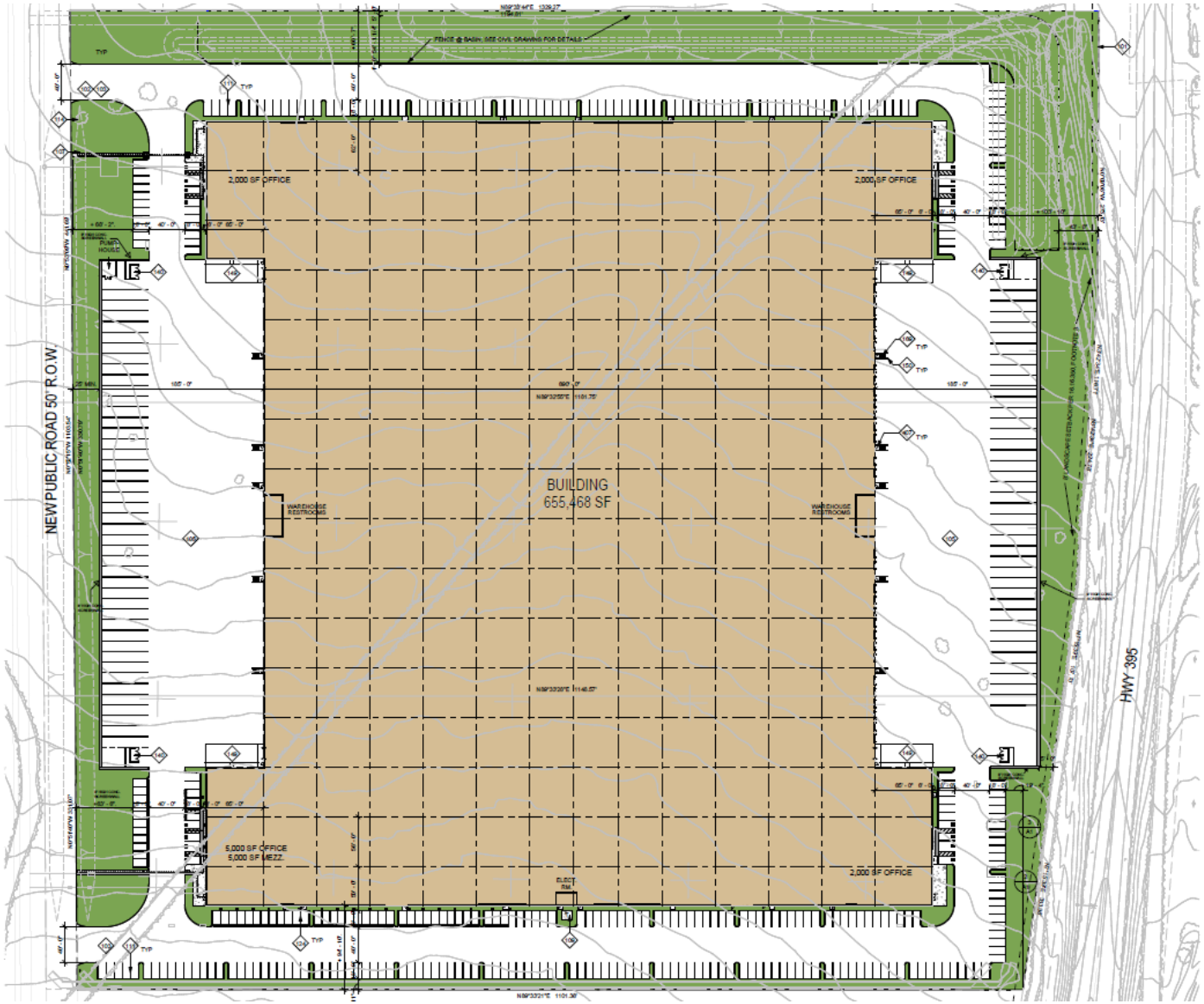


Figure 2: Project Site Plan



2.2 Study Area and Analysis Scenarios

This TIA includes all signalized and unsignalized intersections where the project has the potential to add 50 or more AM or PM peak hour trips. The two proposed driveway intersections (i.e., intersections 13 and 14) were also analyzed in the plus project condition to evaluate the effect on New Public Road. The location of the study area intersections are shown on Figure 3 – Project Study Area (Intersections). The following intersections were included in the analysis:

1. US-395/Phelan Road-Main Street
2. US-395/Poplar Street
3. US-395/Three Flags Road
4. US 395/Joshua Street
5. Phelan Road/New Public Road
6. Main Street/Mesa Linda Street
7. Main Street/Key Pointe Avenue
8. Main Street/I-15 SB Ramps
9. Main Street/I-15 NB Ramps
10. Joshua Road/Outpost Road
11. Joshua Street/I-15 SB Off-Ramp
12. Joshua Street/I-15 NB On-Ramp
13. New Public Road/North Driveway
14. New Public Road/South Driveway

The TIA also includes the analysis of the following study area roadway segments which are shown in Figure 4 – Project Study Area (Roadway Segments):

1. Phelan Road from US-395 to Caliente Road
2. Phelan Road from Caliente Road to Los Banos Avenue
3. US-395 from Phelan Road to Caliente Road
4. US-395 from Phelan Road to Poplar Street
5. Joshua Street from US-395 to I-15SB Off-Ramp
6. Joshua Street from I-15SB Off-Ramp to Mariposa Road

Study area intersections were evaluated during the AM and PM peak hours, which are defined as the hour with the highest traffic volumes during the 7 AM to 9 AM and 4 PM to 6 PM peak commute periods. AM and PM peak hour as well as ADT traffic operations were evaluated for the following scenarios:

- Existing Condition
- Opening Year 2024 Condition
- Opening Year 2024 plus Project Condition

Please note that the project's land use is consistent with the land use (i.e. Neighborhood-Commercial) analyzed in the General Plan. A small component of the project site will be converted into Commercial-Industrial Business Park (CIBP). Overall, the project site would generate fewer trips than the planned land use per the General Plan considering which only Existing Conditions and Opening Year 2024 Conditions were scoped for analysis in this study consistent with the City TIA guidelines.

Forecast traffic volumes for the Opening year 2024 conditions were developed by applying a growth rate of two percent per year to the 2022 traffic counts and adding traffic from nearby cumulative (approved and not yet build and those under review) development projects. The growth rate was approved by the City of Hesperia Engineering staff during the scoping process. Cumulative projects were provided by the City of Hesperia Planning Department and are included in the Opening Year 2024 scenario.

Figure 3: Project Study Area (Intersections)

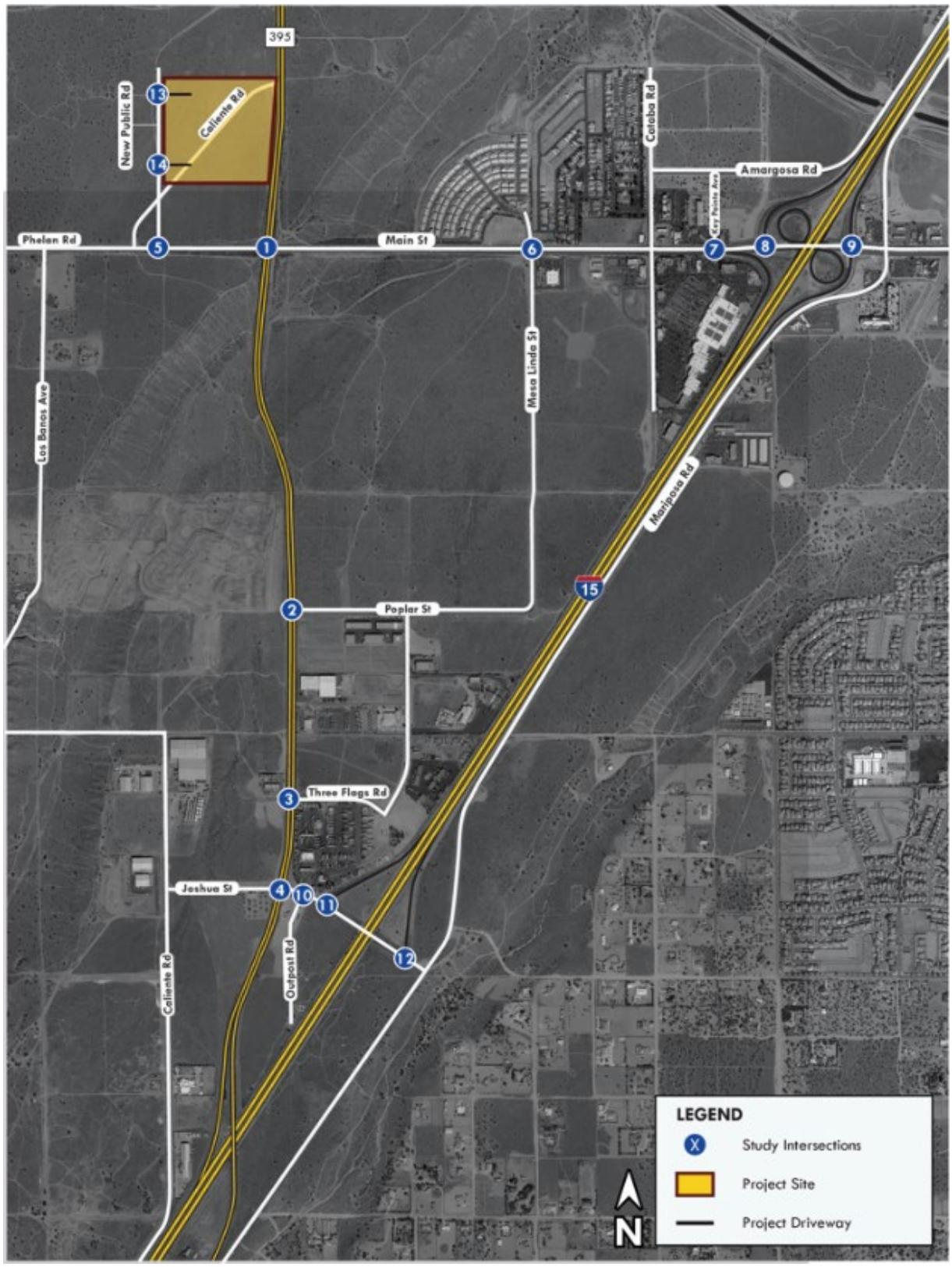
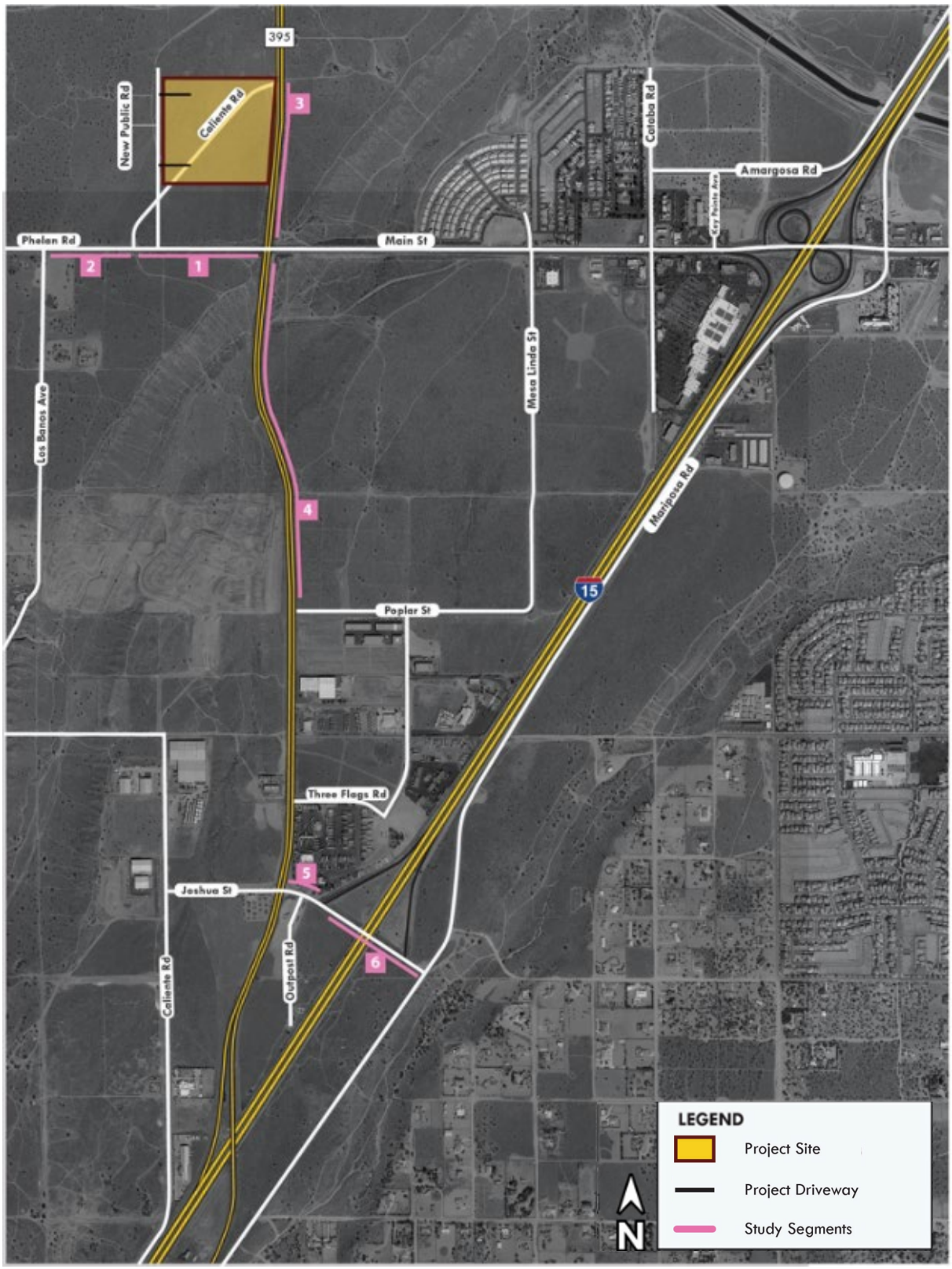


Figure 4: Project Study Area (Roadway Segments)



2.3 Methodology

Intersection operations are evaluated using Level of Service (LOS), which is a measure of the delay experienced by drivers on a roadway facility. LOS A indicates free-flow traffic conditions and is generally the best operating conditions. LOS F is an extremely congested condition and is the worst operating condition from the driver's perspective. In this report, LOS at signalized and unsignalized intersections is calculated using the Highway Capacity Manual (HCM), 6th Edition methodology.

LOS at signalized intersections is defined in terms of the weighted average control delay for the intersection as a whole. Control delay is a measure of the increase in travel time that is experienced due to traffic signal control and is expressed in terms of average control delay per vehicle (in seconds). Control delay is determined based on the intersection geometry and volume, signal cycle length, phasing and coordination along the arterial corridor. Table 1 shows the relationship between control delay and LOS.

Table 1. Relationship between Control Delay and LOS at a Signalized Intersection

LOS	Delay (Seconds per Vehicle)
A	≤ 10
B	>10 – 20
C	>20 – 35
D	>35 – 55
E	>55 – 80
F	>80

Unsignalized intersections are categorized as either all-way stop control (AWSC) or two-way stop control (TWSC). LOS at AWSC intersections is determined by the weighted average control delay of the overall intersection. The HCM TWSC intersection methodology calculates LOS based on the delay experienced by drivers on the minor (stop-controlled) approaches to the intersection. For TWSC intersections, LOS is determined for each minor-street movement, as well as the major-street left-turns. The relationship between delay and LOS at Unsignalized intersections is shown in Table 2.

Table 2. Relationship between Delay and LOS an Unsignalized Intersection

LOS	Delay (seconds)
A	0-10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	>50

2.4 Significance Criteria

The City of Hesperia utilizes a LOS standard of LOS D or better on all roadways and intersections. LOS E during peak hours is considered acceptable through freeway interchanges and major corridors (Bear Valley Road, Main Street/Phelan Road, Highway 395). An impact would occur if the project causes an intersection to deteriorate from acceptable LOS (LOS D or better) to an unacceptable LOS (LOS E or F). At an intersection already operating at LOS E or F in the baseline

condition, a project impact would occur if the project adds measurable delay (5 seconds or more) to an intersection already operating at an unacceptable LOS.

In addition to LOS, a significant queueing deficiency would occur if:

a) The addition of project trips causes the queue to exceed the storage length.

b) The project adds one car length (25 feet) of queue to a queue that exceeds the storage length in the baseline condition.

Table 3 provides the Highway Capacity Manual (HCM) methodology for determining roadway segments LOS standards based on the operating volume to capacity ratio. Table 4 describes the LOS standards for roadway segments for a LOS D capacity as per the Circulation Technical Report for the City of Hesperia General Plan 2010.

Table 3. Roadway Segment LOS (HCM Methodology)

LOS	Volume-to-Capacity Ratio
A	0.00 – 0.60
B	0.61 – 0.70
C	0.71 – 0.80
D	0.81 – 0.90
E	0.91- 1.00
F	1.01 or greater

Table 4. Roadway Segment LOS (HCM Methodology)

Segment	LOS D Capacity (vehicles per day)
2/undivided	14,500
2/divided	17,400
4/undivided	24,480
4/divided	30,600
6/undivided	36,880
6/divided	46,100
8/divided	60,100

3 BASELINE CONDITIONS

This section discusses the baseline (without project) conditions. Baseline conditions are those conditions that exist within the study area in the existing condition and that are forecast to occur in the future, without the proposed project.

3.1 Existing Transportation System

Access to the project site will be provided via 2 unsignalized full-access driveways on New Public Road. Both driveways will be utilized by passenger vehicles and trucks. The following roadways are the primary roadways in the City of Hesperia:

- **Interstate 15 (I-15)** is a major north-south Interstate Highway that begins near the Mexican/US border and runs through Southern California to Alberta, Canada.
- **U.S. Highway 395 (US 395)** is a north-south U.S. route that begins in the Mojave Desert at I-15 and runs through Southern California to the U.S./Canadian border.
- **Phelan Road/Main Street** is an east-west undivided roadway that ranges from two to six lanes. The City of Hesperia classifies Phelan Road/Main Street as a major arterial roadway. The roadway is named Phelan Road west of US 395 and Main Street east of US 396. Phelan Road west of US 395 is a designated truck route. The posted speed limit is 55 MPH.
- **Mesa Linda Street** is a north-south undivided roadway that ranges from two to four lanes. The City of Hesperia classifies Mesa Linda Street as an arterial roadway.
- **Poplar Street** is an east-west undivided roadway that ranges from two to four lanes. The City of Hesperia classifies Poplar Street as a secondary arterial roadway.

3.2 Existing Traffic Volumes and Levels of Service

Traffic counts at the existing study area intersections and roadway segments shown on Figures 3 and 4, were collected on Tuesday, May 17, 2022. The counts were taken on typical weekdays when schools were in session. Intersection turn movement and Average Daily Traffic (ADT) count sheets are provided in Appendix B. Existing Lane configuration is shown in Figure 5 – Project Study Area Existing Lane Configuration. Existing AM and PM peak hour traffic volumes are shown on Figures 6 and 7.

The existing Levels of Service at the study area intersections and roadway segments were determined using the HCM methodology, described previously in Section 2.4. Table 5 shows the existing AM and PM peak hour levels of service at study intersections. All LOS calculations are provided in Appendix C. As shown in Table 5, all study intersections operate at satisfactory LOS during the AM and PM peak hours in the existing (2022) condition except for the intersection of US-395/Poplar Street; which operates at a deficient LOS in the existing scenario. As shown in Table 6 all study roadway segments operate at satisfactory LOS D or better in the existing (2022) condition except for the following roadway segments which operate at an unsatisfactory LOS.

- US-395 from Phelan Road to Caliente Road
- US-395 from Phelan Road to Poplar Street

Figure 5: Project Study Area & Existing Lane Configuration

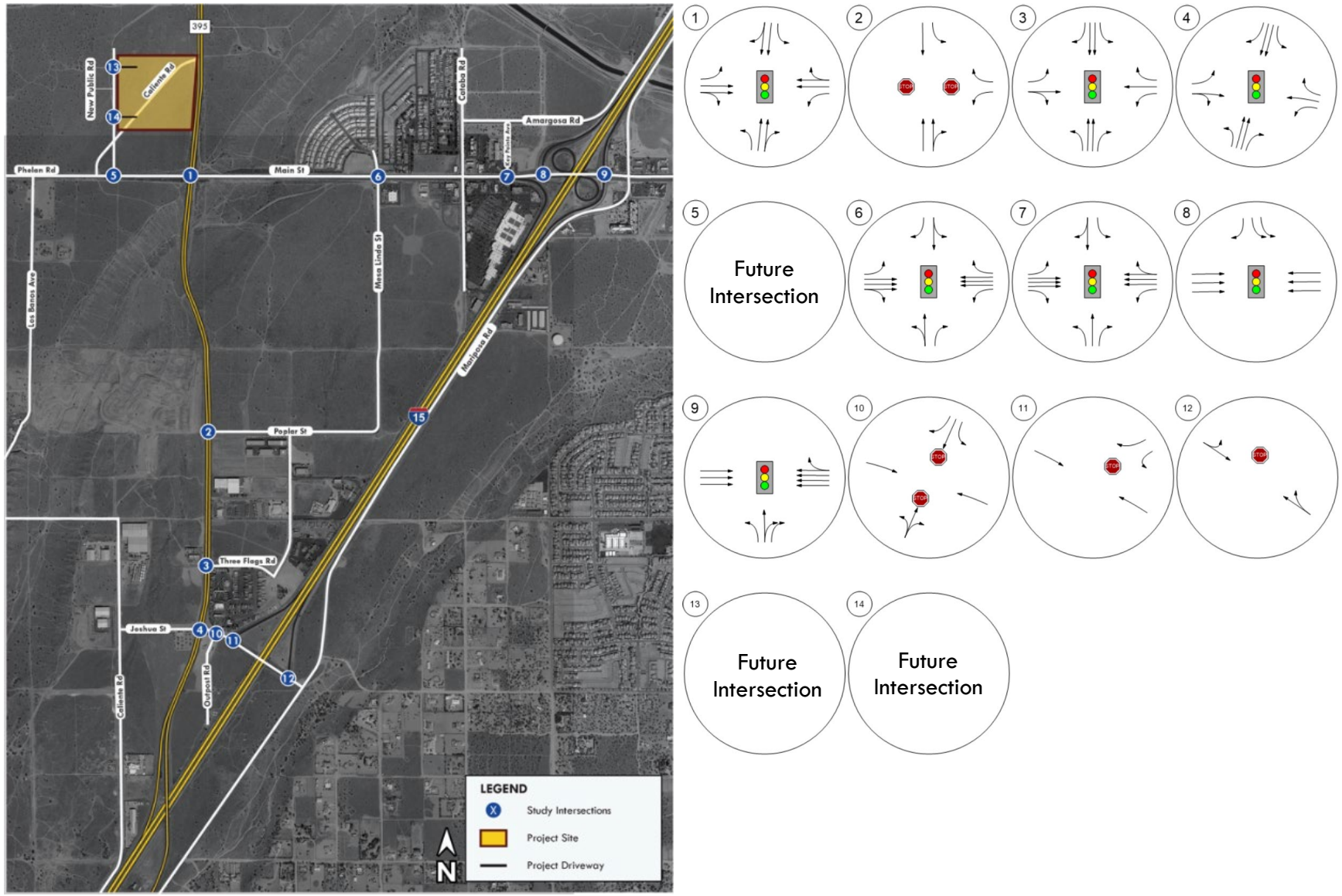


Figure 6: Existing AM Traffic Volumes

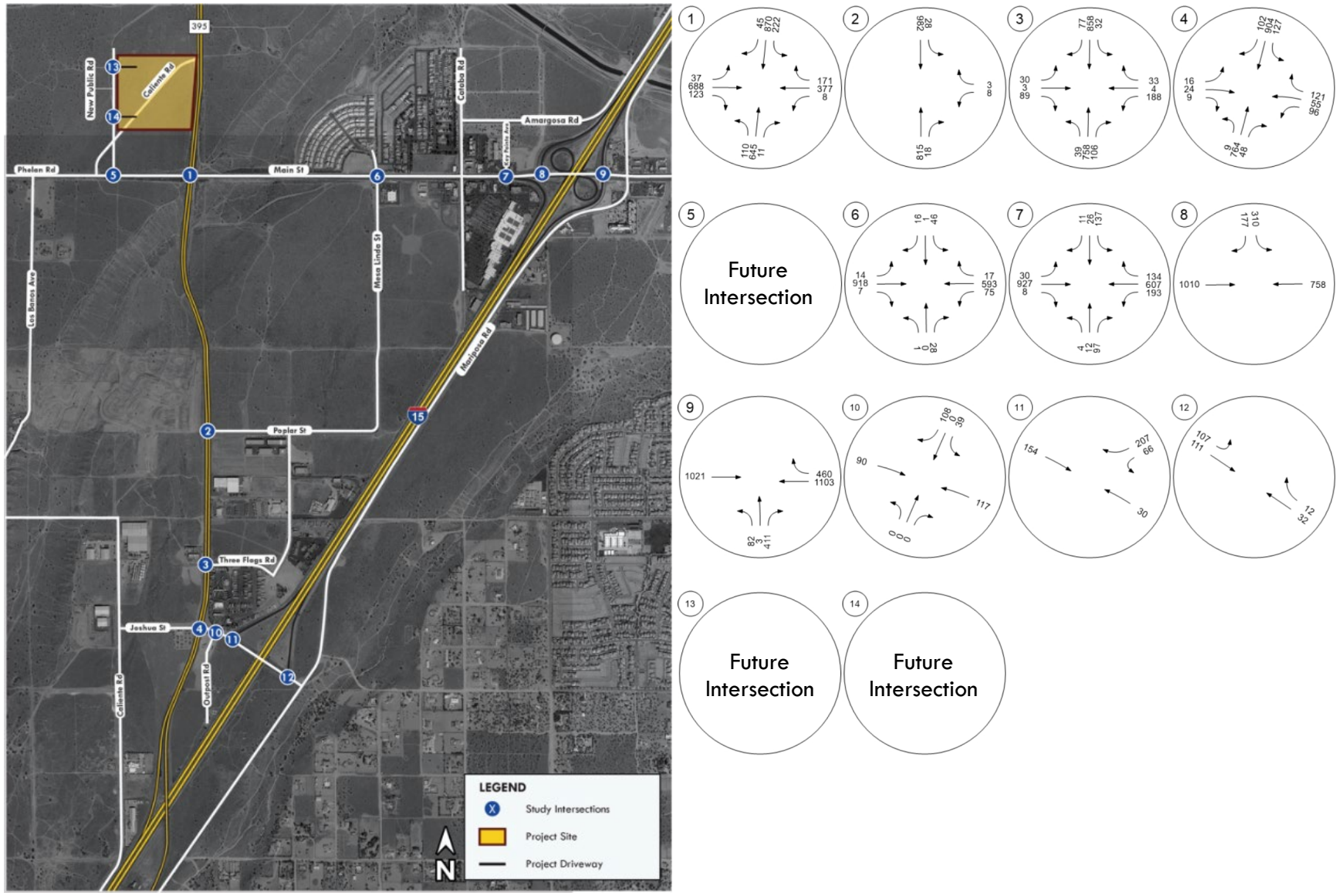


Figure 7: Existing PM Traffic Volumes

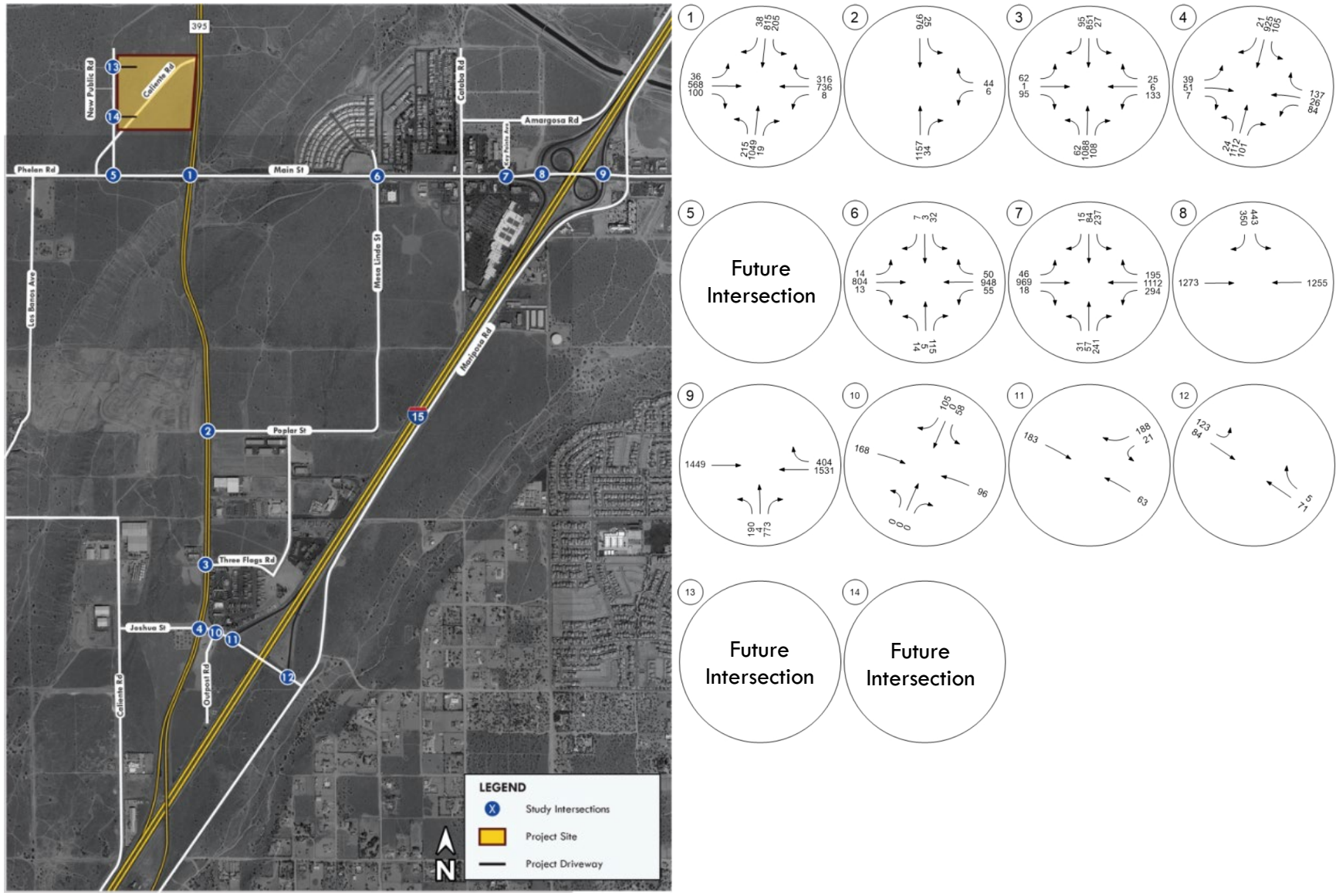


Table 5. Existing AM and PM Peak Hour Levels of Service

Intersection	Traffic Control	AM Peak		PM Peak		Acceptable
		Delay[1]	LOS[2]	Delay[1]	LOS[2]	LOS[3]
1. US-395/Phelan Rd-Main St	Signal	42.9	D	66.4	E	E
2. US-395/Poplar St	TWSC	59.1	F	99.4	F	E
3. US-395/Three Flags Rd	Signal	14.7	B	14.5	B	E
4. US-395/Joshua St	Signal	11.9	B	13.1	B	E
5. Phelan Rd/New Public Rd	TWSC	-	-	-	-	D
6. Main St/Mesa Linda St	Signal	34.6	C	34.2	C	E
7. Main St/Key Pointe Ave	Signal	28.6	C	31.8	C	E
8. Main St/I-15 SB Ramps	Signal	7.9	A	9.9	A	E
9. Main St/I-15 NB Ramps	Signal	15.9	B	14.6	B	E
10. Joshua Rd/Outpost Rd	TWSC	10.6	B	11.1	B	E
11. Joshua St/I-15 SB Off-Ramp	TWSC	10.3	B	10.2	B	E
12. Joshua St/I-15 NB On-Ramp	TWSC	7.5	A	7.6	A	E
13. New Public Rd/North Driveway	TWSC	-	-	-	-	D
14. New Public Rd/South Driveway	TWSC	-	-	-	-	D

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

[3] Acceptable LOS per the City of Hesperia's General Plan Circulation Element - Goal C1-2.

Table 6. Existing Roadway Segments LOS Levels of Service

Roadway Segment			Roadway Classification	No. of Lanes	D or U[1]	Capacity	Existing Conditions			Meets LOS Standards?
Road	From	To					ADT[2]	V/C[3]	LOS	
1. Phelan Rd	US-395	Caliente Rd	Major Arterial	4	U	24,480	19,475	0.796	C	Yes
2. Phelan Rd	Caliente Rd	Los Banos Ave	Major Arterial	4	U	24,480	19,406	0.793	C	Yes
3. US-395	Phelan Rd	Caliente Rd	U.S. Route	2	U	14,500	31,943	2.203	F	No
4. US-395	Phelan Rd	Poplar St	U.S. Route	2	U	14,500	26,013	1.794	F	No
5. Joshua St	US-395	I-15SB Off-Ramp	Major Arterial	2	U	14,500	6,634	0.458	A	Yes
6. Joshua St	I-15SB Off-Ramp	Mariposa Road	Major Arterial	2	U	14,500	3,540	0.244	A	Yes

=Unsatisfactory Level of Service

[1] Divided or Undivided

[2] Average Daily Traffic

[3] Volume-Capacity Ratio

3.3 Opening Year (2024) Baseline Traffic Volumes and LOS

Opening Year 2024 Baseline traffic volumes were developed by applying a growth rate of two percent per year to the existing (2022) traffic volumes and adding traffic generated by other approved and pending development projects. A total of 11 projects in the City of Hesperia, were included in the Opening Year (2024) Baseline. The locations of the cumulative projects are shown in Figure 8 – Location of Cumulative Projects.

The project trip generation for each cumulative project was calculated using trip rates from the Institute of Transportation Engineers, *Trip* Generation, 11th Edition. Table 7 shows the trip generation for each cumulative project. The traffic volumes generated by the cumulative projects were distributed to the study area intersections and are illustrated in Figures 9 and 10. The Opening Year (2024) Baseline traffic volumes are illustrated in Figures 11 and 12.

The Opening Year (2024) Baseline levels of service (LOS) at the existing study area intersections and roadway segments were determined using the HCM methodology, described previously in Section 2.4 - Methodology. Table 8 shows the Opening Year (2024) Baseline AM and PM peak hour levels of service at study intersections. As shown in Table 8, all study intersections would operate at satisfactory LOS in the Opening Year (2024) Baseline condition except for the following intersections which are forecast to operate at a deficient LOS:

- US-395/Phelan Road-Main Street
- US-395/Poplar Street
- Joshua Street/I-15 SB Off-Ramp

It is to be noted that a fourth leg (eastbound approach) will be added at the intersection of US-395/Poplar Street by Hesperia/Dara Industrial Center.

Table 9 shows the Opening Year (2024) Baseline ADT levels of service at study roadway segments. As shown in Table 9, all study roadway segments would operate at an unsatisfactory LOS in the Opening Year (2024) condition except for the roadway segment of Joshua Street (from I-15 SB Off-Ramp to Mariposa Road) which is forecast to operate at a satisfactory LOS.

Figure 8: Location of Cumulative Projects

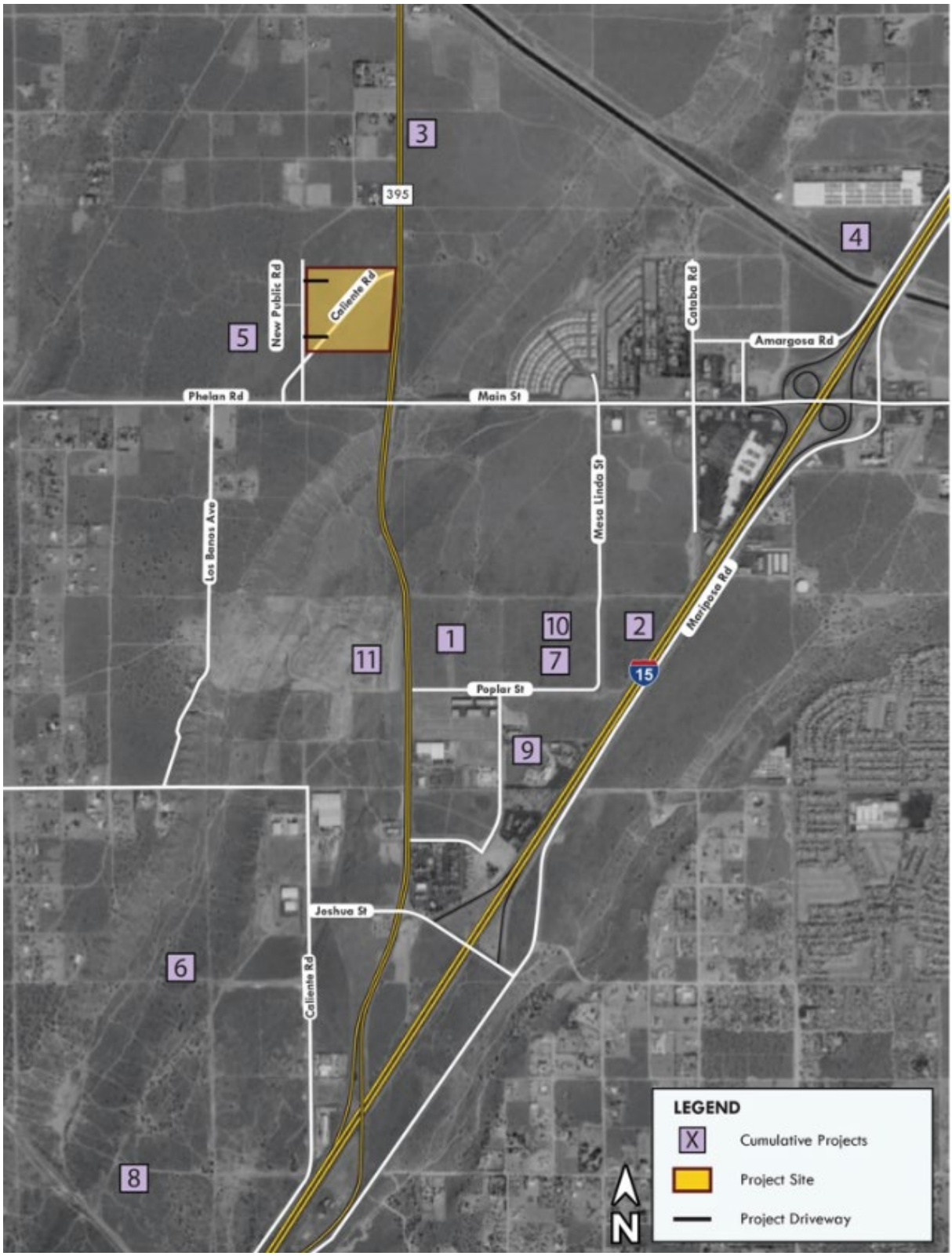


Table 7. Cumulative Projects Trip Generation

					AM Peak Hour			PM Peak Hour		
Land Use	**ITE Code**	**Size**	**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates										
General Light Industrial[1]	110		TSF	4.87	0.65	0.09	0.74	0.09	0.56	0.65
Mini-Warehouse[2]	151		TSF	1.45	0.05	0.04	0.09	0.07	0.08	0.15
High-Cube Transload and Short-Term Storage[3]	154		TSF	1.40	0.06	0.02	0.08	0.03	0.07	0.10
High-Cube Fulfillment Center Warehouse[4]	155		TSF	1.81	0.12	0.03	0.15	0.06	0.10	0.16
High-Cube Cold Storage Warehouse[5]	157		TSF	2.12	0.06	0.06	0.11	0.06	0.06	0.12
1. I-15 Industrial Park A - CUP21-00005 (PCE)	110	647.5	TSF	4,003	539	75	614	77	462	539
2. I-15 Industrial Park B - CUP21-00004 (PCE)	155	1,202.50	TSF	3,277	141	43	184	66	170	236
3. U.S. Cold Storage (CUP21-00003) (PCE)	157	491	TSF	1,678	44	44	88	48	48	96
4. Pixior Warehouse (CUP20-00006) (PCE)	155	440	TSF	1,165	78	18	96	40	63	103
5. Hesperia Commerce Center II (CUP19-00010) (PCE)	110/155	3,745.43	TSF	15,152	1,357	230	1,587	274	1,296	1,570
6. Hesperia Commerce Center (CUP11-10229) (PCE)	155	3,500	TSF	9,268	622	146	768	320	500	819
7. Poplar 18 (CUP21-00010) (PCE)	110/155	414.7	TSF	1,634	153	26	179	33	144	177
8. CUP22-00003 (PCE)	155	750	TSF	1,986	133	31	164	68	107	176
9. CUP22-00006 (PCE)	151	428	Storage Units	908	33	23	56	44	50	94
10. Mesa Linda Street Warehouse (PCE)	154	408.997	TSF	838	37	11	48	17	43	59
11. Hesperia/Dara Industrial Center (PCE)	155/157	750	TSF	1,718	100	34	134	51	81	132
Total Cumulative Trip Generation				41,627	3,237	681	3,918	1,038	2,964	4,001

TSF = Thousand Square Feet

PCE = Passenger Car Equivalent

DU = Dwelling Unit

[1] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 110 - General Light Industrial.

[2] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 151 - Mini-Warehouse.

[3] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 154 - High-Cube Transload and Short-Term Storage.

[4] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 155 - High-Cube Fulfillment Center Warehouse.

[5] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition, 2021*. Land Use Code 157 - High-Cube Cold Storage Warehouse.

Figure 9: Cumulative Projects AM Trip Assignment

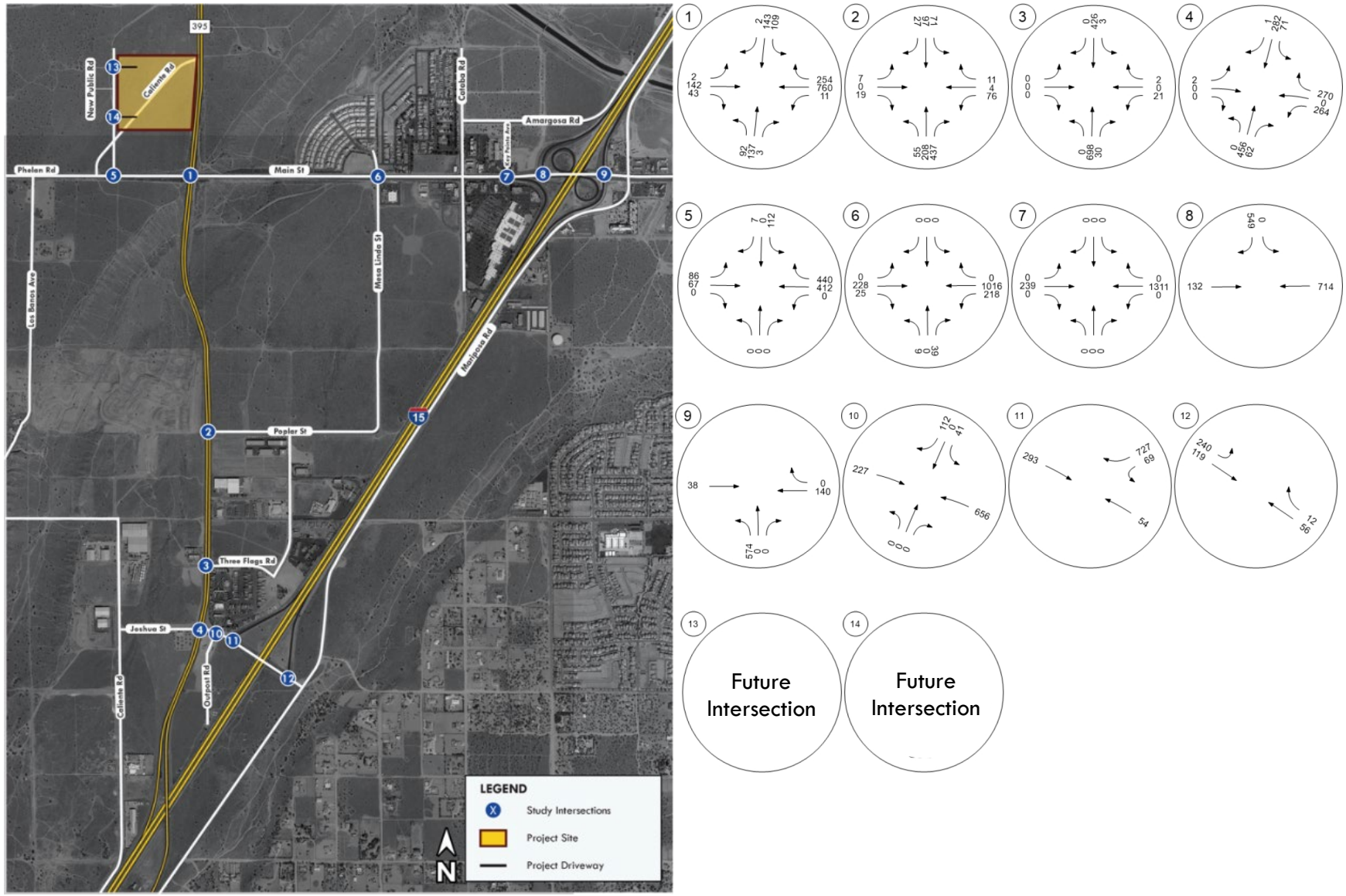


Figure 10: Cumulative Projects PM Trip Assignment

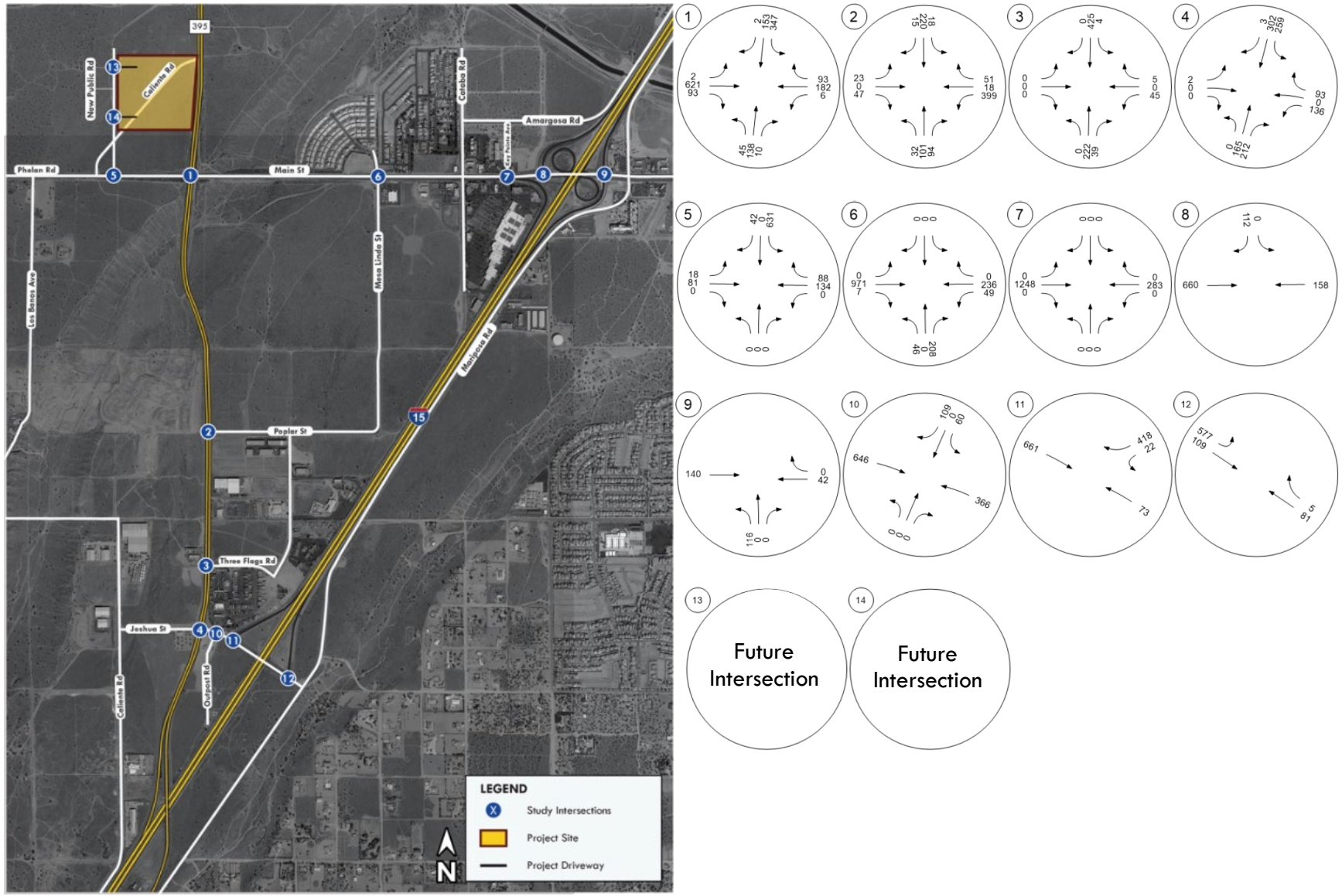


Figure 11: Opening Year 2024 AM Traffic Volumes

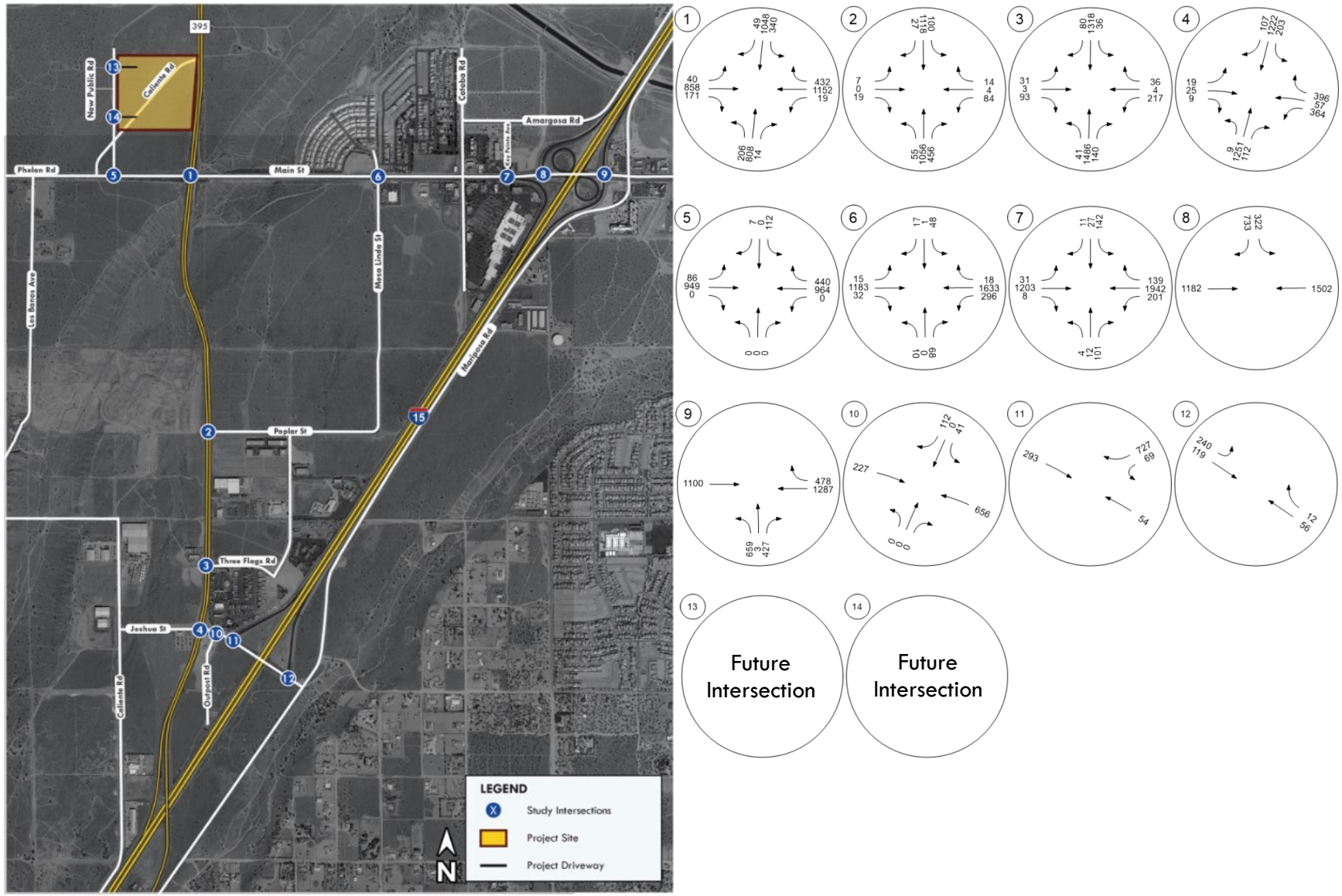


Figure 12: Opening Year 2024 PM Traffic Volumes

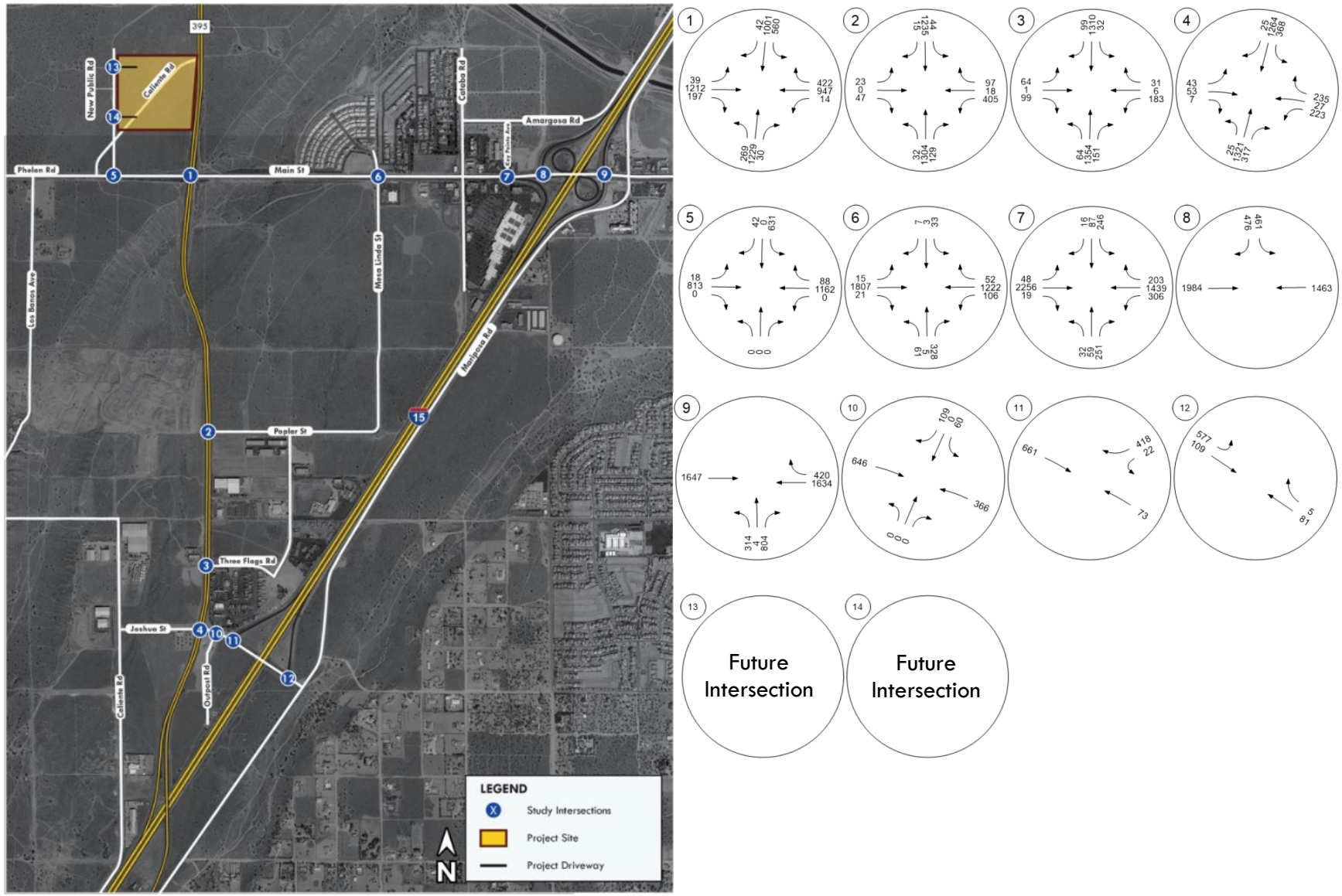


Table 8. Opening Year (2024) Baseline AM and PM Peak Hour Levels of Service

Intersection	Traffic Control	Opening Year 2024				Acceptable LOS[3]
		AM Peak		PM Peak		
		Delay[1]	LOS[2]	Delay[1]	LOS[2]	
1. US-395/Phelan Rd-Main St	Signal	118.5	F	183.1	F	E
2. US-395/Poplar St	TWSC	>400	F	>400	F	E
3. US-395/Three Flags Rd	Signal	21.4	C	21.0	C	E
4. US-395/Joshua St	Signal	30.1	C	41.5	D	E
5. Phelan Rd/New Public Rd	TWSC	5.4	A	22.8	C	D
6. Main St/Mesa Linda St	Signal	47.8	D	44.7	D	E
7. Main St/Key Pointe Ave	Signal	37.9	D	66.9	E	E
8. Main St/I-15 SB Ramps	Signal	17.6	B	13.0	B	E
9. Main St/I-15 NB Ramps	Signal	17.4	B	14.7	B	E
10. Joshua Rd/Outpost Rd	TWSC	28.9	D	38.1	E	E
11. Joshua St/I-15 SB Off-Ramp	TWSC	52.2	F	15.6	C	E
12. Joshua St/I-15 NB On-Ramp	TWSC	7.9	A	9.1	A	E
13. New Public Rd/North Driveway	TWSC	-	-	-	-	D
14. New Public Rd/South Driveway	TWSC	-	-	-	-	D

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

[3] Acceptable LOS per the City of Hesperia's General Plan Circulation Element - Goal C1-2.

Table 9. Opening Year (2024) Baseline Roadway Segment Levels of Service

Roadway Segment			Roadway Classification	No. of Lanes	D or U[1]	Capacity	Opening Year 2024			Meets LOS Standards?
Road	From	To					ADT[2]	V/C[3]	LOS	
1. Phelan Rd	US-395	Caliente Rd	Major Arterial	4	U	24,480	22,945	0.937	E	No
2. Phelan Rd	Caliente Rd	Los Banos Ave	Major Arterial	4	U	24,480	22,547	0.921	E	No
3. US-395	Phelan Rd	Caliente Rd	U.S. Route	2	U	14,500	40,413	2.787	F	No
4. US-395	Phelan Rd	Poplar St	U.S. Route	2	U	14,500	33,618	2.318	F	No
5. Joshua St	US-395	I-15SB Off-Ramp	Major Arterial	2	U	14,500	14,359	0.990	E	No
6. Joshua St	I-15SB Off-Ramp	Mariposa Road	Major Arterial	2	U	14,500	7,694	0.531	A	Yes

=Unsatisfactory Level of Service

[1] Divided or Undivided

[2] Average Daily Traffic

[3] Volume-Capacity Ratio

4 PROPOSED PROJECT

4.1 Project Description and Site Access

As described in Section 2.1 – Project Description, the project proposes to construct a total industrial building area of 655,468 SF comprising 639,468 SF of warehouse and 16,000 SF of office. The site will provide 374 parking stalls comprising 38 EV charging, 309 standard, 16 accessible, and 11 clean air parking stalls. A total of 83 trailer parking stalls will be provided. Access to the project site will be provided via 2 unsignalized full-access driveways on New Public Road. Both driveways will be used by passenger vehicles and trucks.

4.2 Project Trip Generation

Project trips were generated for the project using trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition, September 2021) as follows:

- 75% High Cube Transload and Short-Term Storage Warehouse (Land Use 154) Without Cold Storage
- 5% High Cube Transload and Short-Term Storage Warehouse (Land Use 154) With Cold Storage
- 20% Manufacturing (Land Use 140)

The trip generation for the project is shown in Table 10. The project would generate 1,357 daily trips including131 trips during the AM peak hour and 149 trips during the PM peak hour. Passenger Car Equivalent (PCE) factors were added to truck trips to account for the fact that trucks utilize more roadway capacity due to their size, reduced maneuverability and slower acceleration. The City TIA guidelines state PCE factor of 1.5 for light duty trucks, PCE factor of 2 for medium duty trucks with 3 axles, and a PCE factor of 3 for heavy duty trucks with 4 axles. When the passenger car equivalent factors are considered, the project would generate 1,941 daily trips including 187 trips during the AM peak hour and 213 trips during the PM peak hour. It should be noted that only the peak commute hours are evaluated in this report, consistent with the approved scoping agreement provided in Appendix A.

Table 10. Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
High-Cube Transload and Short-Term Storage[1]		TSF	1.40	0.06	0.02	0.08	0.03	0.07	0.10
Manufacturing [2]		TSF	4.75	0.52	0.16	0.68	0.23	0.51	0.74
Project Trip Generation									
High-Cube Transload and Short-Term Storage	491.601	TSF	688	30	9	39	14	35	49
Without Cold Storage (75%)									
Vehicle Mix [3]		***Percent*** [3]							
Passenger Vehicles		72.50%	499	22	6	28	10	26	36
2-Axle truck		4.60%	32	1	1	2	1	1	2
3-Axle truck		5.70%	39	2	0	2	1	2	3
4+-Axle Trucks		17.20%	118	5	2	7	2	6	8
		100%	688	30	9	39	14	35	49
PCE Trip Generation [4]		***PCE Factor***							
Passenger Vehicles		1.0	499	22	6	28	10	26	36
2-Axle truck		1.5	48	2	1	3	2	1	3
3-Axle truck		2.0	78	4	0	4	2	4	6
4+-Axle Trucks		3.0	354	15	6	21	6	18	24
			979	43	13	56	20	49	69
High-Cube Transload and Short-Term Storage	32.773	TSF	46	2	1	3	1	2	3
With Cold Storage (5%)									
Vehicle Mix [5]		***Percent*** [5]							
Passenger Vehicles		55.30%	25	1	1	2	1	1	2
2-Axle truck		15.50%	7	0	0	0	0	0	0
3-Axle truck		4.90%	2	0	0	0	0	0	0
4+-Axle Trucks		24.30%	12	1	0	1	0	1	1
		100%	46	2	1	3	1	2	3
PCE Trip Generation [4]		***PCE Factor***							
Passenger Vehicles		1.0	25	1	1	2	1	1	2
2-Axle truck		1.5	11	0	0	0	0	0	0
3-Axle truck		2.0	4	0	0	0	0	0	0
4+-Axle Trucks		3.0	36	3	0	3	0	3	3
			76	4	1	5	1	4	5
Manufacturing (20%)	131.094	TSF	623	68	21	89	30	67	97
Vehicle Mix [3]		***Percent*** [3]							
Passenger Vehicles		72.50%	452	49	16	65	22	48	70
2-Axle truck		4.60%	29	3	1	4	1	3	4
3-Axle truck		5.70%	36	4	1	5	2	4	6
4+-Axle Trucks		17.20%	106	12	3	15	5	12	17
		100%	623	68	21	89	30	67	97
PCE Trip Generation [4]		***PCE Factor***							
Passenger Vehicles		1.0	452	49	16	65	22	48	70
2-Axle truck		1.5	44	5	1	6	2	4	6
3-Axle truck		2.0	72	8	2	10	4	8	12
4+-Axle Trucks		3.0	318	36	9	45	15	36	51
			886	98	28	126	43	96	139
Total Trip Generation			1,357	100	31	131	45	104	149
Total Trip Generation (PCE)			1,941	145	42	187	64	149	213

TSF = Thousand Square Feet

PCE = Passenger Car Equivalent

[1] Trip rates from the Institute of Transporation Engineers, Trip Generation, 11th Edition, 2021. Land Use Code 154 - High-Cube Transload and Short-Term Storage.

[2] Trip rates from the Institute of Transporation Engineers, Trip Generation, 11th Edition, 2021. Land Use Code 140 - Manufacturing.

[3] Vehicle Mix from the South Coast Air Quality Management District (AQMD), Warehouse Truck Trip Study Data Results and Usage, July 17, 2014. Without Cold Storage

[4] Passenger Car Equivalent (PCE) factors from the San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016

[5] Vehicle Mix from the South Coast Air Quality Management District (AQMD), Warehouse Truck Trip Study Data Results and Usage, July 17, 2014. With Cold Storage

4.3 Project Trips

Project trips were distributed to the fourteen study area intersections based on the location of the project in relation to surrounding industrial areas. The project trip distribution is shown on Figures 13 and 14. The project trip assignment is shown on Figures 15 and 16. Project trips were assigned to the study area intersections by multiplying the project trip generation by the trip distribution percent at each location.

4.4 Truck Turning Templates

Truck turning templates have been created (provided in Appendix D) to determine if trucks would have sufficient turning distance to turn as they approach and leave the project site using the City's designated truck routes. All analyzed intersections were noted to have adequate curb radius to allow trucks to access the project site safely.

Figure 13: Project Automobile Trip Distribution

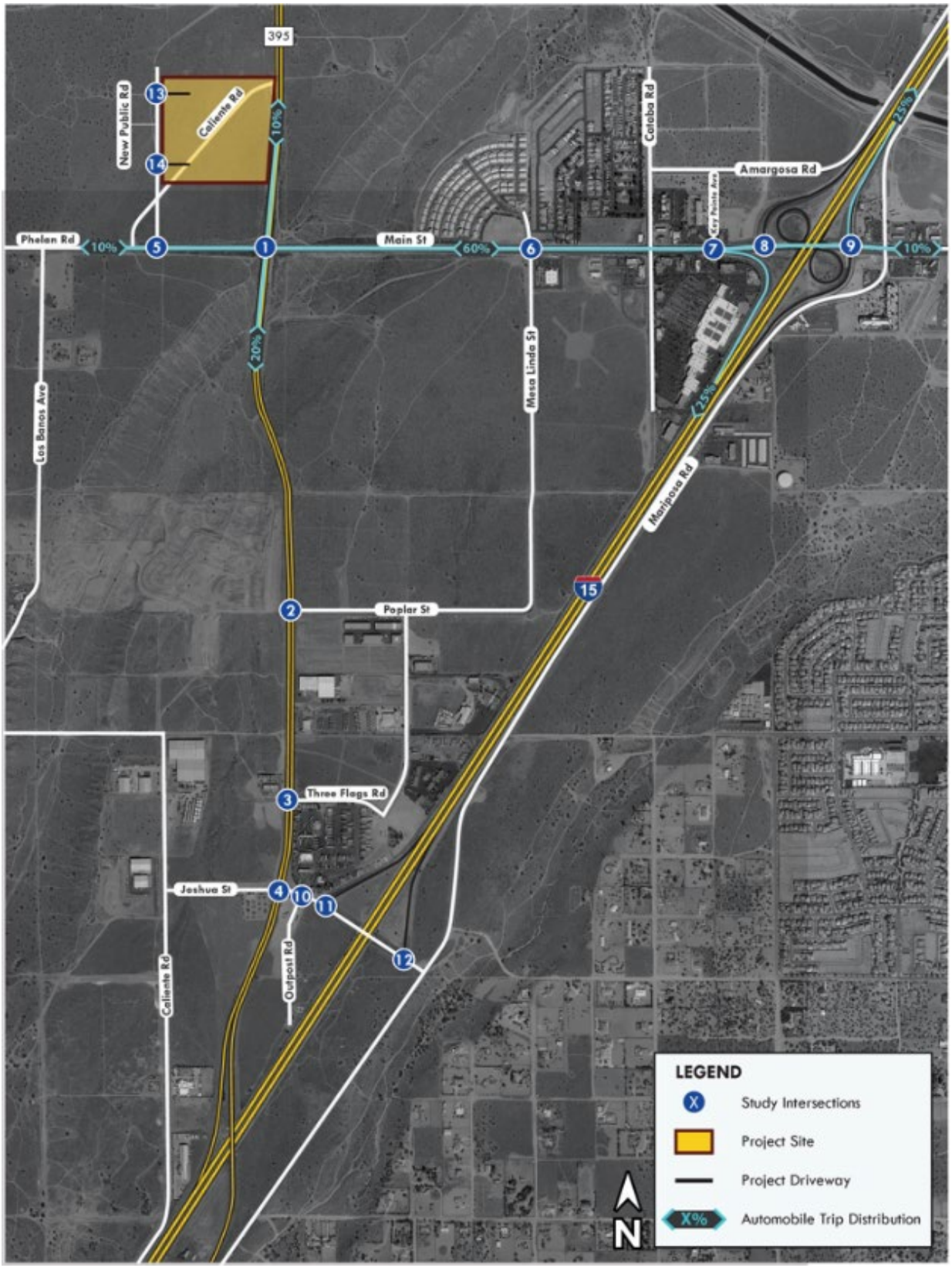


Figure 14: Project Truck Trip Distribution

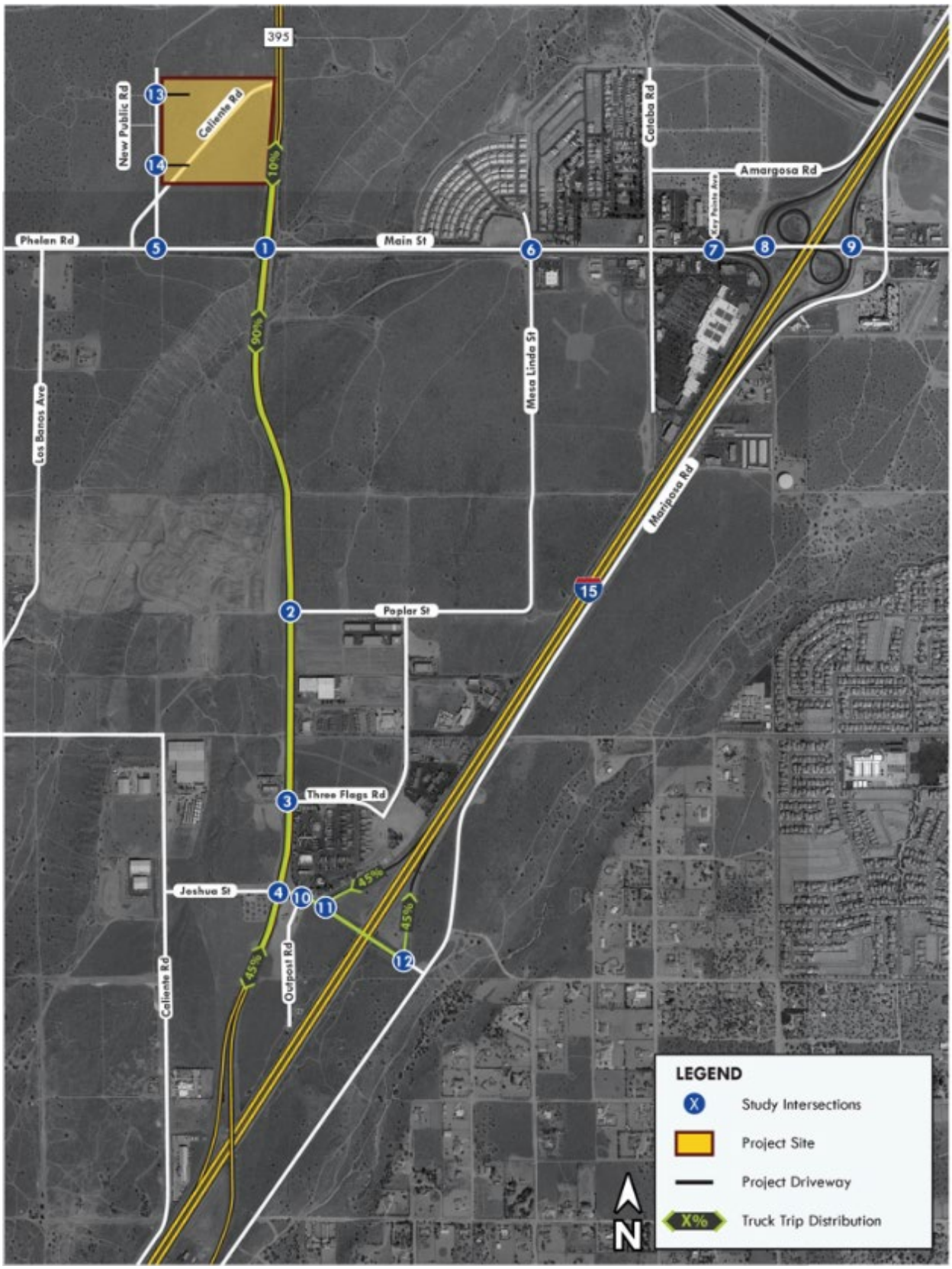


Figure 15: Project AM Trip Assignment

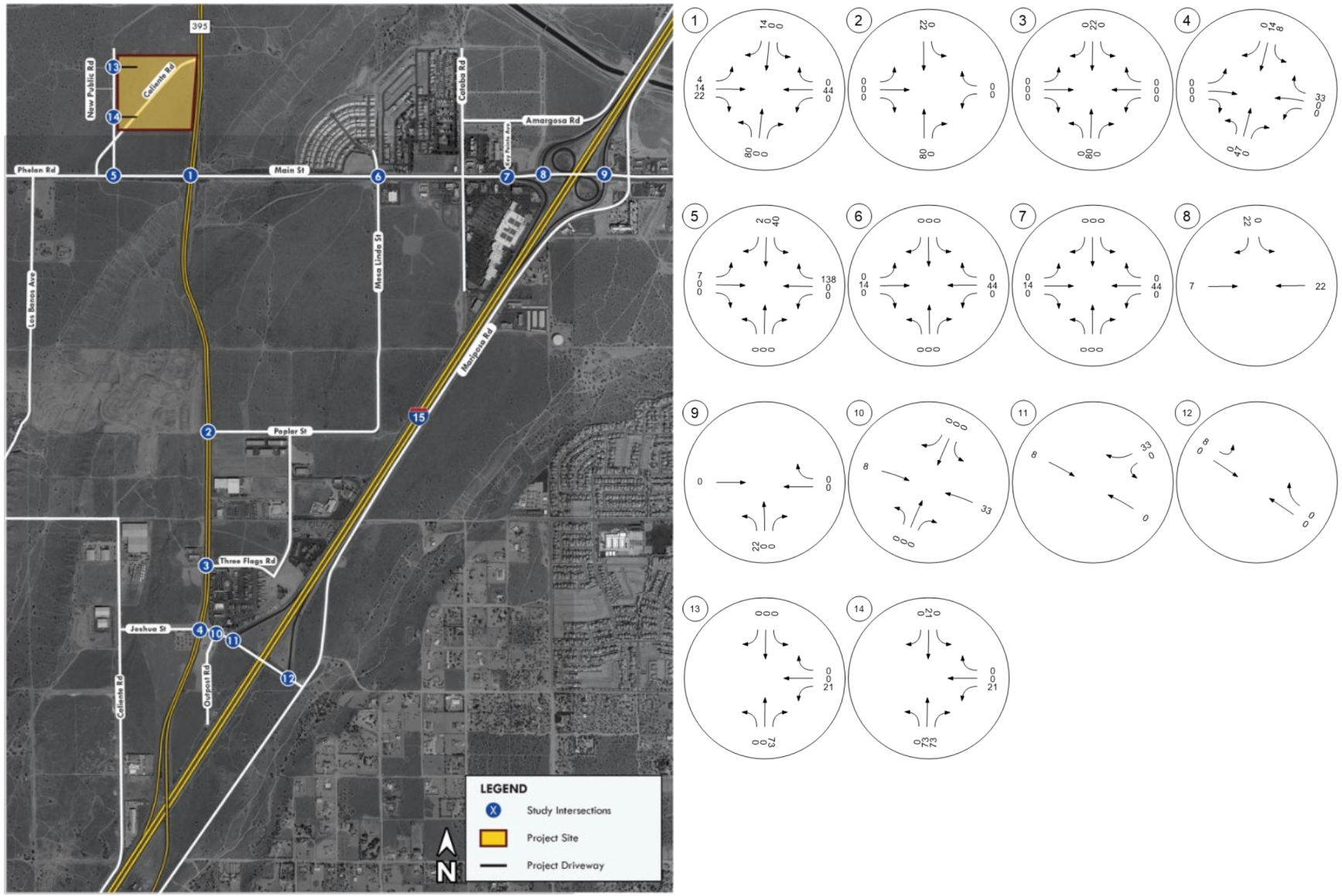
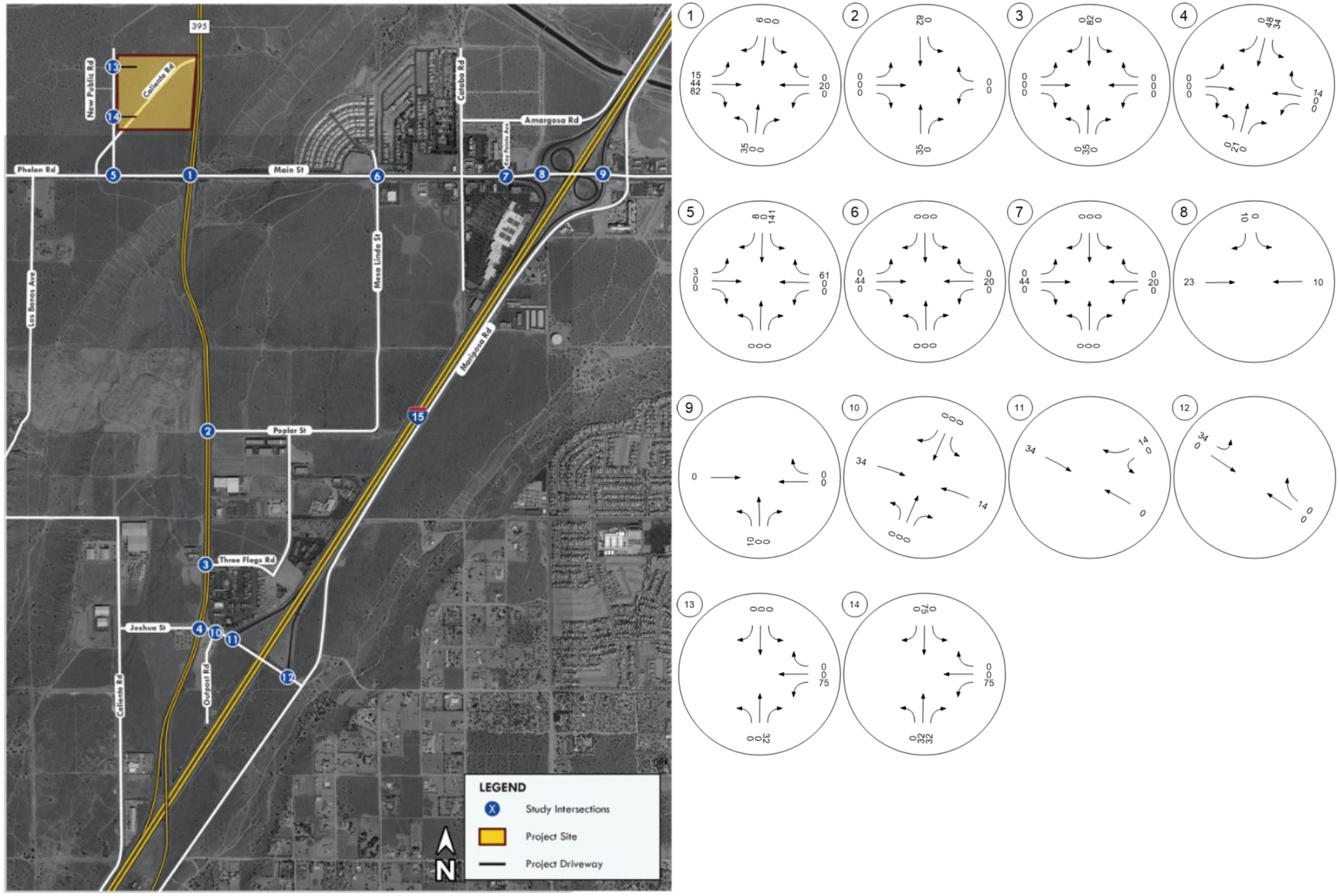


Figure 16: Project PM Trip Assignment



4.5 Sight Distance

An intersection sight distance analysis has been conducted for both Project driveways to ensure adequate sight distance is provided to vehicles approaching and departing Project driveway intersections. The sight distance analysis was conducted in accordance with the *Highway Design Manual,* (July 1, 2020). The analysis includes a figure for each of the Project driveway intersections which shows the clear sight triangle with the required corner sight distance.

The Highway Design Manual states that the minimum corner sight distance at unsignalized intersections should be determined by the following equation:

$$1.47 * V_m * T_g$$

Where Vm is the design speed (mph) of the major road and Tg is the time gap (seconds) for the minor road vehicle to enter the major road. Tg can be determined from Table 11 which is derived from the Highway Design Manual. At a design speed of 35 mph, trucks making a left turn from a stop require a time gap of 9.5 seconds which yields to 489' of required corner sight distance. Clear sight triangles for the maximum required corner sight distance (for trucks) are shown on Figures 17 and 18. The controlling maximum corner sight distance would be 489' since trucks making a left turn require the maximum corner sight distance. As shown in Figures 17 and 18, the required corner sight distance (i.e., 489') would be provided for trucks as they make a left turn.

Table 11. Time Gap for Unsignalized Intersections – Highway Design Manual Topic 405

Design Vehicle	Left-turn from Stop (s) [4]	Right-turn from Stop and Crossing Maneuver (s)
Passenger Car	7½	6½
Private Road Intersection		
Rural Driveway		
Single-Unit Truck	9½	8½
Public Road Intersection		
Combination Truck	11½	10½
Major and Minor Roads on Routes:		
National Network		
Terminal or Service Access		
California Legal		
KPRA Advisory		

Notes: Time gaps are for a stopped vehicle to turn left, right or cross a two-lane highway with no median and with minor road grades of 3 percent or less. The table values should be adjusted as follows:

(1)For multilane highways—When crossing or making a left-turn onto a two-way major road with more than two lanes, add 0.5 s for passenger cars or 0.7 s for trucks for each additional lane to be crossed. Median widths should be converted to an equivalent number of lanes in applying the 0.5 s and 0.7 s criteria. For example, an 18-foot wide median is equivalent to 1.5 lanes; this requires an additional 0.75 s for a passenger car to cross or an additional 1.05 s for a truck to cross.

(2)For minor road approach grades—If the minor road approach grade is an upgrade that exceeds 3 percent and the rear wheels of the design vehicle are on the grade exceeding 3 percent, add 0.2 s for each percent grade for left-turns and crossing maneuvers; or add 0.1 s for each percent grade for right-turns. For example, a passenger car is turning right from a minor road and at the stop location its rear wheels are on a 4 percent upgrade; this requires an additional 0.4 s for the right-turn.

(3)Unique situations may necessitate a different design vehicle for a particular minor road than those listed here (e.g., predominant combination trucks out of a rural driveway). Additionally, for intersections at skewed angles less than 60 degrees, a further adjustment is needed. See the AASHTO "A Policy on Geometric Design of Highways and Streets" for guidance.

(4)Time gap for vehicles approaching from the left can be the same as the right-turn from stop maneuver.

Figure 17: Clear Sight Triangle – New Public Road/North Driveway

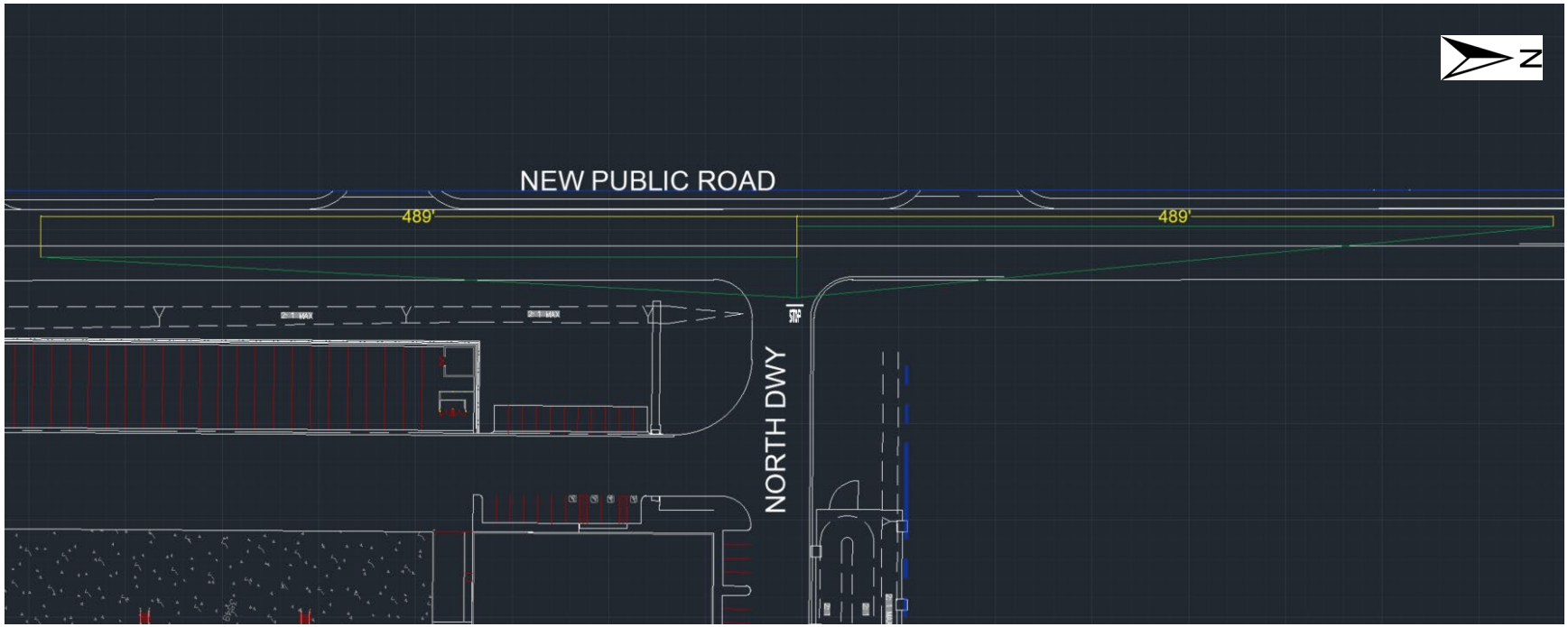
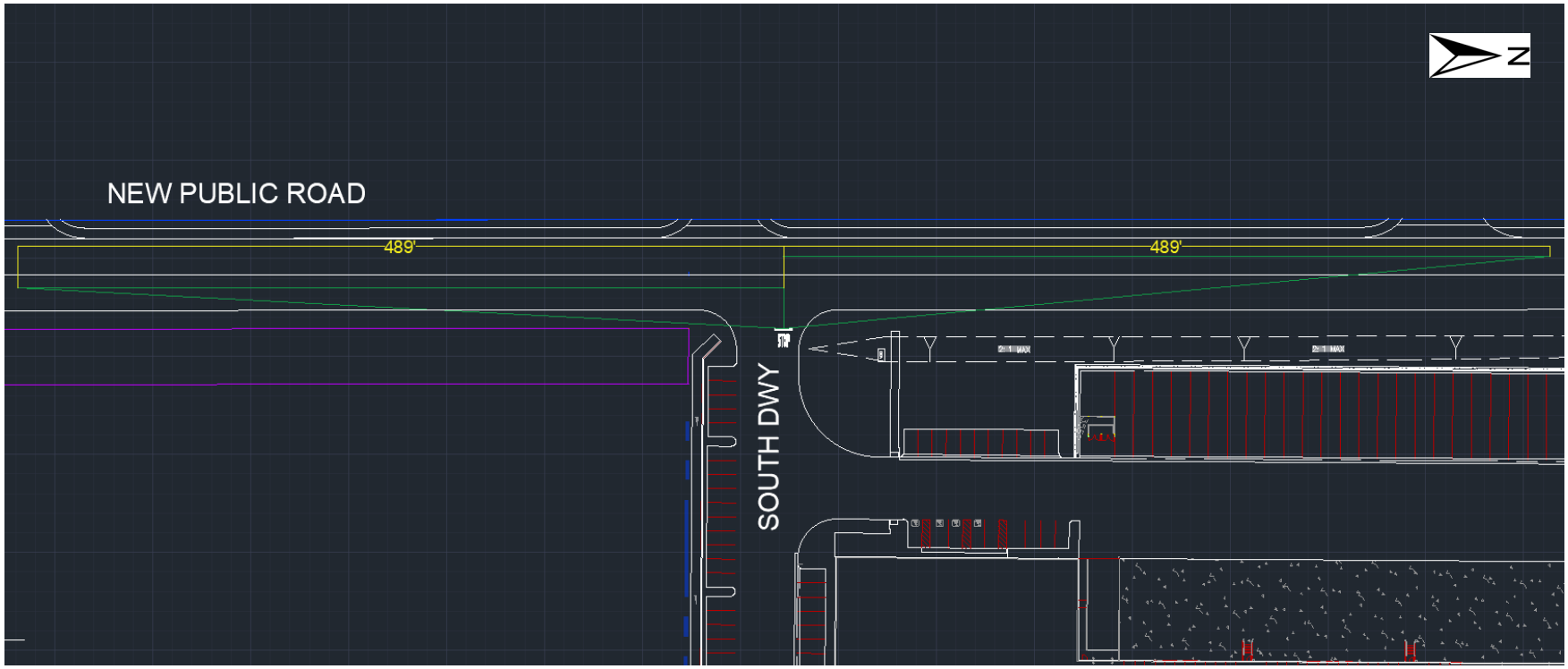


Figure 18: Clear Sight Triangle – New Public Road/South Driveway



4.6 Removal of Unimproved Caliente Road

Caliente Road, an unimproved, unpaved road that starts at Phelan Road and ends at US-395, currently runs along the project site diagonally; however, the road will be removed as part of the project. It is to be noted that removal of the unimproved Caliente Road would not result in any bypass trips because traffic is not currently utilizing the unimproved Caliente Road and it is not included in the future SBTAM model nor is it included in the City of Hesperia Traffic Circulation Plan General Plan. Moreover, the unimproved Caliente Road is not linked in the SBTAM model, which indicates that the General Plan Buildout 2040 SBTAM roadway network was analyzed without considering Caliente Road. No operational deficiencies are expected as a result of the deletion of Caliente Road. The project site will accommodate a new public road post the deletion of the Caliente Road to provide access to the project site via two driveways which would both allow passenger vehicle and truck access.

4.7 Adjacent Roadway Improvements

The project would include constructing pedestrian facilities such as curb and gutter along project frontages. A conceptual exhibit showing site-adjacent improvements is provided in Appendix E.

5 PROJECT IMPACTS

5.1 Opening Year 2024 Plus Project Traffic Volumes and Intersection Operations

Opening Year 2024 with-project traffic volumes were determined by adding the project trips to the Opening Year 2024 Baseline traffic volumes. Figures 19 and 20 show the Opening Year 2024 with-project weekday AM and PM peak hour traffic volumes at the study intersections.

An intersection operations analysis was conducted for the study area to evaluate the Opening Year 2024 with-project weekday AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously.

Table 12 provides a comparison between the Opening Year 2024 without and with-project conditions for study area intersections. As shown in Table 12, all study area intersections would continue to operate with acceptable LOS with the addition of project trips except for the following intersections which are forecast to operate at a deficient LOS:

- US-395/Phelan Road-Main Street
- US-395/Poplar Street
- Joshua Street/I-15 SB Off-Ramp

When compared to the Opening Year scenario, the project adds more than 5 seconds of delay and therefore would have a significant effect on traffic operations at the intersections of US-395/Phelan Road-Main Street, US-395/Poplar Street, and Joshua Street/I-15 SB Off-Ramp in the Opening Year plus Project scenario.

US-395/Phelan Road-Main Street Recommended Improvement: Adding a NBL turn lane, a NBT lane, a SBL turn lane, a EBT lane, a WBT lane, a WBR turn lane, and modifying the traffic signal to implement overlap phasing for the WBR turn lane at the intersection of US-395/Phelan Road-Main Street would improve the intersection's operation and the intersection would operate at a satisfactory LOS.

US-395/Poplar Street Recommended Improvement: The CAMUTCD peak hour traffic signal warrant is met for the intersection of US-395/Poplar Street under the Opening Year Plus Project scenario; therefore, installing a traffic signal, changing the NB lane geometry to one NB left-turn lane, one NB through lane, and one NB through-right lane, and changing the SB, EB, & WB lane geometry to one left-turn lane and one shared through-right lane as an improvement would mitigate the project traffic for the intersection of US-395/Poplar Street in the Opening Year Plus Project scenario. With the implementation of this improvement, the LOS operations at the intersection of US-395/Poplar Street would be improved to a satisfactory LOS. Traffic signal warrant assessment is provided in Appendix F.

Joshua Street/I-15 SB Off-Ramp Recommended Improvement: The CAMUTCD peak hour traffic signal warrant is met for the intersection of Joshua Street/I-15 SB Off-Ramp under the Opening Year plus Project scenario during the AM peak hour; therefore, installing a traffic signal would improve the traffic conditions for the intersection of Joshua Street/I-15 SB Off-Ramp in the Opening Year plus Project scenario. With the implementation of this improvement, the intersection of Joshua

Street/I-15 SB Off-Ramp would operate at a satisfactory LOS. Traffic signal warrant assessment is provided in Appendix F.

5.2 Opening Year 2024 Plus Project Queueing Analysis

A queueing analysis has been conducted for all intersections on Main Street, US 395 and Joshua Street for the Opening Year 2024 Plus Project condition. The queuing analysis was prepared utilizing the 95th percentile queue length, available in the Vistro output sheets attached as Appendix C. As shown in Table 13, the following approaches would have a deficient queue in the Opening Year 2024 Plus Project condition at the following approaches:

- US-395/Phelan Road-Main Street
  - Northbound left-turn lane
  - Southbound left-turn lane

- US-395/Poplar Street
  - Westbound left-turn lane

- US-395/Three Flags Rd
  - Westbound left-turn lane

- US-395/Joshua Street
  - Northbound right-turn lane
  - Southbound left-turn lane
  - Westbound left-turn lane
  - Westbound right-turn lane

- Main Street/Mesa Linda Street
  - Northbound right-turn lane
  - Eastbound left-turn lane
  - Westbound left-turn lane

- Main Street/Key Pointe Avenue
  - Northbound right-turn lane
  - Southbound left-turn lane
  - Westbound left-turn lane

The project would cause a queue deficiency at the following approach in the Opening Year 2024 Plus Project condition:

- US-395/Phelan Road-Main Street
  - Northbound left-turn lane

<u>US-395/Phelan Road-Main Street Recommended Queueing Improvement:</u> The LOS recommended improvement for the US-395/Phelan Road-Main Street intersection also improves the queueing deficiency of the intersection in the Opening Year 2024 Plus Project condition. The recommended improvement will improve the overall traffic queueing to 230 feet during the AM peak hour and 197 feet during the PM peak hour which is within the available queue length storage at the intersection.

5.3 Opening Year 2024 Plus Project Roadway Operations

A roadway operations analysis was conducted for the study area to evaluate the Opening Year 2024 with-project conditions. Table 14 provides a comparison between the Opening Year 2024 without and with-project conditions for study roadway segments. As shown in Table 14, all study roadway segments would operate at an unsatisfactory LOS in the Opening Year 2024 plus project condition except for the roadway segment of Joshua Street (from I-15 SB Off-Ramp to Mariposa Road) which is forecast to operate at a satisfactory LOS.

The widening improvements of the aforementioned roadways are future projects subject to the City's Development Impact Fee (DIF) consistent with the General Plan Implementation Policy CI-2.5 which aims to "*Maintain the City's development impact fee program for future development which includes improvements to roadways to mitigate the impact of the new development.*" Therefore, the cumulative impacts at the impacted roadway segments in Table 14 would be mitigated by payment of the City's DIF. It is to be noted that roadway segments would already be impacted in the Opening Year 2024 without project. Therefore, the project is committed to make the payment of the DIF, which should be considered adequate mitigation for the impact identified in the Opening Year plus Project condition at the impacted roadway segments.

Phelan Road (from US-395 to Caliente Road) and (from Caliente Road to Los Banos) Recommended Improvement: As per the Circulation Element of the City's General Plan, Phelan Road is classified as a major arterial with a 104 feet curb-to-curb right-of-way. It is currently a 4-lane road and is forecasted to be built to its general plan buildout of 6 lanes. As shown in Table 15, widening Phelan Road to 6 lanes would increase its capacity; therefore, both Phelan Road roadway segments would improve and would operate at satisfactory LOS.

US-395 (from Phelan Road to Caliente Road) and (from Phelan Road to Poplar Street) Recommended Improvement: As per the Circulation Element of the City's General Plan, US-395 is classified as a special street with a 106 feet curb-to-curb right-of-way. It is currently a 2-lane highway. The ultimate widening of US-395 is to be determined by Caltrans. It is anticipated that US-395 would be widened to 4 lanes. Therefore, by widening both US-395 highway segments to 4 lanes, its operational capacity would be improved but would still operate at a deficient LOS.

Joshua Street (from US-395 to I-15SB Off-Ramp) Recommended Improvement: Joshua Street is currently built to its general plan buildout of 2 lanes. However, as per the Circulation Element of the City's General Plan, Joshua Street would have a 80 feet total right-of-way including a 50 feet curb-to-curb right-of-way which would suffice for Joshua Street to have 4 lanes. Furthermore, improving Joshua Street by widening it to 4 lanes would cause it to operate at a satisfactory LOS as shown in Table 15.

Figure 19: Opening Year 2024 Plus Project AM Traffic Volumes

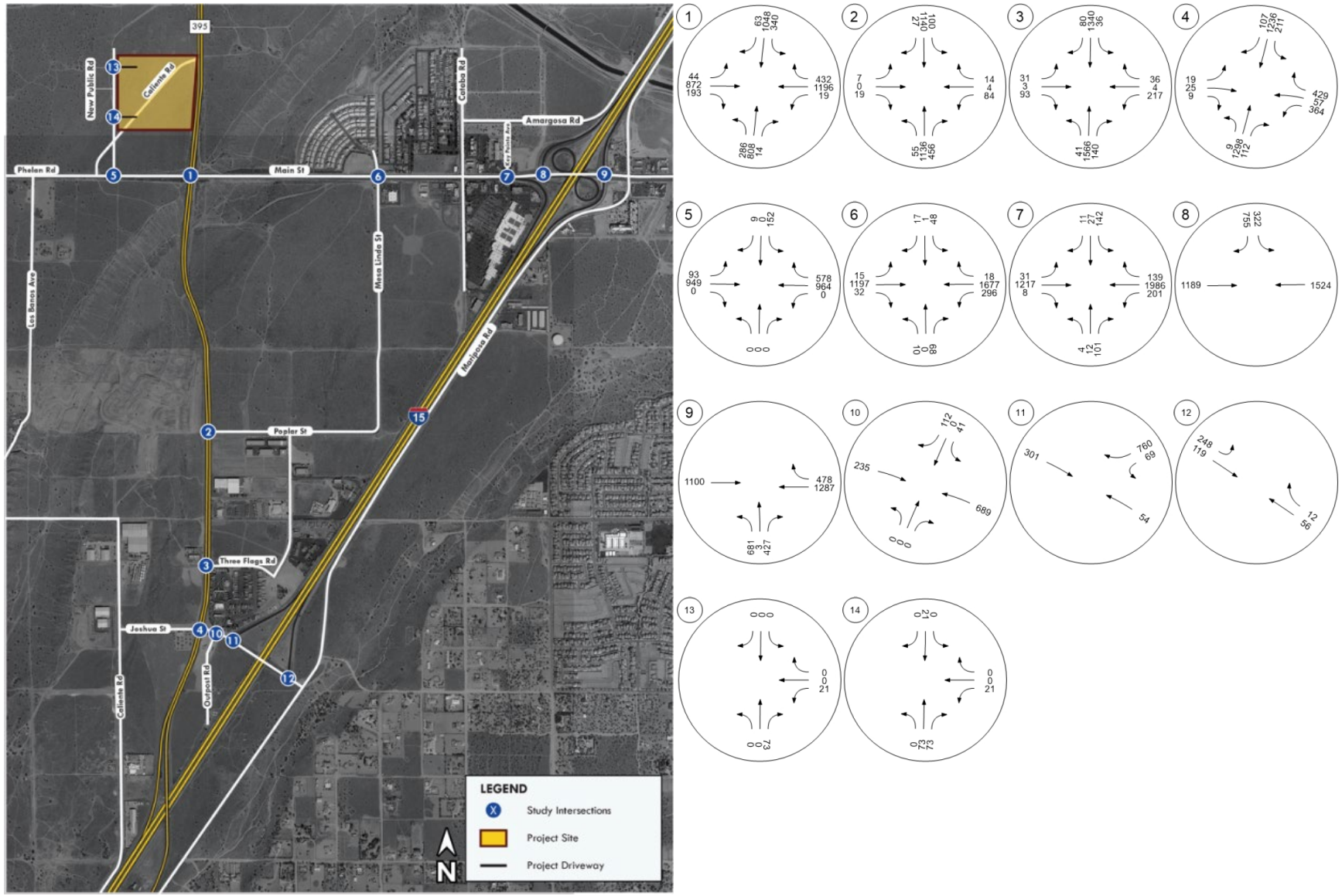


Figure 20: Opening Year 2024 Plus Project PM Traffic Volumes

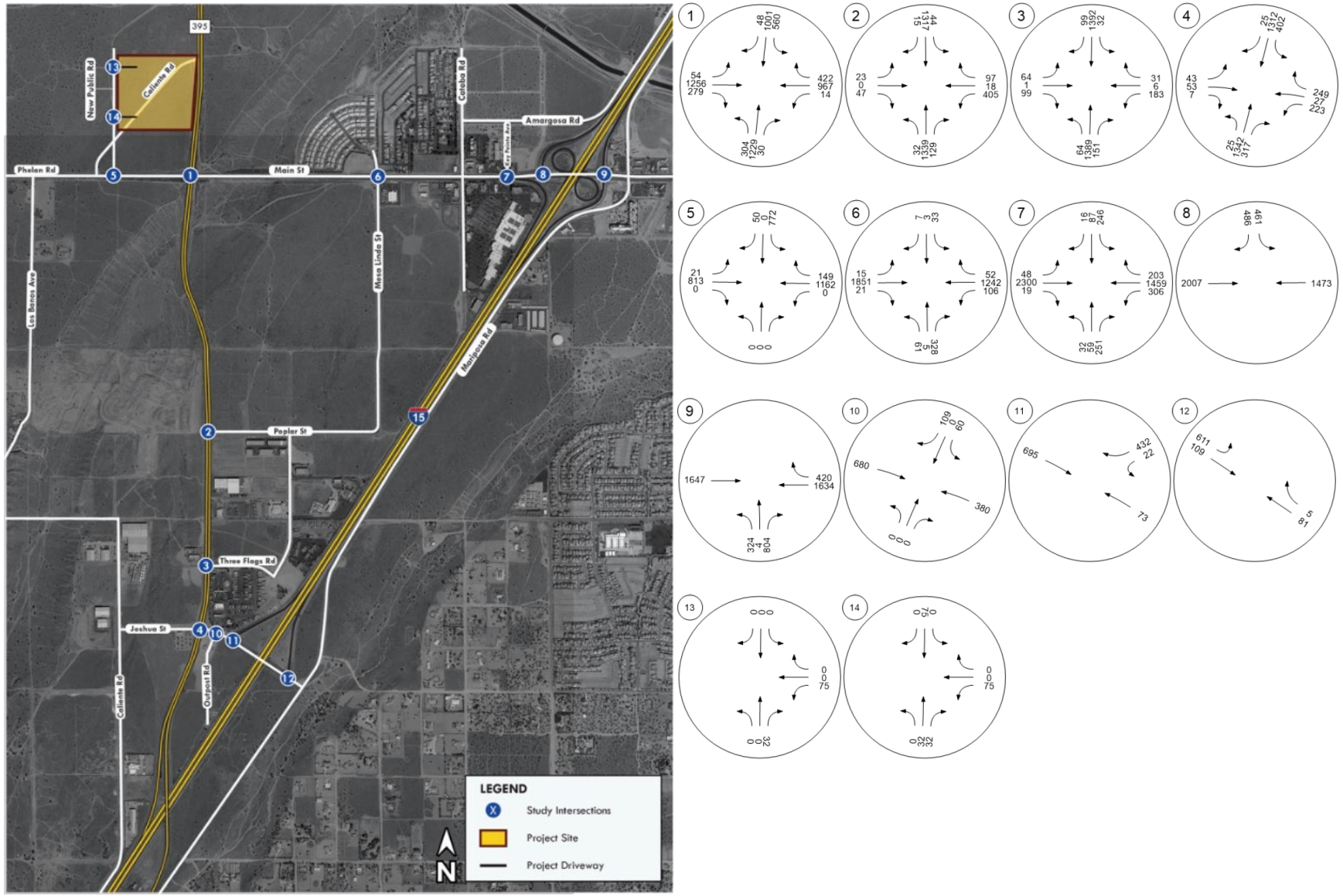


Table 12. Opening Year 2024 Without and With-Project Peak Hour Levels of Service for Intersections

Intersection	Traffic Control	Opening Year 2024				Opening Year 2024 with Project				AM Delay Difference	PM Delay Difference	Acceptable LOS[3]	Impact[4]	Recommended Improvements	Opening Year Plus Project IMP				Impact[4]
		AM Peak		PM Peak		AM Peak		PM Peak							AM Peak		PM Peak		
		Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]						Delay[1]	LOS[2]	Delay[1]	LOS[2]	
1. US-395/Phelan Rd-Main St	Signal	118.5	F	183.1	F	136.7	F	194.6	F	18.2	11.5	E	**Yes**	• Add a 2nd NBL turn lane. • Add a 3rd NBT lane. • Add a 2nd SBL turn lane. • Add a 3rd EBT lane. • Add a 3rd WBT lane. • Add a WBR turn lane. • Modify the traffic signal to implement overlap phasing for the WBR turn lane.	62.9	E	63.8	E	**No**
2. US-395/Poplar St	TWSC	>400	F	>400	F	>400	F	>400	F	>5.0	>5.0	E	**Yes**	• Install a traffic signal. • Change the NB lane geometry to one NB left-turn lane, one NB through lane, and one NB through-right lane. • Change the SB, EB, & WB lane geometry to one left-turn lane and one shared through-right lane.	44.8	D	41.8	D	**No**
3. US-395/Three Flags Rd	Signal	21.4	C	21.0	C	22.1	C	21.6	C	0.7	0.6	E	**No**	-	-	-	-	-	-
4. US-395/Joshua St	Signal	30.1	C	41.5	D	33.5	C	49.2	D	3.4	7.7	E	**No**	-	-	-	-	-	-
5. Phelan Rd/New Public Rd	Signal	5.4	A	22.8	C	6.6	A	35.1	D	1.2	12.3	D	**No**	-	-	-	-	-	-
6. Main St/Mesa Linda St	Signal	47.8	D	44.7	D	48.4	D	50.7	D	0.6	5.9	E	**No**	-	-	-	-	-	-
7. Main St/Key Pointe Ave	Signal	37.9	D	66.9	E	37.8	D	71.4	E	-0.1	4.5	E	**No**	-	-	-	-	-	-
8. Main St/I-15 SB Ramps	Signal	17.6	B	13.0	B	18.8	B	13.3	B	1.2	0.3	E	**No**	-	-	-	-	-	-
9. Main St/I-15 NB Ramps	Signal	17.4	B	14.7	B	18.0	B	14.7	B	0.6	0.0	E	**No**	-	-	-	-	-	-
10. Joshua Rd/Outpost Rd	TWSC	28.9	D	38.1	E	31.5	D	43.1	E	2.6	5.0	E	**No**	-	-	-	-	-	-
11. Joshua St/I-15 SB Off-Ramp	TWSC	52.2	F	15.6	C	65.4	F	16.2	C	13.2	0.6	E	**Yes**	Install a traffic signal.	23.1	C	22.2	C	**No**
12. Joshua St/I-15 NB On-Ramp	TWSC	7.9	A	9.1	A	7.9	A	9.3	A	0.0	0.2	E	**No**	-	-	-	-	-	-
13. New Public Rd/North Driveway	TWSC	-	-	-	-	8.8	A	8.9	A	-	-	D	**No**	-	-	-	-	-	-
14. New Public Rd/South Driveway	TWSC	-	-	-	-	9.4	A	9.6	A	-	-	D	**No**	-	-	-	-	-	-

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

[3] Acceptable LOS per the City of Hesperia's General Plan Circulation Element - Goal C1-2.

[4] The City of Hesperia utilizes a LOS standard of LOS D. An impact would occur if the project causes an intersection to deteriorate from acceptable LOS (LOS D or better) to an unacceptable LOS (LOS E or F). At an intersection already operating at LOS E or F in the baseline condition, a project impact would occur if the project adds measurable delay (5 seconds or more) to an intersection already operating at an unacceptable LOS.

Table 13. Opening Year 2024 Without and With-Project Queueing Analysis

Intersection	Turning Movement	Available Queue Length (Ft)	Opening Year Without Project		Opening Year With Project		Project Deficiency?[1]		Queue Difference		Opening Year With Project		Less than Baseline?	
			AM	PM	AM	PM			AM	PM	AM	PM		
			Required Queueing (Ft)	Required Queueing (Ft)	Required Queueing (Ft)	Required Queueing (Ft)	AM	PM	Queueing Difference (Ft)	Queueing Difference (Ft)	With Mitigation Queueing (Ft)	With Mitigation Queueing (Ft)	AM	PM
1. US-395/Phelan Rd-Main St	NBL	280	438	445	630	571	Yes	Yes	192	125	264	228	Yes	Yes
	SBL	245	701	1345	701	1345	No	No	-	-	-	-	-	-
	EBL	337	106	96	120	165	No	No	-	-	-	-	-	-
	WBL	246	37	25	37	25	No	No	-	-	-	-	-	-
2. US-395/Poplar St	NBL[2]	150	8	5	8	5	No	No	-	-	-	-	-	-
	SBL	100	27	9	30	9	No	No	-	-	-	-	-	-
	EBL[2]	373	32	118	36	118	No	No	-	-	-	-	-	-
	WBL	507	599	1693	607	1701	No	No	-	-	-	-	-	-
3. US-395/Three Flags Rd	NBL	190	63	68	63	89	No	No	-	-	-	-	-	-
	NBR	190	47	43	47	47	No	No	-	-	-	-	-	-
	SBL	224	56	37	56	49	No	No	-	-	-	-	-	-
	SBR	224	26	30	26	34	No	No	-	-	-	-	-	-
	EBL	182	36	53	36	77	No	No	-	-	-	-	-	-
	WBL	274	314	212	314	212	No	No	-	-	-	-	-	-
4. US-395/Joshua St	NBL	191	13	44	14	44	No	No	-	-	-	-	-	-
	NBR	226	50	225	54	232	No	No	-	-	-	-	-	-
	SBL	200	249	532	251	541	No	No	-	-	-	-	-	-
	SBR	223	34	8	35	8	No	No	-	-	-	-	-	-
	EBL	140	20	62	22	62	No	No	-	-	-	-	-	-
	WBL	100	381	334	396	334	No	No	-	-	-	-	-	-
	WBR	100	246	222	264	235	No	No	-	-	-	-	-	-
5. Phelan Rd/New Public Rd	EBL	100	31	13	40	17	No	No	-	-	-	-	-	-
	WBL	100	0	0	0	0	No	No	-	-	-	-	-	-
6. Main St/Mesa Linda St	NBR	100	33	116	89	116	No	No	-	-	-	-	-	-
	SBR	100	6	2	21	2	No	No	-	-	-	-	-	-
	EBL	340	206	523	20	541	No	No	-	-	-	-	-	-
	WBL	150	467	214	363	219	No	No	-	-	-	-	-	-
7. Main St/Key Pointe Ave	NBL	222	5	45	5	45	No	No	-	-	-	-	-	-
	NBR	100	90	256	90	256	No	No	-	-	-	-	-	-
	SBL	136	192	389	192	389	No	No	-	-	-	-	-	-
	EBL	210	41	98	42	98	No	No	-	-	-	-	-	-
	EBR	210	4	11	4	11	No	No	-	-	-	-	-	-
	WBL	177	260	515	260	515	No	No	-	-	-	-	-	-
8. Main St/I-15 SB Ramps	SBL	549	53	111	52	110	No	No	-	-	-	-	-	-
	SBR	515	284	206	297	209	No	No	-	-	-	-	-	-
9. Main St/I-15 NB Ramps	NBL	600	311	132	319	138	No	No	-	-	-	-	-	-
	NBR	615	49	133	47	133	No	No	-	-	-	-	-	-
10. Joshua Rd/Outpost Rd	SBL	100	27	42	31	47	No	No	-	-	-	-	-	-
	SBR	100	42	17	46	18	No	No	-	-	-	-	-	-
11. Joshua St/I-15 SB Off-Ramp	SBL	25	14	7	14	7	No	No	-	-	-	-	-	-
	SBR	1500	510	100	601	108	No	No	-	-	-	-	-	-
12. Joshua St/I-15 NB On-Ramp	EBLT[3]	980	17	53	17	58	No	No	-	-	-	-	-	-

Indicates queueing required greater than storage available

[1] The project would cause a deficiency if: a) The addition of project trips causes the queue to exceed the storage length and b) The project adds one car length (25 feet) of queue to a queue that exceeds the storage length in the baseline condition.

[2] Future Approches.

[3] Available queue length is measured from the Joshua St/I-15 SB Off-Ramp intersection.

Table 14. Opening Year 2024 Without and With-Project ADT LOS for Roadway Segments

Roadway Segment			Roadway	No. of	D or	Capacity	Opening Year 2024			Project	Opening Year 2024 with Project			V/C	Meets LOS
Road	From	To	Classification	Lanes	U[1]		ADT[2]	V/C[3]	LOS	Traffic ADT	ADT[2]	V/C[3]	LOS	Difference	Standards?
1. Phelan Rd	US-395	Caliente Rd	Major Arterial	4	U	24,480	22,945	0.937	E	3,341	26,286	1.074	F	0.136	No
2. Phelan Rd	Caliente Rd	Los Banos Ave	Major Arterial	4	U	24,480	22,547	0.921	E	1,975	24,522	1.002	F	0.081	No
3. US-395	Phelan Rd	Caliente Rd	U.S. Route	2	U	14,500	40,413	2.787	F	2,266	42,679	2.943	F	0.156	No
4. US-395	Phelan Rd	Poplar St	U.S. Route	2	U	14,500	33,618	2.318	F	3,147	36,765	2.535	F	0.217	No
5. Joshua St	US-395	I-15SB Off-Ramp	Major Arterial	2	U	14,500	14,359	0.990	E	1,078	15,437	1.065	F	0.074	No
6. Joshua St	I-15SB Off-Ramp	Mariposa Road	Major Arterial	2	U	14,500	7,694	0.531	A	554	8,248	0.569	A	0.038	Yes

=Unsatisfactory Level of Service

[1] Divided or Undivided

[2] Average Daily Traffic

[3] Volume-Capacity Ratio

Table 15. Opening Year 2024 With-Project LOS Improvements for Roadway Segments

Roadway Segment			Roadway	No. of	D or	Capacity	Opening Year 2024 with Project Plus Improvements			Meets LOS
Road	From	To	Classification	Lanes	U[1]		ADT[2]	V/C[3]	LOS	Standards?
1. Phelan Rd	US-395	Caliente Rd	Major Arterial	6	U	36,880	26,286	0.713	C	Yes
2. Phelan Rd	Caliente Rd	Los Banos Ave	Major Arterial	6	U	36,880	24,522	0.665	B	Yes
3. US-395	Phelan Rd	Caliente Rd	U.S. Route	4	U	24,480	42,679	1.743	F	No
4. US-395	Phelan Rd	Poplar St	U.S. Route	4	U	24,480	36,765	1.502	F	No
5. Joshua St	US-395	I-15SB Off-Ramp	Major Arterial	4	U	24,480	15,437	0.631	B	Yes

=Unsatisfactory Level of Service

[1] Divided or Undivided

[2] Average Daily Traffic

[3] Volume-Capacity Ratio

6 SUMMARY OF PROJECT IMPROVEMENTS AND FAIR SHARE

6.1 Opening Year Plus Project Condition – Intersection LOS

An LOS analysis was prepared for all study intersections in the Opening Year plus Project scenario. All study area intersections are forecast to operate with satisfactory LOS in the Opening Year plus Project scenario except for the following intersections which are forecast to operate at a deficient LOS:

- US-395/Phelan Road-Main Street
- US-395/Poplar Street
- Joshua Street/I-15 SB Off-Ramp

When compared to the Opening Year scenario, the project adds more than 5 seconds of delay and therefore would have a significant effect on traffic operations at the intersections of US-395/Phelan Road-Main Street, US-395/Poplar Street, and Joshua Street/I-15 SB Off-Ramp in the Opening Year plus Project scenario.

US-395/Phelan Road-Main Street Recommended Improvement: Adding a NBL turn lane, a NBT lane, a SBL turn lane, a EBT lane, a WBT lane, a WBR turn lane, and modifying the traffic signal to implement overlap phasing for the WBR turn lane at the intersection of US-395/Phelan Road-Main Street would improve the intersection's operation and the intersection would operate at a satisfactory LOS.

US-395/Poplar Street Recommended Improvement: The CAMUTCD peak hour traffic signal warrant is met for the intersection of US-395/Poplar Street under the Opening Year Plus Project scenario; therefore, installing a traffic signal, changing the NB lane geometry to one NB left-turn lane, one NB through lane, and one NB through-right lane, and changing the SB, EB, & WB lane geometry to one left-turn lane and one shared through-right lane as an improvement would mitigate the project traffic for the intersection of US-395/Poplar Street in the Opening Year Plus Project scenario. With the implementation of this improvement, the LOS operations at the intersection of US-395/Poplar Street would be improved to a satisfactory LOS.

Joshua Street/I-15 SB Off-Ramp Recommended Improvement: The CAMUTCD peak hour traffic signal warrant is met for the intersection of Joshua Street/I-15 SB Off-Ramp under the Opening Year plus Project scenario during the AM peak hour; therefore, installing a traffic signal would improve the traffic conditions for the intersection of Joshua Street/I-15 SB Off-Ramp in the Opening Year plus Project scenario. With the implementation of this improvement, the intersection of Joshua Street/I-15 SB Off-Ramp would operate at a satisfactory LOS.

Since the LOS deficiency at the intersections of US-395/Phelan Road-Main Street, US-395/Poplar Street, and Joshua Street/I-15 SB Off-Ramp are cumulative, the project would contribute to a fair share for the implementation of the aforementioned improvements. The project would be responsible for the highest peak hour fair share of 9.81% for US-395/Phelan Road-Main Street, 9.56% for US-395/Poplar Street, and 6.26% for Joshua Street/I-15 SB. The project's fair share was calculated in compliance with the methodology in the City's Traffic Impact Analysis Guidelines. The project fair share is provided in Table 16. With the implementation of the aforementioned improvements, the operation of the intersection of US-395/Phelan Road-Main Street would be

improved to acceptable LOS, US-395/Poplar Street would be improved to a satisfactory LOS, and Joshua Street/I-15 SB Off-Ramp would be improved to a satisfactory LOS.

Table 16. Project Mitigation and Fair Share for Intersections

Intersection	Improvements	AM Project Trips	PM Project Trips	AM Future Development Trips	PM Future Development Trips	AM Fair Share Percent	PM Fair Share Percent
1 US-395/Phelan Road-Main St	Add a 2nd NBL turn lane, add a 4th NBT lane, add a 2nd SBL turn lane, add a 3rd EBT lane, add a 3rd WBT lane, add a WBR turn lane. Modify the traffic signal to implement overlap phasing for the WBR turn lane.	178	202	1830	1857	8.86%	**9.81%**
2 US-395/Poplar Street	Install a traffic signal, add a 3rd NBT lane, add a NBR turn lane, add a 2nd SBL turn lane, add a 2nd SBT lane.	102	117	1086	1107	8.59%	**9.56%**
11 Joshua Street/I-15 SB	Install a traffic signal.	41	48	686	719	5.64%	**6.26%**

6.2 Opening Year Plus Project Condition – Queueing Analysis

A queueing analysis has been conducted for all intersections on Main Street, US 395 and Joshua Street for the Opening Year 2024 Plus Project condition. The project would cause a queueing deficiency in the Opening Year 2024 Plus Project condition at the following approach:

- US-395/Phelan Road-Main Street
  - Northbound left-turn lane

US-395/Phelan Road-Main Street Recommended Queueing Improvement: The LOS recommended improvement for the US-395/Phelan Road-Main Street intersection also improves the queueing deficiency of the intersection in the Opening Year 2024 Plus Project condition.

6.3 Opening Year Plus Project Condition – Roadway Segments

A roadway operations analysis was conducted for the study area to evaluate the Opening Year 2024 with-project conditions. All study roadway segments would operate at an unsatisfactory LOS in the Opening Year 2024 plus project condition except for the roadway segment of Joshua Street (from I-15 SB Off-Ramp to Mariposa Road) which is forecast to operate at a satisfactory LOS.

The widening improvements of the study roadways are future projects subject to the City's Development Impact Fee (DIF) consistent with the General Plan Implementation Policy CI-2.5 which aims to "*Maintain the City's development impact fee program for future development which includes improvements to roadways to mitigate the impact of the new development.*" Therefore, the cumulative impacts at the impacted roadway segments would be mitigated by payment of the City's DIF. It is to be noted that roadway segments would already be impacted in the Opening Year 2024 without project. Therefore, the project is committed to make the payment of the DIF, which should be considered adequate mitigation for the impact identified in the Opening Year plus Project condition at the impacted roadway segments.

Phelan Road (from US-395 to Caliente Road) and (from Caliente Road to Los Banos) Recommended Improvement: As per the Circulation Element of the City's General Plan, Phelan Road is classified as a major arterial with a 104 feet curb-to-curb right-of-way. It is currently a 4-

lane road and is forecasted to be built to its general plan buildout of 6 lanes. Widening Phelan Road to 6 lanes would increase its capacity; therefore, both Phelan Road roadway segments would improve and would operate at satisfactory LOS.

US-395 (from Phelan Road to Caliente Road) and (from Phelan Road to Poplar Street) Recommended Improvement: As per the Circulation Element of the City's General Plan, US-395 is classified as a special street with a 106 feet curb-to-curb right-of-way. It is currently a 2-lane highway. The ultimate widening of US-395 is to be determined by Caltrans. It is anticipated that US-395 would be widened to 4 lanes. Therefore, by widening both US-395 highway segments to 4 lanes, its operational capacity would be improved but would still operate at a deficient LOS.

Joshua Street (from US-395 to I-15SB Off-Ramp) Recommended Improvement: Joshua Street is currently built to its general plan buildout of 2 lanes. However, as per the Circulation Element of the City's General Plan, Joshua Street has a 80 feet total right-of-way including a 50 feet curb-to-curb right-of-way which would suffice for Joshua Street to have 4 lanes. Furthermore, improving Joshua Street by widening it to 4 lanes would cause it to operate at a satisfactory LOS.

APPENDIX A – TRAFFIC STUDY SCOPING AGREEMENT

Project Scoping Form

Project Identification:

Recommended Approval
TKE Engineering
9/20/22

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	KISS Logistics Center
Project Address:	Northwest Corner of I-395 and Main Street APNs: *3064-401-03, -04, -05*
Project Opening Year:	2024
Project Description:	The proposed project will consist of a new warehouse, office, and truck trailer parking with a total building area of 655,468 SF inclusive of a 11,000 SF of ground floor office space and 5,000 SF of mezzanine office space.

	Consultant:	**Developer:**
Name:	EPD Solutions, Inc.	KISS Logistics Center
Address:	2355 Main Street, Suite 100	25 Harbor Park Drive
	Irvine, CA 92614	Port Washington, NY 11050
Telephone:	(949) 794-1180	
Fax/Email:	hashem@epdsolutions.com	jin@kissusa.com

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation, 11th Edition

Current General Plan Land Use: MSFC SP and NC

Proposed General Plan Land Use: CIBP

Current Zoning: MSFC SP and NC

Proposed Zoning: CIBP

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				57	17	74
PM Trips				26	68	94

Trip Internalization: ☐ Yes ☒ No (_____% Trip Discount)

Pass-By Allowance: ☐ Yes ☒ No (_____% Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses (see Page 11 of the guidelines related to LOS assessment and Pages 24-26).

Is the project screened from LOS assessment? ☐ Yes ☒ No

LOS screening justification (see Page 11 of the guidelines): _____

Is the project screened from VMT assessment? ☐ Yes ☒ No

VMT screening justification (see Pages 24-26 of the guidelines): _____

Level of Service Scoping

- Proposed Trip Distribution (Please See Attached Graphic for Detailed Distribution):

North	South	East	West
Trucks: 55% Cars: 10%	Trucks 45% Cars: 20%	Trucks: 0% Cars: 60%	Trucks: 0% Cars: 10%

- A proposed list of cumulative projects is attached. Please confirm that the list is accurate and provide additional projects if needed.
- Please see attached list of study intersections/roadway segments
- Please see attached site plan
- Other specific items to be addressed:
    - Site access
    - On-site circulation
    - Peak hour traffic signal warrants for all unsignalized intersections operating at unsatisfactory LOS.
- Date of Traffic Counts: May 2022
- Please see attached analysis scenarios
- The project would be built in one phase.

VMT Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used SBTAM
- Figure 2 (Attached) provides the SBCTA Screening VMT Assessment output
- The SBTAM model will be used for the VMT analysis. TAZ 53908101 will be modified to include the project land use and access. Project employment would be determined based on the square footage per employee for Warehouse land use as shown in Table II-B of the SCAG Employment Density Study. As shown in the study, Warehouse land uses in San Bernardino County would have 1 employee per 1,195 square feet. This would equate to 549 project employees. It is recommended that the project zone and the adjacent zone also be modified to include the Hesperia Commerce Center II project, as this approved project would generate 3,134 jobs in the project TAZ and the adjacent TAZ. The employment generated by both the KISS Logistics Center and the Hesperia Commerce Center II project would affect the VMT per service population in the project zone.

Table 1: List of Study Intersections

1.	Phelan Rd & New Public Rd
2.	US-395 & Phelan Rd/Main St
3.	US-395 & Poplar St
4.	US-395 & Three Flags Rd
5.	US-395 & Joshua Rd
6.	Joshua Rd & I-15 SB Ramp
7.	Joshua Rd & I-15 NB Ramp
8.	New Public Rd & North Driveway
9.	New Public Rd & South Driveway

Table 2: List of Study Roadway Segments

No.	Street	From	To
1.	Phelan Rd	U.S. 395	Caliente Rd
2.	Phelan Rd	Caliente Rd	Los Banos Ave
3.	U.S. 395	Phelan Rd	Caliente Rd
4.	U.S. 395	Phelan Rd	Poplar St
5.	Joshua St	U.S. 395	I-15 SB Off-Ramp
6.	Joshua St	I-15 SB Off-Ramp	Mariposa Rd

Table 3: Analysis Scenarios

1.	Existing Conditions (Based on Existing traffic counts)
2.	Project Opening Year Conditions (Existing plus Growth to Opening Year plus Cumulative Projects)
3.	Project Opening Year Plus Project Conditions

Table 4: Project Trip Generation

			AM Peak Hour			PM Peak Hour		
Land Use	**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates								
High-Cube Transload and Short-Term Storage[1]	TSF	1.40	0.06	0.02	0.08	0.03	0.07	0.10
Project Trip Generation								
High-Cube Transload and Short-Term Storag 655.468	TSF	918	40	12	52	18	48	66
Vehicle Mix[2]	***Percent***[2]							
Passenger Vehicles	72.50%	666	29	9	38	13	35	48
2-Axle truck	4.60%	42	2	0	2	1	2	3
3-Axle truck	5.70%	52	2	1	3	1	3	4
4+-Axle Trucks	17.20%	158	7	2	9	3	8	11
	100%	918	40	12	52	18	48	66
PCE Trip Generation[3]	***PCE Factor***							
Passenger Vehicles	1.0	666	29	9	38	13	35	48
2-Axle truck	1.5	63	3	0	3	2	3	5
3-Axle truck	2.0	104	4	2	6	2	6	8
4+-Axle Trucks	3.0	474	21	6	27	9	24	33
		1,307	57	17	74	26	68	94

TSF = Thousand Square Feet

PCE = Passenger Car Equivalent

[1] Trip rates from the Institute of Transporation Engineers, Trip Generation, 11th Edition, 2021. Land Use Code 154 - High-Cube Transload and Short-Term Storage.

[2] Vehicle Mix from the South Coast Air Quality Management District (AQMD), Warehouse Truck Trip Study Data Results and Usage, July 17, 2014. Without Cold Storage

[3] Passenger Car Equivalent (PCE) factors from the San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016

Site Access and Parking

The proposed project will be accessible via two points of entry. Two 40' driveway will be located along New Public Road adjacent to 395 Highway. The proposed project includes 374 vehicle parking spaces which are located along the northern, eastern, and southern side of the project site. 84 trailer parking stalls will also be located along the west and eastern side of the site.

Special Study

Additional special study will include queuing at locations with unacceptable movement LOS, truck turn exhibits from adjacent public streets, existing and future roadway cross sections along the project frontage, sight distance at access points and the elimination and/or re-routing of Caliente Road. A qualitative discussion of the removal of Caliente Road will also be included.

Figure 1: Site Plan

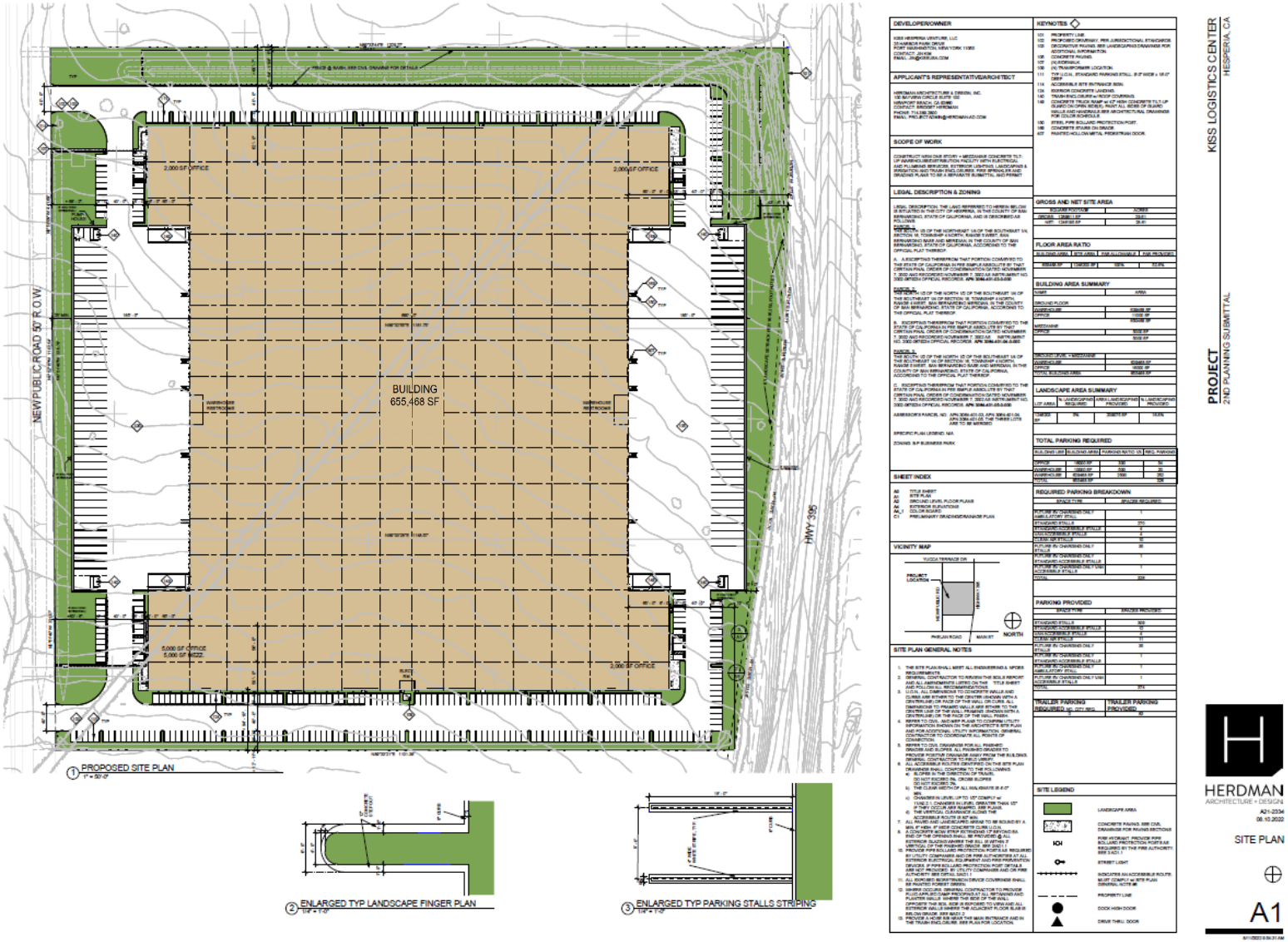


Figure 2: Project Study Area (Intersections)

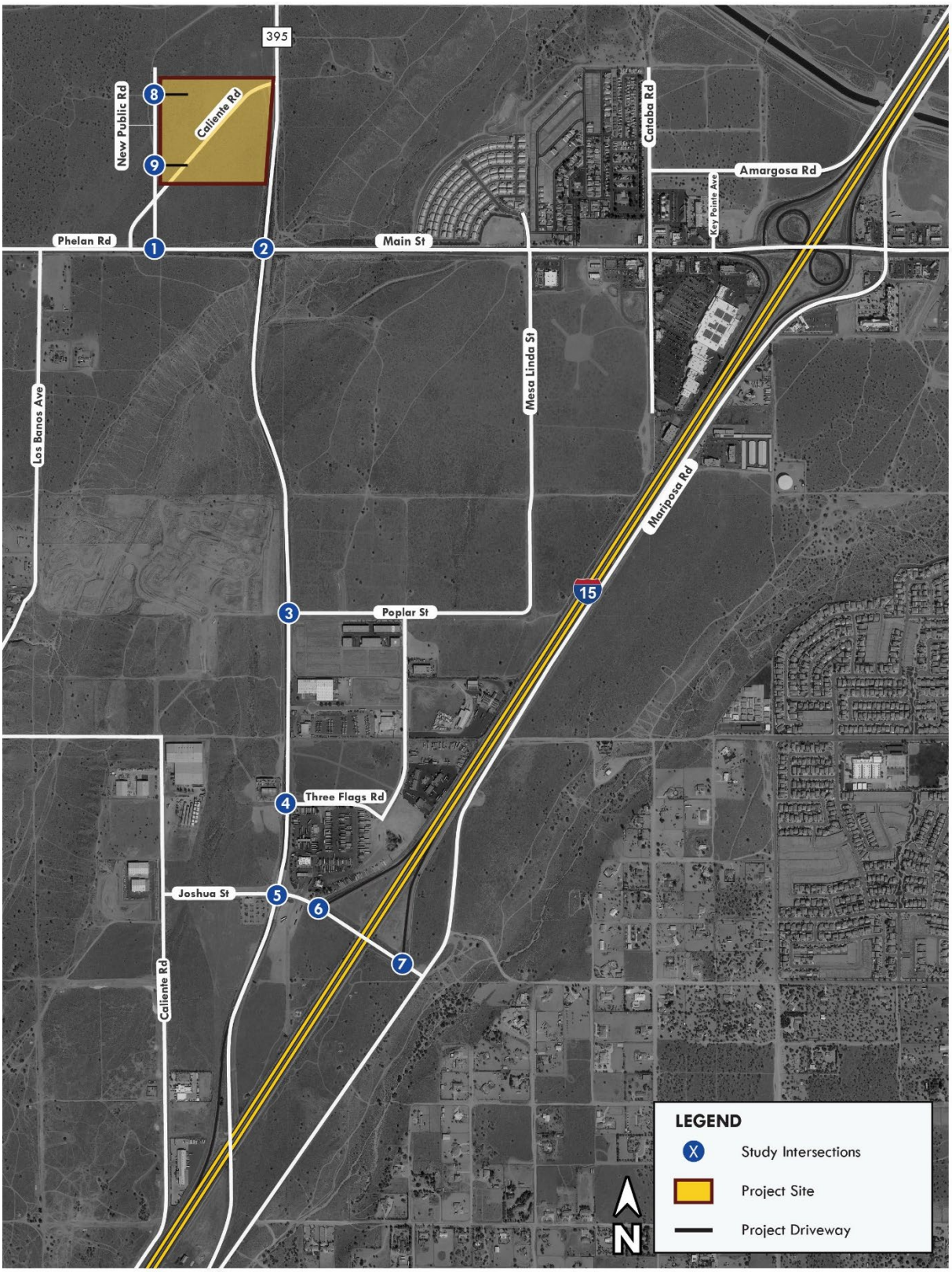


Figure 3: Project Study Area (Roadway Segments)

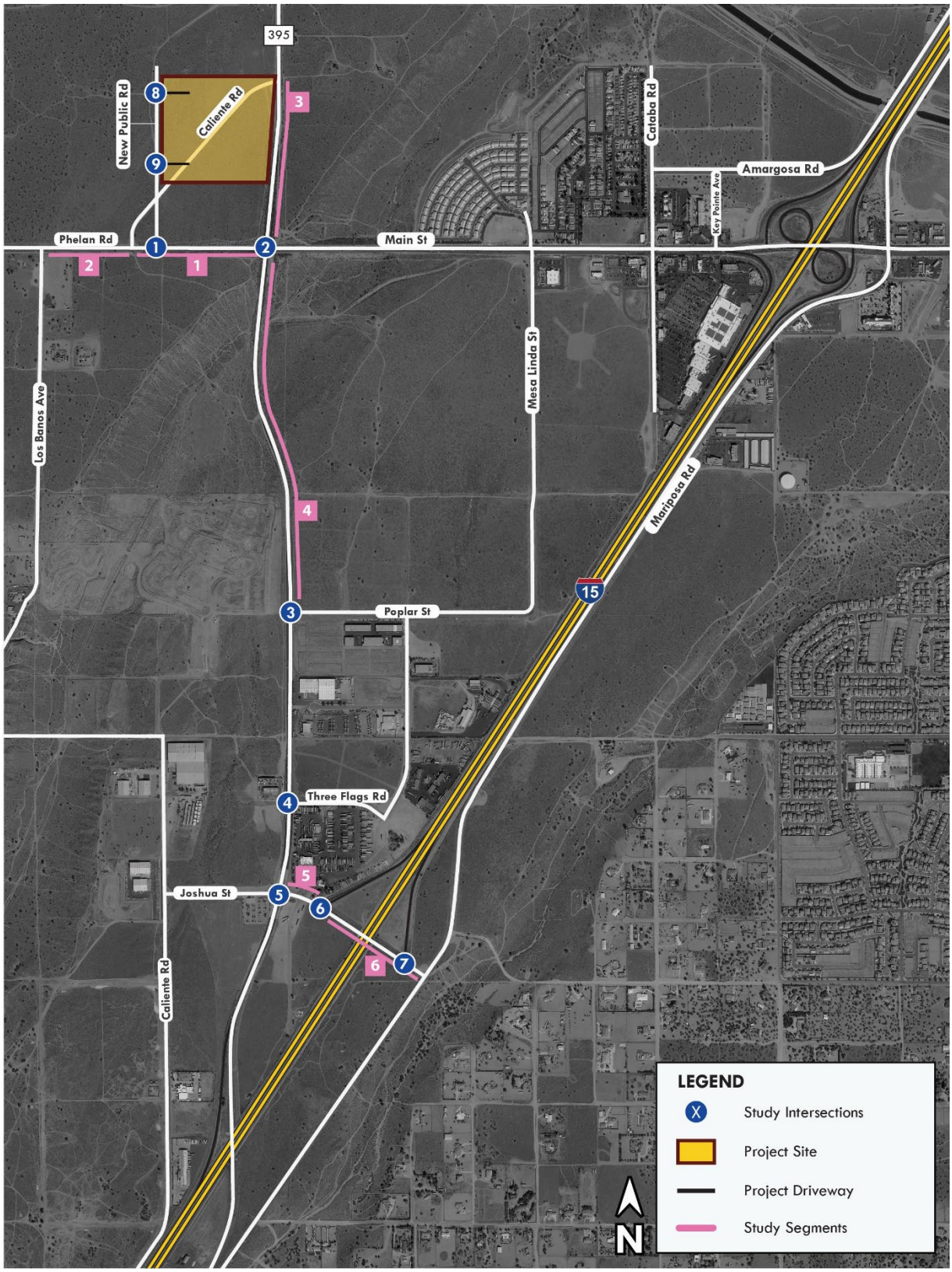


Figure 4: Passenger Car Trip Distribution

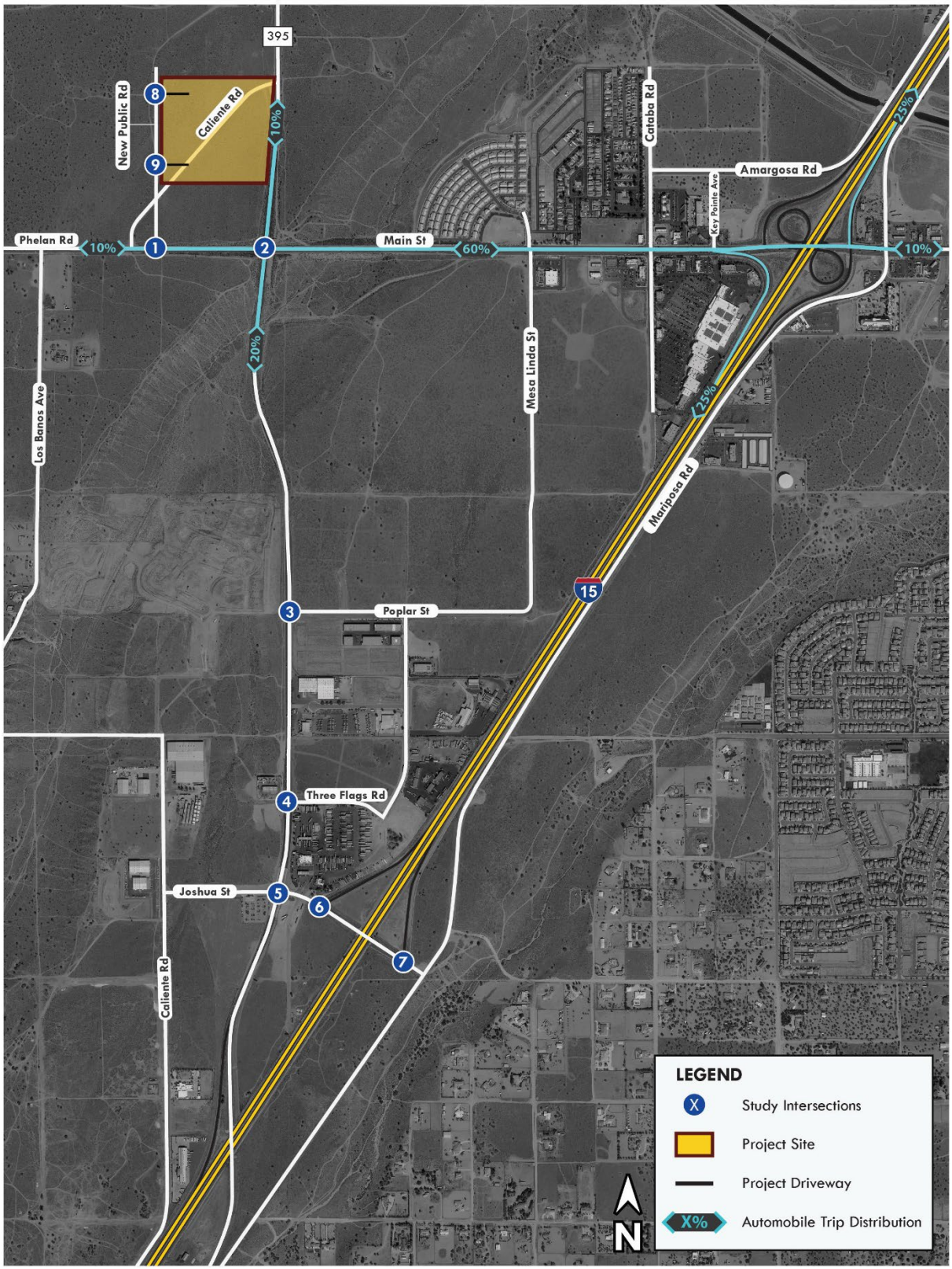


Figure 5: Truck Trip Distribution

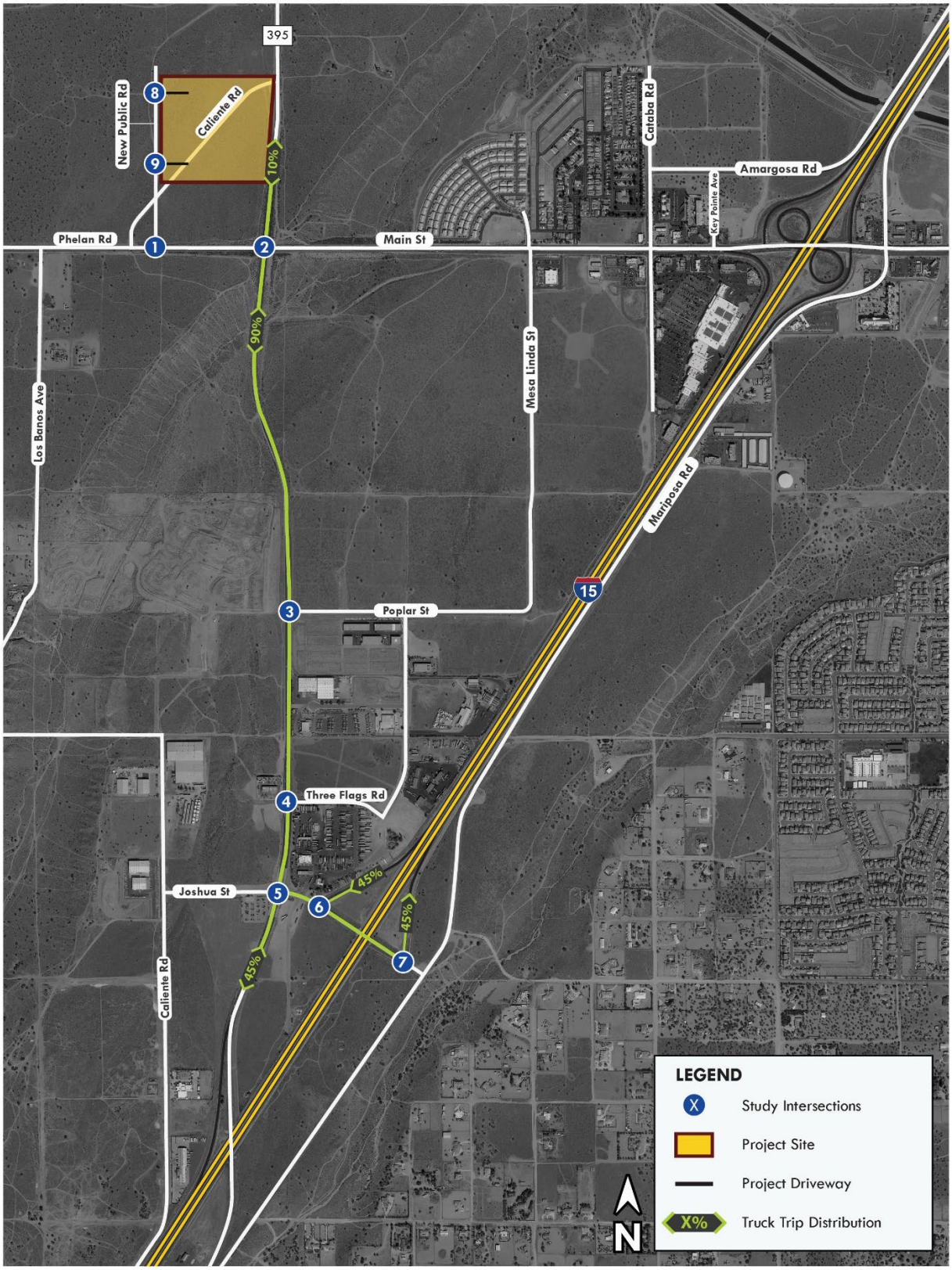


Figure 6: SBCTA Screening Assessment

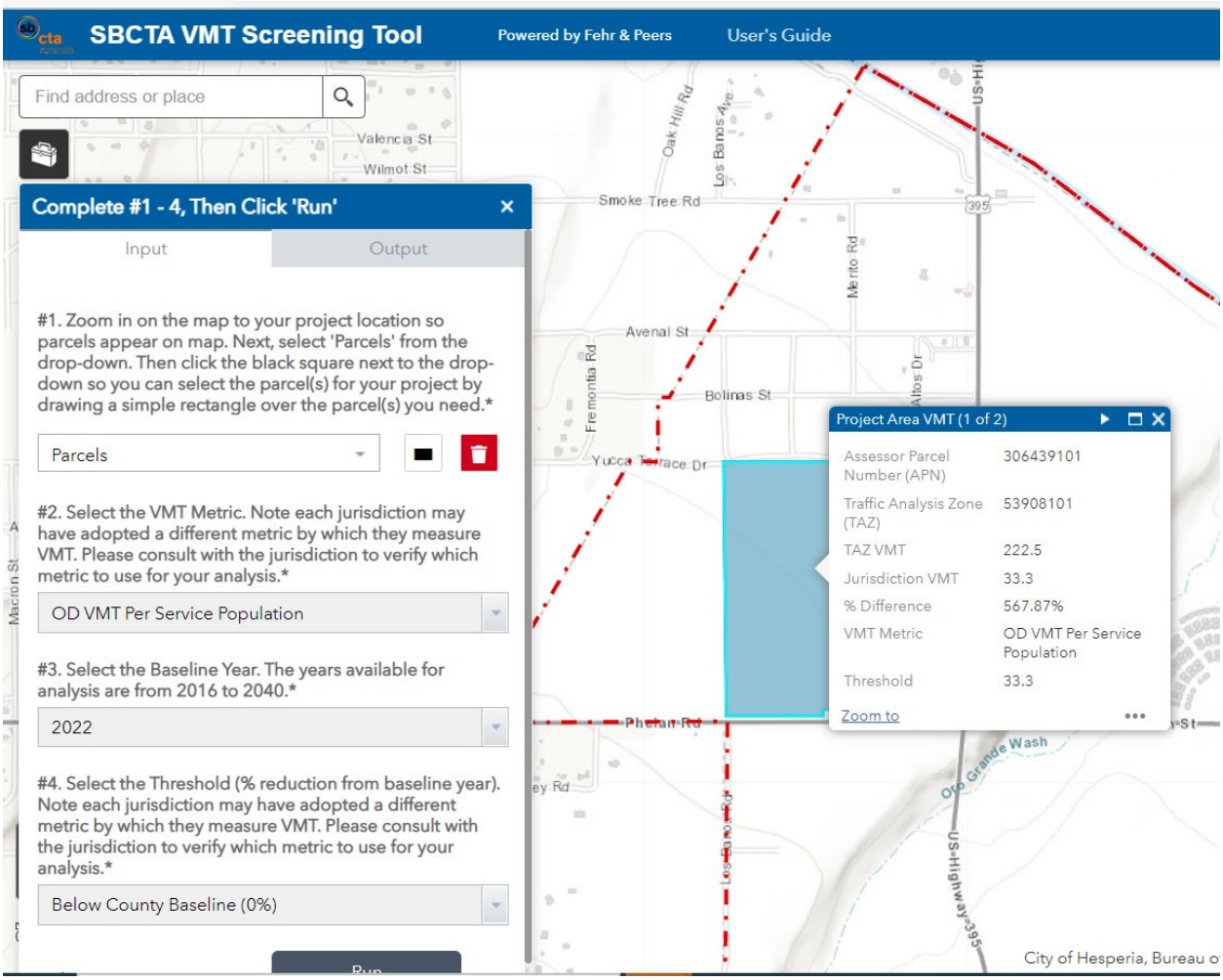


Table 1: List of Cumulative Projects

1.	I-15 Industrial Park A - CUP21-00005
2.	I-15 Industrial Park B - CUP21-00004
3.	U.S. Cold Storage (CUP21-00003)
4.	Pixior Warehouse (CUP20-00006)
5.	Hesperia Commerce Center II (CUP19-00010)
6.	Hesperia Commerce Center (CUP11-10229)
7.	CUP21-00010
8.	CUP22-00004
9.	CUP22-00006
10	Mesa Linda Street Warehouse

APPENDIX B – TRAFFIC COUNTS

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/17/22 TUESDAY	LOCATION:	Hesperia	PROJECT #:	SC3435
	NORTH & SOUTH:	US-395	LOCATION #:	8
	EAST & WEST:	Main	CONTROL:	SIGNAL

PCE Adjusted	NOTES:									
	Class	1	2	3	4	5	6			
	Factor	1	1.5	2	3	2	2			

AM / PM / MD / OTHER / OTHER — ◄ W, E ►, ▲ N, S ▼

	NORTHBOUND US-395			SOUTHBOUND US-395			EASTBOUND Main			WESTBOUND Main				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	17	193	6	45	256	5	9	140	27	4	57	34	791					0
7:15 AM	16	151	2	54	173	15	13	183	28	8	83	49	773					0
7:30 AM	31	175	4	54	204	15	9	168	26	1	107	48	839					0
7:45 AM	28	160	5	53	185	10	12	159	37	1	87	50	785					0
8:00 AM	23	166	0	48	235	9	11	220	27	3	90	32	861					0
8:15 AM	30	145	3	68	248	11	5	142	33	3	93	42	821					0
8:30 AM	15	184	2	61	204	10	12	154	38	4	93	38	812					0
8:45 AM	25	150	7	57	175	7	10	175	29	2	76	57	767					0
VOLUMES	182	1,322	28	438	1,678	81	79	1,339	244	26	685	348	6,446	0	0	0	0	0
APPROACH %	12%	86%	2%	20%	76%	4%	5%	81%	15%	2%	65%	33%						
APP/DEPART	1,531	/	1,748	2,197	/	1,947	1,662	/	1,804	1,058	/	947	0					
BEGIN PEAK HR		7:30 AM																
VOLUMES	110	645	11	222	870	45	37	688	123	8	377	171	3,304					
APPROACH %	14%	84%	1%	19%	77%	4%	4%	81%	14%	1%	68%	31%						
PEAK HR FACTOR		0.916			0.870			0.823			0.889		0.960					
APP/DEPART	766	/	853	1,136	/	1,000	848	/	921	555	/	531	0					
PM																		
4:00 PM	48	260	8	48	216	6	16	166	27	2	159	89	1,041					0
4:15 PM	68	247	5	55	194	13	4	122	32	1	211	60	1,010					0
4:30 PM	39	286	1	42	195	11	13	149	25	4	185	87	1,035					0
4:45 PM	62	257	5	60	210	8	4	132	17	1	182	82	1,018					0
5:00 PM	35	240	7	60	189	13	14	142	21	2	157	58	935					0
5:15 PM	29	244	10	45	153	10	7	139	21	1	205	93	956					0
5:30 PM	42	292	5	59	194	12	12	119	17	4	156	75	984					0
5:45 PM	46	256	5	76	143	10	10	132	19	4	163	70	933					0
VOLUMES	367	2,080	46	445	1,493	82	79	1,099	177	19	1,415	611	7,911	0	0	0	0	0
APPROACH %	15%	83%	2%	22%	74%	4%	6%	81%	13%	1%	69%	30%						
APP/DEPART	2,493	/	2,770	2,019	/	1,688	1,355	/	1,589	2,045	/	1,864	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	215	1,049	19	205	815	38	36	568	100	8	736	316	4,103					
APPROACH %	17%	82%	1%	19%	77%	4%	5%	81%	14%	1%	69%	30%						
PEAK HR FACTOR		0.987			0.950			0.848			0.963		0.986					
APP/DEPART	1,283	/	1,401	1,057	/	923	704	/	792	1,060	/	988	0					

US-395

NORTH SIDE

Main WEST SIDE

EAST SIDE **Main**

SOUTH SIDE

US-395

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/11/22 WEDNESDAY	LOCATION:	Hesperia	PROJECT #:	SC3422
	NORTH & SOUTH:	US-395	LOCATION #:	1
	EAST & WEST:	Poplar	CONTROL:	STOP W

PCE Adjusted	NOTES:												
	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S ▼	
										OTHER			

		NORTHBOUND US-395			SOUTHBOUND US-395			EASTBOUND Poplar			WESTBOUND Poplar				U-TURNS				
	LANES:	NL X	NT 2	NR 0	SL 1	ST 1	SR X	EL X	ET X	ER X	WL 1	WT X	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	217	2	1	254	0	0	0	0	1	0	0	474					0
	7:15 AM	0	200	1	1	248	0	0	0	0	0	0	0	450					0
	7:30 AM	0	195	3	8	255	0	0	0	0	3	0	3	466					0
	7:45 AM	0	204	5	14	207	0	0	0	0	5	0	0	434					0
	8:00 AM	0	217	9	6	273	0	0	0	0	0	0	0	503					0
	8:15 AM	0	148	4	10	245	0	0	0	0	3	0	3	413					0
	8:30 AM	0	200	10	0	275	0	0	0	0	0	0	6	490					0
	8:45 AM	0	168	2	9	231	0	0	0	0	5	0	8	422					0
	VOLUMES	0	1,546	35	48	1,987	0	0	0	0	17	0	19	3,652	0	0	0	0	0
	APPROACH %	0%	98%	2%	2%	98%	0%	0%	0%	0%	47%	0%	53%						
	APP/DEPART	1,581	/	1,565	2,035	/	2,004	0	/	83	36	/	0	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	0	815	18	28	982	0	0	0	0	8	0	3	1,853					
	APPROACH %	0%	98%	2%	3%	97%	0%	0%	0%	0%	73%	0%	27%						
	PEAK HR FACTOR		0.924			0.908			0.000			0.458		0.921					
	APP/DEPART	832	/	818	1,010	/	990	0	/	46	11	/	0	0					
PM	4:00 PM	0	316	8	7	218	0	0	0	0	2	0	3	554					0
	4:15 PM	0	290	12	16	199	0	0	0	0	0	0	2	518					0
	4:30 PM	0	288	6	8	238	0	0	0	0	1	0	11	552					0
	4:45 PM	0	273	10	12	263	0	0	0	0	0	0	17	574					0
	5:00 PM	0	292	6	3	251	0	0	0	0	2	0	7	560					0
	5:15 PM	0	304	12	2	225	0	0	0	0	3	0	10	555					0
	5:30 PM	0	286	6	6	181	0	0	0	0	1	0	4	483					0
	5:45 PM	0	293	8	6	181	0	0	0	0	2	0	8	497					0
	VOLUMES	0	2,340	68	59	1,754	0	0	0	0	11	0	61	4,292	0	0	0	0	0
	APPROACH %	0%	97%	3%	3%	97%	0%	0%	0%	0%	15%	0%	85%						
	APP/DEPART	2,408	/	2,401	1,813	/	1,765	0	/	127	72	/	0	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	1,157	34	25	976	0	0	0	0	6	0	44	2,241					
	APPROACH %	0%	97%	3%	2%	98%	0%	0%	0%	0%	12%	0%	88%						
	PEAK HR FACTOR		0.943			0.911			0.000			0.758		0.976					
	APP/DEPART	1,191	/	1,201	1,000	/	982	0	/	58	50	/	0	0					

US-395

NORTH SIDE

Poplar WEST SIDE EAST SIDE **Poplar**

SOUTH SIDE

US-395

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/11/22 WEDNESDAY				
	LOCATION:	Hesperia	PROJECT #:	SC3422
	NORTH & SOUTH:	US-395	LOCATION #:	3
	EAST & WEST:	Three Flags	CONTROL:	SIGNAL

PCE Adjusted	NOTES:												
	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S ▼	
										OTHER			

		NORTHBOUND US-395			SOUTHBOUND US-395			EASTBOUND Three Flags			WESTBOUND Three Flags				U-TURNS				
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	17	194	32	3	238	19	12	0	27	51	3	9	603					0
	7:15 AM	8	190	23	12	209	14	7	3	16	33	0	12	527					0
	7:30 AM	4	186	15	14	218	20	5	0	23	62	0	6	551					0
	7:45 AM	10	189	36	3	194	25	6	0	23	42	1	6	534					0
	8:00 AM	2	191	30	16	216	22	7	0	21	44	1	20	568					0
	8:15 AM	9	146	42	8	229	19	0	1	23	55	0	15	546					0
	8:30 AM	5	172	34	7	254	13	4	3	22	64	2	19	598					0
	8:45 AM	7	138	37	3	204	28	9	0	25	38	1	19	508					0
	VOLUMES	62	1,403	248	66	1,760	158	50	7	179	389	8	106	4,432	0	0	0	0	0
	APPROACH %	4%	82%	14%	3%	89%	8%	21%	3%	76%	77%	1%	21%						
	APP/DEPART	1,712	/	1,559	1,983	/	2,327	235	/	321	502	/	227	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	39	758	106	32	858	77	30	3	89	188	4	33	2,214					
	APPROACH %	4%	84%	12%	3%	89%	8%	24%	2%	73%	84%	2%	15%						
	PEAK HR FACTOR		0.928			0.933			0.796			0.830		0.918					
	APP/DEPART	902	/	821	967	/	1,134	121	/	141	224	/	119	0					
PM	4:00 PM	13	290	44	9	190	27	17	0	21	46	0	18	674					0
	4:15 PM	18	275	29	3	178	17	14	0	22	23	0	10	588					0
	4:30 PM	19	261	30	8	222	20	17	0	27	33	1	6	642					0
	4:45 PM	17	263	28	0	230	18	12	0	16	46	2	10	640					0
	5:00 PM	15	273	33	18	219	27	16	1	21	22	1	6	652					0
	5:15 PM	11	291	18	1	181	31	17	0	32	32	3	3	619					0
	5:30 PM	8	276	51	3	175	13	10	2	24	30	1	3	595					0
	5:45 PM	8	271	40	4	130	12	13	0	12	40	0	15	543					0
	VOLUMES	107	2,199	272	46	1,524	163	115	3	174	272	7	71	4,951	0	0	0	0	0
	APPROACH %	4%	85%	11%	3%	88%	9%	39%	1%	60%	78%	2%	20%						
	APP/DEPART	2,577	/	2,384	1,733	/	1,969	292	/	321	349	/	277	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	62	1,088	108	27	851	95	62	1	95	133	6	25	2,552					
	APPROACH %	5%	87%	9%	3%	87%	10%	39%	1%	60%	81%	4%	15%						
	PEAK HR FACTOR		0.979			0.923			0.804			0.713		0.979					
	APP/DEPART	1,257	/	1,174	973	/	1,079	158	/	136	164	/	163	0					

US-395

NORTH SIDE

Three Flags WEST SIDE EAST SIDE **Three Flags**

SOUTH SIDE

US-395

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/11/22 WEDNESDAY	LOCATION:	Hesperia	PROJECT #:	SC3422
	NORTH & SOUTH:	US-395	LOCATION #:	2
	EAST & WEST:	Joshua	CONTROL:	SIGNAL

PCE Adjusted	NOTES:												
	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S ▼	
										OTHER			

		NORTHBOUND US-395			SOUTHBOUND US-395			EASTBOUND Joshua			WESTBOUND Joshua				U-TURNS				
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 0.5	ER 0.5	WL 1	WT 1	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	4	213	9	30	250	36	3	3	2	20	15	27	609					0
	7:15 AM	1	190	5	31	188	40	0	7	2	18	23	30	533					0
	7:30 AM	3	169	19	44	246	10	6	6	2	31	9	30	573					0
	7:45 AM	1	194	16	22	221	17	7	8	4	28	9	35	558					0
	8:00 AM	1	193	11	25	246	10	3	2	2	20	6	28	545					0
	8:15 AM	3	159	8	36	265	5	1	4	1	36	7	37	561					0
	8:30 AM	1	189	17	40	294	7	4	8	1	26	6	17	608					0
	8:45 AM	0	143	19	32	230	3	4	0	1	26	5	37	498					0
	VOLUMES	14	1,447	102	258	1,938	127	28	37	14	203	79	239	4,483	0	0	0	0	0
	APPROACH %	1%	93%	6%	11%	83%	5%	35%	47%	18%	39%	15%	46%						
	APP/DEPART	1,563	/	1,713	2,323	/	2,154	79	/	397	520	/	220	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	9	764	48	127	904	102	16	24	9	96	55	121	2,272					
	APPROACH %	1%	93%	6%	11%	80%	9%	32%	49%	19%	35%	20%	44%						
	PEAK HR FACTOR		0.912			0.898			0.674			0.961		0.933					
	APP/DEPART	821	/	900	1,132	/	1,008	49	/	198	271	/	166	0					
PM	4:00 PM	9	294	34	18	233	7	17	13	2	18	8	36	685					0
	4:15 PM	6	279	24	27	191	3	10	13	3	20	6	34	614					0
	4:30 PM	7	263	19	29	245	8	8	18	1	23	7	38	665					0
	4:45 PM	3	277	24	32	257	3	4	9	1	23	6	29	666					0
	5:00 PM	4	265	23	23	236	3	16	15	2	19	7	39	651					0
	5:15 PM	10	288	20	30	206	10	9	5	1	7	5	23	611					0
	5:30 PM	7	270	17	16	208	4	24	17	2	15	10	42	631					0
	5:45 PM	6	282	15	27	148	5	15	16	3	11	2	22	550					0
	VOLUMES	50	2,216	175	199	1,722	42	103	103	15	135	50	262	5,070	0	0	0	0	0
	APPROACH %	2%	91%	7%	10%	88%	2%	47%	47%	7%	30%	11%	59%						
	APP/DEPART	2,441	/	2,581	1,963	/	1,871	221	/	477	446	/	141	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	24	1,112	101	105	925	21	39	51	7	84	26	137	2,629					
	APPROACH %	2%	90%	8%	10%	88%	2%	40%	53%	7%	34%	11%	56%						
	PEAK HR FACTOR		0.921			0.902			0.778			0.906		0.959					
	APP/DEPART	1,236	/	1,288	1,050	/	1,015	97	/	256	247	/	70	0					

US-395

NORTH SIDE

Joshua WEST SIDE

EAST SIDE **Joshua**

SOUTH SIDE

US-395

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/11/22 WEDNESDAY	LOCATION:	Hesperia	PROJECT #:	SC3422
	NORTH & SOUTH:	Mesa Linda	LOCATION #:	6
	EAST & WEST:	Main	CONTROL:	SIGNAL

PCE Adjusted	NOTES:												
	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S ▼	
										OTHER			

		NORTHBOUND Mesa Linda			SOUTHBOUND Mesa Linda			EASTBOUND Main			WESTBOUND Main				U-TURNS				
	LANES:	NL 0.5	NT 0.5	NR 1	SL 0.5	ST 0.5	SR 1	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	2	3	0	6	0	190	0	7	119	2	328					0
	7:15 AM	0	0	2	12	0	2	7	211	3	9	142	3	391					0
	7:30 AM	0	0	10	8	0	5	1	233	2	12	159	3	433					0
	7:45 AM	0	0	5	11	1	5	1	242	1	34	167	4	470					0
	8:00 AM	1	0	11	15	0	4	5	233	1	20	125	7	422					0
	8:15 AM	2	1	15	6	0	2	0	240	2	22	115	2	407					0
	8:30 AM	2	1	15	4	0	4	1	200	2	27	130	7	393					0
	8:45 AM	1	0	9	7	1	2	3	182	7	21	128	6	365					0
	VOLUMES	6	2	69	66	2	30	18	1,729	18	151	1,084	34	3,207	0	0	0	0	0
	APPROACH %	8%	3%	90%	67%	2%	31%	1%	98%	1%	12%	85%	3%						
	APP/DEPART	77	/	53	98	/	170	1,764	/	1,864	1,268	/	1,120	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	1	0	28	46	1	16	14	918	7	75	593	17	1,715					
	APPROACH %	4%	0%	96%	73%	2%	25%	1%	98%	1%	11%	87%	2%						
	PEAK HR FACTOR		0.594			0.829			0.962			0.838		0.913					
	APP/DEPART	29	/	31	63	/	83	939	/	992	684	/	610	0					
PM	4:00 PM	2	2	24	6	0	0	3	261	1	13	245	12	568					0
	4:15 PM	8	1	17	5	0	3	1	185	0	17	265	10	510					0
	4:30 PM	4	2	34	4	1	2	3	215	0	8	229	8	509					0
	4:45 PM	2	1	37	11	0	2	6	181	7	17	217	11	489					0
	5:00 PM	2	0	24	9	0	1	1	192	3	17	249	15	513					0
	5:15 PM	6	2	21	9	2	2	4	216	3	13	254	16	547					0
	5:30 PM	9	0	25	2	0	2	0	173	2	10	227	12	461					0
	5:45 PM	3	1	12	6	0	1	2	155	0	18	209	7	413					0
	VOLUMES	35	9	193	51	3	13	20	1,576	16	113	1,892	91	4,009	0	0	0	0	0
	APPROACH %	15%	4%	82%	77%	5%	19%	1%	98%	1%	5%	90%	4%						
	APP/DEPART	237	/	119	67	/	131	1,611	/	1,820	2,095	/	1,939	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	14	5	115	32	3	7	14	804	13	55	948	50	2,057					
	APPROACH %	10%	3%	86%	76%	7%	17%	2%	97%	2%	5%	90%	5%						
	PEAK HR FACTOR		0.845			0.840			0.932			0.931		0.941					
	APP/DEPART	134	/	68	42	/	71	830	/	951	1,052	/	969	0					

Mesa Linda

NORTH SIDE

Main WEST SIDE

EAST SIDE **Main**

SOUTH SIDE

Mesa Linda

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Hesperia	PROJECT #:	SC3470
5/17/22	NORTH & SOUTH:	Key Pointe	LOCATION #:	10
TUESDAY	EAST & WEST:	Main	CONTROL:	SIGNAL

	NOTES:												
PCE Adjusted	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S	
										OTHER		▼	

		NORTHBOUND Key Pointe			SOUTHBOUND Key Pointe			EASTBOUND Main			WESTBOUND Main				U-TURNS				
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 0.5	SR 0.5	EL 1	ET 3	ER 1	WL 1	WT 3	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	1	0	12	25	2	6	4	203	1	10	127	34	425					0
	7:15 AM	3	0	8	32	5	3	3	238	2	19	167	21	500					0
	7:30 AM	0	1	4	44	4	2	3	208	0	26	190	24	504					0
	7:45 AM	0	0	9	38	3	1	4	239	5	30	169	29	525					0
	8:00 AM	1	4	19	46	4	3	7	250	2	39	128	37	538					0
	8:15 AM	0	2	22	32	5	2	7	233	2	41	145	32	522					0
	8:30 AM	2	4	29	33	8	1	9	213	3	46	171	24	542					0
	8:45 AM	1	2	28	26	9	5	8	232	1	68	164	42	584					0
	VOLUMES	8	13	130	276	40	23	43	1,815	16	277	1,259	240	4,139	0	0	0	0	0
	APPROACH %	5%	9%	86%	81%	12%	7%	2%	97%	1%	16%	71%	14%						
	APP/DEPART	151	/	296	339	/	333	1,874	/	2,220	1,776	/	1,290	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	4	12	97	137	26	11	30	927	8	193	607	134	2,185					
	APPROACH %	4%	11%	86%	79%	15%	6%	3%	96%	1%	21%	65%	14%						
	PEAK HR FACTOR		0.819			0.818			0.933			0.856		0.936					
	APP/DEPART	113	/	176	174	/	227	965	/	1,161	933	/	622	0					
PM	4:00 PM	6	16	52	61	19	6	12	205	2	78	284	49	789					0
	4:15 PM	8	15	59	77	23	3	16	197	4	75	259	52	787					0
	4:30 PM	7	10	70	54	16	3	9	226	4	80	311	41	830					0
	4:45 PM	7	15	51	57	29	4	12	238	6	72	271	59	820					0
	5:00 PM	10	15	72	61	21	4	15	246	2	67	242	49	803					0
	5:15 PM	7	17	49	65	18	4	10	260	6	75	289	46	846					0
	5:30 PM	6	17	64	49	28	5	18	228	3	68	246	64	795					0
	5:45 PM	8	12	57	50	15	3	15	226	5	79	211	45	726					0
	VOLUMES	59	117	473	473	169	32	107	1,824	32	593	2,112	404	6,393	0	0	0	0	0
	APPROACH %	9%	18%	73%	70%	25%	5%	5%	93%	2%	19%	68%	13%						
	APP/DEPART	649	/	628	674	/	794	1,963	/	2,769	3,108	/	2,203	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	31	57	241	237	84	15	46	969	18	294	1,112	195	3,298					
	APPROACH %	9%	17%	73%	70%	25%	4%	4%	94%	2%	18%	69%	12%						
	PEAK HR FACTOR		0.848			0.932			0.935			0.927		0.975					
	APP/DEPART	329	/	298	336	/	396	1,033	/	1,446	1,601	/	1,158	0					

Key Pointe

NORTH SIDE

Main WEST SIDE

EAST SIDE **Main**

SOUTH SIDE

Key Pointe

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Hesperia	PROJECT #:	SC3470
5/17/22	NORTH & SOUTH:	I-15 SB Ramp	LOCATION #:	11
TUESDAY	EAST & WEST:	Main	CONTROL:	SIGNAL

PCE Adjusted	NOTES:												
	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S	
										OTHER		▼	

		NORTHBOUND I-15 SB Ramp			SOUTHBOUND I-15 SB Ramp			EASTBOUND Main			WESTBOUND Main				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 2	ST X	SR 1	EL X	ET 3	ER 1	WL X	WT 3	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	60	0	28	0	222	23	0	130	114	575					0
	7:15 AM	0	0	0	65	0	40	0	256	0	0	169	125	655					0
	7:30 AM	0	0	0	69	0	47	0	247	19	0	194	121	697					0
	7:45 AM	0	0	0	89	0	55	0	271	24	0	191	103	732					0
	8:00 AM	0	0	0	66	0	29	0	261	47	0	160	113	675					0
	8:15 AM	0	0	0	83	0	49	0	257	35	0	176	138	737					0
	8:30 AM	0	0	0	71	0	54	0	243	34	0	199	126	727					0
	8:45 AM	0	0	0	91	0	46	0	249	38	0	223	134	779					0
	VOLUMES	0	0	0	593	0	347	0	2,005	219	0	1,441	972	5,575	0	0	0	0	0
	APPROACH %	0%	0%	0%	63%	0%	37%	0%	90%	10%	0%	60%	40%						
	APP/DEPART	0	/	972	939	/	219	2,223	/	2,597	2,413	/	1,787	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	0	0	0	310	0	177	0	1,010	153	0	758	511	2,917					
	APPROACH %	0%	0%	0%	64%	0%	36%	0%	87%	13%	0%	60%	40%						
	PEAK HR FACTOR		0.000			0.894			0.947			0.889		0.936					
	APP/DEPART	0	/	511	487	/	153	1,163	/	1,320	1,268	/	934	0					
PM	4:00 PM	0	0	0	132	0	78	0	298	25	0	328	106	964					0
	4:15 PM	0	0	0	112	0	72	0	302	34	0	341	85	946					0
	4:30 PM	0	0	0	100	0	85	0	313	49	0	340	108	994					0
	4:45 PM	0	0	0	127	0	91	0	292	37	0	309	105	960					0
	5:00 PM	0	0	0	104	0	91	0	329	53	0	280	107	962					0
	5:15 PM	0	0	0	113	0	84	0	339	39	0	327	99	1,000					0
	5:30 PM	0	0	0	102	0	98	0	292	45	0	290	95	921					0
	5:45 PM	0	0	0	94	0	64	0	295	36	0	274	74	837					0
	VOLUMES	0	0	0	882	0	661	0	2,458	316	0	2,487	778	7,581	0	0	0	0	0
	APPROACH %	0%	0%	0%	57%	0%	43%	0%	89%	11%	0%	76%	24%						
	APP/DEPART	0	/	778	1,543	/	316	2,774	/	3,340	3,265	/	3,148	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	0	0	0	443	0	350	0	1,273	177	0	1,255	418	3,915					
	APPROACH %	0%	0%	0%	56%	0%	44%	0%	88%	12%	0%	75%	25%						
	PEAK HR FACTOR		0.000			0.911			0.950			0.934		0.979					
	APP/DEPART	0	/	418	793	/	177	1,449	/	1,716	1,673	/	1,605	0					

I-15 SB Ramp

NORTH SIDE

Main WEST SIDE

EAST SIDE **Main**

SOUTH SIDE

I-15 SB Ramp

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/17/22 TUESDAY	LOCATION:	Hesperia	PROJECT #:	SC3470
	NORTH & SOUTH:	I-15 NB Ramp	LOCATION #:	12
	EAST & WEST:	Main	CONTROL:	SIGNAL

	NOTES:												
PCE Adjusted	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S ▼	
										OTHER			

		NORTHBOUND I-15 NB Ramp			SOUTHBOUND I-15 NB Ramp			EASTBOUND Main			WESTBOUND Main				U-TURNS				
	LANES:	NL 1	NT 0.5	NR 1.5	SL X	ST X	SR X	EL X	ET 3	ER 1	WL X	WT 3	WR 1	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	27	0	106	0	0	0	0	223	59	0	216	99	729					0
	7:15 AM	21	1	111	0	0	0	0	236	85	0	274	130	856					0
	7:30 AM	13	0	120	0	0	0	0	241	75	0	302	119	869					0
	7:45 AM	27	2	96	0	0	0	0	287	73	0	266	127	877					0
	8:00 AM	21	0	85	0	0	0	0	257	70	0	262	85	779					0
	8:15 AM	20	0	95	0	0	0	0	267	67	0	294	88	831					0
	8:30 AM	20	2	98	0	0	0	0	231	83	0	305	97	835					0
	8:45 AM	25	2	78	0	0	0	0	277	63	0	332	110	885					0
	VOLUMES	173	6	787	0	0	0	0	2,018	573	0	2,250	854	6,660	0	0	0	0	0
	APPROACH %	18%	1%	82%	0%	0%	0%	0%	78%	22%	0%	72%	28%						
	APP/DEPART	965	/	860	0	/	573	2,591	/	2,805	3,104	/	2,423	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	82	3	411	0	0	0	0	1,021	303	0	1,103	460	3,381					
	APPROACH %	16%	1%	83%	0%	0%	0%	0%	77%	23%	0%	71%	29%						
	PEAK HR FACTOR		0.930			0.000			0.919			0.930		0.964					
	APP/DEPART	495	/	463	0	/	303	1,323	/	1,431	1,563	/	1,185	0					
PM	4:00 PM	49	1	205	0	0	0	0	378	51	0	384	111	1,179					0
	4:15 PM	52	2	198	0	0	0	0	354	60	0	375	102	1,141					0
	4:30 PM	46	1	192	0	0	0	0	355	59	0	402	98	1,151					0
	4:45 PM	44	0	178	0	0	0	0	362	58	0	371	93	1,105					0
	5:00 PM	37	0	175	0	0	0	0	363	70	0	350	104	1,097					0
	5:15 PM	35	0	195	0	0	0	0	393	59	0	391	103	1,175					0
	5:30 PM	54	0	224	0	0	0	0	334	56	0	337	102	1,106					0
	5:45 PM	43	1	201	0	0	0	0	346	43	0	305	83	1,021					0
	VOLUMES	359	5	1,567	0	0	0	0	2,883	454	0	2,913	795	8,974	0	0	0	0	0
	APPROACH %	19%	0%	81%	0%	0%	0%	0%	86%	14%	0%	79%	21%						
	APP/DEPART	1,930	/	800	0	/	454	3,337	/	4,450	3,708	/	3,272	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	190	4	773	0	0	0	0	1,449	227	0	1,531	404	4,576					
	APPROACH %	20%	0%	80%	0%	0%	0%	0%	86%	14%	0%	79%	21%						
	PEAK HR FACTOR		0.948			0.000			0.976			0.969		0.970					
	APP/DEPART	967	/	408	0	/	227	1,675	/	2,221	1,935	/	1,721	0					

I-15 NB Ramp

NORTH SIDE

Main WEST SIDE

EAST SIDE **Main**

SOUTH SIDE

I-15 NB Ramp

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 1/18/23 WEDNESDAY	LOCATION:	Hesperia	PROJECT #:	SC3820
	NORTH & SOUTH:	Outpost	LOCATION #:	1
	EAST & WEST:	Joshua	CONTROL:	NO CONTROL

PCE Adjusted										AM PM MD OTHER OTHER	◄ W	▲ N S ▼	E ►

	NORTHBOUND Outpost			SOUTHBOUND Outpost			EASTBOUND Joshua			WESTBOUND Joshua				U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL
LANES:	X	X	X	0	X	0	0	1	X	X	1	0						
AM 7:00 AM	0	0	0	6	0	19	12	23	0	0	23	14	96					0
7:15 AM	0	0	0	8	0	24	22	29	0	0	9	22	113					0
7:30 AM	0	0	0	12	0	35	14	27	0	0	18	8	114					0
7:45 AM	0	0	0	10	0	28	18	21	0	0	26	34	135					0
8:00 AM	0	0	0	9	0	23	15	22	0	0	25	37	129					0
8:15 AM	0	0	0	5	0	20	21	25	0	0	43	11	124					0
8:30 AM	0	0	0	16	0	37	44	23	0	0	24	27	170					0
8:45 AM	0	0	0	7	0	38	26	1	0	0	24	24	119					0
VOLUMES	0	0	0	71	0	224	169	169	0	0	190	175	998	0	0	0	0	0
APPROACH %	0%	0%	0%	24%	0%	76%	50%	50%	0%	0%	52%	48%						
APP/DEPART	0	/	344	295	/	0	338	/	240	365	/	414	0					
BEGIN PEAK HR		7:45 AM																
VOLUMES	0	0	0	39	0	108	96	90	0	0	117	108	557					
APPROACH %	0%	0%	0%	26%	0%	74%	52%	48%	0%	0%	52%	48%						
PEAK HR FACTOR		0.000			0.695			0.699			0.913		0.821					
APP/DEPART	0	/	204	146	/	0	186	/	129	225	/	225	0					
PM 4:00 PM	0	0	0	17	0	25	24	57	0	0	22	23	166					0
4:15 PM	0	0	0	11	0	29	24	39	0	0	24	25	151					0
4:30 PM	0	0	0	22	0	24	35	31	0	0	26	26	163					0
4:45 PM	0	0	0	9	0	27	26	41	0	0	25	31	159					0
5:00 PM	0	0	0	12	0	27	40	43	0	0	31	20	171					0
5:15 PM	0	0	0	12	0	30	19	38	0	0	26	19	144					0
5:30 PM	0	0	0	10	0	16	19	40	0	0	17	22	123					0
5:45 PM	0	0	0	17	0	18	18	19	0	0	20	21	112					0
VOLUMES	0	0	0	108	0	195	203	307	0	0	190	186	1,187	0	0	0	0	0
APPROACH %	0%	0%	0%	36%	0%	64%	40%	60%	0%	0%	51%	49%						
APP/DEPART	0	/	389	303	/	0	510	/	415	375	/	384	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	0	0	58	0	105	108	168	0	0	96	104	638					
APPROACH %	0%	0%	0%	36%	0%	64%	39%	61%	0%	0%	48%	52%						
PEAK HR FACTOR		0.000			0.893			0.861			0.893		0.964					
APP/DEPART	0	/	212	163	/	0	276	/	226	200	/	201	0					

Outpost

NORTH SIDE

Joshua WEST SIDE

EAST SIDE **Joshua**

SOUTH SIDE

Outpost

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/11/22 WEDNESDAY	LOCATION:	Hesperia	PROJECT #:	SC3422
	NORTH & SOUTH:	I-15 SB Ramp	LOCATION #:	8
	EAST & WEST:	Joshua	CONTROL:	STOP S

PCE Adjusted	NOTES:								
	Class	1	2	3	4	5	6		
	Factor	1	1.5	2	3	2	2		

AM / PM / MD / OTHER / OTHER — ◄ W, E ►, ▲ N, S ▼

		NORTHBOUND I-15 SB Ramp			SOUTHBOUND I-15 SB Ramp			EASTBOUND Joshua			WESTBOUND Joshua				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 0	ST X	SR 0	EL X	ET 1	ER X	WL X	WT 1	WR X	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	29	0	58	0	35	0	0	4	0	125					0
	7:15 AM	0	0	0	31	0	65	0	31	0	0	8	0	135					0
	7:30 AM	0	0	0	3	0	57	0	45	0	0	9	0	114					0
	7:45 AM	0	0	0	4	0	28	0	43	0	0	9	0	84					0
	8:00 AM	0	0	0	4	0	47	0	21	0	0	12	0	84					0
	8:15 AM	0	0	0	7	0	52	0	34	0	0	11	0	103					0
	8:30 AM	0	0	0	6	0	39	0	38	0	0	11	0	93					0
	8:45 AM	0	0	0	3	0	38	0	28	0	0	12	0	80					0
	VOLUMES	0	0	0	85	0	382	0	274	0	0	75	0	816	0	0	0	0	0
	APPROACH %	0%	0%	0%	18%	0%	82%	0%	100%	0%	0%	100%	0%						
	APP/DEPART	0	/	0	467	/	0	274	/	359	75	/	457	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	0	0	0	66	0	207	0	154	0	0	30	0	457					
	APPROACH %	0%	0%	0%	24%	0%	76%	0%	100%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.000			0.715			0.856			0.819		0.849					
	APP/DEPART	0	/	0	273	/	0	154	/	220	30	/	237	0					
PM	4:00 PM	0	0	0	7	0	66	0	46	0	0	8	0	126					0
	4:15 PM	0	0	0	1	0	48	0	45	0	0	19	0	112					0
	4:30 PM	0	0	0	5	0	47	0	45	0	0	18	0	114					0
	4:45 PM	0	0	0	9	0	28	0	48	0	0	19	0	103					0
	5:00 PM	0	0	0	3	0	49	0	54	0	0	15	0	120					0
	5:15 PM	0	0	0	6	0	36	0	45	0	0	10	0	97					0
	5:30 PM	0	0	0	7	0	51	0	42	0	0	12	0	112					0
	5:45 PM	0	0	0	0	0	28	0	47	0	0	11	0	86					0
	VOLUMES	0	0	0	37	0	351	0	369	0	0	111	0	868	0	0	0	0	0
	APPROACH %	0%	0%	0%	10%	0%	90%	0%	100%	0%	0%	100%	0%						
	APP/DEPART	0	/	0	388	/	0	369	/	406	111	/	462	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	0	0	0	21	0	188	0	183	0	0	63	0	455					
	APPROACH %	0%	0%	0%	10%	0%	90%	0%	100%	0%	0%	100%	0%						
	PEAK HR FACTOR		0.000			0.724			0.963			0.829		0.902					
	APP/DEPART	0	/	0	209	/	0	183	/	204	63	/	251	0					

I-15 SB Ramp

NORTH SIDE

Joshua WEST SIDE

EAST SIDE **Joshua**

SOUTH SIDE

I-15 SB Ramp

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/11/22 WEDNESDAY	LOCATION:	Hesperia	PROJECT #:	SC3422
	NORTH & SOUTH:	I-15 NB Ramp	LOCATION #:	7
	EAST & WEST:	Joshua	CONTROL:	NO CONTROL

	NOTES:												
PCE Adjusted	Class	1	2	3	4	5	6			AM		▲ N	
	Factor	1	1.5	2	3	2	2			PM	◄ W		E ►
										MD			
										OTHER		S ▼	
										OTHER			

		NORTHBOUND I-15 NB Ramp			SOUTHBOUND I-15 NB Ramp			EASTBOUND Joshua			WESTBOUND Joshua				U-TURNS				
	LANES:	NL X	NT X	NR X	SL X	ST X	SR X	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM	7:00 AM	0	0	0	0	0	0	23	40	0	0	4	3	69					0
	7:15 AM	0	0	0	0	0	0	20	41	0	0	8	0	69					0
	7:30 AM	0	0	0	0	0	0	35	13	0	0	10	3	61					0
	7:45 AM	0	0	0	0	0	0	29	18	0	0	10	7	63					0
	8:00 AM	0	0	0	0	0	0	14	11	0	0	12	2	38					0
	8:15 AM	0	0	0	0	0	0	16	25	0	0	11	0	51					0
	8:30 AM	0	0	0	0	0	0	24	20	0	0	12	2	58					0
	8:45 AM	0	0	0	0	0	0	18	12	0	0	13	2	45					0
	VOLUMES	0	0	0	0	0	0	179	178	0	0	79	18	453	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	82%	18%						
	APP/DEPART	0	/	196	0	/	0	357	/	178	97	/	79	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	0	0	0	0	0	0	107	111	0	0	32	12	262					
	APPROACH %	0%	0%	0%	0%	0%	0%	49%	51%	0%	0%	72%	28%						
	PEAK HR FACTOR		0.000			0.000			0.872			0.680		0.947					
	APP/DEPART	0	/	119	0	/	0	218	/	111	44	/	32	0					
PM	4:00 PM	0	0	0	0	0	0	21	32	0	0	8	0	61					0
	4:15 PM	0	0	0	0	0	0	29	17	0	0	19	0	64					0
	4:30 PM	0	0	0	0	0	0	24	26	0	0	18	0	67					0
	4:45 PM	0	0	0	0	0	0	38	17	0	0	20	1	76					0
	5:00 PM	0	0	0	0	0	0	32	25	0	0	15	4	76					0
	5:15 PM	0	0	0	0	0	0	30	21	0	0	10	5	66					0
	5:30 PM	0	0	0	0	0	0	32	17	0	0	12	2	63					0
	5:45 PM	0	0	0	0	0	0	36	11	0	0	11	1	59					0
	VOLUMES	0	0	0	0	0	0	240	165	0	0	112	13	529	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	59%	41%	0%	0%	90%	10%						
	APP/DEPART	0	/	253	0	/	0	404	/	165	125	/	112	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	0	0	0	0	0	0	123	84	0	0	71	5	282					
	APPROACH %	0%	0%	0%	0%	0%	0%	59%	41%	0%	0%	93%	7%						
	PEAK HR FACTOR		0.000			0.000			0.912			0.905		0.928					
	APP/DEPART	0	/	128	0	/	0	206	/	84	76	/	71	0					

I-15 NB Ramp

NORTH SIDE

Joshua WEST SIDE EAST SIDE **Joshua**

SOUTH SIDE

I-15 NB Ramp

A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS1 Phelan between U.S. 395 and Caliente

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	14	2	0	2	1	0	0	0	0	0	0	0	19
0:15	0	8	1	0	1	0	0	0	0	0	0	0	0	10
0:30	0	10	1	0	1	0	0	0	1	0	0	0	0	13
0:45	0	7	2	0	0	0	0	0	0	0	0	0	0	9
1:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
1:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
1:30	0	9	0	0	0	0	0	0	2	0	2	0	0	13
1:45	0	7	0	0	0	0	0	0	1	0	0	0	0	8
2:00	0	1	1	0	1	0	0	0	2	0	0	0	0	5
2:15	0	8	2	0	0	0	0	0	0	0	0	0	0	10
2:30	0	6	0	0	0	0	0	0	1	0	3	0	0	10
2:45	0	12	2	0	0	0	0	0	1	0	0	0	0	15
3:00	0	12	1	0	0	0	0	0	1	0	1	0	0	15
3:15	0	14	3	0	0	0	0	0	1	0	0	0	0	18
3:30	0	28	2	0	1	0	0	0	2	0	0	0	0	33
3:45	0	26	6	0	0	1	0	0	1	0	0	0	0	34
4:00	0	35	15	0	0	0	0	0	2	0	0	0	0	52
4:15	0	33	17	0	0	1	0	2	1	0	0	0	0	54
4:30	0	37	16	0	1	1	0	0	1	0	3	0	0	59
4:45	2	65	28	0	0	0	0	0	2	0	0	0	0	97
5:00	0	35	19	0	1	1	0	0	5	0	0	0	0	61
5:15	0	49	18	0	2	4	0	0	7	0	0	0	0	80
5:30	1	54	17	0	0	1	0	0	2	0	0	0	0	75
5:45	0	39	24	2	1	0	0	1	1	0	0	0	0	68
6:00	0	59	15	1	1	0	0	0	0	0	0	0	0	76
6:15	0	62	20	0	0	3	0	0	0	0	0	0	0	85
6:30	0	110	33	0	1	1	0	1	1	0	2	0	0	149
6:45	0	116	30	0	4	0	0	2	1	0	0	0	0	153
7:00	0	111	25	1	7	0	0	4	2	0	0	0	0	150
7:15	0	155	42	1	2	2	0	1	2	1	0	0	0	206
7:30	0	148	32	0	5	0	0	3	1	0	0	0	0	189
7:45	0	158	36	1	1	0	0	1	1	0	0	0	0	198
8:00	0	191	36	1	2	1	0	1	3	0	0	0	0	235
8:15	2	140	26	0	0	1	0	2	0	0	0	0	0	171
8:30	1	129	34	0	3	4	0	3	2	0	0	0	0	176
8:45	0	149	41	0	2	1	0	1	1	0	0	0	0	195
9:00	1	151	28	0	2	2	0	3	2	0	0	0	0	189
9:15	0	134	23	1	4	2	0	0	1	0	0	0	0	165
9:30	0	96	20	0	0	0	0	2	3	0	0	0	0	121
9:45	0	130	29	0	1	0	0	0	2	0	0	0	0	162
10:00	1	109	21	0	2	1	0	1	3	0	0	0	0	138
10:15	0	102	24	1	1	0	0	0	5	0	0	0	0	133
10:30	1	143	26	0	2	3	0	0	3	0	0	0	0	178
10:45	0	115	30	1	3	1	0	1	3	0	0	0	0	154
11:00	2	106	19	0	1	0	0	0	1	0	0	0	0	129
11:15	0	96	30	0	2	1	0	0	1	0	0	0	0	130
11:30	0	127	20	0	3	0	0	1	5	0	0	0	0	156
11:45	1	133	35	0	5	0	0	0	1	0	0	0	0	175
TOTAL	12	3,489	853	10	65	33	0	30	78	1	11	0	0	4,582

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	828

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	121	18	0	2	1	0	0	0	0	0	0	0	142
12:15	0	115	26	1	1	0	0	0	3	0	0	0	0	146
12:30	1	97	17	0	3	0	0	0	3	0	0	0	0	121
12:45	1	105	17	0	3	0	0	0	3	0	0	0	0	129
13:00	0	109	20	0	4	1	0	0	0	0	0	0	0	134
13:15	0	108	25	0	2	2	0	0	4	0	0	0	0	141
13:30	1	108	25	0	2	0	0	0	2	0	1	0	0	139
13:45	0	106	23	1	7	0	0	0	3	0	0	0	0	140
14:00	1	125	18	0	3	0	0	1	1	0	0	0	0	149
14:15	0	111	31	3	2	0	0	0	1	0	1	0	0	149
14:30	0	139	34	0	3	2	0	0	1	0	0	0	0	179
14:45	0	123	35	0	7	1	0	0	2	0	0	0	0	168
15:00	0	171	42	2	5	1	0	1	1	0	0	0	0	223
15:15	1	121	34	1	10	0	0	0	1	0	0	0	0	168
15:30	0	141	32	0	5	0	0	0	1	0	0	0	0	179
15:45	0	124	42	0	3	0	0	0	0	0	0	0	0	169
16:00	0	150	39	0	7	1	0	0	0	0	0	0	0	197
16:15	0	110	24	0	10	1	0	0	1	0	0	0	0	146
16:30	2	132	34	1	5	0	0	0	1	0	0	0	0	175
16:45	1	85	44	1	10	0	0	0	0	0	0	0	0	141
17:00	0	131	31	0	3	0	0	0	1	0	0	0	0	166
17:15	0	122	32	0	8	0	0	0	0	0	0	0	0	162
17:30	0	96	29	0	5	0	0	0	2	0	0	0	0	132
17:45	0	103	30	0	9	1	0	0	1	0	0	0	0	144
18:00	0	103	24	0	5	0	0	0	0	0	0	0	0	132
18:15	0	95	34	1	3	0	0	0	0	0	0	0	0	133
18:30	1	80	21	0	6	0	0	0	0	0	0	0	0	108
18:45	1	80	22	0	3	1	0	0	2	0	0	0	0	109
19:00	0	66	15	0	0	0	0	0	1	0	0	0	0	82
19:15	1	49	14	0	0	0	0	0	0	0	0	0	0	64
19:30	0	54	19	0	2	0	0	0	0	0	1	1	0	77
19:45	1	66	17	1	1	0	0	0	0	0	0	0	0	86
20:00	0	106	24	0	2	0	0	0	0	0	0	0	0	132
20:15	0	44	8	0	0	0	0	0	2	0	0	0	0	54
20:30	0	46	10	0	2	0	0	0	1	0	0	0	0	59
20:45	0	32	12	0	0	1	0	0	2	0	0	0	0	47
21:00	0	35	5	1	1	0	0	0	1	0	0	0	0	43
21:15	0	43	7	0	1	0	0	0	0	0	0	0	0	51
21:30	0	35	5	0	0	0	0	0	1	0	0	0	0	41
21:45	0	25	3	0	0	0	0	0	0	0	0	0	0	28
22:00	0	17	3	0	0	0	0	0	0	0	0	0	0	20
22:15	0	15	1	0	0	0	0	0	0	0	0	0	0	16
22:30	0	18	0	0	0	0	0	0	0	0	0	0	0	18
22:45	0	12	0	0	1	0	0	0	1	0	0	0	0	14
23:00	0	14	4	0	0	0	0	0	1	0	0	0	0	19
23:15	0	11	5	0	0	0	0	0	0	0	0	0	0	16
23:30	0	17	5	0	0	0	0	0	0	0	0	0	0	22
23:45	0	5	4	0	2	0	0	0	0	0	3	0	0	14
TOTAL	12	3,921	964	13	148	13	0	2	44	0	6	1	0	5,124

PM PEAK HOUR	3:00 PM
PM PEAK VOLUME	739

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: AM+PM	24	7,410	1,817	23	213	46	0	32	122	1	17	1	0	9,706
% OF TOTAL	0.2%	76.3%	18.7%	0.2%	2.2%	0.5%	0.0%	0.3%	1.3%	0.0%	0.2%	0.0%	0.0%	100.0%
TOTAL: ALL	51	14,869	3,629	39	439	94	4	65	247	2	35	1	0	19,475
% OF TOTAL	0.5%	153.2%	37.4%	0.4%	4.5%	1.0%	0.0%	0.7%	2.5%	0.0%	0.4%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS1 Phelan between U.S. 395 and Caliente

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	17	4	0	2	0	0	0	1	0	0	0	0	24
0:15	0	10	0	0	1	0	0	0	0	0	0	0	0	11
0:30	0	15	1	0	0	0	0	0	0	0	3	0	0	19
0:45	0	6	2	0	0	0	0	0	1	0	0	0	0	9
1:00	0	19	2	0	0	0	0	0	1	0	0	0	0	22
1:15	0	10	1	0	0	0	0	0	0	0	3	0	0	14
1:30	0	9	1	0	0	0	0	0	0	0	0	0	0	10
1:45	0	8	0	0	1	0	0	0	0	0	1	0	0	10
2:00	0	11	0	0	0	0	0	0	1	0	0	0	0	12
2:15	0	11	2	0	0	0	0	0	0	0	0	0	0	13
2:30	0	5	1	0	1	0	0	0	0	0	0	0	0	7
2:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:00	0	11	1	0	2	0	0	0	1	0	1	0	0	16
3:15	0	13	0	0	0	0	0	0	1	0	2	0	0	16
3:30	0	14	1	0	1	0	0	0	0	0	0	0	0	16
3:45	0	13	2	0	0	0	0	0	0	0	0	0	0	15
4:00	0	18	6	0	0	1	0	0	0	0	0	0	0	25
4:15	0	15	4	0	0	0	0	2	3	0	0	0	0	24
4:30	0	19	5	0	1	0	0	0	1	0	0	0	0	26
4:45	0	27	11	0	1	0	0	0	3	0	0	0	0	42
5:00	0	24	16	0	1	0	0	1	0	0	0	0	0	42
5:15	1	42	5	0	1	0	0	1	0	0	0	0	0	50
5:30	0	32	16	0	6	1	0	2	3	0	0	0	0	60
5:45	0	47	14	0	2	1	0	0	0	0	0	0	0	64
6:00	0	52	14	0	0	0	0	0	0	0	1	0	0	67
6:15	0	74	17	3	1	0	0	0	2	0	0	0	0	97
6:30	0	67	20	1	1	1	1	0	3	0	0	0	0	94
6:45	0	64	15	0	2	0	0	1	2	0	0	0	0	84
7:00	0	58	20	0	0	0	0	0	1	0	0	0	0	79
7:15	0	80	15	0	2	0	0	2	1	0	0	0	0	100
7:30	0	85	35	2	3	0	2	0	1	0	0	0	0	128
7:45	1	97	14	0	1	0	0	1	0	0	0	0	0	114
8:00	0	84	16	0	2	2	0	3	0	0	0	0	0	107
8:15	1	85	20	0	2	0	0	2	3	0	0	0	0	113
8:30	0	78	18	1	2	2	0	0	1	0	0	0	0	102
8:45	0	77	15	1	0	0	0	3	0	0	0	0	0	96
9:00	0	74	15	0	2	2	0	2	1	0	0	0	0	96
9:15	0	77	24	0	3	0	1	1	3	0	0	0	0	109
9:30	0	68	23	0	3	1	0	3	2	0	0	0	0	100
9:45	1	73	25	0	5	1	0	2	3	0	0	0	0	110
10:00	0	85	17	0	0	0	0	0	4	1	0	0	0	107
10:15	0	78	23	0	4	1	0	0	1	0	0	0	0	107
10:30	0	92	19	0	1	2	0	0	1	0	0	0	0	115
10:45	1	111	21	0	4	5	0	0	1	0	0	0	0	143
11:00	1	114	24	0	1	1	0	1	1	0	0	0	0	143
11:15	1	122	19	0	3	3	0	3	1	0	0	0	0	152
11:30	0	94	27	0	2	0	0	1	6	0	0	0	0	130
11:45	0	112	20	0	4	0	0	0	1	0	0	0	0	137
TOTAL	7	2,405	571	8	68	24	4	31	55	1	11	0	0	3,185

AM PEAK HOUR	10:45 AM
AM PEAK VOLUME	568

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	113	23	0	6	2	0	0	2	0	0	0	0	146
12:15	0	126	24	0	3	0	0	0	2	0	0	0	0	155
12:30	0	125	21	0	4	0	0	0	2	0	0	0	0	152
12:45	0	121	22	0	1	0	0	0	0	0	0	0	0	144
13:00	1	107	23	0	3	1	0	0	0	0	0	0	0	135
13:15	0	132	22	0	7	1	0	0	2	0	0	0	0	164
13:30	2	126	15	0	2	2	0	0	2	0	0	0	0	149
13:45	0	119	25	0	7	1	0	0	1	0	0	0	0	153
14:00	0	126	28	0	6	0	0	1	2	0	0	0	0	163
14:15	0	126	30	0	4	0	0	0	3	0	0	0	0	163
14:30	0	153	44	1	7	1	0	0	1	0	0	0	0	207
14:45	0	106	36	2	7	1	0	0	2	0	0	0	0	154
15:00	1	118	35	0	9	0	0	0	4	0	0	0	0	167
15:15	0	135	51	1	6	3	0	0	2	0	0	0	0	198
15:30	1	161	47	2	6	1	0	1	2	0	0	0	0	221
15:45	3	156	49	0	7	0	0	0	3	0	0	0	0	218
16:00	1	146	39	1	5	0	0	0	3	0	0	0	0	195
16:15	1	192	58	0	9	0	0	0	3	0	0	0	0	263
16:30	2	163	44	0	7	1	0	0	2	0	0	0	0	219
16:45	3	173	52	1	3	1	0	0	3	0	1	0	0	237
17:00	0	149	43	0	1	0	0	0	1	0	0	0	0	194
17:15	0	181	37	0	10	2	0	0	2	0	0	0	0	232
17:30	0	158	37	0	4	0	0	0	1	0	0	0	0	200
17:45	0	166	46	0	0	0	0	0	1	0	0	0	0	213
18:00	0	118	25	0	4	0	0	0	1	0	0	0	0	148
18:15	1	130	31	0	4	0	0	0	0	0	0	0	0	166
18:30	0	124	28	0	0	1	0	0	1	0	0	0	0	154
18:45	0	97	30	0	4	0	0	0	0	0	0	0	0	131
19:00	0	104	23	0	3	0	0	0	2	0	0	0	0	132
19:15	0	112	24	0	2	1	0	0	1	0	0	0	0	140
19:30	1	103	29	0	1	0	0	0	1	0	0	0	0	135
19:45	0	87	21	0	4	0	0	0	0	0	0	0	0	112
20:00	0	84	23	0	0	0	0	0	2	0	0	0	0	109
20:15	1	95	20	0	1	0	0	0	3	0	2	0	0	122
20:30	0	76	19	0	1	3	0	0	3	0	0	0	0	102
20:45	0	64	24	0	0	0	0	0	1	0	0	0	0	89
21:00	0	79	14	0	2	0	0	0	4	0	0	0	0	99
21:15	0	58	15	0	1	1	0	0	0	0	0	0	0	75
21:30	1	58	14	0	2	0	0	0	0	0	1	0	0	76
21:45	0	53	12	0	2	0	0	0	1	0	1	0	0	69
22:00	0	50	11	0	1	0	0	0	0	0	2	0	0	64
22:15	0	40	6	0	0	0	0	0	0	0	0	0	0	46
22:30	0	24	3	0	0	0	0	0	0	0	0	0	0	27
22:45	0	32	7	0	0	0	0	0	2	0	0	0	0	41
23:00	0	27	4	0	0	1	0	0	0	0	0	0	0	32
23:15	0	28	2	0	1	0	0	0	1	0	0	0	0	32
23:30	0	22	4	0	1	0	0	0	1	0	0	0	0	28
23:45	1	11	1	0	0	0	0	0	0	0	0	0	0	13
TOTAL	20	5,054	1,241	8	158	24	0	2	70	0	7	0	0	6,584

PM PEAK HOUR	4:00 PM
PM PEAK VOLUME	914

TOTAL: AM+PM	27	7,459	1,812	16	226	48	4	33	125	1	18	0	0	9,769
% OF TOTAL	0.3%	76.4%	18.5%	0.2%	2.3%	0.5%	0.0%	0.3%	1.3%	0.0%	0.2%	0.0%	0.0%	100.0%
Class	1	2	3	4	5	6	7	8	9	10	11	12	13	

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS2 Phelan between Caliente and Los Banos

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	15	1	0	2	1	0	0	0	0	0	0	0	19
0:15	0	7	2	0	1	0	0	0	0	0	0	0	0	10
0:30	0	10	1	0	1	0	0	0	1	0	0	0	0	13
0:45	0	7	2	0	0	0	0	0	0	0	0	0	0	9
1:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
1:15	0	5	1	0	0	0	0	0	1	0	0	0	0	7
1:30	0	10	0	0	0	0	0	0	1	0	2	0	0	13
1:45	0	7	0	0	0	0	0	0	1	0	0	0	0	8
2:00	0	2	1	0	1	0	0	0	1	0	0	0	0	5
2:15	0	8	1	0	0	0	0	0	1	0	0	0	0	10
2:30	0	5	1	0	0	0	0	0	1	0	3	0	0	10
2:45	0	12	2	0	0	0	0	0	1	0	0	0	0	15
3:00	0	12	1	0	0	0	0	0	1	0	1	0	0	15
3:15	0	15	2	0	0	0	0	0	1	0	0	0	0	18
3:30	0	27	3	0	1	0	0	0	1	0	0	0	0	32
3:45	0	24	7	0	0	1	0	0	2	0	0	0	0	34
4:00	0	37	14	0	0	0	0	0	1	0	0	0	0	52
4:15	0	32	17	0	0	1	0	2	2	0	0	0	0	54
4:30	1	34	18	0	1	1	0	0	1	0	3	0	0	59
4:45	1	67	25	0	0	0	0	0	3	0	0	0	0	96
5:00	0	37	20	0	1	1	0	0	4	0	0	0	0	63
5:15	0	49	19	0	1	3	0	0	6	0	0	0	0	78
5:30	1	52	17	0	1	2	0	0	2	0	0	0	0	75
5:45	0	40	22	2	1	1	0	1	1	0	0	0	0	68
6:00	0	57	16	1	1	0	0	0	1	0	0	0	0	76
6:15	0	59	23	0	0	2	0	0	1	0	0	0	0	85
6:30	0	113	30	0	1	1	0	1	0	0	2	0	0	148
6:45	0	116	30	0	4	0	0	2	1	0	0	0	0	153
7:00	0	106	29	1	7	1	0	4	2	0	0	0	0	150
7:15	0	160	37	1	2	1	0	1	1	1	0	0	0	204
7:30	0	146	33	0	5	0	0	3	2	0	0	0	0	189
7:45	0	159	35	1	1	0	0	1	1	0	0	0	0	198
8:00	0	186	34	1	2	1	0	1	2	0	0	0	0	227
8:15	2	143	28	0	0	1	0	2	1	0	0	0	0	177
8:30	1	130	35	0	3	3	0	3	1	0	0	0	0	176
8:45	0	148	39	0	2	2	0	1	2	0	0	0	0	194
9:00	0	153	27	0	2	2	0	3	2	0	0	0	0	189
9:15	1	132	25	1	4	1	0	0	1	0	0	0	0	165
9:30	0	94	22	0	0	1	0	2	2	0	0	0	0	121
9:45	0	131	27	0	1	0	0	0	3	0	0	0	0	162
10:00	1	109	21	0	2	1	0	1	3	0	0	0	0	138
10:15	1	102	23	1	1	1	0	0	4	0	0	0	0	133
10:30	0	142	26	0	2	2	0	0	4	0	0	0	0	176
10:45	1	118	28	1	3	1	0	1	3	0	0	0	0	156
11:00	1	105	21	0	1	0	0	0	1	0	0	0	0	129
11:15	0	96	30	0	2	1	0	0	1	0	0	0	0	130
11:30	0	123	24	0	3	0	0	1	5	0	0	0	0	156
11:45	1	136	32	0	5	0	0	0	1	0	0	0	0	175
TOTAL	12	3,482	852	10	65	33	0	30	78	1	11	0	0	4,574

AM PEAK HOUR	7:15 AM
AM PEAK VOLUME	818

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	120	19	0	2	1	0	0	0	0	0	0	0	142
12:15	1	117	23	1	2	0	0	0	3	0	0	0	0	147
12:30	0	96	19	0	3	0	0	0	3	0	0	0	0	121
12:45	1	106	17	0	2	0	0	0	3	0	0	0	0	129
13:00	0	108	21	0	4	1	0	0	0	0	0	0	0	134
13:15	1	107	24	0	3	2	0	0	4	0	0	0	0	141
13:30	0	106	25	0	5	0	0	0	2	0	1	0	0	139
13:45	0	110	22	1	5	0	0	0	3	0	0	0	0	141
14:00	1	121	23	1	2	0	0	1	1	0	0	0	0	150
14:15	0	117	28	1	3	0	0	0	1	0	1	0	0	151
14:30	0	139	33	1	4	2	0	0	1	0	0	0	0	180
14:45	0	124	35	0	6	1	0	0	2	0	0	0	0	168
15:00	1	163	40	1	7	1	0	1	2	0	0	0	0	216
15:15	0	129	37	1	8	0	0	0	1	0	0	0	0	176
15:30	0	140	33	1	5	0	0	0	1	0	0	0	0	180
15:45	0	125	41	0	4	0	0	0	0	0	0	0	0	170
16:00	0	149	39	0	7	1	0	0	0	0	0	0	0	196
16:15	1	108	26	0	9	1	0	0	1	0	0	0	0	146
16:30	1	129	34	1	6	0	0	0	1	0	0	0	0	172
16:45	1	89	42	0	8	0	0	0	0	0	0	0	0	140
17:00	0	125	31	1	5	0	0	0	1	0	0	0	0	163
17:15	0	119	33	0	7	0	0	0	0	0	0	0	0	159
17:30	0	94	29	0	6	0	0	0	2	0	0	0	0	131
17:45	0	103	32	0	7	1	0	0	1	0	0	0	0	144
18:00	0	103	24	0	5	0	0	0	0	0	0	0	0	132
18:15	1	97	30	1	4	0	0	0	0	0	0	0	0	133
18:30	0	78	23	0	5	1	0	0	1	0	0	0	0	108
18:45	0	84	22	0	2	0	0	0	1	0	0	0	0	109
19:00	1	60	27	0	2	1	0	0	1	0	0	0	0	92
19:15	1	48	15	0	0	0	0	0	0	0	0	0	0	64
19:30	0	56	18	0	2	0	0	0	0	0	0	1	0	77
19:45	1	66	17	0	1	0	0	0	0	0	1	0	0	86
20:00	0	97	20	1	2	0	0	0	1	0	0	0	0	121
20:15	0	41	12	0	0	0	0	0	1	0	0	0	0	54
20:30	0	49	9	0	2	0	0	0	1	0	0	0	0	61
20:45	0	33	11	0	0	1	0	0	2	0	0	0	0	47
21:00	0	34	6	1	1	0	0	0	1	0	0	0	0	43
21:15	0	43	7	0	1	0	0	0	0	0	0	0	0	51
21:30	0	33	5	0	0	0	0	0	1	0	0	0	0	39
21:45	0	25	3	0	0	0	0	0	0	0	0	0	0	28
22:00	0	18	2	0	0	0	0	0	0	0	0	0	0	20
22:15	0	16	1	0	0	0	0	0	0	0	0	0	0	17
22:30	0	17	1	0	0	0	0	0	0	0	0	0	0	18
22:45	0	10	2	0	1	0	0	0	1	0	0	0	0	14
23:00	0	15	3	0	0	0	0	0	1	0	0	0	0	19
23:15	0	12	4	0	0	0	0	0	0	0	0	0	0	16
23:30	0	16	4	0	1	0	0	0	0	0	1	0	0	22
23:45	0	6	5	0	1	0	0	0	0	0	2	0	0	14
TOTAL	12	3,901	977	13	150	14	0	2	45	0	6	1	0	5,121

PM PEAK HOUR	3:00 PM
PM PEAK VOLUME	742

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	24	7,383	1,829	23	215	47	0	32	123	1	17	1	0	9,695
% OF TOTAL	0.2%	76.2%	18.9%	0.2%	2.2%	0.5%	0.0%	0.3%	1.3%	0.0%	0.2%	0.0%	0.0%	100.0%

Class	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	
TOTAL: ALL	51	14,801	3,626	39	439	94	4	65	249	2	35	1	0	19,406
% OF TOTAL	0.5%	152.7%	37.4%	0.4%	4.5%	1.0%	0.0%	0.7%	2.6%	0.0%	0.4%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS2 Phelan between Caliente and Los Banos

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	16	2	0	2	0	0	0	1	0	0	0	0	21
0:15	0	10	2	0	1	0	0	0	0	0	0	0	0	13
0:30	0	16	0	0	0	0	0	0	0	0	2	0	0	18
0:45	0	7	2	0	0	0	0	0	1	0	0	0	0	10
1:00	0	19	1	0	0	0	0	0	0	0	0	0	0	20
1:15	0	7	2	0	0	0	0	0	1	0	2	0	0	12
1:30	0	10	1	0	0	0	0	0	0	0	1	0	0	12
1:45	0	8	0	0	1	0	0	0	0	0	1	0	0	10
2:00	0	11	0	0	0	0	0	0	1	0	0	0	0	12
2:15	0	10	2	0	0	0	0	0	0	0	0	0	0	12
2:30	0	7	1	0	1	0	0	0	0	0	0	0	0	9
2:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:00	0	11	1	0	2	0	0	0	1	0	1	0	0	16
3:15	0	15	0	0	0	0	0	0	0	0	1	0	0	16
3:30	0	11	1	0	1	0	0	0	1	0	1	0	0	15
3:45	0	14	2	0	0	0	0	0	0	0	0	0	0	16
4:00	0	17	6	0	0	1	0	0	1	0	0	0	0	25
4:15	0	15	4	0	0	0	0	2	2	0	0	0	0	23
4:30	0	20	5	0	1	0	0	0	1	0	0	0	0	27
4:45	0	27	11	0	1	0	0	0	2	0	0	0	0	41
5:00	0	22	16	0	2	0	0	1	1	0	0	0	0	42
5:15	1	41	5	0	2	0	0	1	0	0	0	0	0	50
5:30	0	34	15	0	4	1	0	1	3	0	0	0	0	58
5:45	0	46	15	0	2	1	0	1	0	0	0	0	0	65
6:00	0	51	15	1	0	0	0	0	1	0	1	0	0	69
6:15	0	75	16	2	0	0	0	0	1	0	0	0	0	94
6:30	0	63	20	1	1	1	1	0	3	0	0	0	0	90
6:45	0	66	14	0	1	0	0	1	2	0	0	0	0	84
7:00	0	60	19	0	1	0	0	0	1	0	0	0	0	81
7:15	0	81	14	0	2	0	0	2	1	0	0	0	0	100
7:30	0	81	35	2	3	0	2	0	0	0	0	0	0	123
7:45	1	97	12	0	1	1	0	1	1	0	0	0	0	114
8:00	0	82	18	0	2	1	0	3	1	0	0	0	0	107
8:15	1	88	19	0	0	0	0	1	2	0	0	0	0	111
8:30	0	78	18	1	2	1	0	1	1	0	0	0	0	102
8:45	0	76	14	1	1	1	0	2	0	0	0	0	0	95
9:00	0	72	16	0	3	2	0	3	1	0	0	0	0	97
9:15	0	76	24	0	4	0	1	1	3	0	0	0	0	109
9:30	0	72	22	0	2	1	0	2	2	0	0	0	0	101
9:45	1	76	24	0	3	1	0	1	3	0	0	0	0	109
10:00	0	81	18	0	2	0	0	2	3	1	0	0	0	107
10:15	0	79	22	0	4	1	0	0	2	0	0	0	0	108
10:30	0	93	19	0	2	2	0	0	2	0	0	0	0	118
10:45	1	109	21	0	3	3	0	0	1	0	0	0	0	138
11:00	1	113	23	0	1	3	0	1	1	0	0	0	0	143
11:15	0	119	22	0	3	2	0	2	2	0	0	0	0	150
11:30	1	96	25	0	2	1	0	1	4	0	0	0	0	130
11:45	0	110	19	0	4	0	0	1	2	0	0	0	0	136
TOTAL	7	2,396	563	8	67	24	4	31	56	1	10	0	0	3,167

AM PEAK HOUR	10:45 AM
AM PEAK VOLUME	561

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	115	23	0	6	2	0	0	2	0	0	0	0	148
12:15	0	118	25	0	3	0	0	0	3	0	0	0	0	149
12:30	0	125	20	0	4	0	0	0	1	0	0	0	0	150
12:45	0	123	22	0	1	0	0	0	1	0	0	0	0	147
13:00	1	111	24	0	3	1	0	0	0	0	0	0	0	140
13:15	0	129	21	0	6	1	0	0	2	0	0	0	0	159
13:30	1	125	15	0	3	2	0	0	2	0	0	0	0	148
13:45	1	125	24	0	5	1	0	1	1	0	0	0	0	158
14:00	0	119	27	0	6	0	0	0	2	0	0	0	0	154
14:15	0	124	30	0	5	0	0	0	3	0	0	0	0	162
14:30	0	148	42	1	6	1	0	0	1	0	0	0	0	199
14:45	1	105	37	2	9	1	0	0	2	0	0	0	0	157
15:00	0	121	35	0	8	0	0	0	3	0	0	0	0	167
15:15	0	134	51	1	7	3	0	0	2	0	0	0	0	198
15:30	2	159	46	1	6	1	0	1	1	0	0	0	0	217
15:45	2	156	48	1	7	0	0	0	4	0	0	0	0	218
16:00	1	140	40	1	6	0	0	0	3	0	0	0	0	191
16:15	1	186	55	0	8	0	0	0	4	0	0	0	0	254
16:30	2	168	46	0	7	1	0	0	1	0	0	0	0	225
16:45	2	170	52	1	3	1	0	0	2	0	1	0	0	232
17:00	1	152	45	0	2	0	0	0	2	0	0	0	0	202
17:15	0	182	35	0	8	1	0	0	1	0	0	0	0	227
17:30	0	155	37	0	4	1	0	0	2	0	0	0	0	199
17:45	0	165	42	0	1	0	0	0	1	0	0	0	0	209
18:00	0	117	29	0	3	0	0	0	1	0	0	0	0	150
18:15	1	121	30	0	3	0	0	0	0	0	0	0	0	155
18:30	0	123	27	0	2	0	0	0	1	0	0	0	0	153
18:45	0	106	31	0	3	0	0	0	0	0	0	0	0	140
19:00	0	104	24	0	3	0	0	0	1	0	0	0	0	132
19:15	1	109	23	0	2	1	0	0	2	0	0	0	0	138
19:30	0	103	29	0	1	0	0	0	1	0	0	0	0	134
19:45	0	89	22	0	2	0	0	0	1	0	0	0	0	114
20:00	0	85	24	0	2	0	0	0	1	0	0	0	0	112
20:15	1	93	18	0	1	1	0	0	3	0	1	0	0	118
20:30	0	83	19	0	1	1	0	0	2	0	1	0	0	107
20:45	0	67	21	0	0	1	0	0	2	0	0	0	0	91
21:00	0	77	15	0	2	0	0	0	3	0	0	0	0	97
21:15	0	53	17	0	1	1	0	0	1	0	0	0	0	73
21:30	1	52	14	0	2	0	0	0	0	0	1	0	0	70
21:45	0	50	11	0	3	0	0	0	1	0	1	0	0	66
22:00	0	52	11	0	0	0	0	0	0	0	1	0	0	64
22:15	0	41	7	0	0	0	0	0	0	0	0	0	0	48
22:30	0	28	4	0	0	0	0	0	0	0	1	0	0	33
22:45	0	29	6	0	0	0	0	0	2	0	1	0	0	38
23:00	0	25	3	0	0	1	0	0	0	0	0	0	0	29
23:15	0	28	2	0	0	0	0	0	1	0	0	0	0	31
23:30	1	18	3	0	2	0	0	0	1	0	0	0	0	25
23:45	0	14	2	0	0	0	0	0	0	0	0	0	0	16
TOTAL	20	5,022	1,234	8	157	23	0	2	70	0	8	0	0	6,544

PM PEAK HOUR	4:15 PM
PM PEAK VOLUME	913

TOTAL: AM+PM	27	7,418	1,797	16	224	47	4	33	126	1	18	0	0	9,711
% OF TOTAL	0.3%	76.4%	18.5%	0.2%	2.3%	0.5%	0.0%	0.3%	1.3%	0.0%	0.2%	0.0%	0.0%	100.0%
Class	1	2	3	4	5	6	7	8	9	10	11	12	13	

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS6 U.S. 395 between Phelan and Caliente

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	60	8	0	1	0	0	0	3	1	3	1	0	77
0:15	0	60	7	0	1	0	0	0	5	0	2	0	0	75
0:30	0	41	4	0	1	0	0	0	3	0	2	0	0	51
0:45	0	32	8	0	0	0	0	1	4	0	2	0	0	47
1:00	1	46	2	0	0	0	0	0	3	0	1	0	0	53
1:15	0	32	2	0	1	0	0	0	3	0	4	0	0	42
1:30	1	42	0	0	0	0	0	2	3	0	2	0	0	50
1:45	0	25	4	0	1	0	0	0	4	0	2	0	0	36
2:00	0	24	1	0	0	0	0	0	2	0	1	0	0	28
2:15	0	21	3	0	0	0	0	0	1	0	2	0	0	27
2:30	0	26	1	0	1	0	0	0	6	0	0	0	0	34
2:45	0	26	1	0	0	0	0	0	4	0	0	0	0	31
3:00	0	26	2	0	3	0	0	0	4	0	3	0	0	38
3:15	0	26	2	0	1	0	0	0	1	0	0	0	0	30
3:30	0	23	1	0	1	0	0	0	6	0	1	0	0	32
3:45	0	38	5	1	3	0	0	0	4	0	1	0	0	52
4:00	0	33	7	0	0	0	0	0	5	1	0	0	0	46
4:15	0	50	15	0	2	0	0	0	9	0	2	0	0	78
4:30	0	57	18	0	0	0	0	0	5	0	2	0	0	82
4:45	0	46	18	0	0	0	0	0	16	0	1	0	0	81
5:00	0	51	11	0	0	0	0	0	5	0	4	0	0	71
5:15	0	71	19	1	3	6	0	3	14	0	1	0	0	118
5:30	1	69	23	0	1	3	0	3	16	0	0	0	0	116
5:45	0	86	34	2	4	0	0	0	10	1	1	0	0	138
6:00	0	89	28	1	4	1	1	2	12	0	0	0	0	138
6:15	1	115	37	0	7	0	0	2	16	0	0	0	0	178
6:30	0	149	34	2	3	0	0	2	12	0	0	0	0	202
6:45	1	132	45	0	7	1	0	0	7	0	0	0	0	193
7:00	0	129	41	0	4	2	0	2	12	0	1	0	0	191
7:15	0	140	21	0	4	1	0	1	10	0	1	1	0	179
7:30	1	137	26	1	10	2	2	1	10	0	0	0	0	190
7:45	0	145	27	0	4	0	2	2	7	0	1	0	0	188
8:00	0	102	29	0	5	2	1	4	13	0	1	0	0	157
8:15	1	124	19	0	3	0	1	2	10	0	0	0	0	160
8:30	0	116	29	0	4	0	2	3	15	0	2	1	0	172
8:45	0	107	39	0	7	0	0	4	11	0	0	0	0	168
9:00	0	90	28	1	8	1	2	3	15	0	0	1	0	149
9:15	2	91	15	0	6	0	3	2	14	0	1	0	0	134
9:30	1	110	24	0	4	0	2	4	10	0	1	0	0	156
9:45	0	113	26	0	5	1	2	6	17	0	0	0	0	170
10:00	1	103	34	0	6	3	0	3	14	0	1	0	0	165
10:15	0	98	33	1	3	1	1	1	20	0	0	0	0	158
10:30	1	129	19	2	3	1	1	9	21	0	1	0	0	187
10:45	0	119	19	0	1	2	2	4	22	1	3	0	0	173
11:00	0	102	15	0	3	0	0	5	15	0	2	0	0	142
11:15	3	118	24	0	3	3	4	2	16	0	1	0	0	174
11:30	0	114	19	0	6	0	2	1	14	0	8	1	0	165
11:45	0	136	20	1	5	0	1	2	12	0	4	1	0	182
TOTAL	15	3,819	847	13	139	30	29	76	461	4	65	6	0	5,504

AM PEAK HOUR	6:30 AM
AM PEAK VOLUME	765

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	134	21	0	4	2	0	0	12	0	2	0	0	176
12:15	0	144	13	0	4	3	0	0	15	0	4	0	0	183
12:30	0	150	19	2	1	0	0	0	17	0	3	0	0	192
12:45	0	176	19	2	9	0	0	0	15	0	1	0	0	222
13:00	1	156	18	1	5	2	0	0	19	0	3	0	0	205
13:15	1	153	20	0	2	4	0	0	7	0	8	0	0	195
13:30	0	130	22	0	8	0	0	0	10	0	7	0	0	177
13:45	1	161	28	0	6	2	0	0	15	0	5	2	0	220
14:00	1	148	31	0	7	0	0	0	16	0	5	1	0	209
14:15	0	198	40	2	4	1	0	1	15	0	8	0	0	269
14:30	0	166	41	0	4	0	0	1	17	1	6	1	0	237
14:45	2	173	39	1	7	3	0	1	11	0	7	0	0	244
15:00	1	173	34	0	5	5	0	0	17	0	5	1	0	241
15:15	0	239	57	0	5	1	0	1	14	0	2	1	0	320
15:30	2	214	37	0	5	2	0	0	10	0	0	0	0	270
15:45	0	233	53	0	8	0	0	1	10	1	8	0	0	314
16:00	2	264	45	2	9	0	0	0	5	0	4	1	0	332
16:15	0	238	37	0	4	1	0	0	3	0	4	0	0	287
16:30	1	254	49	1	3	0	0	2	12	0	7	0	0	329
16:45	2	234	45	0	3	1	0	0	13	0	3	0	0	301
17:00	2	202	44	0	4	1	0	0	6	0	3	0	0	262
17:15	4	261	47	0	0	0	0	1	5	0	3	0	0	321
17:30	1	277	46	0	3	1	0	0	9	0	3	0	0	340
17:45	0	264	39	0	1	0	0	0	7	0	1	0	0	312
18:00	2	262	50	0	4	0	0	0	8	0	6	1	0	333
18:15	2	291	44	0	1	2	0	0	13	0	4	0	0	357
18:30	1	244	31	0	1	1	0	0	7	0	6	0	0	291
18:45	2	206	26	0	5	1	0	0	4	0	2	0	0	246
19:00	0	226	40	0	1	1	0	0	7	0	4	0	0	279
19:15	1	228	31	0	2	0	0	0	13	0	4	0	0	279
19:30	0	177	34	0	4	1	0	0	17	0	9	0	0	242
19:45	1	186	22	0	1	0	0	0	9	0	4	0	0	223
20:00	0	167	21	0	4	0	0	0	7	0	1	0	0	200
20:15	0	159	12	0	3	0	0	0	9	0	3	0	0	186
20:30	0	159	10	0	2	0	0	0	12	0	4	0	0	187
20:45	1	161	28	0	0	0	0	0	6	0	1	2	0	199
21:00	0	111	12	0	2	0	0	0	9	0	5	0	0	139
21:15	1	109	9	0	2	2	0	0	4	0	2	0	0	129
21:30	0	108	8	0	0	0	0	0	12	0	3	0	0	131
21:45	0	116	7	0	1	0	0	0	7	0	4	1	0	136
22:00	0	86	11	0	2	1	0	0	4	0	2	0	0	106
22:15	1	72	7	0	2	0	0	1	4	0	2	2	0	91
22:30	0	85	14	0	0	0	0	0	11	0	5	1	0	116
22:45	0	64	7	0	0	0	0	1	7	0	5	0	0	84
23:00	0	79	4	0	1	0	0	0	5	0	2	1	0	92
23:15	0	57	7	0	0	1	0	0	5	0	2	0	0	72
23:30	1	67	9	0	2	0	0	0	5	0	4	1	0	89
23:45	0	41	3	0	1	1	0	0	4	0	4	0	0	54
TOTAL	35	8,203	1,291	11	152	40	0	10	469	2	190	16	0	10,419

PM PEAK HOUR	5:30 PM
PM PEAK VOLUME	1,342

TOTAL: AM+PM	50	12,022	2,138	24	291	70	29	86	930	6	255	22	0	15,923
% OF TOTAL	0.3%	75.5%	13.4%	0.2%	1.8%	0.4%	0.2%	0.5%	5.8%	0.0%	1.6%	0.1%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	113	23,984	4,159	46	593	217	32	141	###	20	479	37	0	31,943
% OF TOTAL	0.7%	150.6%	26.1%	0.3%	3.7%	1.4%	0.2%	0.9%	13.3%	0.1%	3.0%	0.2%	0.0%	100.0%

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS6 U.S. 395 between Phelan and Caliente

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	21	5	0	0	1	0	0	10	0	2	0	0	39
0:15	1	26	3	0	2	0	0	0	4	0	7	0	0	43
0:30	0	23	1	0	0	0	0	0	10	0	0	0	0	34
0:45	0	24	2	0	0	0	0	0	8	0	1	0	0	35
1:00	0	25	3	0	1	0	0	1	13	0	1	0	0	44
1:15	1	31	2	0	1	0	0	0	7	0	2	0	0	44
1:30	0	25	4	0	0	0	0	0	7	0	3	0	0	39
1:45	0	30	5	0	2	0	0	0	6	0	4	0	0	47
2:00	0	50	1	0	0	0	0	0	5	0	1	2	0	59
2:15	0	44	5	0	0	0	0	0	7	1	0	0	0	57
2:30	0	63	5	0	1	3	0	0	15	0	6	0	0	93
2:45	1	70	5	0	0	0	0	0	8	0	1	0	0	85
3:00	1	82	9	0	1	1	0	0	7	0	0	1	0	102
3:15	0	116	12	0	0	0	0	0	9	0	1	0	0	138
3:30	0	112	14	0	3	0	0	0	6	0	0	0	0	135
3:45	0	154	15	0	2	0	0	0	11	0	5	0	0	187
4:00	1	181	33	0	0	2	0	0	8	0	0	0	0	225
4:15	0	222	48	0	0	0	0	0	11	0	3	0	0	284
4:30	0	188	40	0	0	1	0	0	14	0	3	1	0	247
4:45	0	230	44	0	0	1	0	0	9	0	3	0	0	287
5:00	0	225	33	1	1	1	0	0	13	0	8	0	0	282
5:15	1	239	34	0	3	1	0	1	10	0	1	0	0	290
5:30	0	225	34	0	2	1	0	2	10	0	3	1	0	278
5:45	0	169	29	0	0	1	0	0	6	0	3	3	0	211
6:00	0	165	31	0	1	2	0	2	10	0	3	0	0	214
6:15	1	194	29	2	1	0	0	0	10	0	1	0	0	238
6:30	1	191	26	0	2	1	0	2	7	0	2	1	0	233
6:45	0	213	24	0	1	1	0	2	8	0	5	0	0	254
7:00	2	208	28	0	1	3	0	4	11	0	1	1	0	259
7:15	2	159	29	0	1	0	0	2	10	0	2	0	0	205
7:30	1	166	30	1	1	0	0	1	16	0	6	0	0	222
7:45	0	168	25	0	2	1	0	0	10	0	4	0	0	210
8:00	1	174	21	1	3	6	1	2	14	1	5	1	0	230
8:15	1	192	40	2	2	6	0	0	18	0	2	1	0	264
8:30	0	169	25	0	3	5	0	2	14	0	5	0	0	223
8:45	0	149	27	0	2	0	0	2	14	0	2	0	0	196
9:00	2	141	21	0	4	3	0	1	12	2	4	0	0	190
9:15	0	141	21	0	3	3	0	1	16	0	3	0	0	188
9:30	2	133	30	3	2	3	1	1	18	0	5	0	0	198
9:45	0	151	17	0	5	3	0	0	20	1	4	0	0	201
10:00	0	143	20	1	1	4	0	1	16	1	3	0	0	190
10:15	1	116	16	0	8	4	0	2	24	0	3	0	0	174
10:30	0	127	26	0	3	3	1	2	12	1	5	0	0	180
10:45	0	123	21	0	9	2	0	1	12	1	4	0	0	173
11:00	0	125	19	0	3	4	0	3	14	0	5	0	0	173
11:15	3	170	24	0	4	3	0	2	19	0	0	0	0	225
11:30	1	143	19	0	4	3	0	2	14	0	1	0	0	187
11:45	0	131	23	0	1	6	0	0	13	0	2	0	0	176
TOTAL	24	6,367	978	11	86	79	3	39	546	8	135	12	0	8,288

AM PEAK HOUR	4:45 AM
AM PEAK VOLUME	1,137

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	133	16	0	6	7	0	0	18	0	3	0	0	184
12:15	1	144	13	1	4	4	0	0	21	0	4	0	0	192
12:30	0	162	11	0	4	2	0	0	13	0	4	0	0	196
12:45	0	151	20	1	5	3	0	0	16	0	3	0	0	199
13:00	1	182	20	0	7	4	0	1	10	0	3	0	0	228
13:15	0	169	20	1	8	0	0	0	14	0	0	0	0	212
13:30	9	168	27	0	9	1	0	1	12	0	0	0	0	227
13:45	2	158	23	0	7	1	0	0	18	0	0	1	0	210
14:00	0	171	39	0	11	2	0	2	13	0	2	1	0	241
14:15	0	152	34	0	16	5	0	0	11	0	0	0	0	218
14:30	0	151	42	1	4	0	0	1	10	1	4	0	0	214
14:45	0	171	38	1	14	2	0	1	13	0	0	0	0	240
15:00	1	167	52	0	10	2	0	1	6	0	2	0	0	241
15:15	0	175	38	1	7	1	0	0	11	0	1	0	0	234
15:30	1	176	32	1	11	1	0	3	18	0	1	0	0	244
15:45	0	174	38	0	5	3	0	0	5	0	1	0	0	226
16:00	2	160	38	0	3	4	0	0	14	0	3	0	0	224
16:15	0	139	44	1	6	1	0	0	17	1	1	0	0	210
16:30	1	147	30	0	4	0	0	1	18	1	1	0	0	203
16:45	2	174	34	1	8	0	0	2	15	0	3	0	0	239
17:00	0	162	24	0	4	0	0	0	17	0	1	0	0	208
17:15	2	142	21	0	4	1	0	0	6	0	2	0	0	178
17:30	3	156	29	0	3	2	0	0	21	0	0	0	0	214
17:45	2	135	28	0	4	2	0	0	16	0	0	0	0	187
18:00	1	134	23	0	6	1	0	1	20	0	2	0	0	188
18:15	1	106	20	0	2	1	0	0	6	0	4	0	0	140
18:30	0	109	22	0	3	2	0	1	13	0	4	0	0	154
18:45	1	97	13	0	4	1	0	1	21	0	3	0	0	141
19:00	2	99	21	0	0	2	0	0	13	1	0	0	0	138
19:15	0	89	23	0	7	0	0	0	8	0	2	0	0	129
19:30	0	82	27	0	0	0	0	0	20	0	0	0	0	129
19:45	0	66	20	0	2	1	0	0	15	0	8	0	0	112
20:00	0	93	17	0	6	0	0	0	15	0	3	0	0	134
20:15	3	105	17	0	2	0	0	0	12	0	5	0	0	144
20:30	1	108	25	0	2	4	0	0	17	0	6	0	0	163
20:45	0	83	15	0	3	2	0	0	20	0	1	0	0	124
21:00	0	74	7	0	3	0	0	0	13	0	1	0	0	98
21:15	2	77	13	1	3	1	0	0	6	0	4	0	0	107
21:30	0	64	8	0	1	0	0	0	13	0	2	0	0	88
21:45	0	51	10	0	1	0	0	0	16	0	0	0	0	78
22:00	0	57	8	1	0	1	0	0	9	1	1	0	0	78
22:15	0	46	9	0	1	0	0	0	18	0	0	0	0	74
22:30	0	57	6	0	0	0	0	0	15	0	1	0	0	79
22:45	0	44	9	0	0	1	0	0	10	0	0	0	0	64
23:00	0	38	5	0	0	0	0	0	9	0	0	1	0	53
23:15	0	43	5	0	1	0	0	0	10	1	0	0	0	60
23:30	0	29	5	0	4	2	0	0	8	0	0	0	0	48
23:45	0	25	4	0	1	1	0	0	6	0	3	0	0	40
TOTAL	39	5,595	1,043	11	216	68	0	16	646	6	89	3	0	7,732

PM PEAK HOUR	2:45 PM
PM PEAK VOLUME	959

TOTAL: AM+PM	63	####	2,021	22	302	147	3	55	###	14	224	15	0	16,020
% OF TOTAL	0.4%	74.7%	12.6%	0.1%	1.9%	0.9%	0.0%	0.3%	7.4%	0.1%	1.4%	0.1%	0.0%	100.0%
Class	1	2	3	4	5	6	7	8	9	10	11	12	13	

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS7 U.S. 395 between Phelan and Poplar

AM	NORTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	5	2	0	0	0	0	0	1	0	0	1	0	9
0:15	0	2	1	0	0	0	0	0	2	0	0	0	0	5
0:30	0	2	0	0	0	0	0	0	2	0	0	0	0	4
0:45	0	3	0	0	0	0	0	0	1	0	0	0	0	4
1:00	0	6	1	0	0	0	0	0	1	0	0	0	0	8
1:15	0	4	2	0	0	0	0	0	0	0	0	0	0	6
1:30	1	1	0	0	0	0	0	0	1	0	0	0	0	3
1:45	0	3	1	0	0	0	0	0	0	0	1	0	0	5
2:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:15	0	3	0	0	0	0	0	0	1	0	0	0	0	4
2:30	0	4	0	0	0	0	0	0	2	0	0	0	0	6
2:45	0	4	0	0	0	0	0	0	2	0	0	0	0	6
3:00	0	4	1	0	1	0	0	0	3	0	0	0	0	9
3:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
3:30	0	5	1	0	0	0	0	0	2	0	1	0	0	9
3:45	0	6	0	0	0	0	0	0	0	0	1	0	0	7
4:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
4:15	0	3	0	0	0	0	0	0	0	0	2	0	0	5
4:30	0	2	2	0	0	0	0	0	2	0	1	0	0	7
4:45	0	3	2	0	0	0	0	0	3	0	0	0	0	8
5:00	0	5	1	0	0	0	0	0	0	0	4	0	0	10
5:15	0	7	2	0	1	0	0	1	2	0	1	0	0	14
5:30	0	19	13	0	1	1	0	0	6	0	0	0	0	40
5:45	0	61	26	0	4	0	0	0	9	1	1	0	0	102
6:00	0	75	17	0	3	0	1	2	11	0	0	0	0	109
6:15	0	90	30	1	6	0	0	1	17	0	0	0	0	145
6:30	0	125	36	0	3	0	0	1	13	0	0	0	0	178
6:45	1	113	36	0	6	1	0	0	8	0	0	0	0	165
7:00	0	113	36	0	5	2	0	2	12	0	1	0	0	171
7:15	0	115	8	0	4	1	0	1	10	0	0	1	0	140
7:30	1	106	30	1	12	2	2	1	10	0	0	0	0	165
7:45	0	118	22	0	3	0	2	3	7	0	1	0	0	156
8:00	0	87	24	0	5	2	1	6	13	0	1	0	0	139
8:15	0	99	19	0	3	0	1	2	13	0	0	0	0	137
8:30	0	89	27	0	4	0	2	3	14	0	2	1	0	142
8:45	0	85	31	1	5	0	0	4	11	0	0	0	0	137
9:00	0	70	25	1	8	1	2	4	15	0	0	1	0	127
9:15	2	78	15	0	6	0	3	2	14	0	1	0	0	121
9:30	1	86	26	0	6	1	2	3	11	0	1	0	0	137
9:45	0	79	23	0	6	2	2	6	19	0	0	0	0	137
10:00	0	83	31	0	6	2	0	3	14	0	1	0	0	140
10:15	0	77	25	0	5	2	1	2	21	0	0	0	0	133
10:30	1	79	17	0	2	1	1	7	22	0	1	0	0	131
10:45	0	93	17	0	3	1	2	4	23	1	3	0	0	147
11:00	0	79	22	0	3	1	0	6	14	0	2	0	0	127
11:15	2	100	20	0	3	4	4	3	16	0	1	0	0	153
11:30	0	89	18	0	5	0	2	1	17	0	8	1	0	141
11:45	0	118	14	1	5	0	1	2	11	0	4	1	0	157
TOTAL	9	2,407	624	5	124	24	29	70	377	2	39	6	0	3,716

AM PEAK HOUR	6:15 AM
AM PEAK VOLUME	659

PM	NORTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	103	19	0	2	3	0	0	13	0	2	0	0	143
12:15	0	101	17	0	3	3	0	0	16	0	4	0	0	144
12:30	0	99	17	0	5	0	0	0	17	0	3	0	0	141
12:45	0	142	24	2	5	1	0	0	15	0	1	0	0	190
13:00	1	124	21	0	5	3	0	0	19	0	3	0	0	176
13:15	1	116	16	0	3	4	0	0	7	0	8	0	0	155
13:30	0	108	21	0	7	1	0	0	10	0	7	0	0	154
13:45	1	113	25	0	5	3	0	0	15	0	5	2	0	169
14:00	1	109	24	0	6	0	0	0	17	0	5	1	0	163
14:15	0	179	45	0	7	1	0	1	17	0	8	0	0	258
14:30	0	141	45	0	5	1	0	1	15	1	6	1	0	216
14:45	0	129	35	2	8	4	0	1	13	0	7	0	0	199
15:00	0	146	32	0	7	4	0	0	18	0	5	1	0	213
15:15	0	212	59	0	5	1	0	1	14	0	2	1	0	295
15:30	1	171	35	1	5	2	0	0	10	0	0	0	0	225
15:45	2	225	51	0	10	0	0	1	10	1	8	0	0	308
16:00	3	218	41	0	12	0	0	0	5	0	4	1	0	284
16:15	1	233	37	0	6	1	0	0	5	0	4	0	0	287
16:30	1	201	46	0	5	1	0	2	11	0	6	0	0	273
16:45	2	202	44	0	2	2	0	0	15	0	4	0	0	271
17:00	2	176	42	0	4	1	0	0	7	0	3	0	0	235
17:15	3	198	44	0	2	1	0	1	5	0	3	0	0	257
17:30	1	240	42	0	4	1	0	0	9	0	3	0	0	300
17:45	0	229	39	0	1	0	0	0	7	0	1	0	0	277
18:00	2	221	42	0	5	0	0	0	8	0	6	1	0	285
18:15	0	234	43	0	3	2	0	0	13	0	4	0	0	299
18:30	0	213	29	0	1	2	0	0	7	0	6	0	0	258
18:45	1	168	28	0	6	1	0	0	5	0	2	0	0	211
19:00	0	171	40	0	2	1	0	0	9	0	4	0	0	227
19:15	1	202	34	0	3	0	0	0	13	0	4	0	0	257
19:30	0	148	29	0	4	1	0	0	16	0	9	0	0	207
19:45	0	158	21	0	0	0	0	0	9	0	4	0	0	192
20:00	0	124	19	0	3	0	0	0	8	0	1	0	0	155
20:15	0	103	18	0	2	0	0	0	11	0	5	0	0	139
20:30	0	107	11	0	2	2	0	0	11	0	4	0	0	137
20:45	1	133	25	0	0	1	0	0	7	0	1	2	0	170
21:00	0	81	10	0	2	0	0	0	9	0	5	0	0	107
21:15	0	52	5	0	0	0	0	0	6	0	1	0	0	64
21:30	0	6	2	0	0	0	0	0	3	0	0	0	0	11
21:45	0	15	1	0	1	0	0	0	2	0	1	1	0	21
22:00	0	9	3	0	1	0	0	0	1	0	0	0	0	14
22:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
22:30	0	9	2	0	0	0	0	0	4	0	0	0	0	15
22:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
23:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
23:15	0	4	1	0	0	0	0	0	1	0	0	0	0	6
23:30	0	4	1	0	0	1	0	0	0	0	1	0	0	7
23:45	0	9	0	0	0	0	0	0	3	0	1	0	0	13
TOTAL	26	6,107	1,187	5	159	49	0	8	436	2	161	11	0	8,151

PM PEAK HOUR	5:30 PM
PM PEAK VOLUME	1,161

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: AM+PM	35	8,514	1,811	10	283	73	29	78	813	4	200	17	0	11,867
% OF TOTAL	0.3%	71.7%	15.3%	0.1%	2.4%	0.6%	0.2%	0.7%	6.9%	0.0%	1.7%	0.1%	0.0%	100.0%
TOTAL: ALL	95	18,711	3,700	20	573	225	32	138	###	18	420	33	0	26,013
% OF TOTAL	0.8%	157.7%	31.2%	0.2%	4.8%	1.9%	0.3%	1.2%	17.3%	0.2%	3.5%	0.3%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 17, 2022
JOB #: SC3435

CITY: Hesperia
LOCATION: CLASS7 U.S. 395 between Phelan and Poplar

AM	SOUTHBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	19	6	0	1	1	0	0	11	0	2	0	0	40
0:15	1	21	2	0	2	0	0	0	4	0	2	0	0	32
0:30	0	23	2	0	1	0	0	0	9	0	0	0	0	35
0:45	0	17	3	0	0	0	0	0	9	0	1	0	0	30
1:00	0	23	3	0	1	0	0	1	12	0	1	0	0	41
1:15	1	26	2	0	1	0	0	0	7	0	2	0	0	39
1:30	0	24	4	0	0	0	0	0	9	0	4	0	0	41
1:45	0	33	5	0	1	0	0	0	6	0	2	0	0	47
2:00	0	45	2	0	1	0	0	0	6	0	1	2	0	57
2:15	0	44	6	0	0	0	0	0	7	1	0	0	0	58
2:30	0	63	5	0	0	3	0	0	15	0	5	0	0	91
2:45	1	75	6	0	0	0	0	0	9	0	1	0	0	92
3:00	1	86	9	0	1	1	0	0	7	0	0	1	0	106
3:15	0	122	12	0	0	0	0	0	9	0	1	0	0	144
3:30	0	110	14	0	3	0	0	0	9	0	0	0	0	136
3:45	0	152	17	0	2	0	0	0	11	0	5	0	0	187
4:00	1	191	40	0	0	2	0	0	10	0	0	0	0	244
4:15	0	231	60	0	0	1	0	2	12	0	3	0	0	309
4:30	0	194	47	0	0	2	0	0	13	0	6	1	0	263
4:45	1	245	57	0	1	1	0	0	9	0	3	0	0	317
5:00	1	236	38	0	2	1	0	0	15	0	8	0	0	301
5:15	1	248	42	0	4	1	0	1	14	0	1	0	0	312
5:30	1	217	34	0	1	1	0	2	11	0	3	1	0	271
5:45	0	157	33	1	0	1	0	0	7	0	3	3	0	205
6:00	0	157	34	0	1	2	0	2	10	0	3	0	0	209
6:15	1	188	25	0	1	2	0	0	10	0	1	0	0	228
6:30	1	179	23	0	1	0	0	2	8	0	2	1	0	217
6:45	0	182	17	0	0	1	0	2	9	0	4	0	0	215
7:00	2	180	25	0	1	3	0	5	12	0	1	1	0	230
7:15	2	123	24	1	2	0	0	1	13	1	2	0	0	169
7:30	1	136	22	0	4	0	0	1	15	0	6	0	0	185
7:45	0	153	23	0	2	1	0	0	8	0	4	0	0	191
8:00	1	147	24	0	3	4	1	2	15	1	5	1	0	204
8:15	1	163	34	2	0	6	0	0	16	0	2	1	0	225
8:30	0	136	27	0	2	7	0	3	13	0	4	0	0	192
8:45	0	119	21	0	3	0	0	2	15	0	2	0	0	162
9:00	2	121	23	0	5	3	0	2	13	2	4	0	0	175
9:15	0	125	18	0	2	3	0	0	16	0	3	0	0	167
9:30	2	106	23	1	0	2	1	3	20	0	5	0	0	163
9:45	0	123	15	0	5	3	0	0	21	1	4	0	0	172
10:00	0	128	19	1	2	4	0	1	17	0	3	0	0	175
10:15	1	87	14	0	8	4	0	2	27	0	3	0	0	146
10:30	0	115	28	0	4	1	1	2	12	1	5	0	0	169
10:45	0	99	22	0	8	3	0	1	13	1	4	0	0	151
11:00	0	99	15	0	3	4	0	4	13	0	5	0	0	143
11:15	3	133	19	0	4	2	0	1	19	0	0	0	0	181
11:30	1	122	19	0	4	3	0	3	16	0	1	0	0	169
11:45	0	94	31	0	1	6	0	0	14	0	2	0	0	148
TOTAL	27	5,817	994	6	88	79	3	45	576	8	129	12	0	7,784

AM PEAK HOUR	4:45 AM
AM PEAK VOLUME	1,201

PM	SOUTHBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	1	111	12	0	5	7	0	0	16	0	3	0	0	155
12:15	1	126	10	0	4	4	0	0	23	0	4	0	0	172
12:30	0	121	5	0	2	2	0	0	16	0	4	0	0	150
12:45	0	138	17	1	5	3	0	0	19	0	3	0	0	186
13:00	1	168	16	0	7	5	0	1	10	0	3	0	0	211
13:15	0	140	17	0	8	1	0	0	14	0	0	0	0	180
13:30	9	139	21	0	7	1	0	0	12	0	0	0	0	189
13:45	2	133	20	0	6	1	0	0	20	0	0	1	0	183
14:00	0	150	39	0	11	2	0	2	12	0	2	1	0	219
14:15	0	118	33	1	19	5	0	0	9	0	1	0	0	186
14:30	0	117	36	0	4	1	0	1	10	1	4	0	0	174
14:45	0	140	30	0	11	3	0	1	14	0	0	0	0	199
15:00	1	131	39	1	8	2	0	1	7	0	2	0	0	192
15:15	0	136	37	0	9	1	0	0	12	0	1	0	0	196
15:30	1	127	26	0	8	1	0	3	16	0	1	0	0	183
15:45	0	133	42	0	4	3	0	0	5	0	1	0	0	188
16:00	2	138	35	0	3	5	0	0	13	0	3	0	0	199
16:15	0	106	42	1	5	2	0	0	17	1	1	0	0	175
16:30	1	118	32	0	5	0	0	1	19	1	1	0	0	178
16:45	1	134	27	0	7	0	0	2	15	0	3	0	0	189
17:00	0	119	21	0	4	0	0	0	16	0	1	0	0	161
17:15	1	116	19	0	5	0	0	0	6	0	2	0	0	149
17:30	3	107	29	0	2	1	0	0	21	0	0	0	0	163
17:45	0	85	18	0	5	2	0	0	16	0	0	0	0	126
18:00	1	102	17	0	7	1	0	1	18	0	2	0	0	149
18:15	1	67	16	0	1	1	0	0	7	0	4	0	0	97
18:30	0	77	17	0	5	2	0	1	13	0	4	0	0	119
18:45	2	67	10	0	3	2	0	1	23	0	3	0	0	111
19:00	0	73	14	0	0	2	0	0	13	1	0	0	0	103
19:15	1	65	21	0	6	0	0	0	8	0	2	0	0	103
19:30	0	69	23	0	2	0	0	0	20	0	1	1	0	116
19:45	0	46	18	0	0	1	0	0	15	0	8	0	0	88
20:00	0	82	16	0	6	0	0	0	15	0	3	0	0	122
20:15	2	80	14	0	1	0	0	0	13	0	5	0	0	115
20:30	0	72	18	0	0	3	0	0	18	0	6	0	0	117
20:45	0	58	12	0	3	2	0	0	22	0	1	0	0	98
21:00	0	52	6	0	3	0	0	0	14	0	1	0	0	76
21:15	2	58	11	0	4	1	0	0	6	0	4	0	0	86
21:30	0	48	6	0	0	0	0	0	14	0	2	0	0	70
21:45	0	45	9	0	1	0	0	0	16	0	0	0	0	71
22:00	0	48	8	0	0	1	0	0	10	1	1	0	0	69
22:15	0	41	10	0	1	0	0	0	19	0	0	0	0	71
22:30	0	38	3	0	0	1	0	0	15	0	1	0	0	58
22:45	0	30	5	0	1	1	0	0	11	0	0	0	0	48
23:00	0	30	7	0	0	0	0	0	10	0	0	1	0	48
23:15	0	31	6	0	0	0	0	0	9	1	0	0	0	47
23:30	0	31	3	0	3	2	0	0	6	0	0	0	0	45
23:45	0	19	2	0	1	1	0	0	6	0	3	0	0	32
TOTAL	33	4,380	895	4	202	73	0	15	659	6	91	4	0	6,362

PM PEAK HOUR	2:00 PM
PM PEAK VOLUME	778

TOTAL: AM+PM	60	####	1,889	10	290	152	3	60	###	14	220	16	0	14,146
% OF TOTAL	0.4%	72.1%	13.4%	0.1%	2.1%	1.1%	0.0%	0.4%	8.7%	0.1%	1.6%	0.1%	0.0%	100.0%
Class	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

APPENDIX C – LEVEL OF SERVICE CALCULATIONS

KISS Warehouse

Vistro File: C:\...\Revised Vistro (Used the same for 22-031 and 21-139) - Revised 8.4.2023.vistro

Scenario 1 Existing AM

Report File: C:\...\Existing AM.pdf

8/1/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	US-395/Phelan Rd-Main St	Signalized	HCM 6th Edition	EB Left	0.639	42.9	D
2	US-395/Poplar St	Two-way stop	HCM 6th Edition	WB Left	0.204	59.1	F
3	US-395/Three Flags Rd	Signalized	HCM 6th Edition	SB Left	0.465	14.7	B
4	US-395/Joshua St	Signalized	HCM 6th Edition	NB Left	0.404	11.9	B
5	Phelan Rd/New Public Rd	Signalized	HCM 6th Edition	EB Thru	0.236	6.6	A
6	Main St/Mesa Linda St	Signalized	HCM 6th Edition	SB Left	0.294	34.6	C
7	Main St/Key Pointe Ave	Signalized	HCM 6th Edition	WB Left	0.469	28.6	C
8	Main St/I-15 SB Off Ramp	Signalized	HCM 6th Edition	SB Right	0.322	7.9	A
9	Main St/I-15 NB Ramps	Signalized	HCM 6th Edition	WB Right	0.362	15.9	B
10	Joshua Rd/Outpost Rd	Two-way stop	HCM 6th Edition	SB Left	0.080	10.6	B
11	Joshua St/I-15 SB Off-Ramp	Two-way stop	HCM 6th Edition	SB Left	0.119	10.3	B
12	Joshua St/I-15 NB On-Ramp	Two-way stop	HCM 6th Edition	EB Left	0.079	7.5	A
13	New Public Rd/North Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	
14	New Public Rd/South Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: US-395/Phelan Rd-Main St

Control Type:	Signalized	Delay (sec / veh):	42.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.639

Intersection Setup

Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	242.00	100.00	100.00	337.00	100.00	100.00	246.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	232.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Phelan Rd			Main St		
Base Volume Input [veh/h]	110	645	11	222	870	45	37	688	123	8	377	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	3	0	0	11	0	0	31	0	0	43
Total Hourly Volume [veh/h]	110	645	8	222	870	34	37	688	92	8	377	128
Peak Hour Factor	0.9163	0.9163	0.9163	0.8698	0.8698	0.8698	0.8228	0.8228	0.8228	0.8886	0.8886	0.8886
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	176	2	64	250	10	11	209	28	2	106	36
Total Analysis Volume [veh/h]	120	704	9	255	1000	39	45	836	112	9	424	144
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	10	26	0	17	33	0	5	26	0	5	26	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	30	0	21	37	0	9	30	0	9	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	26	26	17	33	33	5	26	26	5	26	26
g / C, Green / Cycle	0.11	0.29	0.29	0.19	0.37	0.37	0.06	0.29	0.29	0.06	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.07	0.20	0.20	0.16	0.29	0.29	0.03	0.27	0.27	0.01	0.16	0.17
s, saturation flow rate [veh/h]	1619	1800	1792	1619	1800	1776	1619	1800	1726	1619	1800	1647
c, Capacity [veh/h]	180	520	518	306	660	651	90	520	499	90	520	476
d1, Uniform Delay [s]	38.40	28.39	28.39	35.14	25.43	25.45	41.29	31.12	31.12	40.36	27.21	27.29
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	17.91	7.23	7.26	22.66	9.42	9.59	18.51	25.53	26.27	2.21	4.42	4.98
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.69	0.69	0.83	0.79	0.79	0.50	0.93	0.93	0.10	0.57	0.57
d, Delay for Lane Group [s/veh]	56.31	35.62	35.65	57.80	34.86	35.04	59.80	56.65	57.39	42.58	31.63	32.27
Lane Group LOS	E	D	D	E	C	D	E	E	E	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.25	7.18	7.15	6.85	10.43	10.34	1.37	12.79	12.37	0.23	5.48	5.17
50th-Percentile Queue Length [ft/ln]	81.35	179.41	178.75	171.15	260.64	258.42	34.23	319.78	309.31	5.81	137.12	129.20
95th-Percentile Queue Length [veh/ln]	5.86	11.57	11.54	11.14	15.72	15.61	2.46	18.66	18.14	0.42	9.33	8.90
95th-Percentile Queue Length [ft/ln]	146.42	289.25	288.38	278.42	393.02	390.23	61.62	466.41	453.52	10.47	233.15	222.41

Movement, Approach, & Intersection Results

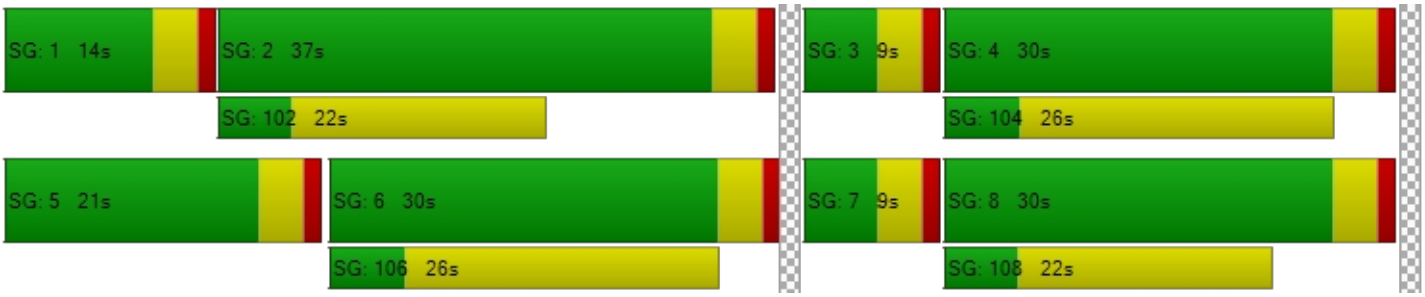
d_M, Delay for Movement [s/veh]	56.31	35.64	35.65	57.80	34.95	35.04	59.80	56.96	57.39	42.58	31.83	32.27
Movement LOS	E	D	D	E	C	D	E	E	E	D	C	C
d_A, Approach Delay [s/veh]	38.61			39.45			57.14			32.10		
Approach LOS	D			D			E			C		
d_I, Intersection Delay [s/veh]	42.87											
Intersection LOS	D											
Intersection V/C	0.639											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	3.016	3.138	2.924	3.029
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	578	733	578	578
d_b, Bicycle Delay [s]	22.76	18.05	22.76	22.76
I_b,int, Bicycle LOS Score for Intersection	2.249	2.636	2.404	2.071
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: US-395/Poplar St

Control Type:	Two-way stop	Delay (sec / veh):	59.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.204

Intersection Setup

Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	373.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	510.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	US-395			US-395						Poplar St		
Base Volume Input [veh/h]	0	815	18	28	982	0	0	0	0	8	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	815	18	28	982	0	0	0	0	8	0	3
Peak Hour Factor	1.0000	0.9244	0.9244	0.9078	0.9078	1.0000	1.0000	1.0000	1.0000	0.4583	1.0000	0.4583
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	220	5	8	270	0	0	0	0	4	0	2
Total Analysis Volume [veh/h]	0	882	19	31	1082	0	0	0	0	17	0	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.20	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	9.92	0.00	0.00	0.00	0.00	0.00	59.08	0.00	11.49
Movement LOS		A	A	A	A					F		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.00	17.75	0.00	0.95
d_A, Approach Delay [s/veh]	0.00			0.28			0.00			45.20		
Approach LOS	A			A			A			E		
d_I, Intersection Delay [s/veh]	0.68											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 3: US-395/Three Flags Rd

Control Type:	Signalized	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.465

Intersection Setup

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	190.00	100.00	190.00	224.00	100.00	224.00	182.00	100.00	100.00	274.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Base Volume Input [veh/h]	39	758	106	32	858	77	30	3	89	188	4	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	27	0	0	19	0	0	22	0	0	8
Total Hourly Volume [veh/h]	39	758	79	32	858	58	30	3	67	188	4	25
Peak Hour Factor	0.9280	0.9280	0.9280	0.9329	0.9329	0.9329	0.7961	0.7961	0.7961	0.8296	0.8296	0.8296
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	204	21	9	230	16	9	1	21	57	1	8
Total Analysis Volume [veh/h]	42	817	85	34	920	62	38	4	84	227	5	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	23	0	12	23	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	32	32	2	32	32	18	18	18	18	18
g / C, Green / Cycle	0.04	0.50	0.50	0.04	0.49	0.49	0.28	0.28	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.03	0.24	0.06	0.02	0.27	0.04	0.03	0.06	0.17	0.00	0.02
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1395	1541	1330	1800	1530
c, Capacity [veh/h]	67	1716	766	58	1697	758	444	430	373	502	427
d1, Uniform Delay [s]	30.67	10.64	8.58	30.87	11.32	8.63	19.35	17.92	25.28	16.94	17.23
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.38	0.95	0.29	9.22	1.25	0.21	0.08	0.23	1.61	0.01	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.48	0.11	0.59	0.54	0.08	0.09	0.20	0.61	0.01	0.07
d, Delay for Lane Group [s/veh]	40.05	11.59	8.87	40.09	12.57	8.85	19.43	18.15	26.89	16.95	17.30
Lane Group LOS	D	B	A	D	B	A	B	B	C	B	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.77	3.16	0.55	0.63	3.80	0.40	0.43	0.97	3.34	0.05	0.32
50th-Percentile Queue Length [ft/ln]	19.17	79.05	13.87	15.72	94.99	10.12	10.83	24.28	83.49	1.29	7.94
95th-Percentile Queue Length [veh/ln]	1.38	5.69	1.00	1.13	6.84	0.73	0.78	1.75	6.01	0.09	0.57
95th-Percentile Queue Length [ft/ln]	34.50	142.29	24.97	28.29	170.98	18.21	19.49	43.70	150.28	2.33	14.28

Movement, Approach, & Intersection Results

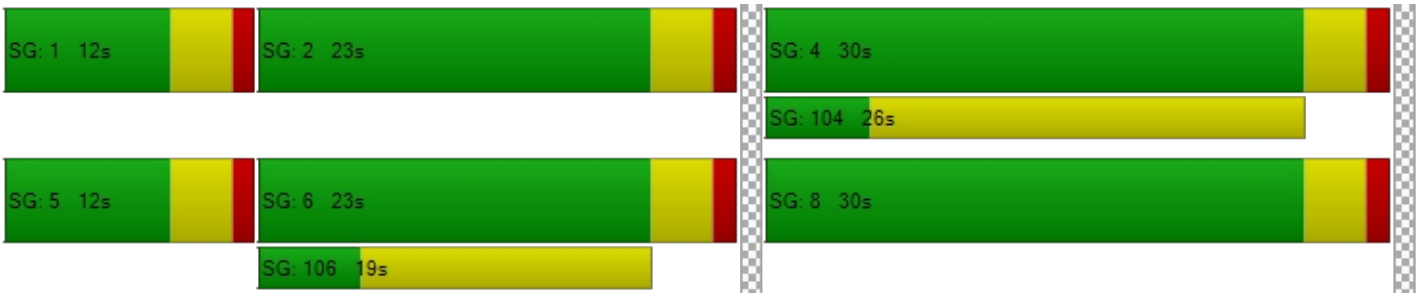
d_M, Delay for Movement [s/veh]	40.05	11.59	8.87	40.09	12.57	8.85	19.43	18.15	18.15	26.89	16.95	17.30
Movement LOS	D	B	A	D	B	A	B	B	B	C	B	B
d_A, Approach Delay [s/veh]	12.61			13.27			18.53			25.60		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	14.66											
Intersection LOS	B											
Intersection V/C	0.465											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.12	0.00	24.12
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.989	0.000	2.230
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	585	585	800	800
d_b, Bicycle Delay [s]	16.28	16.28	11.70	11.70
I_b,int, Bicycle LOS Score for Intersection	2.361	2.413	1.804	2.005
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: US-395/Joshua St

Control Type:	Signalized	Delay (sec / veh):	11.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.404

Intersection Setup

Name	US-395			US-395			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	191.00	100.00	226.00	200.00	100.00	223.00	140.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Joshua St			Joshua St		
Base Volume Input [veh/h]	9	764	48	127	904	102	16	24	9	96	55	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	12	0	0	26	0	0	2	0	0	30
Total Hourly Volume [veh/h]	9	764	36	127	904	76	16	24	7	96	55	91
Peak Hour Factor	0.9117	0.9117	0.9117	0.8984	0.8984	0.8984	0.6736	0.6736	0.6736	0.9610	0.9610	0.9610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	209	10	35	252	21	6	9	3	25	14	24
Total Analysis Volume [veh/h]	10	838	39	141	1006	85	24	36	10	100	57	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	23	0	12	25	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	36	36	7	42	42	10	10	10	10	10
g / C, Green / Cycle	0.01	0.55	0.55	0.11	0.65	0.65	0.16	0.16	0.16	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.01	0.24	0.03	0.09	0.29	0.06	0.02	0.03	0.07	0.03	0.06
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1255	1733	1381	1800	1530
c, Capacity [veh/h]	24	1896	847	176	2219	991	235	266	254	277	235
d1, Uniform Delay [s]	31.82	8.60	6.67	28.34	5.73	4.28	26.93	23.97	28.19	24.10	24.88
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.54	0.75	0.10	8.11	0.67	0.17	0.19	0.30	0.99	0.36	1.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.44	0.05	0.80	0.45	0.09	0.10	0.17	0.39	0.21	0.40
d, Delay for Lane Group [s/veh]	43.36	9.35	6.77	36.44	6.40	4.45	27.12	24.27	29.18	24.46	26.00
Lane Group LOS	D	A	A	D	A	A	C	C	C	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.22	2.71	0.21	2.34	2.21	0.30	0.32	0.58	1.43	0.72	1.26
50th-Percentile Queue Length [ft/ln]	5.48	67.65	5.13	58.41	55.34	7.51	8.07	14.39	35.72	17.93	31.47
95th-Percentile Queue Length [veh/ln]	0.39	4.87	0.37	4.21	3.98	0.54	0.58	1.04	2.57	1.29	2.27
95th-Percentile Queue Length [ft/ln]	9.87	121.77	9.23	105.15	99.61	13.53	14.52	25.91	64.29	32.27	56.65

Movement, Approach, & Intersection Results

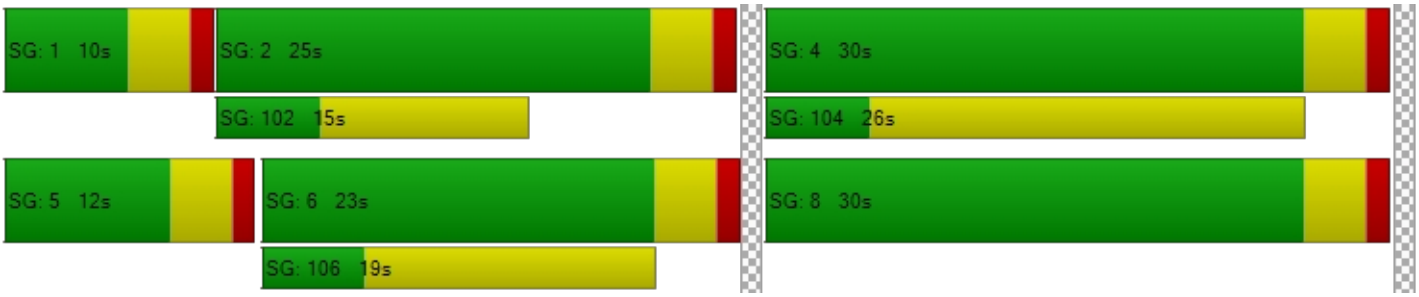
d_M, Delay for Movement [s/veh]	43.36	9.35	6.77	36.44	6.40	4.45	27.12	24.27	24.27	29.18	24.46	26.00
Movement LOS	D	A	A	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	9.62			9.70			25.25			26.91		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	11.89											
Intersection LOS	B											
Intersection V/C	0.404											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.16	24.16	24.16
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.056	2.050	2.345
Crosswalk LOS	F	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	584	645	799	799
d_b, Bicycle Delay [s]	16.31	14.92	11.73	11.73
I_b,int, Bicycle LOS Score for Intersection	2.301	2.597	1.678	2.025
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Phelan Rd/New Public Rd

Control Type:	Signalized	Delay (sec / veh):	6.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.236

Intersection Setup

Name										Phelan Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name										Phelan Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	848	0	0	531	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	848	0	0	531	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	212	0	0	133	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	848	0	0	531	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	90	0	0	90	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	86	86	86	86	86	86
g / C, Green / Cycle	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.24	0.24	0.00	0.15	0.15
s, saturation flow rate [veh/h]	1800	1800	887	1800	1800	660	1800	1800
c, Capacity [veh/h]	420	420	637	1290	1290	464	1290	1290
d1, Uniform Delay [s]	0.00	0.00	0.00	6.30	6.30	0.00	5.65	5.65
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.00	0.00	0.68	0.68	0.00	0.36	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.00	0.00	0.33	0.33	0.00	0.21	0.21
d, Delay for Lane Group [s/veh]	0.00	0.00	0.00	6.98	6.98	0.00	6.01	6.01
Lane Group LOS	A	A	A	A	A	A	A	A
Critical Lane Group	No	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	3.38	3.38	0.00	1.89	1.89
50th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	84.47	84.47	0.00	47.24	47.24
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	6.08	6.08	0.00	3.40	3.40
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	152.05	152.05	0.00	85.03	85.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.98	6.98	0.00	6.01	6.01
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.98			6.01		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.61											
Intersection LOS	A											
Intersection V/C	0.236											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	1.730	1.730	2.763	2.842
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	433	1433	1433
d_b, Bicycle Delay [s]	36.82	36.82	4.82	4.82
I_b,int, Bicycle LOS Score for Intersection	1.560	1.560	2.259	1.998
Bicycle LOS	A	A	B	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Main St/Mesa Linda St

Control Type:	Signalized	Delay (sec / veh):	34.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.294

Intersection Setup

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	340.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	2	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Base Volume Input [veh/h]	1	0	28	46	1	16	14	918	7	75	593	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	7	0	0	4	0	0	2	0	0	4
Total Hourly Volume [veh/h]	1	0	21	46	1	12	14	918	5	75	593	13
Peak Hour Factor	0.5938	0.5938	0.5938	0.8289	0.8289	0.8289	0.9621	0.9621	0.9621	0.8382	0.8382	0.8382
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	9	14	0	4	4	239	1	22	177	4
Total Analysis Volume [veh/h]	2	0	35	55	1	14	15	954	5	89	707	16
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	14	0	11	28	0	17	34	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	10	10	7	24	24	13	30	30
g / C, Green / Cycle	0.34	0.34	0.11	0.11	0.07	0.25	0.25	0.14	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00	0.02	0.03	0.01	0.01	0.18	0.18	0.05	0.14	0.01
s, saturation flow rate [veh/h]	1714	1530	1716	1530	1619	3427	1795	1619	4903	1530
c, Capacity [veh/h]	577	515	181	161	119	866	454	222	1548	483
d1, Uniform Delay [s]	20.91	21.38	39.31	38.38	41.14	32.50	32.50	37.45	25.98	22.47
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.25	4.42	1.06	2.16	5.30	9.79	5.35	0.97	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.07	0.31	0.09	0.13	0.73	0.73	0.40	0.46	0.03
d, Delay for Lane Group [s/veh]	20.92	21.63	43.73	39.44	43.30	37.80	42.29	42.80	26.96	22.60
Lane Group LOS	C	C	D	D	D	D	D	D	C	C
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	0.56	1.42	0.34	0.38	6.78	7.67	2.12	4.07	0.25
50th-Percentile Queue Length [ft/ln]	0.78	14.00	35.54	8.51	9.60	169.42	191.68	52.93	101.68	6.19
95th-Percentile Queue Length [veh/ln]	0.06	1.01	2.56	0.61	0.69	11.05	12.21	3.81	7.32	0.45
95th-Percentile Queue Length [ft/ln]	1.40	25.20	63.96	15.32	17.29	276.16	305.21	95.27	183.02	11.15

Movement, Approach, & Intersection Results

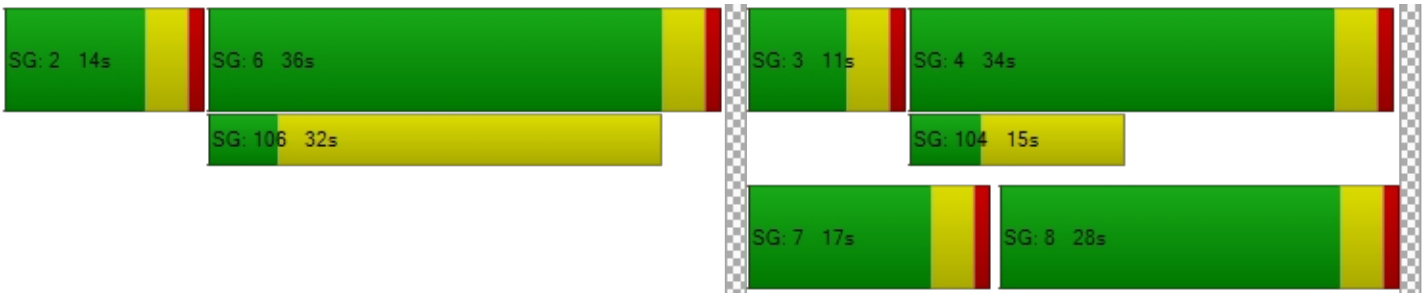
d_M, Delay for Movement [s/veh]	20.92	20.92	21.63	43.73	43.73	39.44	43.30	39.33	42.29	42.80	26.96	22.60
Movement LOS	C	C	C	D	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	21.59			42.87			39.41			28.61		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	34.55											
Intersection LOS	C											
Intersection V/C	0.294											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	38.93	0.00	38.93
I_p,int, Pedestrian LOS Score for Intersectio	0.000	1.985	0.000	3.115
Crosswalk LOS	F	A	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	674	211	505	632
d_b, Bicycle Delay [s]	20.89	38.03	26.53	22.24
I_b,int, Bicycle LOS Score for Intersection	1.632	1.682	2.096	2.008
Bicycle LOS	A	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Main St/Key Pointe Ave

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.469

Intersection Setup

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	140.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Base Volume Input [veh/h]	4	12	97	137	26	11	30	927	8	193	607	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	24	0	0	3	0	0	2	0	0	34
Total Hourly Volume [veh/h]	4	12	73	137	26	8	30	927	6	193	607	100
Peak Hour Factor	0.8188	0.8188	0.8188	0.8184	0.8184	0.8184	0.9333	0.9333	0.9333	0.8560	0.8560	0.8560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	22	42	8	2	8	248	2	56	177	29
Total Analysis Volume [veh/h]	5	15	89	167	32	10	32	993	6	225	709	117
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	36	0	9	23	0	16	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	27	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	C
C, Cycle Length [s]	75	75	75	75	75	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	32	32	32	5	19	19	12	26	26
g / C, Green / Cycle	0.43	0.43	0.43	0.43	0.43	0.07	0.25	0.25	0.16	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.00	0.01	0.06	0.13	0.02	0.02	0.20	0.00	0.14	0.16	0.16
s, saturation flow rate [veh/h]	1386	1800	1530	1311	1727	1619	4903	1530	1619	3427	1673
c, Capacity [veh/h]	631	768	653	614	737	108	1242	388	259	1188	580
d1, Uniform Delay [s]	14.20	12.43	13.09	15.72	12.63	33.33	26.22	20.99	30.73	19.09	19.11
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.02	0.05	0.43	1.09	0.15	6.88	5.45	0.07	30.35	1.32	2.71
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.02	0.14	0.27	0.06	0.30	0.80	0.02	0.87	0.47	0.47
d, Delay for Lane Group [s/veh]	14.22	12.48	13.52	16.81	12.78	40.20	31.66	21.06	61.08	20.41	21.82
Lane Group LOS	B	B	B	B	B	D	C	C	E	C	C
Critical Lane Group	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.05	0.15	0.94	2.05	0.42	0.72	5.51	0.08	5.77	3.46	3.63
50th-Percentile Queue Length [ft/ln]	1.34	3.68	23.38	51.14	10.51	17.93	137.72	1.97	144.14	86.54	90.63
95th-Percentile Queue Length [veh/ln]	0.10	0.26	1.68	3.68	0.76	1.29	9.36	0.14	9.70	6.23	6.53
95th-Percentile Queue Length [ft/ln]	2.42	6.62	42.08	92.06	18.91	32.27	233.95	3.54	242.59	155.77	163.13

Movement, Approach, & Intersection Results

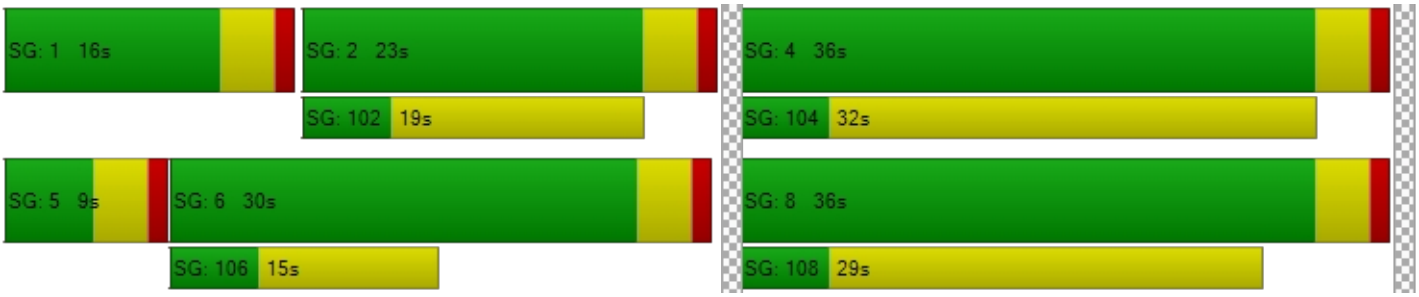
d_M, Delay for Movement [s/veh]	14.22	12.48	13.52	16.81	12.78	12.78	40.20	31.66	21.06	61.08	20.72	21.82
Movement LOS	B	B	B	B	B	B	D	C	C	E	C	C
d_A, Approach Delay [s/veh]	13.41			16.00			31.87			29.48		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	28.60											
Intersection LOS	C											
Intersection V/C	0.469											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.04	29.04	29.04	29.04
I_p,int, Pedestrian LOS Score for Intersectio	2.255	2.070	3.085	3.420
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	853	853	507	693
d_b, Bicycle Delay [s]	12.33	12.33	20.91	16.01
I_b,int, Bicycle LOS Score for Intersection	1.779	1.909	2.128	2.156
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Main St/I-15 SB Off Ramp

Control Type:	Signalized	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.322

Intersection Setup

Name	I-15 SB Off Ramp		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	1100.00	530.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	I-15 SB Off Ramp		Main St		Main St	
Base Volume Input [veh/h]	310	177	0	1010	758	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	44	0	0	0	0
Total Hourly Volume [veh/h]	310	133	0	1010	758	0
Peak Hour Factor	0.8943	0.8943	1.0000	0.9467	0.8892	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	37	0	267	213	0
Total Analysis Volume [veh/h]	347	149	0	1067	852	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	37	0	0	23	23	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	43	43
g / C, Green / Cycle	0.16	0.16	0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.10	0.10	0.22	0.17
s, saturation flow rate [veh/h]	3329	1530	4903	4903
c, Capacity [veh/h]	525	241	3477	3477
d1, Uniform Delay [s]	23.77	23.59	3.25	3.07
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.43	2.57	0.23	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.62	0.31	0.25
d, Delay for Lane Group [s/veh]	25.20	26.16	3.47	3.24
Lane Group LOS	C	C	A	A
Critical Lane Group	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.18	1.94	0.54	0.41
50th-Percentile Queue Length [ft/ln]	54.57	48.59	13.53	10.19
95th-Percentile Queue Length [veh/ln]	3.93	3.50	0.97	0.73
95th-Percentile Queue Length [ft/ln]	98.23	87.46	24.35	18.34

Movement, Approach, & Intersection Results

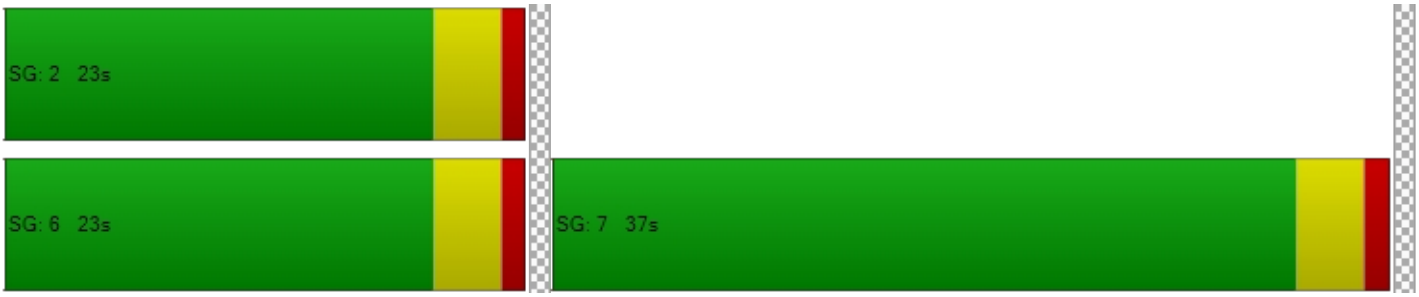
d_M, Delay for Movement [s/veh]	25.20	26.16	0.00	3.47	3.24	0.00
Movement LOS	C	C		A	A	
d_A, Approach Delay [s/veh]	25.49		3.47		3.24	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	7.91					
Intersection LOS	A					
Intersection V/C	0.322					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1100	633	633
d_b, Bicycle Delay [s]	6.08	14.01	14.01
I_b,int, Bicycle LOS Score for Intersection	1.560	2.146	2.028
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Main St/I-15 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.362

Intersection Setup

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	1790.00	100.00	615.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Base Volume Input [veh/h]	82	3	411	0	0	0	0	1021	0	0	1103	460
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	103	0	0	0	0	0	0	0	0	115
Total Hourly Volume [veh/h]	82	3	308	0	0	0	0	1021	0	0	1103	345
Peak Hour Factor	0.9295	0.9295	0.9295	1.0000	1.0000	1.0000	1.0000	0.9188	1.0000	1.0000	0.9304	0.9304
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	1	83	0	0	0	0	278	0	0	296	93
Total Analysis Volume [veh/h]	88	3	331	0	0	0	0	1111	0	0	1186	371
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	14	0	0	0	0	0	46	0	0	46	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	14	0	0	3	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		C	C	C
C, Cycle Length [s]	60	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	31		21	21	21
g / C, Green / Cycle	0.52	0.52	0.52		0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.11	0.11		0.23	0.24	0.25
s, saturation flow rate [veh/h]	1714	1534	1530		4903	4903	1541
c, Capacity [veh/h]	883	790	788		1723	1723	542
d1, Uniform Delay [s]	7.43	7.91	7.91		16.31	16.56	16.88
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.61	0.61		0.41	0.47	1.81
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.21	0.21		0.64	0.68	0.72
d, Delay for Lane Group [s/veh]	7.66	8.52	8.53		16.72	17.04	18.69
Lane Group LOS	A	A	A		B	B	B
Critical Lane Group	No	No	Yes		No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.49	1.02	1.02		3.43	3.67	3.94
50th-Percentile Queue Length [ft/ln]	12.34	25.52	25.46		85.82	91.72	98.38
95th-Percentile Queue Length [veh/ln]	0.89	1.84	1.83		6.18	6.60	7.08
95th-Percentile Queue Length [ft/ln]	22.21	45.94	45.83		154.47	165.09	177.08

Movement, Approach, & Intersection Results

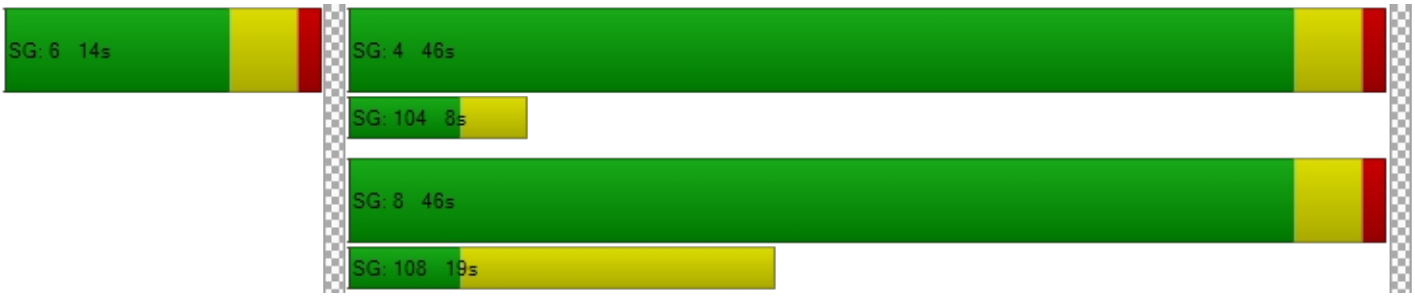
d_M, Delay for Movement [s/veh]	7.66	8.52	8.52	0.00	0.00	0.00	0.00	16.72	0.00	0.00	17.06	18.69
Movement LOS	A	A	A					B			B	B
d_A, Approach Delay [s/veh]	8.34			0.00			16.72			17.45		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	15.94											
Intersection LOS	B											
Intersection V/C	0.362											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.429	1.881	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	333	0	1400	1400
d_b, Bicycle Delay [s]	20.83	30.00	2.70	2.70
I_b,int, Bicycle LOS Score for Intersection	2.426	4.132	2.171	2.249
Bicycle LOS	B	D	B	B

Sequence

Ring 1	-	6	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Joshua Rd/Outpost Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.080

Intersection Setup

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Base Volume Input [veh/h]	0	0	0	39	0	108	0	90	0	0	117	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	39	0	108	0	90	0	0	117	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.6952	0.6952	0.6952	1.0000	0.6992	1.0000	1.0000	0.9126	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	14	0	39	0	32	0	0	32	0
Total Analysis Volume [veh/h]	0	0	0	56	0	155	0	129	0	0	128	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.08	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.94	10.53	8.89	10.59	10.53	9.66	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	B	A	B	B	A		A			A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.26	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	6.50	0.00	14.96	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.45			9.91			0.00			0.00		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	4.47											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Joshua St/I-15 SB Off-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.119

Intersection Setup

Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	1500.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Joshua St		Joshua St		Joshua St	
Base Volume Input [veh/h]	66	207	0	154	30	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	207	0	154	30	0
Peak Hour Factor	0.7147	0.7147	1.0000	0.8556	0.8194	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	72	0	45	9	0
Total Analysis Volume [veh/h]	92	290	0	180	37	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.28	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.26	9.79	0.00	0.00	0.00	0.00
Movement LOS	B	A		A	A	
95th-Percentile Queue Length [veh/ln]	0.40	1.14	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	10.04	28.61	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.90		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.32					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 12: Joshua St/I-15 NB On-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.079

Intersection Setup

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Base Volume Input [veh/h]	0	0	107	111	32	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	107	111	32	12
Peak Hour Factor	1.0000	1.0000	0.8720	0.8720	0.6797	0.6797
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	31	32	12	4
Total Analysis Volume [veh/h]	0	0	123	127	47	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.08	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.52	0.00	0.00	0.00
Movement LOS			A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.26	0.26	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	6.46	6.46	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		3.70		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.94					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Public Rd/North Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

Intersection Level Of Service Report
Intersection 14: New Public Rd/South Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

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Scenario 1 Existing AM

Report File: C:\...\Existing AM.pdf

8/1/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	US-395/Phelan Rd-Main St	110	645	11	222	870	45	37	688	123	8	377	171	3307

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
2	US-395/Poplar St	815	18	28	982	8	3	1854

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	US-395/Three Flags Rd	39	758	106	32	858	77	30	3	89	188	4	33	2217

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	US-395/Joshua St	9	764	48	127	904	102	16	24	9	96	55	121	2275

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Phelan Rd/New Public Rd	0	0	0	0	0	0	0	848	0	0	531	0	1379

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6	Main St/Mesa Linda St	1	0	28	46	1	16	14	918	7	75	593	17	1716

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Main St/Key Pointe Ave	4	12	97	137	26	11	30	927	8	193	607	134	2186

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
8	Main St/I-15 SB Off Ramp	310	177	1010	758	2255

ID	Intersection Name	Northbound			Eastbound	Westbound		Total Volume
		Left	Thru	Right	Thru	Thru	Right	
9	Main St/I-15 NB Ramps	82	3	411	1021	1103	460	3080

ID	Intersection Name	Northbound			Southbound			Eastbound	Westbound	Total Volume
		Left	Thru	Right	Left	Thru	Right	Thru	Thru	
10	Joshua Rd/Outpost Rd	0	0	0	39	0	108	90	117	354

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
11	Joshua St/I-15 SB Off-Ramp	66	207	154	30	457

ID	Intersection Name	Eastbound		Westbound		Total Volume
		Left	Thru	Thru	Right	
12	Joshua St/I-15 NB On-Ramp	107	111	32	12	262

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
13	New Public Rd/North Driveway	0	0	0	0	0	0	0	0	0	0

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	New Public Rd/South Driveway	0	0	0	0	0	0	0	0	0	0

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Scenario 2 Existing PM

Report File: C:\...\Existing PM.pdf

8/1/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	US-395/Phelan Rd-Main St	Signalized	HCM 6th Edition	SB Right	0.752	66.4	E
2	US-395/Poplar St	Two-way stop	HCM 6th Edition	WB Left	0.174	99.4	F
3	US-395/Three Flags Rd	Signalized	HCM 6th Edition	NB Left	0.483	14.5	B
4	US-395/Joshua St	Signalized	HCM 6th Edition	NB Left	0.498	13.1	B
5	Phelan Rd/New Public Rd	Signalized	HCM 6th Edition	WB Thru	0.274	7.1	A
6	Main St/Mesa Linda St	Signalized	HCM 6th Edition	WB Left	0.308	34.2	C
7	Main St/Key Pointe Ave	Signalized	HCM 6th Edition	WB Left	0.635	31.8	C
8	Main St/I-15 SB Off Ramp	Signalized	HCM 6th Edition	SB Right	0.461	9.9	A
9	Main St/I-15 NB Ramps	Signalized	HCM 6th Edition	WB Right	0.504	14.6	B
10	Joshua Rd/Outpost Rd	Two-way stop	HCM 6th Edition	SB Left	0.099	11.1	B
11	Joshua St/I-15 SB Off-Ramp	Two-way stop	HCM 6th Edition	SB Left	0.040	10.2	B
12	Joshua St/I-15 NB On-Ramp	Two-way stop	HCM 6th Edition	EB Left	0.088	7.6	A
13	New Public Rd/North Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	
14	New Public Rd/South Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: US-395/Phelan Rd-Main St

Control Type:	Signalized	Delay (sec / veh):	66.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.752

Intersection Setup

Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	242.00	100.00	100.00	337.00	100.00	100.00	246.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	232.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Phelan Rd			Main St		
Base Volume Input [veh/h]	215	1049	19	205	815	38	36	568	100	8	736	316
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	5	0	0	10	0	0	25	0	0	79
Total Hourly Volume [veh/h]	215	1049	14	205	815	28	36	568	75	8	736	237
Peak Hour Factor	0.9869	0.9869	0.9869	0.9501	0.9501	0.9501	0.8482	0.8482	0.8482	0.9632	0.9632	0.9632
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	266	4	54	214	7	11	167	22	2	191	62
Total Analysis Volume [veh/h]	218	1063	14	216	858	29	42	670	88	8	764	246
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	17	31	0	16	30	0	6	32	0	5	31	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	20	32	0	19	27	0	9	33	0	9	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	28	28	15	23	23	5	29	29	5	29	29
g / C, Green / Cycle	0.17	0.29	0.29	0.16	0.24	0.24	0.05	0.31	0.31	0.05	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.13	0.30	0.30	0.13	0.25	0.25	0.03	0.21	0.22	0.00	0.29	0.29
s, saturation flow rate [veh/h]	1619	1800	1792	1619	1800	1779	1619	1800	1728	1619	1800	1652
c, Capacity [veh/h]	273	531	528	256	436	431	85	549	527	85	549	504
d1, Uniform Delay [s]	37.96	33.50	33.50	38.87	36.00	36.00	43.77	29.20	29.21	42.84	32.41	32.41
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.29	43.44	43.67	27.52	49.21	49.52	18.96	7.36	7.69	2.18	29.39	31.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	1.02	1.02	0.84	1.02	1.02	0.49	0.70	0.70	0.09	0.96	0.96
d, Delay for Lane Group [s/veh]	59.25	76.94	77.17	66.39	85.21	85.52	62.72	36.56	36.89	45.02	61.80	63.44
Lane Group LOS	E	F	F	E	F	F	E	D	D	D	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.13	17.38	17.33	6.49	15.15	15.01	1.35	8.17	7.90	0.22	15.14	14.13
50th-Percentile Queue Length [ft/ln]	153.20	434.44	433.28	162.27	378.63	375.21	33.83	204.22	197.48	5.50	378.54	353.13
95th-Percentile Queue Length [veh/ln]	10.19	24.48	24.43	10.67	21.82	21.66	2.44	12.86	12.51	0.40	21.52	20.29
95th-Percentile Queue Length [ft/ln]	254.70	611.95	610.73	266.73	545.54	541.39	60.90	321.40	312.71	9.91	538.08	507.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	59.25	77.05	77.17	66.39	85.36	85.52	62.72	36.70	36.89	45.02	62.31	63.44
Movement LOS	E	F	E	E	F	F	E	D	D	D	E	E
d_A, Approach Delay [s/veh]	74.06			81.65			38.09			62.45		
Approach LOS	E			F			D			E		
d_I, Intersection Delay [s/veh]	66.41											
Intersection LOS	E											
Intersection V/C	0.752											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.93	38.93	38.93	38.93
I_p,int, Pedestrian LOS Score for Intersectio	3.126	3.229	3.000	3.166
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	589	484	611	611
d_b, Bicycle Delay [s]	23.63	27.28	22.93	22.93
I_b,int, Bicycle LOS Score for Intersection	2.632	2.478	2.240	2.465
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: US-395/Poplar St

Control Type:	Two-way stop	Delay (sec / veh):	99.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.174

Intersection Setup

Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	373.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	510.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	US-395			US-395						Poplar St		
Base Volume Input [veh/h]	0	1157	34	25	976	0	0	0	0	6	0	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1157	34	25	976	0	0	0	0	6	0	44
Peak Hour Factor	1.0000	0.9433	0.9433	0.9107	0.9107	1.0000	1.0000	1.0000	1.0000	0.7576	1.0000	0.7576
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	307	9	7	268	0	0	0	0	2	0	15
Total Analysis Volume [veh/h]	0	1227	36	27	1072	0	0	0	0	8	0	58
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.17	0.00	0.14
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	11.79	0.00	0.00	0.00	0.00	0.00	99.35	0.00	14.72
Movement LOS		A	A	B	A					F		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.47
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	3.81	0.00	0.00	0.00	0.00	0.00	14.15	0.00	11.63
d_A, Approach Delay [s/veh]	0.00			0.29			0.00			24.98		
Approach LOS	A			A			A			C		
d_I, Intersection Delay [s/veh]	0.81											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 3: US-395/Three Flags Rd

Control Type:	Signalized	Delay (sec / veh):	14.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.483

Intersection Setup

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	190.00	100.00	190.00	224.00	100.00	224.00	182.00	100.00	100.00	274.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Base Volume Input [veh/h]	62	1088	108	27	851	95	62	1	95	133	6	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	27	0	0	24	0	0	24	0	0	6
Total Hourly Volume [veh/h]	62	1088	81	27	851	71	62	1	71	133	6	19
Peak Hour Factor	0.9790	0.9790	0.9790	0.9231	0.9231	0.9231	0.8036	0.8036	0.8036	0.7130	0.7130	0.7130
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	278	21	7	230	19	19	0	22	47	2	7
Total Analysis Volume [veh/h]	63	1111	83	29	922	77	77	1	88	187	8	27
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	21	26	0	9	14	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	35	35	2	33	33	16	16	16	16	16
g / C, Green / Cycle	0.05	0.53	0.53	0.03	0.51	0.51	0.25	0.25	0.25	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.04	0.32	0.05	0.02	0.27	0.05	0.06	0.06	0.14	0.00	0.02
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1395	1533	1329	1800	1530
c, Capacity [veh/h]	85	1822	813	51	1749	781	407	387	336	454	386
d1, Uniform Delay [s]	30.35	10.55	7.54	31.04	10.66	8.20	21.33	19.29	26.10	18.25	18.49
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.73	1.53	0.25	9.63	1.14	0.25	0.22	0.30	1.44	0.02	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.61	0.10	0.57	0.53	0.10	0.19	0.23	0.56	0.02	0.07
d, Delay for Lane Group [s/veh]	42.08	12.08	7.79	40.68	11.80	8.46	21.55	19.59	27.54	18.27	18.57
Lane Group LOS	D	B	A	D	B	A	C	B	C	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.17	4.40	0.48	0.55	3.59	0.48	0.95	1.04	2.77	0.09	0.30
50th-Percentile Queue Length [ft/ln]	29.14	109.90	12.12	13.68	89.82	12.02	23.75	25.92	69.35	2.18	7.51
95th-Percentile Queue Length [veh/ln]	2.10	7.83	0.87	0.99	6.47	0.87	1.71	1.87	4.99	0.16	0.54
95th-Percentile Queue Length [ft/ln]	52.45	195.86	21.82	24.63	161.67	21.64	42.75	46.65	124.83	3.93	13.51

Movement, Approach, & Intersection Results

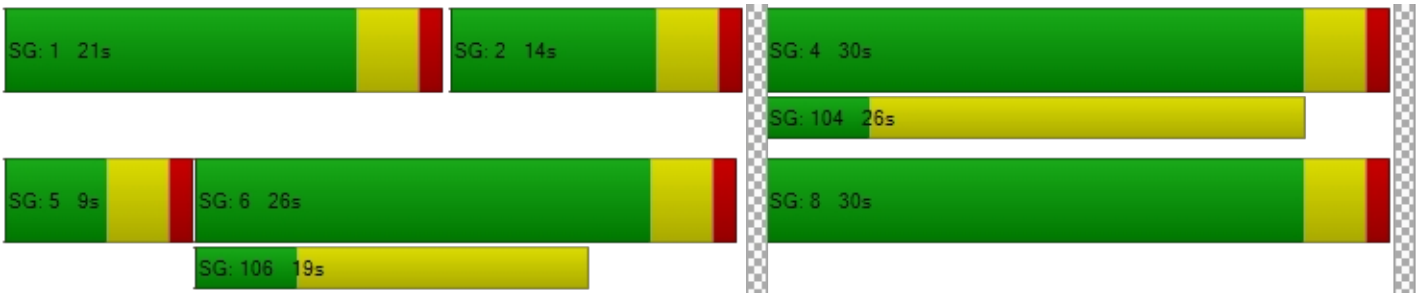
d_M, Delay for Movement [s/veh]	42.08	12.08	7.79	40.68	11.80	8.46	21.55	19.59	19.59	27.54	18.27	18.57
Movement LOS	D	B	A	D	B	A	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	13.30			12.36			20.50			26.12		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	14.45											
Intersection LOS	B											
Intersection V/C	0.483											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.12	0.00	24.12
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.136	0.000	2.214
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	677	308	800	800
d_b, Bicycle Delay [s]	14.22	23.27	11.70	11.70
I_b,int, Bicycle LOS Score for Intersection	2.619	2.428	1.873	1.936
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: US-395/Joshua St

Control Type:	Signalized	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.498

Intersection Setup

Name	US-395			US-395			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	191.00	100.00	226.00	200.00	100.00	223.00	140.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Joshua St			Joshua St		
Base Volume Input [veh/h]	24	1112	101	105	925	21	39	51	7	84	26	137
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	25	0	0	5	0	0	2	0	0	34
Total Hourly Volume [veh/h]	24	1112	76	105	925	16	39	51	5	84	26	103
Peak Hour Factor	0.9210	0.9210	0.9210	0.9016	0.9016	0.9016	0.7782	0.7782	0.7782	0.9063	0.9063	0.9063
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	302	21	29	256	4	13	16	2	23	7	28
Total Analysis Volume [veh/h]	26	1207	83	116	1026	18	50	66	6	93	29	114
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	14	23	0	12	21	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	36	36	6	40	40	11	11	11	11	11
g / C, Green / Cycle	0.03	0.56	0.56	0.09	0.62	0.62	0.17	0.17	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.02	0.35	0.05	0.07	0.30	0.01	0.04	0.04	0.07	0.02	0.07
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1265	1774	1349	1800	1530
c, Capacity [veh/h]	47	1910	853	145	2116	945	266	300	247	304	258
d1, Uniform Delay [s]	31.15	9.84	6.74	29.05	6.79	4.81	26.07	23.40	28.24	22.82	24.26
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.71	1.60	0.23	9.86	0.80	0.04	0.34	0.41	0.95	0.13	1.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.63	0.10	0.80	0.48	0.02	0.19	0.24	0.38	0.10	0.44
d, Delay for Lane Group [s/veh]	40.86	11.44	6.97	38.90	7.59	4.85	26.41	23.81	29.19	22.96	25.44
Lane Group LOS	D	B	A	D	A	A	C	C	C	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.50	4.56	0.44	2.01	2.69	0.07	0.66	0.89	1.33	0.35	1.49
50th-Percentile Queue Length [ft/ln]	12.41	114.07	11.09	50.14	67.27	1.77	16.59	22.30	33.25	8.71	37.32
95th-Percentile Queue Length [veh/ln]	0.89	8.07	0.80	3.61	4.84	0.13	1.19	1.61	2.39	0.63	2.69
95th-Percentile Queue Length [ft/ln]	22.33	201.65	19.97	90.25	121.09	3.19	29.87	40.13	59.84	15.67	67.17

Movement, Approach, & Intersection Results

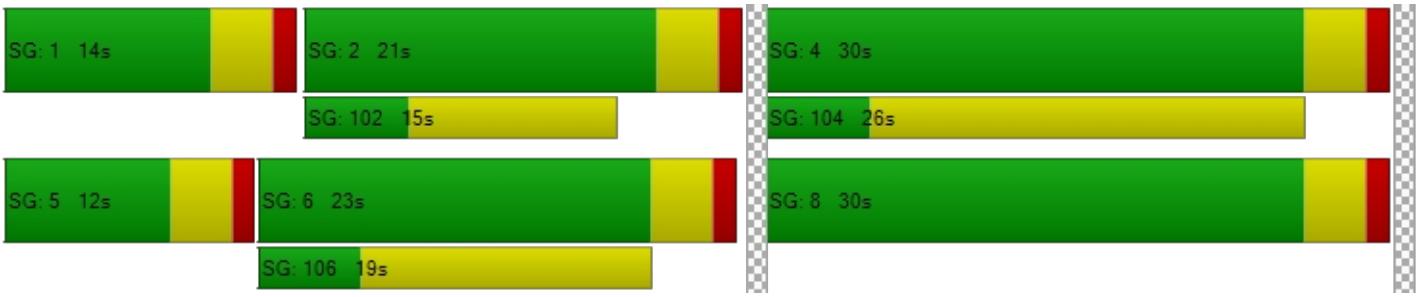
d_M, Delay for Movement [s/veh]	40.86	11.44	6.97	38.90	7.59	4.85	26.41	23.81	23.81	29.19	22.96	25.44
Movement LOS	D	B	A	D	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	11.74			10.68			24.88			26.61		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	13.11											
Intersection LOS	B											
Intersection V/C	0.498											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	24.13	24.13	24.13
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.143	2.026	2.369
Crosswalk LOS	F	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	585	523	800	800
d_b, Bicycle Delay [s]	16.28	17.73	11.70	11.70
I_b,int, Bicycle LOS Score for Intersection	2.666	2.521	1.764	2.005
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Phelan Rd/New Public Rd

Control Type:	Signalized	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.274

Intersection Setup

Name										Phelan Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name										Phelan Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	704	0	0	988	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	704	0	0	988	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	176	0	0	247	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	704	0	0	988	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	90	0	0	90	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	86	86	86	86	86	86
g / C, Green / Cycle	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.00	0.20	0.20	0.00	0.27	0.27
s, saturation flow rate [veh/h]	1800	1800	579	1800	1800	755	1800	1800
c, Capacity [veh/h]	420	420	403	1290	1290	537	1290	1290
d1, Uniform Delay [s]	0.00	0.00	0.00	5.99	5.99	0.00	6.64	6.64
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.00	0.00	0.52	0.52	0.00	0.86	0.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.00	0.00	0.27	0.27	0.00	0.38	0.38
d, Delay for Lane Group [s/veh]	0.00	0.00	0.00	6.51	6.51	0.00	7.50	7.50
Lane Group LOS	A	A	A	A	A	A	A	A
Critical Lane Group	No	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	2.66	2.66	0.00	4.16	4.16
50th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	66.51	66.51	0.00	103.93	103.93
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	4.79	4.79	0.00	7.48	7.48
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	119.71	119.71	0.00	187.08	187.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.51	6.51	0.00	7.50	7.50
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.51			7.50		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.09											
Intersection LOS	A											
Intersection V/C	0.274											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	1.730	1.730	2.865	2.926
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	433	1433	1433
d_b, Bicycle Delay [s]	36.82	36.82	4.82	4.82
I_b,int, Bicycle LOS Score for Intersection	1.560	1.560	2.140	2.375
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Main St/Mesa Linda St

Control Type:	Signalized	Delay (sec / veh):	34.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

Intersection Setup

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	340.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	2	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Base Volume Input [veh/h]	14	5	115	32	3	7	14	804	13	55	948	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	29	0	0	2	0	0	3	0	0	13
Total Hourly Volume [veh/h]	14	5	86	32	3	5	14	804	10	55	948	37
Peak Hour Factor	0.8449	0.8449	0.8449	0.8400	0.8400	0.8400	0.9320	0.9320	0.9320	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	25	10	1	1	4	216	3	15	255	10
Total Analysis Volume [veh/h]	17	6	102	38	4	6	15	863	11	59	1018	40
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	14	0	11	26	0	14	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	10	10	7	22	22	10	25	25
g / C, Green / Cycle	0.36	0.36	0.11	0.11	0.08	0.24	0.24	0.11	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.02	0.00	0.01	0.17	0.17	0.04	0.21	0.03
s, saturation flow rate [veh/h]	1736	1530	1722	1530	1619	3427	1788	1619	4903	1530
c, Capacity [veh/h]	617	544	191	170	126	838	437	180	1362	425
d1, Uniform Delay [s]	18.94	20.02	36.44	35.70	38.63	30.86	30.86	36.90	29.62	24.10
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.76	2.63	0.39	1.92	4.53	8.48	4.81	3.78	0.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.19	0.22	0.04	0.12	0.69	0.69	0.33	0.75	0.09
d, Delay for Lane Group [s/veh]	19.05	20.79	39.07	36.08	40.55	35.39	39.35	41.71	33.41	24.54
Lane Group LOS	B	C	D	D	D	D	D	D	C	C
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.33	1.56	0.97	0.13	0.36	5.73	6.47	1.37	6.59	0.64
50th-Percentile Queue Length [ft/ln]	8.19	39.02	24.30	3.37	8.97	143.32	161.74	34.22	164.63	15.94
95th-Percentile Queue Length [veh/ln]	0.59	2.81	1.75	0.24	0.65	9.66	10.64	2.46	10.79	1.15
95th-Percentile Queue Length [ft/ln]	14.74	70.23	43.74	6.06	16.15	241.49	266.02	61.59	269.85	28.70

Movement, Approach, & Intersection Results

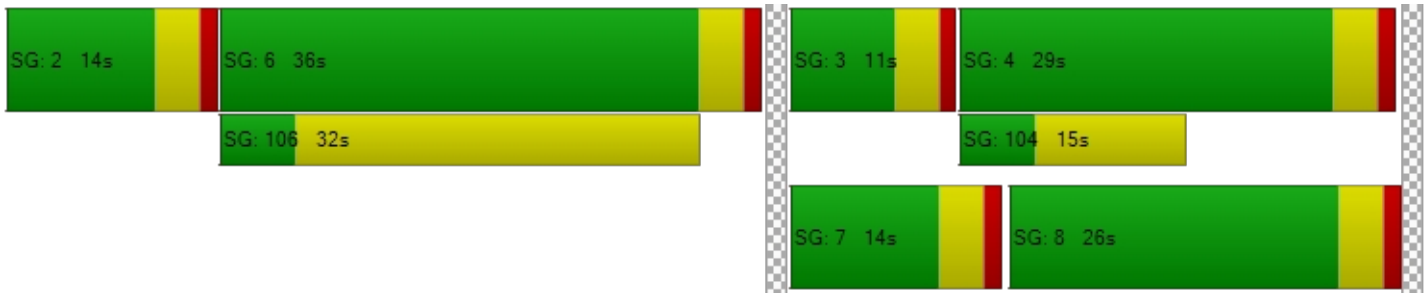
d_M, Delay for Movement [s/veh]	19.05	19.05	20.79	39.07	39.07	36.08	40.55	36.72	39.35	41.71	33.41	24.54
Movement LOS	B	B	C	D	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	20.47			38.70			36.81			33.53		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	34.23											
Intersection LOS	C											
Intersection V/C	0.308											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	0.00	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	1.985	0.000	3.185
Crosswalk LOS	F	A	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	711	222	489	556
d_b, Bicycle Delay [s]	18.69	35.56	25.69	23.47
I_b,int, Bicycle LOS Score for Intersection	1.814	1.642	2.050	2.181
Bicycle LOS	A	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Main St/Key Pointe Ave

Control Type:	Signalized	Delay (sec / veh):	31.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	140.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Base Volume Input [veh/h]	31	57	241	237	84	15	46	969	18	294	1112	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	60	0	0	4	0	0	5	0	0	49
Total Hourly Volume [veh/h]	31	57	181	237	84	11	46	969	13	294	1112	146
Peak Hour Factor	0.8479	0.8479	0.8479	0.9319	0.9319	0.9319	0.9352	0.9352	0.9352	0.9273	0.9273	0.9273
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	17	53	64	23	3	12	259	3	79	300	39
Total Analysis Volume [veh/h]	37	67	213	254	90	12	49	1036	14	317	1199	157
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	85
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	36	0	11	24	0	25	38	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	27	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	C
C, Cycle Length [s]	85	85	85	85	85	85	85	85	85	85	85
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	32	32	32	7	20	20	21	34	34
g / C, Green / Cycle	0.38	0.38	0.38	0.38	0.38	0.08	0.24	0.24	0.25	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.03	0.04	0.14	0.23	0.06	0.03	0.21	0.01	0.20	0.26	0.26
s, saturation flow rate [veh/h]	1313	1800	1530	1117	1763	1619	4903	1530	1619	3427	1695
c, Capacity [veh/h]	498	678	576	452	664	133	1154	360	400	1371	678
d1, Uniform Delay [s]	20.54	17.16	19.20	24.78	17.54	36.91	31.51	25.08	29.96	20.80	20.81
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.29	0.29	1.82	4.99	0.49	7.64	11.07	0.20	14.83	2.52	5.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.10	0.37	0.56	0.15	0.37	0.90	0.04	0.79	0.66	0.66
d, Delay for Lane Group [s/veh]	20.83	17.45	21.02	29.77	18.03	44.54	42.58	25.28	44.79	23.33	25.85
Lane Group LOS	C	B	C	C	B	D	D	C	D	C	C
Critical Lane Group	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.55	0.88	3.22	4.89	1.37	1.19	7.43	0.22	7.16	6.88	7.29
50th-Percentile Queue Length [ft/ln]	13.66	21.97	80.52	122.20	34.31	29.65	185.68	5.54	179.01	171.92	182.20
95th-Percentile Queue Length [veh/ln]	0.98	1.58	5.80	8.51	2.47	2.13	11.90	0.40	11.55	11.18	11.72
95th-Percentile Queue Length [ft/ln]	24.59	39.54	144.94	212.85	61.75	53.37	297.41	9.98	288.72	279.43	292.89

Movement, Approach, & Intersection Results

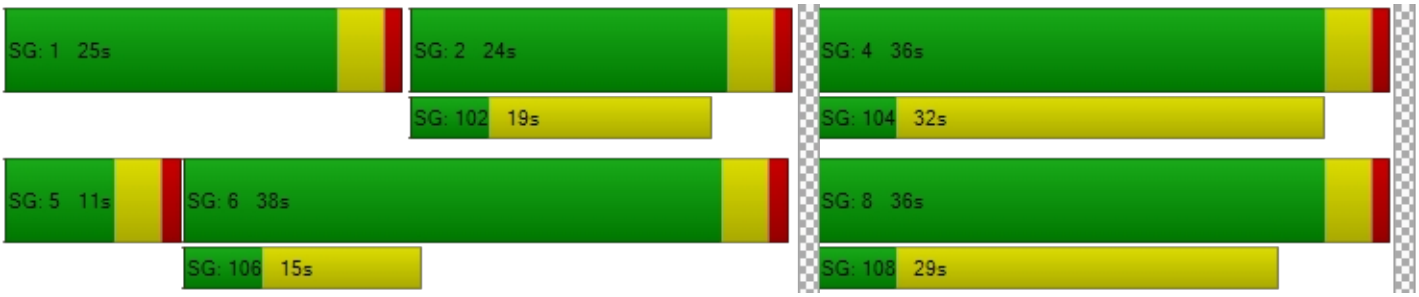
d_M, Delay for Movement [s/veh]	20.83	17.45	21.02	29.77	18.03	18.03	44.54	42.58	25.28	44.79	23.94	25.85
Movement LOS	C	B	C	C	B	B	D	D	C	D	C	C
d_A, Approach Delay [s/veh]	20.24			26.41			42.44			28.07		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	31.76											
Intersection LOS	C											
Intersection V/C	0.635											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	33.98	33.98	33.98	33.98
I_p,int, Pedestrian LOS Score for Intersectio	2.411	2.166	3.262	3.786
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	753	753	471	800
d_b, Bicycle Delay [s]	16.52	16.52	24.85	15.30
I_b,int, Bicycle LOS Score for Intersection	2.182	2.154	2.167	2.507
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Main St/I-15 SB Off Ramp

Control Type:	Signalized	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name	I-15 SB Off Ramp		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	1100.00	530.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	I-15 SB Off Ramp		Main St		Main St	
Base Volume Input [veh/h]	443	350	0	1273	1255	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	88	0	0	0	0
Total Hourly Volume [veh/h]	443	262	0	1273	1255	0
Peak Hour Factor	0.9115	0.9115	1.0000	0.9495	0.9344	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	122	72	0	335	336	0
Total Analysis Volume [veh/h]	486	287	0	1341	1343	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	37	0	0	23	23	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	37	37
g / C, Green / Cycle	0.25	0.25	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.15	0.19	0.27	0.27
s, saturation flow rate [veh/h]	3329	1530	4903	4903
c, Capacity [veh/h]	823	378	3038	3038
d1, Uniform Delay [s]	19.91	20.93	5.98	5.98
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.68	3.15	0.47	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.76	0.44	0.44
d, Delay for Lane Group [s/veh]	20.59	24.08	6.45	6.45
Lane Group LOS	C	C	A	A
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	2.71	3.59	1.68	1.69
50th-Percentile Queue Length [ft/ln]	67.64	89.84	42.08	42.17
95th-Percentile Queue Length [veh/ln]	4.87	6.47	3.03	3.04
95th-Percentile Queue Length [ft/ln]	121.76	161.71	75.74	75.90

Movement, Approach, & Intersection Results

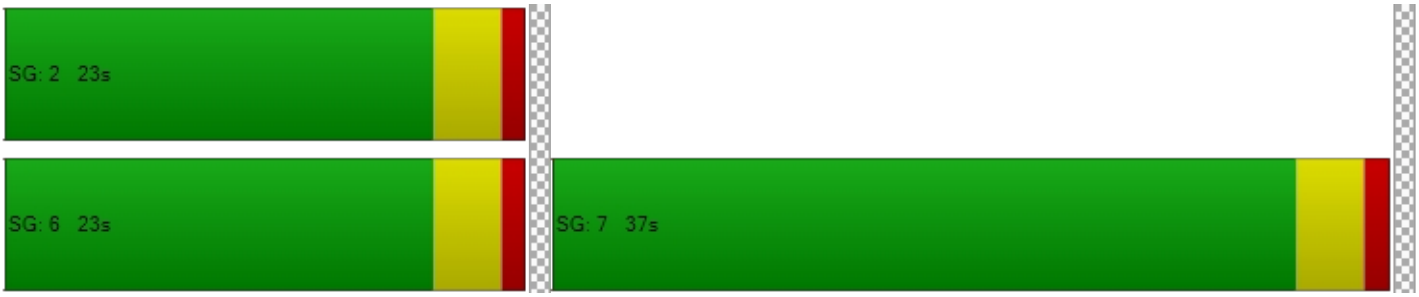
d_M, Delay for Movement [s/veh]	20.59	24.08	0.00	6.45	6.45	0.00
Movement LOS	C	C		A	A	
d_A, Approach Delay [s/veh]	21.88		6.45		6.45	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	9.90					
Intersection LOS	A					
Intersection V/C	0.461					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1100	633	633
d_b, Bicycle Delay [s]	6.08	14.01	14.01
I_b,int, Bicycle LOS Score for Intersection	1.560	2.297	2.298
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Main St/I-15 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	1790.00	100.00	615.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Base Volume Input [veh/h]	190	4	773	0	0	0	0	1449	0	0	1531	404
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	193	0	0	0	0	0	0	0	0	101
Total Hourly Volume [veh/h]	190	4	580	0	0	0	0	1449	0	0	1531	303
Peak Hour Factor	0.9475	0.9475	0.9475	1.0000	1.0000	1.0000	1.0000	0.9761	1.0000	1.0000	0.9692	0.9692
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	1	153	0	0	0	0	371	0	0	395	78
Total Analysis Volume [veh/h]	201	4	612	0	0	0	0	1484	0	0	1580	313
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	14	0	0	0	0	0	46	0	0	46	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	14	0	0	3	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		C	C	C
C, Cycle Length [s]	60	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27		25	25	25
g / C, Green / Cycle	0.45	0.45	0.45		0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.12	0.20	0.20		0.30	0.29	0.29
s, saturation flow rate [veh/h]	1714	1533	1530		4903	4903	1612
c, Capacity [veh/h]	769	688	686		2050	2050	674
d1, Uniform Delay [s]	10.34	11.42	11.42		14.57	14.30	14.38
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.83	2.11	2.12		0.50	0.43	1.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.45	0.45		0.72	0.69	0.70
d, Delay for Lane Group [s/veh]	11.16	13.53	13.54		15.06	14.72	15.73
Lane Group LOS	B	B	B		B	B	B
Critical Lane Group	No	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.51	2.66	2.66		4.29	4.02	4.21
50th-Percentile Queue Length [ft/ln]	37.68	66.42	66.38		107.24	100.52	105.36
95th-Percentile Queue Length [veh/ln]	2.71	4.78	4.78		7.69	7.24	7.58
95th-Percentile Queue Length [ft/ln]	67.82	119.56	119.49		192.15	180.93	189.53

Movement, Approach, & Intersection Results

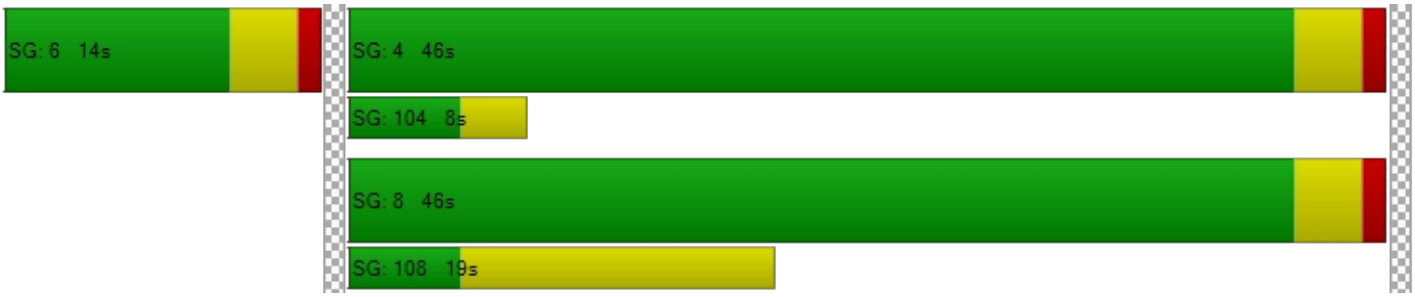
d_M, Delay for Movement [s/veh]	11.16	13.53	13.53	0.00	0.00	0.00	0.00	15.06	0.00	0.00	14.82	15.73
Movement LOS	B	B	B					B			B	B
d_A, Approach Delay [s/veh]	12.95			0.00			15.06			14.97		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	14.61											
Intersection LOS	B											
Intersection V/C	0.504											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.715	1.812	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	333	0	1400	1400
d_b, Bicycle Delay [s]	20.83	30.00	2.70	2.70
I_b,int, Bicycle LOS Score for Intersection	3.226	4.132	2.376	2.382
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	6	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Joshua Rd/Outpost Rd

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Base Volume Input [veh/h]	0	0	0	58	0	105	0	168	0	0	96	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	58	0	105	0	168	0	0	96	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8929	0.8929	0.8929	1.0000	0.8609	1.0000	1.0000	0.8929	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	16	0	29	0	49	0	0	27	0
Total Analysis Volume [veh/h]	0	0	0	65	0	118	0	195	0	0	108	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.10	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.88	10.87	9.23	11.12	10.87	9.32	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	B	A	B	B	A		A			A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.33	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	8.25	0.00	10.58	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.66			9.96			0.00			0.00		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	3.75											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Joshua St/I-15 SB Off-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.040

Intersection Setup

Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	1500.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Joshua St		Joshua St		Joshua St	
Base Volume Input [veh/h]	21	188	0	183	63	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	188	0	183	63	0
Peak Hour Factor	0.7240	0.7240	1.0000	0.9632	0.8289	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	65	0	47	19	0
Total Analysis Volume [veh/h]	29	260	0	190	76	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.26	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.15	9.92	0.00	0.00	0.00	0.00
Movement LOS	B	A		A	A	
95th-Percentile Queue Length [veh/ln]	0.12	1.06	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.11	26.38	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.94		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.18					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 12: Joshua St/I-15 NB On-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Base Volume Input [veh/h]	0	0	123	84	71	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	123	84	71	5
Peak Hour Factor	1.0000	1.0000	0.9115	0.9115	0.9048	0.9048
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	34	23	20	1
Total Analysis Volume [veh/h]	0	0	135	92	78	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.09	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.59	0.00	0.00	0.00
Movement LOS			A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.29	0.29	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	7.27	7.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		4.51		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.29					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Public Rd/North Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

Intersection Level Of Service Report
Intersection 14: New Public Rd/South Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

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Scenario 2 Existing PM

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8/1/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	US-395/Phelan Rd-Main St	215	1049	19	205	815	38	36	568	100	8	736	316	4105

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
2	US-395/Poplar St	1157	34	25	976	6	44	2242

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	US-395/Three Flags Rd	62	1088	108	27	851	95	62	1	95	133	6	25	2553

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	US-395/Joshua St	24	1112	101	105	925	21	39	51	7	84	26	137	2632

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Phelan Rd/New Public Rd	0	0	0	0	0	0	0	704	0	0	988	0	1692

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6	Main St/Mesa Linda St	14	5	115	32	3	7	14	804	13	55	948	50	2060

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Main St/Key Pointe Ave	31	57	241	237	84	15	46	969	18	294	1112	195	3299

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
8	Main St/I-15 SB Off Ramp	443	350	1273	1255	3321

ID	Intersection Name	Northbound			Eastbound	Westbound		Total Volume
		Left	Thru	Right	Thru	Thru	Right	
9	Main St/I-15 NB Ramps	190	4	773	1449	1531	404	4351

ID	Intersection Name	Northbound			Southbound			Eastbound	Westbound	Total Volume
		Left	Thru	Right	Left	Thru	Right	Thru	Thru	
10	Joshua Rd/Outpost Rd	0	0	0	58	0	105	168	96	427

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
11	Joshua St/I-15 SB Off-Ramp	21	188	183	63	455

ID	Intersection Name	Eastbound		Westbound		Total Volume
		Left	Thru	Thru	Right	
12	Joshua St/I-15 NB On-Ramp	123	84	71	5	283

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
13	New Public Rd/North Driveway	0	0	0	0	0	0	0	0	0	0

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	New Public Rd/South Driveway	0	0	0	0	0	0	0	0	0	0

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Scenario 5 Opening Year AM

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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	US-395/Phelan Rd-Main St	Signalized	HCM 6th Edition	WB Right	1.009	118.5	F
2	US-395/Poplar St	Two-way stop	HCM 6th Edition	WB Left	13.003	5,926.1	F
3	US-395/Three Flags Rd	Signalized	HCM 6th Edition	NB Left	0.689	21.4	C
4	US-395/Joshua St	Signalized	HCM 6th Edition	NB Left	0.815	30.1	C
5	Phelan Rd/New Public Rd	Signalized	HCM 6th Edition	SB Left	0.456	5.4	A
6	Main St/Mesa Linda St	Signalized	HCM 6th Edition	WB Left	0.566	47.8	D
7	Main St/Key Pointe Ave	Signalized	HCM 6th Edition	WB Right	0.620	37.9	D
8	Main St/I-15 SB Off Ramp	Signalized	HCM 6th Edition	SB Right	0.746	17.6	B
9	Main St/I-15 NB Ramps	Signalized	HCM 6th Edition	NB Left	0.697	17.4	B
10	Joshua Rd/Outpost Rd	Two-way stop	HCM 6th Edition	SB Left	0.282	28.9	D
11	Joshua St/I-15 SB Off-Ramp	Two-way stop	HCM 6th Edition	SB Right	1.014	52.2	F
12	Joshua St/I-15 NB On-Ramp	Two-way stop	HCM 6th Edition	EB Left	0.183	7.9	A
13	New Public Rd/North Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	
14	New Public Rd/South Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: US-395/Phelan Rd-Main St

Control Type:	Signalized	Delay (sec / veh):	118.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.009

Intersection Setup

Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	242.00	100.00	100.00	337.00	100.00	100.00	246.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	232.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Phelan Rd			Main St		
Base Volume Input [veh/h]	110	645	11	222	870	45	37	688	123	8	377	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	92	97	3	97	69	0	0	138	43	11	759	242
Site-Generated Trips [veh/h]	0	40	0	12	74	2	2	4	0	0	1	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	4	0	0	12	0	0	43	0	0	108
Total Hourly Volume [veh/h]	206	808	10	340	1048	37	40	858	128	19	1152	324
Peak Hour Factor	0.9163	0.9163	0.9163	0.8698	0.8698	0.8698	0.8228	0.8228	0.8228	0.8886	0.8886	0.8886
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	220	3	98	301	11	12	261	39	5	324	91
Total Analysis Volume [veh/h]	225	882	11	391	1205	43	49	1043	156	21	1296	365
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	15	26	0	25	36	0	5	48	0	5	48	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	19	30	0	29	40	0	9	52	0	9	52	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	26	26	25	36	36	5	48	48	5	48	48
g / C, Green / Cycle	0.13	0.22	0.22	0.21	0.30	0.30	0.04	0.40	0.40	0.04	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.14	0.25	0.25	0.24	0.35	0.35	0.03	0.34	0.34	0.01	0.47	0.49
s, saturation flow rate [veh/h]	1619	1800	1792	1619	1800	1778	1619	1800	1719	1619	1800	1668
c, Capacity [veh/h]	202	390	388	337	540	533	67	720	688	67	720	667
d1, Uniform Delay [s]	52.50	47.00	47.00	47.50	42.00	42.00	56.82	32.73	32.79	55.83	36.00	36.00
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	96.44	92.15	92.28	99.59	90.83	93.56	50.29	12.04	12.76	11.62	92.75	113.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.11	1.15	1.15	1.16	1.16	1.17	0.73	0.85	0.85	0.31	1.17	1.22
d, Delay for Lane Group [s/veh]	148.94	139.15	139.28	147.09	132.83	135.56	107.11	44.77	45.55	67.45	128.75	149.01
Lane Group LOS	F	F	F	F	F	F	F	D	D	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	11.24	20.98	20.90	18.86	28.52	28.58	2.35	17.23	16.67	0.81	37.72	38.72
50th-Percentile Queue Length [ft/ln]	280.93	524.52	522.59	471.54	713.05	714.60	58.83	430.78	416.83	20.30	943.12	967.94
95th-Percentile Queue Length [veh/ln]	17.50	30.68	30.58	28.05	40.81	41.02	4.24	24.04	23.37	1.46	53.35	55.85
95th-Percentile Queue Length [ft/ln]	437.52	766.91	764.47	701.37	1020.36	1025.42	105.90	600.98	584.25	36.54	1333.65	1396.33

Movement, Approach, & Intersection Results

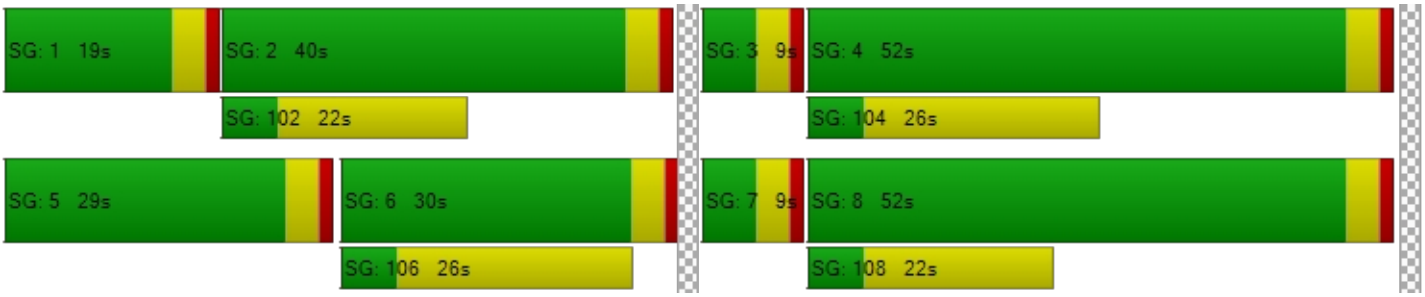
d_M, Delay for Movement [s/veh]	148.94	139.21	139.28	147.09	134.14	135.56	107.11	45.09	45.55	67.45	135.79	149.01
Movement LOS	F	F	F	F	F	F	F	D	D	E	F	F
d_A, Approach Delay [s/veh]	141.17			137.27			47.59			137.80		
Approach LOS	F			F			D			F		
d_I, Intersection Delay [s/veh]	118.51											
Intersection LOS	F											
Intersection V/C	1.009											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	3.231	3.395	3.401	3.587
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	600	800	800
d_b, Bicycle Delay [s]	36.82	29.40	21.60	21.60
I_b,int, Bicycle LOS Score for Intersection	2.485	2.922	2.625	3.036
Bicycle LOS	B	C	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: US-395/Poplar St

Control Type:	Two-way stop	Delay (sec / veh):	5,926.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	13.003

Intersection Setup

Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	0	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	373.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	510.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	US-395			US-395						Poplar St		
Base Volume Input [veh/h]	0	815	18	28	982	0	0	0	0	8	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	55	171	412	65	29	27	7	0	19	70	4	8
Site-Generated Trips [veh/h]	0	37	25	6	68	0	0	0	0	6	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	1056	456	100	1118	27	7	0	19	84	4	14
Peak Hour Factor	1.0000	0.9244	0.9244	0.9078	0.9078	1.0000	1.0000	1.0000	1.0000	0.4583	1.0000	0.4583
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	286	123	28	308	7	2	0	5	46	1	8
Total Analysis Volume [veh/h]	55	1142	493	110	1232	27	7	0	19	183	4	31
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.01	0.00	0.27	0.01	0.00	0.54	0.00	0.04	13.00	0.43	0.10
d_M, Delay for Movement [s/veh]	12.14	0.00	0.00	17.29	0.00	0.00	461.33	542.40	13.58	5926.13	438.04	64.38
Movement LOS	B	A	A	C	A	A	F	F	B	F	F	F
95th-Percentile Queue Length [veh/ln]	0.33	0.00	0.00	1.10	0.00	0.00	1.29	0.14	0.14	23.98	2.14	2.14
95th-Percentile Queue Length [ft/ln]	8.14	0.00	0.00	27.43	0.00	0.00	32.31	3.39	3.39	599.44	53.56	53.56
d_A, Approach Delay [s/veh]	0.40			1.39			134.13			4991.88		
Approach LOS	A			A			F			F		
d_I, Intersection Delay [s/veh]	331.30											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 3: US-395/Three Flags Rd

Control Type:	Signalized	Delay (sec / veh):	21.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.689

Intersection Setup

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	190.00	100.00	190.00	224.00	100.00	224.00	182.00	100.00	100.00	274.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Base Volume Input [veh/h]	39	758	106	32	858	77	30	3	89	188	4	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	638	0	0	355	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	60	30	3	71	0	0	0	0	21	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	35	0	0	20	0	0	23	0	0	9
Total Hourly Volume [veh/h]	41	1486	105	36	1318	60	31	3	70	217	4	27
Peak Hour Factor	0.9280	0.9280	0.9280	0.9329	0.9329	0.9329	0.7961	0.7961	0.7961	0.8296	0.8296	0.8296
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	400	28	10	353	16	10	1	22	65	1	8
Total Analysis Volume [veh/h]	44	1601	113	39	1413	64	39	4	88	262	5	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	33	56	0	19	42	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	64	64	3	63	63	26	26	26	26	26
g / C, Green / Cycle	0.04	0.61	0.61	0.03	0.60	0.60	0.25	0.25	0.25	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.47	0.07	0.02	0.41	0.04	0.03	0.06	0.20	0.00	0.02
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1391	1540	1325	1800	1530
c, Capacity [veh/h]	59	2073	925	54	2062	921	384	381	308	446	379
d1, Uniform Delay [s]	50.12	15.38	8.85	50.28	14.17	8.69	32.32	31.61	43.82	29.80	30.37
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.22	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	17.10	2.86	0.27	16.80	1.87	0.15	0.11	0.32	12.57	0.01	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.77	0.12	0.73	0.69	0.07	0.10	0.24	0.85	0.01	0.09
d, Delay for Lane Group [s/veh]	67.22	18.25	9.12	67.09	16.04	8.83	32.43	31.93	56.39	29.81	30.47
Lane Group LOS	E	B	A	E	B	A	C	C	E	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.39	12.76	1.04	1.24	10.18	0.57	0.80	1.90	7.94	0.10	0.65
50th-Percentile Queue Length [ft/ln]	34.76	319.07	25.98	30.90	254.51	14.33	20.04	47.48	198.42	2.42	16.33
95th-Percentile Queue Length [veh/ln]	2.50	18.62	1.87	2.22	15.41	1.03	1.44	3.42	12.56	0.17	1.18
95th-Percentile Queue Length [ft/ln]	62.57	465.55	46.76	55.62	385.32	25.79	36.08	85.47	313.92	4.36	29.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.22	18.25	9.12	67.09	16.04	8.83	32.43	31.93	31.93	56.39	29.81	30.47
Movement LOS	E	B	A	E	B	A	C	C	C	E	C	C
d_A, Approach Delay [s/veh]	18.89			17.05			32.08			53.09		
Approach LOS	B			B			C			D		
d_I, Intersection Delay [s/veh]	21.37											
Intersection LOS	C											
Intersection V/C	0.689											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	43.89	0.00	43.89
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.330	0.000	2.275
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	990	724	495	495
d_b, Bicycle Delay [s]	13.38	21.38	29.72	29.72
I_b,int, Bicycle LOS Score for Intersection	3.039	2.827	1.814	2.069
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: US-395/Joshua St

Control Type:	Signalized	Delay (sec / veh):	30.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.815

Intersection Setup

Name	US-395			US-395			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	191.00	100.00	226.00	200.00	100.00	223.00	140.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Joshua St			Joshua St		
Base Volume Input [veh/h]	9	764	48	127	904	102	16	24	9	96	55	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	406	0	45	217	0	0	0	0	0	0	232
Site-Generated Trips [veh/h]	0	50	62	26	65	1	2	0	0	264	0	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	28	0	0	27	0	0	2	0	0	99
Total Hourly Volume [veh/h]	9	1251	84	203	1222	80	19	25	7	364	57	297
Peak Hour Factor	0.9117	0.9117	0.9117	0.8984	0.8984	0.8984	0.6736	0.6736	0.6736	0.9610	0.9610	0.9610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	343	23	56	340	22	7	9	3	95	15	77
Total Analysis Volume [veh/h]	10	1372	92	226	1360	89	28	37	10	379	59	309
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	19	43	0	17	41	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	39	39	13	51	51	26	26	26	26	26
g / C, Green / Cycle	0.01	0.43	0.43	0.14	0.56	0.56	0.29	0.29	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.01	0.40	0.06	0.14	0.40	0.06	0.03	0.03	0.27	0.03	0.20
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1030	1735	1380	1800	1530
c, Capacity [veh/h]	22	1483	662	235	1934	863	330	501	421	520	442
d1, Uniform Delay [s]	44.08	24.16	15.42	38.24	14.17	9.08	26.52	23.40	34.99	23.54	28.53
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.32	0.11	0.16
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.98	11.25	0.44	19.55	2.17	0.24	0.11	0.08	17.69	0.10	2.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.93	0.14	0.96	0.70	0.10	0.08	0.09	0.90	0.11	0.70
d, Delay for Lane Group [s/veh]	58.06	35.41	15.85	57.79	16.34	9.32	26.63	23.48	52.68	23.63	31.52
Lane Group LOS	E	D	B	E	B	A	C	C	D	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.30	14.46	1.12	5.96	8.83	0.75	0.45	0.70	10.04	0.88	5.87
50th-Percentile Queue Length [ft/ln]	7.45	361.43	27.99	148.91	220.78	18.72	11.31	17.45	251.03	22.03	146.80
95th-Percentile Queue Length [veh/ln]	0.54	20.69	2.02	9.96	13.70	1.35	0.81	1.26	15.24	1.59	9.85
95th-Percentile Queue Length [ft/ln]	13.40	517.32	50.38	248.98	342.61	33.70	20.35	31.41	380.95	39.65	246.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.06	35.41	15.85	57.79	16.34	9.32	26.63	23.48	23.48	52.68	23.63	31.52
Movement LOS	E	D	B	E	B	A	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	34.34			21.56			24.65			41.63		
Approach LOS	C			C			C			D		
d_I, Intersection Delay [s/veh]	30.14											
Intersection LOS	C											
Intersection V/C	0.815											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.46	36.46	36.46
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.388	2.072	2.723
Crosswalk LOS	F	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	866	822	578	578
d_b, Bicycle Delay [s]	14.46	15.62	22.77	22.77
I_b,int, Bicycle LOS Score for Intersection	2.799	2.964	1.687	2.956
Bicycle LOS	C	C	A	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: Phelan Rd/New Public Rd

Control Type:	Signalized	Delay (sec / veh):	5.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.456

Intersection Setup

Name												
										Phelan Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name										Phelan Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	848	0	0	531	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	112	0	7	86	61	0	0	409	440
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	6	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	2	0	0	0	0	0	110
Total Hourly Volume [veh/h]	0	0	0	112	0	5	86	949	0	0	964	330
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	28	0	1	22	237	0	0	241	83
Total Analysis Volume [veh/h]	0	0	0	112	0	5	86	949	0	0	964	330
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	39	0	0	39	0	0	56	0	0	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	77	77	77	77	77	77
g / C, Green / Cycle	0.10	0.10	0.81	0.81	0.81	0.81	0.81	0.81
(v / s)_i Volume / Saturation Flow Rate	0.00	0.08	0.20	0.26	0.26	0.00	0.37	0.38
s, saturation flow rate [veh/h]	1655	1485	433	1800	1800	600	1800	1646
c, Capacity [veh/h]	208	226	363	1464	1464	504	1464	1338
d1, Uniform Delay [s]	0.00	41.39	6.73	2.25	2.25	0.00	2.65	2.66
k, delay calibration	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	1.82	1.53	0.59	0.59	0.00	1.04	1.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.52	0.24	0.32	0.32	0.00	0.46	0.46
d, Delay for Lane Group [s/veh]	0.00	43.21	8.26	2.84	2.84	0.00	3.69	3.82
Lane Group LOS	A	D	A	A	A	A	A	A
Critical Lane Group	No	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	2.76	0.70	0.95	0.95	0.00	1.61	1.54
50th-Percentile Queue Length [ft/ln]	0.00	68.90	17.46	23.83	23.83	0.00	40.36	38.40
95th-Percentile Queue Length [veh/ln]	0.00	4.96	1.26	1.72	1.72	0.00	2.91	2.77
95th-Percentile Queue Length [ft/ln]	0.00	124.03	31.44	42.90	42.90	0.00	72.66	69.13

Movement, Approach, & Intersection Results

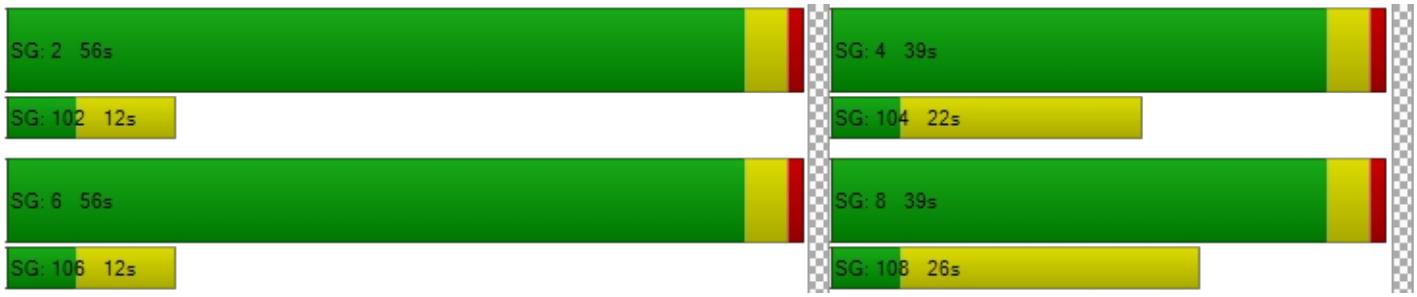
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	43.21	43.21	43.21	8.26	2.84	2.84	0.00	3.73	3.82
Movement LOS	A	A	A	D	D	D	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			43.21			3.29			3.75		
Approach LOS	A			D			A			A		
d_I, Intersection Delay [s/veh]	5.44											
Intersection LOS	A											
Intersection V/C	0.456											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.93	38.93	38.93	38.93
I_p,int, Pedestrian LOS Score for Intersectio	1.719	2.159	2.956	3.440
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	737	737	1095	1095
d_b, Bicycle Delay [s]	18.95	18.95	9.73	9.73
I_b,int, Bicycle LOS Score for Intersection	1.560	1.756	2.413	2.718
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Main St/Mesa Linda St

Control Type:	Signalized	Delay (sec / veh):	47.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.566

Intersection Setup

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	340.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	2	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Base Volume Input [veh/h]	1	0	28	46	1	16	14	918	7	75	593	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	8	0	37	0	0	0	0	213	24	212	1004	0
Site-Generated Trips [veh/h]	1	0	2	0	0	0	0	15	1	6	12	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	17	0	0	4	0	0	8	0	0	5
Total Hourly Volume [veh/h]	10	0	51	48	1	13	15	1183	24	296	1633	13
Peak Hour Factor	0.5938	0.5938	0.5938	0.8289	0.8289	0.8289	0.9621	0.9621	0.9621	0.8382	0.8382	0.8382
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	21	14	0	4	4	307	6	88	487	4
Total Analysis Volume [veh/h]	17	0	86	58	1	16	16	1230	25	353	1948	16
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	14	0	9	37	0	33	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	10	10	5	33	33	29	57	57
g / C, Green / Cycle	0.27	0.27	0.08	0.08	0.04	0.28	0.28	0.24	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.01	0.06	0.04	0.01	0.01	0.26	0.26	0.22	0.42	0.01
s, saturation flow rate [veh/h]	1619	1530	1620	1530	1619	3237	1683	1619	4631	1445
c, Capacity [veh/h]	432	408	135	128	67	890	463	391	2200	686
d1, Uniform Delay [s]	32.61	34.19	52.32	50.95	55.65	42.34	42.34	44.12	28.55	16.72
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.17	1.17	9.95	2.02	8.10	17.02	27.20	26.49	5.70	0.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.21	0.44	0.13	0.24	0.93	0.93	0.90	0.89	0.02
d, Delay for Lane Group [s/veh]	32.78	35.36	62.28	52.96	63.76	59.36	69.54	70.62	34.25	16.79
Lane Group LOS	C	D	E	D	E	E	E	E	C	B
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.39	2.10	2.07	0.52	0.61	13.40	15.24	12.58	16.52	0.23
50th-Percentile Queue Length [ft/ln]	9.77	52.44	51.69	12.97	15.17	334.89	380.98	314.45	413.12	5.84
95th-Percentile Queue Length [veh/ln]	0.70	3.78	3.72	0.93	1.09	19.40	21.64	18.39	23.19	0.42
95th-Percentile Queue Length [ft/ln]	17.59	94.40	93.04	23.35	27.31	484.95	541.03	459.86	579.79	10.52

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.78	32.78	35.36	62.28	62.28	52.96	63.76	62.70	69.54	70.62	34.25	16.79
Movement LOS	C	C	D	E	E	D	E	E	E	E	C	B
d_A, Approach Delay [s/veh]	34.94			60.29			62.85			39.67		
Approach LOS	C			E			E			D		
d_I, Intersection Delay [s/veh]	47.77											
Intersection LOS	D											
Intersection V/C	0.566											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	1.999	0.000	3.502
Crosswalk LOS	F	A	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	167	550	950
d_b, Bicycle Delay [s]	32.27	50.42	31.54	16.54
I_b,int, Bicycle LOS Score for Intersection	1.758	1.690	2.263	2.837
Bicycle LOS	A	A	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Main St/Key Pointe Ave

Control Type:	Signalized	Delay (sec / veh):	37.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	140.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Base Volume Input [veh/h]	4	12	97	137	26	11	30	927	8	193	607	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	222	0	0	1293	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	17	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	25	0	0	3	0	0	2	0	0	35
Total Hourly Volume [veh/h]	4	12	76	142	27	8	31	1203	6	201	1942	104
Peak Hour Factor	0.8188	0.8188	0.8188	0.8184	0.8184	0.8184	0.9333	0.9333	0.9333	0.8560	0.8560	0.8560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	23	43	8	2	8	322	2	59	567	30
Total Analysis Volume [veh/h]	5	15	93	174	33	10	33	1289	6	235	2269	121
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	36	0	16	45	0	29	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	27	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	32	32	32	12	41	41	25	54	54
g / C, Green / Cycle	0.29	0.29	0.29	0.29	0.29	0.11	0.37	0.37	0.23	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.00	0.01	0.06	0.13	0.02	0.02	0.26	0.00	0.15	0.46	0.47
s, saturation flow rate [veh/h]	1385	1800	1530	1306	1729	1619	4903	1530	1619	3427	1754
c, Capacity [veh/h]	418	524	445	414	503	177	1828	570	368	1682	861
d1, Uniform Delay [s]	30.67	27.89	29.44	34.12	28.36	44.56	29.36	21.73	38.42	26.33	26.71
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.05	0.10	1.07	3.12	0.33	2.33	2.32	0.03	8.23	11.08	20.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.03	0.21	0.42	0.09	0.19	0.71	0.01	0.64	0.93	0.95
d, Delay for Lane Group [s/veh]	30.72	27.99	30.51	37.23	28.69	46.89	31.68	21.76	46.65	37.41	47.37
Lane Group LOS	C	C	C	D	C	D	C	C	D	D	D
Critical Lane Group	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.11	0.30	1.99	4.28	0.87	0.90	9.35	0.10	6.29	19.67	22.97
50th-Percentile Queue Length [ft/ln]	2.65	7.47	49.79	106.93	21.87	22.59	233.84	2.45	157.23	491.75	574.20
95th-Percentile Queue Length [veh/ln]	0.19	0.54	3.58	7.67	1.57	1.63	14.37	0.18	10.40	26.94	30.83
95th-Percentile Queue Length [ft/ln]	4.76	13.45	89.62	191.72	39.37	40.65	359.23	4.41	260.05	673.59	770.69

Movement, Approach, & Intersection Results

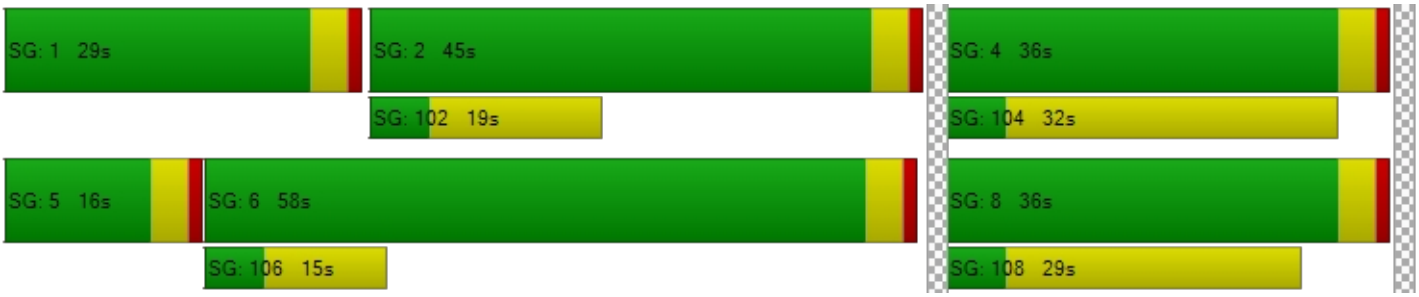
d_M, Delay for Movement [s/veh]	30.72	27.99	30.51	37.23	28.69	28.69	46.89	31.68	21.76	46.65	40.47	47.37
Movement LOS	C	C	C	D	C	C	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	30.18			35.54			32.01			41.34		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	37.86											
Intersection LOS	D											
Intersection V/C	0.620											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
I_p,int, Pedestrian LOS Score for Intersectio	2.279	2.093	3.481	3.887
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	582	582	745	982
d_b, Bicycle Delay [s]	27.65	27.65	21.64	14.25
I_b,int, Bicycle LOS Score for Intersection	1.787	1.923	2.291	3.023
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Main St/I-15 SB Off Ramp

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.746

Intersection Setup

Name	I-15 SB Off Ramp		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	1100.00	530.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	I-15 SB Off Ramp		Main St		Main St	
Base Volume Input [veh/h]	310	177	0	1010	758	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	546	0	116	699	0
Site-Generated Trips [veh/h]	0	3	0	16	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	183	0	0	0	0
Total Hourly Volume [veh/h]	322	550	0	1182	1502	0
Peak Hour Factor	0.8943	0.8943	1.0000	0.9467	0.8892	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	90	154	0	312	422	0
Total Analysis Volume [veh/h]	360	615	0	1249	1689	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	46	0	0	14	14	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	25	25
g / C, Green / Cycle	0.45	0.45	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.11	0.40	0.25	0.34
s, saturation flow rate [veh/h]	3329	1530	4903	4903
c, Capacity [veh/h]	1506	692	2031	2031
d1, Uniform Delay [s]	10.09	15.04	13.81	15.70
k, delay calibration	0.11	0.15	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.08	5.45	1.40	4.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.89	0.61	0.83
d, Delay for Lane Group [s/veh]	10.17	20.48	15.22	19.85
Lane Group LOS	B	C	B	B
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.19	7.02	3.59	5.89
50th-Percentile Queue Length [ft/ln]	29.72	175.44	89.73	147.31
95th-Percentile Queue Length [veh/ln]	2.14	11.36	6.46	9.87
95th-Percentile Queue Length [ft/ln]	53.49	284.06	161.51	246.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.17	20.48	0.00	15.22	19.85	0.00
Movement LOS	B	C		B	B	
d_A, Approach Delay [s/veh]	16.67		15.22		19.85	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	17.58					
Intersection LOS	B					
Intersection V/C	0.746					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1400	333	333
d_b, Bicycle Delay [s]	2.70	20.83	20.83
I_b,int, Bicycle LOS Score for Intersection	1.560	2.247	2.489
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 9: Main St/I-15 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.697

Intersection Setup

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	1790.00	100.00	615.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Base Volume Input [veh/h]	82	3	411	0	0	0	0	1021	0	0	1103	460
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	571	0	0	0	0	0	0	23	0	0	128	0
Site-Generated Trips [veh/h]	3	0	0	0	0	0	1	15	0	0	12	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	107	0	0	0	0	0	0	0	0	120
Total Hourly Volume [veh/h]	659	3	320	0	0	0	1	1100	0	0	1287	358
Peak Hour Factor	0.9295	0.9295	0.9295	1.0000	1.0000	1.0000	1.0000	0.9188	1.0000	1.0000	0.9304	0.9304
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	177	1	86	0	0	0	0	299	0	0	346	96
Total Analysis Volume [veh/h]	709	3	344	0	0	0	1	1197	0	0	1383	385
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	31	0	0	0	0	0	29	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	14	0	0	3	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		C	C	C
C, Cycle Length [s]	60	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	31		21	21	21
g / C, Green / Cycle	0.51	0.51	0.51		0.36	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.41	0.11	0.11		0.24	0.27	0.28
s, saturation flow rate [veh/h]	1714	1534	1530		4903	4903	1560
c, Capacity [veh/h]	872	780	778		1756	1756	559
d1, Uniform Delay [s]	12.36	8.17	8.17		16.35	16.94	17.24
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	8.20	0.66	0.66		0.47	0.68	3.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.22	0.22		0.68	0.76	0.79
d, Delay for Lane Group [s/veh]	20.55	8.83	8.84		16.82	17.62	20.37
Lane Group LOS	C	A	A		B	B	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.84	1.09	1.09		3.73	4.30	4.75
50th-Percentile Queue Length [ft/ln]	195.97	27.25	27.27		93.20	107.52	118.77
95th-Percentile Queue Length [veh/ln]	12.43	1.96	1.96		6.71	7.70	8.33
95th-Percentile Queue Length [ft/ln]	310.76	49.05	49.08		167.76	192.54	208.14

Movement, Approach, & Intersection Results

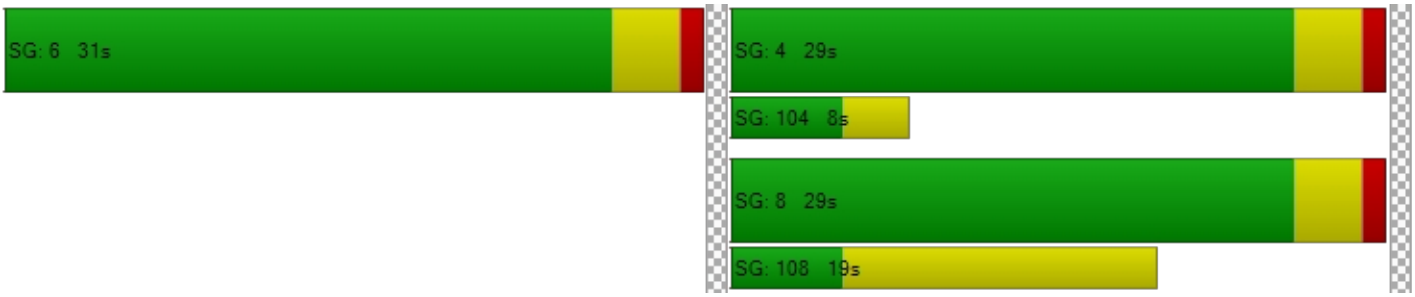
d_M, Delay for Movement [s/veh]	20.55	8.83	8.83	0.00	0.00	0.00	0.00	16.82	0.00	0.00	17.73	20.37
Movement LOS	C	A	A					B			B	C
d_A, Approach Delay [s/veh]	16.70			0.00			16.82			18.31		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	17.44											
Intersection LOS	B											
Intersection V/C	0.697											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.642	1.899	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	900	0	833	833
d_b, Bicycle Delay [s]	9.08	30.00	10.21	10.21
I_b,int, Bicycle LOS Score for Intersection	3.479	4.132	2.218	2.338
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	6	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Joshua Rd/Outpost Rd

Control Type:	Two-way stop	Delay (sec / veh):	28.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.282

Intersection Setup

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Base Volume Input [veh/h]	0	0	0	39	0	108	0	90	0	0	117	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	45	0	0	232	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	88	0	0	302	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	41	0	112	0	227	0	0	656	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.6952	0.6952	0.6952	1.0000	0.6992	1.0000	1.0000	0.9126	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	15	0	40	0	81	0	0	180	0
Total Analysis Volume [veh/h]	0	0	0	59	0	161	0	325	0	0	719	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.28	0.00	0.37	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	36.18	20.59	9.99	28.88	20.59	18.21	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	E	C	A	D	C	C		A			A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.11	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	27.86	0.00	42.46	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	22.26			21.07			0.00			0.00		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	3.67											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 11: Joshua St/I-15 SB Off-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	52.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.014

Intersection Setup

Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	1500.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Joshua St		Joshua St		Joshua St	
Base Volume Input [veh/h]	66	207	0	154	30	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	213	0	45	19	0
Site-Generated Trips [veh/h]	0	299	0	88	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	727	0	293	54	0
Peak Hour Factor	0.7147	0.7147	1.0000	0.8556	0.8194	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	254	0	86	16	0
Total Analysis Volume [veh/h]	97	1017	0	342	66	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	1.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.11	52.19	0.00	0.00	0.00	0.00
Movement LOS	B	F		A	A	
95th-Percentile Queue Length [veh/ln]	0.57	20.39	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.24	509.85	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	48.70		0.00		0.00	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	35.65					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 12: Joshua St/I-15 NB On-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.183

Intersection Setup

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Base Volume Input [veh/h]	0	0	107	111	32	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	42	3	19	0
Site-Generated Trips [veh/h]	0	0	87	1	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	240	119	56	12
Peak Hour Factor	1.0000	1.0000	0.8720	0.8720	0.6797	0.6797
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	69	34	21	4
Total Analysis Volume [veh/h]	0	0	275	136	82	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.18	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.93	0.00	0.00	0.00
Movement LOS			A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.67	0.67	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	16.69	16.69	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		5.30		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.27					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Public Rd/North Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

Intersection Level Of Service Report
Intersection 14: New Public Rd/South Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

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Scenario 5 Opening Year AM

8/1/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	US-395/Phelan Rd-Main St	206	808	14	340	1048	49	40	858	171	19	1152	432	5137

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	US-395/Poplar St	55	1056	456	100	1118	27	7	0	19	84	4	14	2940

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	US-395/Three Flags Rd	41	1486	140	36	1318	80	31	3	93	217	4	36	3485

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	US-395/Joshua St	9	1251	112	203	1222	107	19	25	9	364	57	396	3774

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Phelan Rd/New Public Rd	0	0	0	112	0	7	86	949	0	0	964	440	2558

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6	Main St/Mesa Linda St	10	0	68	48	1	17	15	1183	32	296	1633	18	3321

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Main St/Key Pointe Ave	4	12	101	142	27	11	31	1203	8	201	1942	139	3821

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
8	Main St/I-15 SB Off Ramp	322	733	1182	1502	3739

ID	Intersection Name	Northbound			Eastbound	Westbound		Total Volume
		Left	Thru	Right	Thru	Thru	Right	
9	Main St/I-15 NB Ramps	659	3	427	1100	1287	478	3954

ID	Intersection Name	Northbound			Southbound			Eastbound	Westbound	Total Volume
		Left	Thru	Right	Left	Thru	Right	Thru	Thru	
10	Joshua Rd/Outpost Rd	0	0	0	41	0	112	227	656	1036

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
11	Joshua St/I-15 SB Off-Ramp	69	727	293	54	1143

ID	Intersection Name	Eastbound		Westbound		Total Volume
		Left	Thru	Thru	Right	
12	Joshua St/I-15 NB On-Ramp	240	119	56	12	427

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
13	New Public Rd/North Driveway	0	0	0	0	0	0	0	0	0	0

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	New Public Rd/South Driveway	0	0	0	0	0	0	0	0	0	0

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Scenario 6 Opening Year PM

Report File: C:\...\Opening Year PM.pdf

8/1/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	US-395/Phelan Rd-Main St	Signalized	HCM 6th Edition	EB Right	1.184	183.1	F
2	US-395/Poplar St	Two-way stop	HCM 6th Edition	WB Left	31.814	10,000.0	F
3	US-395/Three Flags Rd	Signalized	HCM 6th Edition	NB Left	0.648	21.0	C
4	US-395/Joshua St	Signalized	HCM 6th Edition	NB Left	0.853	41.5	D
5	Phelan Rd/New Public Rd	Signalized	HCM 6th Edition	EB Left	0.797	22.8	C
6	Main St/Mesa Linda St	Signalized	HCM 6th Edition	WB Left	0.684	44.7	D
7	Main St/Key Pointe Ave	Signalized	HCM 6th Edition	WB Left	0.935	66.9	E
8	Main St/I-15 SB Off Ramp	Signalized	HCM 6th Edition	SB Right	0.682	13.0	B
9	Main St/I-15 NB Ramps	Signalized	HCM 6th Edition	EB Thru	0.553	14.7	B
10	Joshua Rd/Outpost Rd	Two-way stop	HCM 6th Edition	SB Left	0.385	38.1	E
11	Joshua St/I-15 SB Off-Ramp	Two-way stop	HCM 6th Edition	SB Left	0.081	15.6	C
12	Joshua St/I-15 NB On-Ramp	Two-way stop	HCM 6th Edition	EB Left	0.419	9.1	A
13	New Public Rd/North Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	
14	New Public Rd/South Driveway	Two-way stop	HCM 6th Edition		0.000	0.0	

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: US-395/Phelan Rd-Main St

Control Type:	Signalized	Delay (sec / veh):	183.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.184

Intersection Setup

Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	242.00	100.00	100.00	337.00	100.00	100.00	246.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	232.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Phelan Rd			Main St		
Base Volume Input [veh/h]	215	1049	19	205	815	38	36	568	100	8	736	316
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	45	67	10	334	98	0	0	619	93	6	179	80
Site-Generated Trips [veh/h]	0	71	0	13	55	2	2	2	0	0	3	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	11	0	0	49	0	0	106
Total Hourly Volume [veh/h]	269	1229	22	560	1001	31	39	1212	148	14	947	316
Peak Hour Factor	0.9869	0.9869	0.9869	0.9501	0.9501	0.9501	0.8482	0.8482	0.8482	0.9632	0.9632	0.9632
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	311	6	147	263	8	11	357	44	4	246	82
Total Analysis Volume [veh/h]	273	1245	22	589	1054	33	46	1429	174	15	983	328
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	20	30	0	31	41	0	5	38	0	5	38	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	34	0	35	45	0	9	42	0	9	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	30	30	31	41	41	5	38	38	5	38	38
g / C, Green / Cycle	0.17	0.25	0.25	0.26	0.34	0.34	0.04	0.32	0.32	0.04	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.17	0.35	0.35	0.36	0.30	0.30	0.03	0.45	0.46	0.01	0.38	0.38
s, saturation flow rate [veh/h]	1619	1800	1789	1619	1800	1781	1619	1800	1733	1619	1800	1649
c, Capacity [veh/h]	270	450	447	418	615	608	67	570	549	67	570	522
d1, Uniform Delay [s]	50.00	45.00	45.00	44.50	37.29	37.38	56.72	41.00	41.00	55.62	41.00	41.00
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	57.80	197.63	198.97	197.51	17.07	17.75	43.80	199.16	210.86	7.47	103.70	110.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.01	1.41	1.41	1.41	0.89	0.89	0.68	1.42	1.45	0.22	1.19	1.21
d, Delay for Lane Group [s/veh]	107.80	242.63	243.97	242.01	54.36	55.13	100.51	240.16	251.86	63.09	144.70	151.34
Lane Group LOS	F	F	F	F	D	E	F	F	F	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	12.03	37.29	37.23	34.62	16.92	16.97	2.14	47.18	47.21	0.56	32.07	30.33
50th-Percentile Queue Length [ft/ln]	300.64	932.28	930.74	865.54	423.06	424.22	53.57	1179.51	1180.13	14.07	801.64	758.27
95th-Percentile Queue Length [veh/ln]	17.82	56.24	56.19	52.62	23.67	23.72	3.86	70.84	71.35	1.01	46.12	44.12
95th-Percentile Queue Length [ft/ln]	445.42	1405.94	1404.85	1315.56	591.72	593.11	96.42	1771.04	1783.84	25.32	1153.03	1103.12

Movement, Approach, & Intersection Results

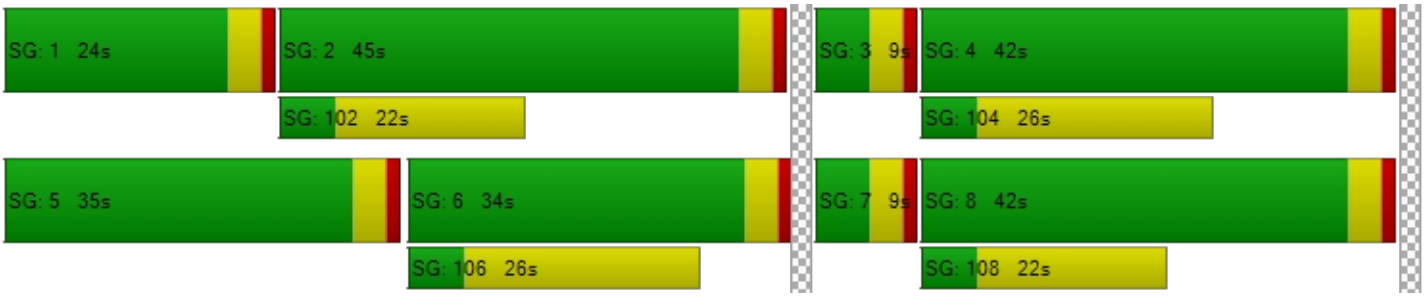
d_M, Delay for Movement [s/veh]	107.80	243.29	243.97	242.01	54.73	55.13	100.51	245.23	251.86	63.09	146.74	151.34
Movement LOS	F	F	F	F	D	E	F	F	F	E	F	F
d_A, Approach Delay [s/veh]	219.28			120.56			241.90			146.93		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	183.08											
Intersection LOS	F											
Intersection V/C	1.184											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	3.342	3.500	3.457	3.656
Crosswalk LOS	C	D	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	683	633	633
d_b, Bicycle Delay [s]	33.75	26.00	28.02	28.02
I_b,int, Bicycle LOS Score for Intersection	2.837	2.951	2.960	2.741
Bicycle LOS	C	C	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: US-395/Poplar St

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	31.814

Intersection Setup

Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	0	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	373.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	510.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	US-395			US-395						Poplar St		
Base Volume Input [veh/h]	0	1157	34	25	976	0	0	0	0	6	0	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	32	37	83	15	168	15	23	0	47	370	18	44
Site-Generated Trips [veh/h]	0	64	11	3	52	0	0	0	0	29	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	1304	129	44	1235	15	23	0	47	405	18	97
Peak Hour Factor	1.0000	0.9433	0.9433	0.9107	0.9107	1.0000	1.0000	1.0000	1.0000	0.7576	1.0000	0.7576
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	346	34	12	339	4	6	0	12	134	5	32
Total Analysis Volume [veh/h]	32	1382	137	48	1356	15	23	0	47	535	18	128
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.01	0.00	0.11	0.01	0.00	0.00	0.00	0.12	31.81	1.52	0.36
d_M, Delay for Movement [s/veh]	12.58	0.00	0.00	14.06	0.00	0.00	10000.0	334.86	15.21	10000.0	785.14	492.24
Movement LOS	B	A	A	B	A	A	F	F	C	F	F	F
95th-Percentile Queue Length [veh/ln]	0.20	0.00	0.00	0.36	0.00	0.00	4.71	0.40	0.40	67.73	12.81	12.81
95th-Percentile Queue Length [ft/ln]	5.03	0.00	0.00	9.00	0.00	0.00	117.68	9.91	9.91	1693.37	320.16	320.16
d_A, Approach Delay [s/veh]	0.26			0.48			3295.93			7969.37		
Approach LOS	A			A			F			F		
d_I, Intersection Delay [s/veh]	1520.81											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 3: US-395/Three Flags Rd

Control Type:	Signalized	Delay (sec / veh):	21.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.648

Intersection Setup

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	190.00	100.00	190.00	224.00	100.00	224.00	182.00	100.00	100.00	274.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Base Volume Input [veh/h]	62	1088	108	27	851	95	62	1	95	133	6	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	152	0	0	348	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	70	39	4	77	0	0	0	0	45	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	38	0	0	25	0	0	25	0	0	8
Total Hourly Volume [veh/h]	64	1354	113	32	1310	74	64	1	74	183	6	23
Peak Hour Factor	0.9790	0.9790	0.9790	0.9231	0.9231	0.9231	0.8036	0.8036	0.8036	0.7130	0.7130	0.7130
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	346	29	9	355	20	20	0	23	64	2	8
Total Analysis Volume [veh/h]	65	1383	115	35	1419	80	80	1	92	257	8	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	36	41	0	9	14	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	42	42	3	41	41	23	23	23	23	23
g / C, Green / Cycle	0.05	0.53	0.53	0.03	0.51	0.51	0.29	0.29	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.04	0.40	0.08	0.02	0.41	0.05	0.06	0.06	0.19	0.00	0.02
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1389	1532	1324	1800	1530
c, Capacity [veh/h]	84	1806	806	55	1745	779	450	443	376	521	443
d1, Uniform Delay [s]	37.48	15.01	9.68	38.16	16.45	10.17	23.30	21.51	30.51	20.30	20.64
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.29	3.17	0.37	11.64	4.27	0.26	0.19	0.23	2.20	0.01	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.77	0.14	0.64	0.81	0.10	0.18	0.21	0.68	0.02	0.07
d, Delay for Lane Group [s/veh]	51.78	18.18	10.05	49.80	20.72	10.43	23.49	21.74	32.71	20.31	20.71
Lane Group LOS	D	B	B	D	C	B	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.52	8.86	0.95	0.82	9.92	0.68	1.18	1.31	4.86	0.11	0.43
50th-Percentile Queue Length [ft/ln]	37.96	221.40	23.69	20.45	247.94	16.91	29.40	32.66	121.61	2.63	10.75
95th-Percentile Queue Length [veh/ln]	2.73	13.74	1.71	1.47	15.08	1.22	2.12	2.35	8.48	0.19	0.77
95th-Percentile Queue Length [ft/ln]	68.32	343.41	42.65	36.81	377.06	30.44	52.92	58.79	212.04	4.74	19.36

Movement, Approach, & Intersection Results

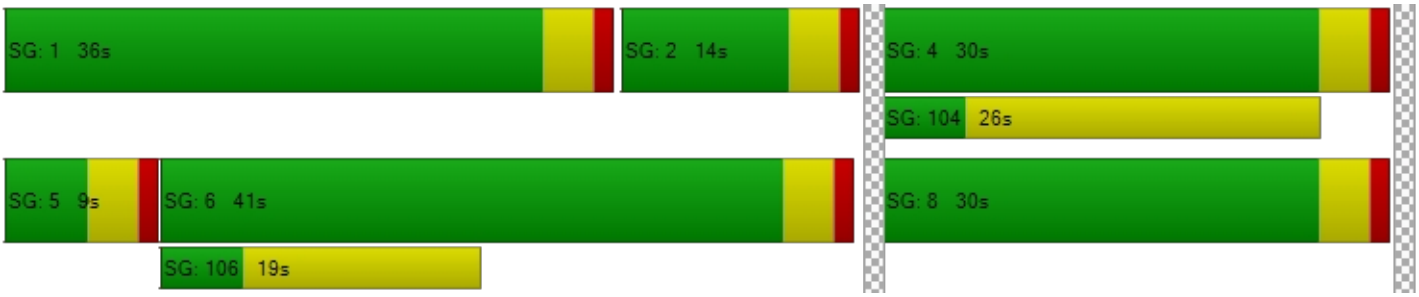
d_M, Delay for Movement [s/veh]	51.78	18.18	10.05	49.80	20.72	10.43	23.49	21.74	21.74	32.71	20.31	20.71
Movement LOS	D	B	B	D	C	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	18.98			20.85			22.55			31.08		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	20.97											
Intersection LOS	C											
Intersection V/C	0.648											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	31.51	0.00	31.51
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.344	0.000	2.259
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	925	250	650	650
d_b, Bicycle Delay [s]	11.56	30.63	18.23	18.23
I_b,int, Bicycle LOS Score for Intersection	2.880	2.846	1.886	2.063
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: US-395/Joshua St

Control Type:	Signalized	Delay (sec / veh):	41.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.853

Intersection Setup

Name	US-395			US-395			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	191.00	100.00	226.00	200.00	100.00	223.00	140.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Joshua St			Joshua St		
Base Volume Input [veh/h]	24	1112	101	105	925	21	39	51	7	84	26	137
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	96	0	210	232	0	0	0	0	0	0	55
Site-Generated Trips [veh/h]	0	69	212	49	70	3	2	0	0	136	0	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	79	0	0	6	0	0	2	0	0	59
Total Hourly Volume [veh/h]	25	1321	238	368	1264	19	43	53	5	223	27	176
Peak Hour Factor	0.9210	0.9210	0.9210	0.9016	0.9016	0.9016	0.7782	0.7782	0.7782	0.9063	0.9063	0.9063
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	359	65	102	350	5	14	17	2	62	7	49
Total Analysis Volume [veh/h]	27	1434	258	408	1402	21	55	68	6	246	30	194
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	37	54	0	36	53	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	50	50	32	79	79	26	26	26	26	26
g / C, Green / Cycle	0.03	0.42	0.42	0.26	0.66	0.66	0.22	0.22	0.22	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.02	0.42	0.17	0.25	0.41	0.01	0.05	0.04	0.18	0.02	0.13
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1175	1775	1347	1800	1530
c, Capacity [veh/h]	41	1435	641	428	2253	1006	280	385	285	390	332
d1, Uniform Delay [s]	57.90	34.84	24.37	43.39	11.91	7.13	41.54	38.37	50.84	37.39	42.11
k, delay calibration	0.11	0.50	0.50	0.41	0.50	0.50	0.11	0.11	0.25	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.01	23.60	1.88	29.52	1.31	0.04	0.34	0.24	16.11	0.08	1.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	1.00	0.40	0.95	0.62	0.02	0.20	0.19	0.86	0.08	0.58
d, Delay for Lane Group [s/veh]	73.91	58.44	26.25	72.90	13.21	7.17	41.87	38.61	66.95	37.48	43.74
Lane Group LOS	E	E	C	E	B	A	D	D	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.98	24.19	5.24	14.93	9.70	0.18	1.38	1.77	8.56	0.70	5.16
50th-Percentile Queue Length [ft/ln]	24.45	604.77	131.00	373.32	242.44	4.43	34.58	44.14	213.97	17.41	128.93
95th-Percentile Queue Length [veh/ln]	1.76	32.26	8.99	21.27	14.80	0.32	2.49	3.18	13.36	1.25	8.88
95th-Percentile Queue Length [ft/ln]	44.01	806.43	224.86	531.75	370.12	7.98	62.25	79.46	333.92	31.34	222.03

Movement, Approach, & Intersection Results

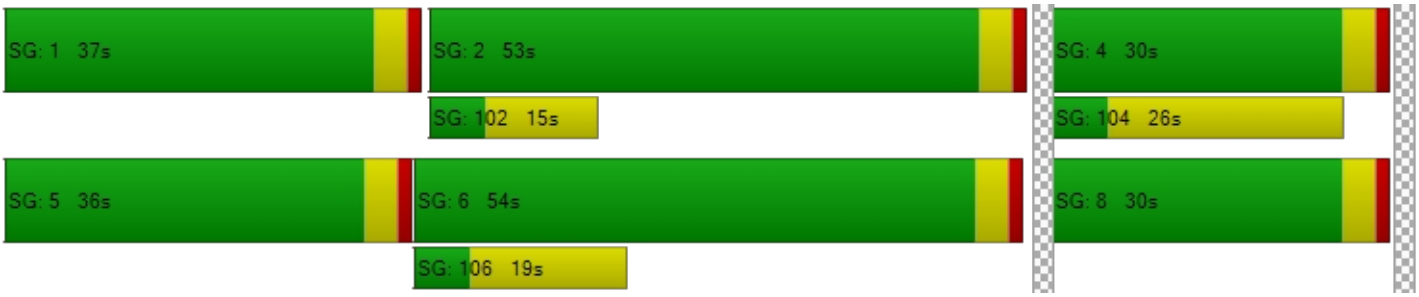
d_M, Delay for Movement [s/veh]	73.91	58.44	26.25	72.90	13.21	7.17	41.87	38.61	38.61	66.95	37.48	43.74
Movement LOS	E	E	C	E	B	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	53.85			26.44			40.00			55.49		
Approach LOS	D			C			D			E		
d_I, Intersection Delay [s/veh]	41.51											
Intersection LOS	D											
Intersection V/C	0.853											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.32	51.32	51.32
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.427	2.063	2.721
Crosswalk LOS	F	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	834	817	433	433
d_b, Bicycle Delay [s]	20.40	20.99	36.80	36.80
I_b,int, Bicycle LOS Score for Intersection	3.043	3.075	1.776	2.432
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Phelan Rd/New Public Rd

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.797

Intersection Setup

Name										Phelan Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name										Phelan Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	704	0	0	988	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	631	0	42	18	77	0	0	129	88
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	4	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	11	0	0	0	0	0	22
Total Hourly Volume [veh/h]	0	0	0	631	0	31	18	813	0	0	1162	66
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	158	0	8	5	203	0	0	291	17
Total Analysis Volume [veh/h]	0	0	0	631	0	31	18	813	0	0	1162	66
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	31	0	0	31	0	0	29	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	25	25	25	25	25	25
g / C, Green / Cycle	0.45	0.45	0.42	0.42	0.42	0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.00	0.45	0.04	0.23	0.23	0.00	0.34	0.34
s, saturation flow rate [veh/h]	1727	1464	461	1800	1800	682	1800	1766
c, Capacity [veh/h]	837	776	157	750	750	265	750	736
d1, Uniform Delay [s]	0.00	16.39	26.44	13.19	13.19	0.00	15.56	15.57
k, delay calibration	0.11	0.38	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	9.02	1.48	2.80	2.80	0.00	10.09	10.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.85	0.11	0.54	0.54	0.00	0.83	0.83
d, Delay for Lane Group [s/veh]	0.00	25.41	27.92	15.99	15.99	0.00	25.65	25.90
Lane Group LOS	A	C	C	B	B	A	C	C
Critical Lane Group	No	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	9.50	0.28	3.70	3.70	0.00	7.70	7.62
50th-Percentile Queue Length [ft/ln]	0.00	237.39	7.02	92.43	92.43	0.00	192.53	190.39
95th-Percentile Queue Length [veh/ln]	0.00	14.55	0.51	6.65	6.65	0.00	12.25	12.14
95th-Percentile Queue Length [ft/ln]	0.00	363.73	12.64	166.37	166.37	0.00	306.31	303.53

Movement, Approach, & Intersection Results

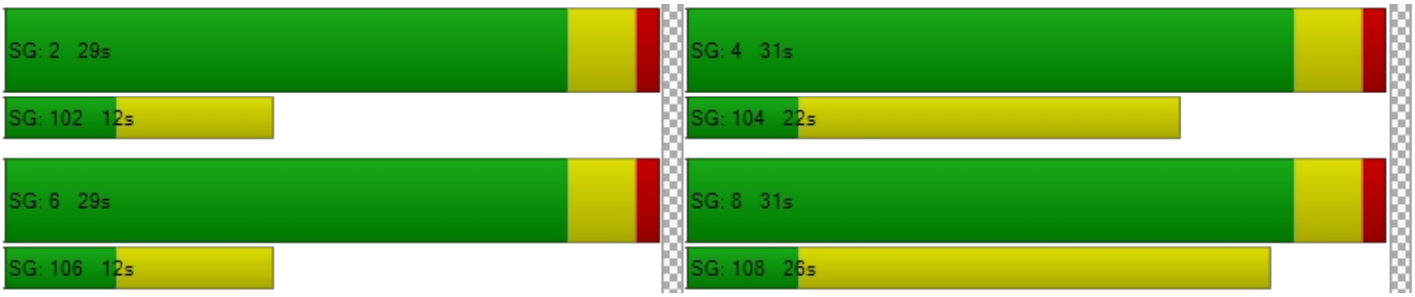
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	25.41	25.41	25.41	27.92	15.99	15.99	0.00	25.77	25.90
Movement LOS	A	A	A	C	C	C	C	B	B	A	C	C
d_A, Approach Delay [s/veh]	0.00			25.41			16.25			25.77		
Approach LOS	A			C			B			C		
d_I, Intersection Delay [s/veh]	22.77											
Intersection LOS	C											
Intersection V/C	0.797											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
I_p,int, Pedestrian LOS Score for Intersectio	1.696	2.117	2.942	4.092
Crosswalk LOS	A	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	900	900	833	833
d_b, Bicycle Delay [s]	9.08	9.08	10.21	10.21
I_b,int, Bicycle LOS Score for Intersection	1.560	2.670	2.245	2.591
Bicycle LOS	A	B	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Main St/Mesa Linda St

Control Type:	Signalized	Delay (sec / veh):	44.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

Intersection Setup

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	340.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	2	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Base Volume Input [veh/h]	14	5	115	32	3	7	14	804	13	55	948	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	45	0	202	0	0	0	0	957	6	47	221	0
Site-Generated Trips [veh/h]	1	0	6	0	0	0	0	14	1	2	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	82	0	0	2	0	0	5	0	0	13
Total Hourly Volume [veh/h]	61	5	246	33	3	5	15	1807	16	106	1222	39
Peak Hour Factor	0.8449	0.8449	0.8449	0.8400	0.8400	0.8400	0.9320	0.9320	0.9320	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	1	73	10	1	1	4	485	4	28	328	10
Total Analysis Volume [veh/h]	72	6	291	39	4	6	16	1939	17	114	1313	42
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	32	0	0	10	0	5	49	0	13	57	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	14	0	9	53	0	17	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	10	10	5	49	49	13	57	57
g / C, Green / Cycle	0.27	0.27	0.08	0.08	0.04	0.41	0.41	0.11	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.05	0.19	0.03	0.00	0.01	0.40	0.40	0.07	0.28	0.03
s, saturation flow rate [veh/h]	1625	1530	1626	1530	1619	3237	1692	1619	4631	1445
c, Capacity [veh/h]	433	408	136	128	67	1322	691	175	2200	686
d1, Uniform Delay [s]	33.89	39.85	51.79	50.62	55.65	34.82	34.83	51.32	23.08	17.03
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.91	10.17	6.05	0.70	8.10	18.84	28.06	17.18	1.20	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.71	0.32	0.05	0.24	0.97	0.97	0.65	0.60	0.06
d, Delay for Lane Group [s/veh]	34.80	50.02	57.84	51.31	63.76	53.65	62.89	68.50	24.29	17.20
Lane Group LOS	C	D	E	D	E	D	E	E	C	B
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.88	8.90	1.45	0.19	0.61	20.41	23.13	4.02	8.62	0.63
50th-Percentile Queue Length [ft/ln]	46.90	222.51	36.25	4.78	15.17	510.31	578.35	100.42	215.46	15.64
95th-Percentile Queue Length [veh/ln]	3.38	13.79	2.61	0.34	1.09	27.82	31.02	7.23	13.43	1.13
95th-Percentile Queue Length [ft/ln]	84.42	344.83	65.25	8.61	27.31	695.55	775.55	180.76	335.83	28.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.80	34.80	50.02	57.84	57.84	51.31	63.76	56.77	62.89	68.50	24.29	17.20
Movement LOS	C	C	D	E	E	D	E	E	E	E	C	B
d_A, Approach Delay [s/veh]	46.80			57.04			56.88			27.51		
Approach LOS	D			E			E			C		
d_I, Intersection Delay [s/veh]	44.74											
Intersection LOS	D											
Intersection V/C	0.684											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.000	0.000	3.538
Crosswalk LOS	F	A	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	167	817	950
d_b, Bicycle Delay [s]	32.27	50.42	21.00	16.54
I_b,int, Bicycle LOS Score for Intersection	2.304	1.644	2.647	2.375
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Main St/Key Pointe Ave

Control Type:	Signalized	Delay (sec / veh):	66.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.935

Intersection Setup

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	140.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Base Volume Input [veh/h]	31	57	241	237	84	15	46	969	18	294	1112	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	1228	0	0	266	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	20	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	63	0	0	4	0	0	5	0	0	51
Total Hourly Volume [veh/h]	32	59	188	246	87	12	48	2256	14	306	1439	152
Peak Hour Factor	0.8479	0.8479	0.8479	0.9319	0.9319	0.9319	0.9352	0.9352	0.9352	0.9273	0.9273	0.9273
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	17	55	66	23	3	13	603	4	82	388	41
Total Analysis Volume [veh/h]	38	70	222	264	93	13	51	2412	15	330	1552	164
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	36	0	10	56	0	28	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	27	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	32	32	32	6	52	52	24	70	70
g / C, Green / Cycle	0.27	0.27	0.27	0.27	0.27	0.05	0.43	0.43	0.20	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.03	0.04	0.15	0.24	0.06	0.03	0.49	0.01	0.20	0.33	0.34
s, saturation flow rate [veh/h]	1308	1800	1530	1104	1762	1619	4903	1530	1619	3427	1714
c, Capacity [veh/h]	326	480	408	303	470	81	2125	663	324	1999	1000
d1, Uniform Delay [s]	39.25	33.57	37.74	47.82	34.33	55.91	34.00	19.46	48.00	15.62	15.68
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.73	0.64	5.14	27.17	1.11	31.79	67.28	0.06	54.97	1.19	2.41
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.15	0.54	0.87	0.23	0.63	1.14	0.02	1.02	0.57	0.58
d, Delay for Lane Group [s/veh]	39.98	34.21	42.88	74.99	35.44	87.70	101.28	19.52	102.97	16.81	18.08
Lane Group LOS	D	C	D	E	D	F	F	B	F	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.99	1.66	6.18	10.31	2.58	2.18	32.10	0.24	14.20	8.96	9.41
50th-Percentile Queue Length [ft/ln]	24.82	41.39	154.52	257.64	64.42	54.57	802.58	6.01	355.08	224.12	235.13
95th-Percentile Queue Length [veh/ln]	1.79	2.98	10.26	15.57	4.64	3.93	45.30	0.43	20.60	13.88	14.43
95th-Percentile Queue Length [ft/ln]	44.67	74.50	256.46	389.25	115.96	98.22	1132.38	10.81	514.89	346.88	360.87

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	39.98	34.21	42.88	74.99	35.44	35.44	87.70	101.28	19.52	102.97	17.14	18.08
Movement LOS	D	C	D	E	D	D	F	F	B	F	B	B
d_A, Approach Delay [s/veh]	40.71			63.66			100.50			31.06		
Approach LOS	D			E			F			C		
d_I, Intersection Delay [s/veh]	66.92											
Intersection LOS	E											
Intersection V/C	0.935											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.440	2.192	3.633	4.231
Crosswalk LOS	B	B	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	533	867	1167
d_b, Bicycle Delay [s]	32.27	32.27	19.27	10.42
I_b,int, Bicycle LOS Score for Intersection	2.208	2.177	2.925	2.713
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Main St/I-15 SB Off Ramp

Control Type:	Signalized	Delay (sec / veh):	13.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.682

Intersection Setup

Name	I-15 SB Off Ramp		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	1100.00	530.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	I-15 SB Off Ramp		Main St		Main St	
Base Volume Input [veh/h]	443	350	0	1273	1255	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	111	0	643	142	0
Site-Generated Trips [veh/h]	0	1	0	17	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	119	0	0	0	0
Total Hourly Volume [veh/h]	461	357	0	1984	1463	0
Peak Hour Factor	0.9115	0.9115	1.0000	0.9495	0.9344	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	126	98	0	522	391	0
Total Analysis Volume [veh/h]	506	392	0	2090	1566	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	46	0	0	14	14	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	33	33
g / C, Green / Cycle	0.32	0.32	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.15	0.26	0.43	0.32
s, saturation flow rate [veh/h]	3329	1530	4903	4903
c, Capacity [veh/h]	1052	484	2700	2700
d1, Uniform Delay [s]	16.55	18.87	10.56	8.90
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.34	3.32	2.24	0.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.81	0.77	0.58
d, Delay for Lane Group [s/veh]	16.89	22.19	12.79	9.82
Lane Group LOS	B	C	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.46	4.70	5.03	3.05
50th-Percentile Queue Length [ft/ln]	61.51	117.58	125.67	76.28
95th-Percentile Queue Length [veh/ln]	4.43	8.26	8.70	5.49
95th-Percentile Queue Length [ft/ln]	110.71	206.49	217.60	137.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	16.89	22.19	0.00	12.79	9.82	0.00
Movement LOS	B	C		B	A	
d_A, Approach Delay [s/veh]	19.20		12.79		9.82	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	13.03					
Intersection LOS	B					
Intersection V/C	0.682					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1400	333	333
d_b, Bicycle Delay [s]	2.70	20.83	20.83
I_b,int, Bicycle LOS Score for Intersection	1.560	2.709	2.421
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 9: Main St/I-15 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.553

Intersection Setup

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	1790.00	100.00	615.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Base Volume Input [veh/h]	190	4	773	0	0	0	0	1449	0	0	1531	404
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	115	0	0	0	0	0	0	126	0	0	27	0
Site-Generated Trips [veh/h]	1	0	0	0	0	0	3	14	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	201	0	0	0	0	0	0	0	0	105
Total Hourly Volume [veh/h]	314	4	603	0	0	0	3	1647	0	0	1634	315
Peak Hour Factor	0.9475	0.9475	0.9475	1.0000	1.0000	1.0000	1.0000	0.9761	1.0000	1.0000	0.9692	0.9692
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	83	1	159	0	0	0	1	422	0	0	421	81
Total Analysis Volume [veh/h]	331	4	636	0	0	0	3	1687	0	0	1686	325
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	20	0	0	0	0	0	40	0	0	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	14	0	0	3	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		C	C	C
C, Cycle Length [s]	60	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26		26	26	26
g / C, Green / Cycle	0.43	0.43	0.43		0.44	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.19	0.21	0.21		0.34	0.31	0.31
s, saturation flow rate [veh/h]	1714	1533	1530		4903	4903	1616
c, Capacity [veh/h]	734	657	655		2149	2149	708
d1, Uniform Delay [s]	12.15	12.39	12.40		14.43	13.67	13.74
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	2.00	2.58	2.59		0.66	0.42	1.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.49	0.49		0.78	0.70	0.71
d, Delay for Lane Group [s/veh]	14.15	14.97	14.99		15.08	14.09	15.07
Lane Group LOS	B	B	B		B	B	B
Critical Lane Group	No	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.94	2.96	2.97		4.93	4.15	4.34
50th-Percentile Queue Length [ft/ln]	73.39	74.07	74.15		123.17	103.67	108.62
95th-Percentile Queue Length [veh/ln]	5.28	5.33	5.34		8.57	7.46	7.76
95th-Percentile Queue Length [ft/ln]	132.10	133.33	133.46		214.18	186.60	194.09

Movement, Approach, & Intersection Results

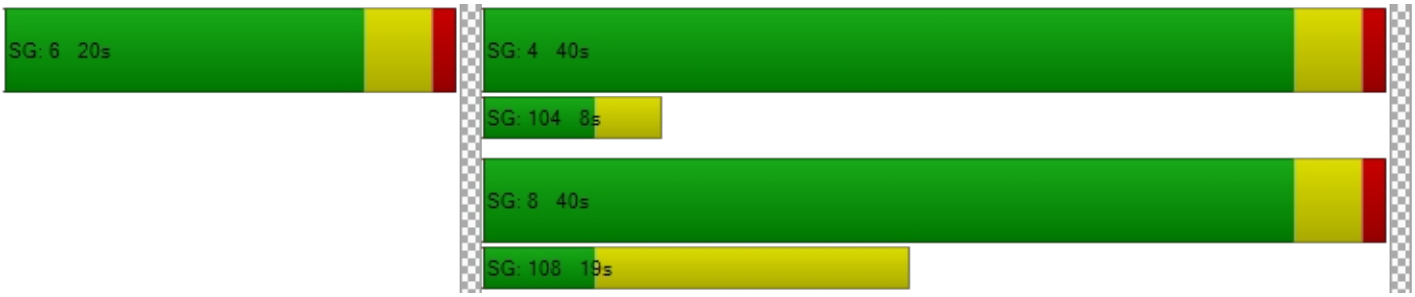
d_M, Delay for Movement [s/veh]	14.15	14.97	14.98	0.00	0.00	0.00	0.00	15.08	0.00	0.00	14.19	15.07
Movement LOS	B	B	B					B			B	B
d_A, Approach Delay [s/veh]	14.70			0.00			15.08			14.34		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	14.68											
Intersection LOS	B											
Intersection V/C	0.553											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.779	1.827	0.000	0.000
Crosswalk LOS	C	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	0	1200	1200
d_b, Bicycle Delay [s]	16.13	30.00	4.80	4.80
I_b,int, Bicycle LOS Score for Intersection	3.493	4.132	2.487	2.432
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	6	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Joshua Rd/Outpost Rd

Control Type:	Two-way stop	Delay (sec / veh):	38.1
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.385

Intersection Setup

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Base Volume Input [veh/h]	0	0	0	58	0	105	0	168	0	0	96	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	210	0	0	92	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	261	0	0	174	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	60	0	109	0	646	0	0	366	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8929	0.8929	0.8929	1.0000	0.8609	1.0000	1.0000	0.8929	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	17	0	31	0	188	0	0	102	0
Total Analysis Volume [veh/h]	0	0	0	67	0	122	0	750	0	0	410	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.38	0.00	0.19	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	33.07	23.26	13.68	38.06	23.26	11.87	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	C	B	E	C	B		A			A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.67	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	41.72	0.00	17.28	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	23.34			21.15			0.00			0.00		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	2.96											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 11: Joshua St/I-15 SB Off-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	15.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.081

Intersection Setup

Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	1500.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Joshua St		Joshua St		Joshua St	
Base Volume Input [veh/h]	21	188	0	183	63	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	51	0	210	4	0
Site-Generated Trips [veh/h]	0	171	0	261	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	418	0	661	73	0
Peak Hour Factor	0.7240	0.7240	1.0000	0.9632	0.8289	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	144	0	172	22	0
Total Analysis Volume [veh/h]	30	577	0	686	88	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.59	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	15.60	13.88	0.00	0.00	0.00	0.00
Movement LOS	C	B		A	A	
95th-Percentile Queue Length [veh/ln]	0.26	4.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.58	100.42	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.97		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.14					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 12: Joshua St/I-15 NB On-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.419

Intersection Setup

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Base Volume Input [veh/h]	0	0	123	84	71	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	193	17	4	0
Site-Generated Trips [veh/h]	0	0	256	5	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	577	109	81	5
Peak Hour Factor	1.0000	1.0000	0.9115	0.9115	0.9048	0.9048
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	158	30	22	1
Total Analysis Volume [veh/h]	0	0	633	120	90	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.42	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	9.09	0.00	0.00	0.00
Movement LOS			A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	2.12	2.12	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	53.08	53.08	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		7.64		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.78					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Public Rd/North Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

Intersection Level Of Service Report
Intersection 14: New Public Rd/South Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	8.50	9.00	8.30
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.40			2.40			0.00			8.60		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.35											
Intersection LOS												

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Scenario 6 Opening Year PM

8/1/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	US-395/Phelan Rd-Main St	269	1229	30	560	1001	42	39	1212	197	14	947	422	5962

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	US-395/Poplar St	32	1304	129	44	1235	15	23	0	47	405	18	97	3349

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	US-395/Three Flags Rd	64	1354	151	32	1310	99	64	1	99	183	6	31	3394

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	US-395/Joshua St	25	1321	317	368	1264	25	43	53	7	223	27	235	3908

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Phelan Rd/New Public Rd	0	0	0	631	0	42	18	813	0	0	1162	88	2754

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6	Main St/Mesa Linda St	61	5	328	33	3	7	15	1807	21	106	1222	52	3660

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Main St/Key Pointe Ave	32	59	251	246	87	16	48	2256	19	306	1439	203	4962

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
8	Main St/I-15 SB Off Ramp	461	476	1984	1463	4384

ID	Intersection Name	Northbound			Eastbound	Westbound		Total Volume
		Left	Thru	Right	Thru	Thru	Right	
9	Main St/I-15 NB Ramps	314	4	804	1647	1634	420	4823

ID	Intersection Name	Northbound			Southbound			Eastbound	Westbound	Total Volume
		Left	Thru	Right	Left	Thru	Right	Thru	Thru	
10	Joshua Rd/Outpost Rd	0	0	0	60	0	109	646	366	1181

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
11	Joshua St/I-15 SB Off-Ramp	22	418	661	73	1174

ID	Intersection Name	Eastbound		Westbound		Total Volume
		Left	Thru	Thru	Right	
12	Joshua St/I-15 NB On-Ramp	577	109	81	5	772

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
13	New Public Rd/North Driveway	0	0	0	0	0	0	0	0	0	0

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	New Public Rd/South Driveway	0	0	0	0	0	0	0	0	0	0

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Scenario 7 Opening Year Plus Project AM

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8/1/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	US-395/Phelan Rd-Main St	Signalized	HCM 6th Edition	SB Right	1.083	136.7	F
2	US-395/Poplar St	Two-way stop	HCM 6th Edition	WB Left	15.877	7,330.3	F
3	US-395/Three Flags Rd	Signalized	HCM 6th Edition	NB Left	0.714	22.1	C
4	US-395/Joshua St	Signalized	HCM 6th Edition	NB Left	0.835	33.5	C
5	Phelan Rd/New Public Rd	Signalized	HCM 6th Edition	SB Left	0.520	6.6	A
6	Main St/Mesa Linda St	Signalized	HCM 6th Edition	WB Left	0.584	48.4	D
7	Main St/Key Pointe Ave	Signalized	HCM 6th Edition	EB Left	0.630	37.8	D
8	Main St/I-15 SB Off Ramp	Signalized	HCM 6th Edition	WB Thru	0.763	18.8	B
9	Main St/I-15 NB Ramps	Signalized	HCM 6th Edition	WB Right	0.711	18.0	B
10	Joshua Rd/Outpost Rd	Two-way stop	HCM 6th Edition	SB Left	0.304	31.5	D
11	Joshua St/I-15 SB Off-Ramp	Two-way stop	HCM 6th Edition	SB Right	1.059	65.4	F
12	Joshua St/I-15 NB On-Ramp	Two-way stop	HCM 6th Edition	EB Left	0.189	7.9	A
13	New Public Rd/North Driveway	Two-way stop	HCM 6th Edition	WB Left	0.022	8.8	A
14	New Public Rd/South Driveway	Two-way stop	HCM 6th Edition	WB Left	0.025	9.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: US-395/Phelan Rd-Main St

Control Type:	Signalized	Delay (sec / veh):	136.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.083

Intersection Setup

Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	242.00	100.00	100.00	337.00	100.00	100.00	246.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	232.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Phelan Rd			Main St		
Base Volume Input [veh/h]	110	645	11	222	870	45	37	688	123	8	377	171
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	92	97	3	97	69	0	0	138	43	11	759	242
Site-Generated Trips [veh/h]	80	40	0	12	74	16	6	18	22	0	45	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	4	0	0	16	0	0	48	0	0	108
Total Hourly Volume [veh/h]	286	808	10	340	1048	47	44	872	145	19	1196	324
Peak Hour Factor	0.9163	0.9163	0.9163	0.8698	0.8698	0.8698	0.8228	0.8228	0.8228	0.8886	0.8886	0.8886
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	78	220	3	98	301	14	13	265	44	5	336	91
Total Analysis Volume [veh/h]	312	882	11	391	1205	54	53	1060	176	21	1346	365
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	19	28	0	24	33	0	5	47	0	5	47	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	23	32	0	28	37	0	9	51	0	9	51	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	28	28	24	33	33	5	47	47	5	47	47
g / C, Green / Cycle	0.16	0.23	0.23	0.20	0.28	0.28	0.04	0.39	0.39	0.04	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.19	0.25	0.25	0.24	0.35	0.35	0.03	0.35	0.35	0.01	0.48	0.50
s, saturation flow rate [veh/h]	1619	1800	1792	1619	1800	1773	1619	1800	1712	1619	1800	1672
c, Capacity [veh/h]	256	420	418	324	495	488	67	705	671	67	705	655
d1, Uniform Delay [s]	50.50	46.00	46.00	48.00	43.50	43.50	56.97	34.22	34.31	55.83	36.50	36.50
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	127.79	62.33	62.51	118.80	139.48	143.58	60.21	16.34	17.53	11.62	116.28	140.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.22	1.07	1.07	1.21	1.28	1.29	0.79	0.90	0.90	0.31	1.23	1.29
d, Delay for Lane Group [s/veh]	178.29	108.33	108.51	166.80	182.98	187.08	117.18	50.56	51.84	67.45	152.78	176.96
Lane Group LOS	F	F	F	F	F	F	F	D	D	E	F	F
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	16.42	19.07	19.01	19.85	32.93	33.00	2.66	19.03	18.44	0.81	41.61	43.06
50th-Percentile Queue Length [ft/ln]	410.49	476.74	475.18	496.30	823.35	824.89	66.46	475.76	461.01	20.30	1040.28	1076.43
95th-Percentile Queue Length [veh/ln]	25.19	27.21	27.13	29.84	48.52	48.76	4.79	26.18	25.48	1.46	59.83	63.14
95th-Percentile Queue Length [ft/ln]	629.80	680.17	678.33	745.94	1213.04	1218.96	119.63	654.61	637.08	36.54	1495.85	1578.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	178.29	108.42	108.51	166.80	184.93	187.08	117.18	51.08	51.84	67.45	161.36	176.96
Movement LOS	F	F	F	F	F	F	F	D	D	E	F	F
d_A, Approach Delay [s/veh]	126.51			180.71			53.90			163.51		
Approach LOS	F			F			D			F		
d_I, Intersection Delay [s/veh]	136.71											
Intersection LOS	F											
Intersection V/C	1.083											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	3.271	3.407	3.479	3.607
Crosswalk LOS	C	C	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	467	550	783	783
d_b, Bicycle Delay [s]	35.27	31.54	22.20	22.20
I_b,int, Bicycle LOS Score for Intersection	2.557	2.934	2.663	3.078
Bicycle LOS	B	C	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: US-395/Poplar St

Control Type:	Two-way stop	Delay (sec / veh):	7,330.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	15.877

Intersection Setup

Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	0	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	373.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	510.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	US-395			US-395						Poplar St		
Base Volume Input [veh/h]	0	815	18	28	982	0	0	0	0	8	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	55	171	412	65	29	27	7	0	19	70	4	8
Site-Generated Trips [veh/h]	0	117	25	6	90	0	0	0	0	6	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	1136	456	100	1140	27	7	0	19	84	4	14
Peak Hour Factor	1.0000	0.9244	0.9244	0.9078	0.9078	1.0000	1.0000	1.0000	1.0000	0.4583	1.0000	0.4583
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	307	123	28	314	7	2	0	5	46	1	8
Total Analysis Volume [veh/h]	55	1229	493	110	1256	27	7	0	19	183	4	31
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.01	0.00	0.30	0.01	0.00	0.71	0.00	0.04	15.88	0.52	0.10
d_M, Delay for Movement [s/veh]	12.31	0.00	0.00	18.68	0.00	0.00	649.46	663.31	13.75	7330.27	550.17	91.36
Movement LOS	B	A	A	C	A	A	F	F	B	F	F	F
95th-Percentile Queue Length [veh/ln]	0.33	0.00	0.00	1.21	0.00	0.00	1.45	0.14	0.14	24.26	2.54	2.54
95th-Percentile Queue Length [ft/ln]	8.33	0.00	0.00	30.34	0.00	0.00	36.23	3.45	3.45	606.57	63.55	63.55
d_A, Approach Delay [s/veh]	0.38			1.47			184.90			6176.48		
Approach LOS	A			A			F			F		
d_I, Intersection Delay [s/veh]	396.61											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 3: US-395/Three Flags Rd

Control Type:	Signalized	Delay (sec / veh):	22.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.714

Intersection Setup

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	190.00	100.00	190.00	224.00	100.00	224.00	182.00	100.00	100.00	274.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Base Volume Input [veh/h]	39	758	106	32	858	77	30	3	89	188	4	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	638	0	0	355	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	140	30	3	93	0	0	0	0	21	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	35	0	0	20	0	0	23	0	0	9
Total Hourly Volume [veh/h]	41	1566	105	36	1340	60	31	3	70	217	4	27
Peak Hour Factor	0.9280	0.9280	0.9280	0.9329	0.9329	0.9329	0.7961	0.7961	0.7961	0.8296	0.8296	0.8296
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	422	28	10	359	16	10	1	22	65	1	8
Total Analysis Volume [veh/h]	44	1688	113	39	1436	64	39	4	88	262	5	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	33	56	0	19	42	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	64	64	3	63	63	26	26	26	26	26
g / C, Green / Cycle	0.04	0.61	0.61	0.03	0.60	0.60	0.25	0.25	0.25	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.49	0.07	0.02	0.42	0.04	0.03	0.06	0.20	0.00	0.02
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1391	1540	1325	1800	1530
c, Capacity [veh/h]	59	2073	925	54	2062	921	384	381	308	446	379
d1, Uniform Delay [s]	50.12	16.15	8.85	50.28	14.33	8.69	32.32	31.61	43.82	29.80	30.37
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.22	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	17.10	3.65	0.27	16.80	1.97	0.15	0.11	0.32	12.57	0.01	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.81	0.12	0.73	0.70	0.07	0.10	0.24	0.85	0.01	0.09
d, Delay for Lane Group [s/veh]	67.22	19.80	9.12	67.09	16.30	8.83	32.43	31.93	56.39	29.81	30.47
Lane Group LOS	E	B	A	E	B	A	C	C	E	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.39	14.27	1.04	1.24	10.48	0.57	0.80	1.90	7.94	0.10	0.65
50th-Percentile Queue Length [ft/ln]	34.76	356.67	25.98	30.90	261.96	14.33	20.04	47.48	198.42	2.42	16.33
95th-Percentile Queue Length [veh/ln]	2.50	20.46	1.87	2.22	15.79	1.03	1.44	3.42	12.56	0.17	1.18
95th-Percentile Queue Length [ft/ln]	62.57	511.53	46.76	55.62	394.68	25.79	36.08	85.47	313.92	4.36	29.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	67.22	19.80	9.12	67.09	16.30	8.83	32.43	31.93	31.93	56.39	29.81	30.47
Movement LOS	E	B	A	E	B	A	C	C	C	E	C	C
d_A, Approach Delay [s/veh]	20.28			17.28			32.08			53.09		
Approach LOS	C			B			C			D		
d_I, Intersection Delay [s/veh]	22.05											
Intersection LOS	C											
Intersection V/C	0.714											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	43.89	0.00	43.89
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.357	0.000	2.275
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	990	724	495	495
d_b, Bicycle Delay [s]	13.38	21.38	29.72	29.72
I_b,int, Bicycle LOS Score for Intersection	3.111	2.846	1.814	2.069
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: US-395/Joshua St

Control Type:	Signalized	Delay (sec / veh):	33.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.835

Intersection Setup

Name	US-395			US-395			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	191.00	100.00	226.00	200.00	100.00	223.00	140.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Joshua St			Joshua St		
Base Volume Input [veh/h]	9	764	48	127	904	102	16	24	9	96	55	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	406	0	45	217	0	0	0	0	0	0	232
Site-Generated Trips [veh/h]	0	97	62	34	79	1	2	0	0	264	0	71
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	28	0	0	27	0	0	2	0	0	107
Total Hourly Volume [veh/h]	9	1298	84	211	1236	80	19	25	7	364	57	322
Peak Hour Factor	0.9117	0.9117	0.9117	0.8984	0.8984	0.8984	0.6736	0.6736	0.6736	0.9610	0.9610	0.9610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	356	23	59	344	22	7	9	3	95	15	84
Total Analysis Volume [veh/h]	10	1424	92	235	1376	89	28	37	10	379	59	335
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	20	45	0	19	44	0	0	31	0	0	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	41	41	15	55	55	27	27	27	27	27
g / C, Green / Cycle	0.01	0.43	0.43	0.16	0.58	0.58	0.28	0.28	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.01	0.42	0.06	0.15	0.40	0.06	0.03	0.03	0.27	0.03	0.22
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1006	1735	1380	1800	1530
c, Capacity [veh/h]	22	1477	659	257	1974	881	316	493	412	512	435
d1, Uniform Delay [s]	46.54	26.32	16.37	39.36	14.27	9.07	28.28	25.02	37.24	25.17	31.16
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.36	0.11	0.23
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.43	16.28	0.44	12.44	2.07	0.23	0.12	0.08	22.11	0.10	5.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.96	0.14	0.92	0.70	0.10	0.09	0.10	0.92	0.12	0.77
d, Delay for Lane Group [s/veh]	60.97	42.60	16.81	51.80	16.33	9.30	28.40	25.10	59.35	25.26	37.09
Lane Group LOS	E	D	B	D	B	A	C	C	E	C	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.31	17.28	1.20	6.01	9.31	0.78	0.49	0.75	11.10	0.95	7.29
50th-Percentile Queue Length [ft/ln]	7.83	432.02	30.03	150.35	232.80	19.38	12.15	18.79	277.44	23.72	182.24
95th-Percentile Queue Length [veh/ln]	0.56	24.10	2.16	10.04	14.32	1.40	0.87	1.35	16.56	1.71	11.72
95th-Percentile Queue Length [ft/ln]	14.10	602.45	54.06	250.90	357.91	34.88	21.87	33.83	414.03	42.70	292.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.97	42.60	16.81	51.80	16.33	9.30	28.40	25.10	25.10	59.35	25.26	37.09
Movement LOS	E	D	B	D	B	A	C	C	C	E	C	D
d_A, Approach Delay [s/veh]	41.16			20.87			26.33			47.10		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	33.55											
Intersection LOS	C											
Intersection V/C	0.835											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	38.93	38.93	38.93
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.418	2.075	2.753
Crosswalk LOS	F	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	863	842	568	568
d_b, Bicycle Delay [s]	15.35	15.93	24.34	24.34
I_b,int, Bicycle LOS Score for Intersection	2.842	2.984	1.687	3.012
Bicycle LOS	C	C	A	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: Phelan Rd/New Public Rd

Control Type:	Signalized	Delay (sec / veh):	6.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name										Phelan Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name										Phelan Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	848	0	0	531	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	112	0	7	86	61	0	0	409	440
Site-Generated Trips [veh/h]	0	0	0	40	0	2	7	6	0	0	3	138
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	2	0	0	0	0	0	145
Total Hourly Volume [veh/h]	0	0	0	152	0	7	93	949	0	0	964	433
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	38	0	2	23	237	0	0	241	108
Total Analysis Volume [veh/h]	0	0	0	152	0	7	93	949	0	0	964	433
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	50	0	0	50	0	0	25	0	0	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	75	75	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10	57	57	57	57	57	57
g / C, Green / Cycle	0.13	0.13	0.76	0.76	0.76	0.76	0.76	0.76
(v / s)_i Volume / Saturation Flow Rate	0.00	0.11	0.24	0.26	0.26	0.00	0.41	0.41
s, saturation flow rate [veh/h]	1561	1488	392	1800	1800	600	1800	1615
c, Capacity [veh/h]	253	290	312	1371	1371	478	1371	1230
d1, Uniform Delay [s]	0.00	31.52	9.92	2.89	2.89	0.00	3.58	3.63
k, delay calibration	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	1.62	2.43	0.69	0.69	0.00	1.48	1.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.55	0.30	0.35	0.35	0.00	0.53	0.54
d, Delay for Lane Group [s/veh]	0.00	33.14	12.35	3.58	3.58	0.00	5.06	5.35
Lane Group LOS	A	C	B	A	A	A	A	A
Critical Lane Group	No	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	2.84	0.89	1.00	1.00	0.00	1.97	1.89
50th-Percentile Queue Length [ft/ln]	0.00	70.94	22.14	25.02	25.02	0.00	49.18	47.24
95th-Percentile Queue Length [veh/ln]	0.00	5.11	1.59	1.80	1.80	0.00	3.54	3.40
95th-Percentile Queue Length [ft/ln]	0.00	127.69	39.85	45.04	45.04	0.00	88.52	85.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	33.14	33.14	33.14	12.35	3.58	3.58	0.00	5.13	5.35
Movement LOS	A	A	A	C	C	C	B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			33.14			4.37			5.20		
Approach LOS	A			C			A			A		
d_I, Intersection Delay [s/veh]	6.58											
Intersection LOS	A											
Intersection V/C	0.520											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.04	29.04	29.04	29.04
I_p,int, Pedestrian LOS Score for Intersectio	1.707	2.248	2.947	3.584
Crosswalk LOS	A	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1227	1227	560	560
d_b, Bicycle Delay [s]	5.61	5.61	19.44	19.44
I_b,int, Bicycle LOS Score for Intersection	1.560	1.825	2.419	2.832
Bicycle LOS	A	A	B	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Main St/Mesa Linda St

Control Type:	Signalized	Delay (sec / veh):	48.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.584

Intersection Setup

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	340.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	2	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Base Volume Input [veh/h]	1	0	28	46	1	16	14	918	7	75	593	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	8	0	37	0	0	0	0	213	24	212	1004	0
Site-Generated Trips [veh/h]	1	0	2	0	0	0	0	29	1	6	56	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	68	48	1	17	15	1197	32	296	1677	18
Peak Hour Factor	0.5940	0.5940	0.5940	0.8289	0.8289	0.8289	0.9621	0.9621	0.9621	0.8382	0.8382	0.8382
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	29	14	0	5	4	311	8	88	500	5
Total Analysis Volume [veh/h]	17	0	114	58	1	21	16	1244	33	353	2001	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	32	0	0	10	0	5	25	0	22	42	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	14	0	9	37	0	33	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	10	10	5	33	33	29	57	57
g / C, Green / Cycle	0.27	0.27	0.08	0.08	0.04	0.28	0.28	0.24	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.04	0.01	0.01	0.25	0.25	0.22	0.43	0.01
s, saturation flow rate [veh/h]	1619	1530	1620	1530	1619	3237	1777	1619	4631	1530
c, Capacity [veh/h]	432	408	135	128	67	890	489	391	2200	727
d1, Uniform Delay [s]	32.61	34.86	52.32	51.12	55.65	42.31	42.32	44.12	29.12	16.77
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.17	1.70	9.95	2.76	8.10	16.83	25.96	26.49	7.03	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.28	0.44	0.16	0.24	0.93	0.93	0.90	0.91	0.03
d, Delay for Lane Group [s/veh]	32.78	36.57	62.28	53.88	63.76	59.14	68.27	70.62	36.15	16.84
Lane Group LOS	C	D	E	D	E	E	E	E	D	B
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.39	2.85	2.07	0.69	0.61	13.35	15.90	12.58	17.53	0.31
50th-Percentile Queue Length [ft/ln]	9.77	71.22	51.69	17.18	15.17	333.67	397.46	314.45	438.27	7.67
95th-Percentile Queue Length [veh/ln]	0.70	5.13	3.72	1.24	1.09	19.34	22.44	18.39	24.40	0.55
95th-Percentile Queue Length [ft/ln]	17.59	128.19	93.04	30.92	27.31	483.46	560.93	459.86	609.94	13.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.78	32.78	36.57	62.28	62.28	53.88	63.76	62.22	68.27	70.62	36.15	16.84
Movement LOS	C	C	D	E	E	D	E	E	E	E	D	B
d_A, Approach Delay [s/veh]	36.07			60.07			62.39			41.10		
Approach LOS	D			E			E			D		
d_I, Intersection Delay [s/veh]	48.42											
Intersection LOS	D											
Intersection V/C	0.584											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.34	0.00	51.34
I_p,int, Pedestrian LOS Score for Intersectio	0.000	1.993	0.000	3.511
Crosswalk LOS	F	A	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	167	550	950
d_b, Bicycle Delay [s]	32.27	50.42	31.54	16.54
I_b,int, Bicycle LOS Score for Intersection	1.776	1.692	2.271	2.866
Bicycle LOS	A	A	B	C

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Main St/Key Pointe Ave

Control Type:	Signalized	Delay (sec / veh):	37.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.630

Intersection Setup

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	140.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Base Volume Input [veh/h]	4	12	97	137	26	11	30	927	8	193	607	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	222	0	0	1293	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	31	0	0	62	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	25	0	0	3	0	0	2	0	0	35
Total Hourly Volume [veh/h]	4	12	76	142	27	8	31	1217	6	201	1986	104
Peak Hour Factor	0.8188	0.8188	0.8188	0.8184	0.8184	0.8184	0.9333	0.9333	0.9333	0.8560	0.8560	0.8560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	23	43	8	2	8	326	2	59	580	30
Total Analysis Volume [veh/h]	5	15	93	174	33	10	33	1304	6	235	2320	121
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	36	0	15	45	0	29	59	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	27	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	32	32	32	11	41	41	25	55	55
g / C, Green / Cycle	0.29	0.29	0.29	0.29	0.29	0.10	0.37	0.37	0.23	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.00	0.01	0.06	0.13	0.02	0.02	0.27	0.00	0.15	0.47	0.48
s, saturation flow rate [veh/h]	1385	1800	1530	1306	1729	1619	4903	1530	1619	3427	1755
c, Capacity [veh/h]	418	524	445	414	503	162	1828	570	368	1714	878
d1, Uniform Delay [s]	30.67	27.89	29.44	34.12	28.36	45.48	29.48	21.73	38.42	25.86	26.26
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.05	0.10	1.07	3.12	0.33	2.82	2.41	0.03	8.23	11.14	20.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.03	0.21	0.42	0.09	0.20	0.71	0.01	0.64	0.94	0.95
d, Delay for Lane Group [s/veh]	30.72	27.99	30.51	37.23	28.69	48.30	31.89	21.76	46.65	37.00	47.17
Lane Group LOS	C	C	C	D	C	D	C	C	D	D	D
Critical Lane Group	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.11	0.30	1.99	4.28	0.87	0.93	9.51	0.10	6.29	19.98	23.44
50th-Percentile Queue Length [ft/ln]	2.65	7.47	49.79	106.93	21.87	23.14	237.78	2.45	157.23	499.50	586.04
95th-Percentile Queue Length [veh/ln]	0.19	0.54	3.58	7.67	1.57	1.67	14.57	0.18	10.40	27.31	31.38
95th-Percentile Queue Length [ft/ln]	4.76	13.45	89.62	191.72	39.37	41.65	364.22	4.41	260.05	682.77	784.55

Movement, Approach, & Intersection Results

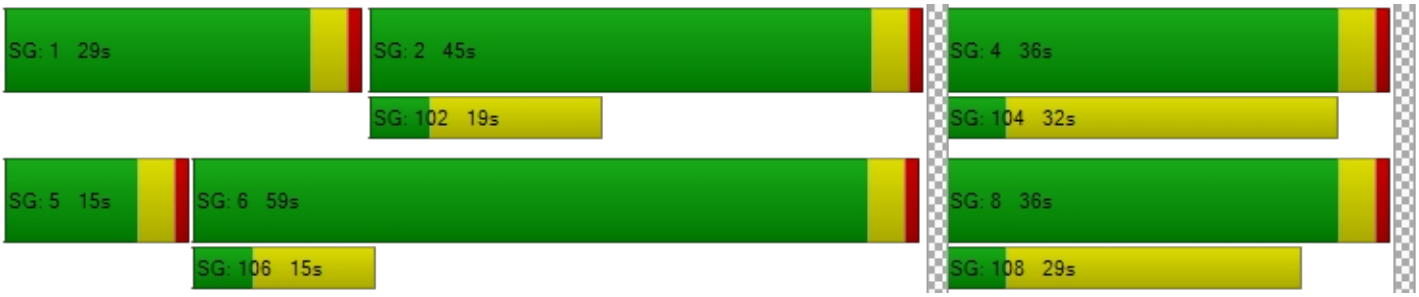
d_M, Delay for Movement [s/veh]	30.72	27.99	30.51	37.23	28.69	28.69	48.30	31.89	21.76	46.65	40.13	47.17
Movement LOS	C	C	C	D	C	C	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	30.18			35.54			32.25			41.02		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	37.76											
Intersection LOS	D											
Intersection V/C	0.630											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
I_p,int, Pedestrian LOS Score for Intersectio	2.279	2.093	3.495	3.902
Crosswalk LOS	B	B	C	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	582	582	745	1000
d_b, Bicycle Delay [s]	27.65	27.65	21.64	13.75
I_b,int, Bicycle LOS Score for Intersection	1.787	1.923	2.299	3.051
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Main St/I-15 SB Off Ramp

Control Type:	Signalized	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.763

Intersection Setup

Name	I-15 SB Off Ramp		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	1100.00	530.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	I-15 SB Off Ramp		Main St		Main St	
Base Volume Input [veh/h]	310	177	0	1010	758	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	546	0	116	699	0
Site-Generated Trips [veh/h]	0	25	0	23	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	189	0	0	0	0
Total Hourly Volume [veh/h]	322	566	0	1189	1524	0
Peak Hour Factor	0.8943	0.8943	1.0000	0.9467	0.8892	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	90	158	0	314	428	0
Total Analysis Volume [veh/h]	360	633	0	1256	1714	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	44	0	0	16	16	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	24	24
g / C, Green / Cycle	0.46	0.46	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.11	0.41	0.26	0.35
s, saturation flow rate [veh/h]	3329	1530	4903	4903
c, Capacity [veh/h]	1539	707	1982	1982
d1, Uniform Delay [s]	9.72	14.79	14.31	16.37
k, delay calibration	0.11	0.18	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.08	6.79	1.56	5.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.89	0.63	0.86
d, Delay for Lane Group [s/veh]	9.80	21.58	15.87	21.70
Lane Group LOS	A	C	B	C
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.15	7.42	3.73	6.36
50th-Percentile Queue Length [ft/ln]	28.84	185.44	93.30	158.95
95th-Percentile Queue Length [veh/ln]	2.08	11.88	6.72	10.49
95th-Percentile Queue Length [ft/ln]	51.92	297.11	167.95	262.34

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.80	21.58	0.00	15.87	21.70	0.00
Movement LOS	A	C		B	C	
d_A, Approach Delay [s/veh]	17.31		15.87		21.70	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	18.75					
Intersection LOS	B					
Intersection V/C	0.763					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1333	400	400
d_b, Bicycle Delay [s]	3.33	19.20	19.20
I_b,int, Bicycle LOS Score for Intersection	1.560	2.250	2.502
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 9: Main St/I-15 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.711

Intersection Setup

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	1790.00	100.00	615.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Base Volume Input [veh/h]	82	3	411	0	0	0	0	1021	0	0	1103	460
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	571	0	0	0	0	0	0	23	0	0	128	0
Site-Generated Trips [veh/h]	25	0	0	0	0	0	8	15	0	0	12	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	107	0	0	0	0	0	0	0	0	120
Total Hourly Volume [veh/h]	681	3	320	0	0	0	8	1100	0	0	1287	358
Peak Hour Factor	0.9295	0.9295	0.9295	1.0000	1.0000	1.0000	1.0000	0.9188	1.0000	1.0000	0.9304	0.9304
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	183	1	86	0	0	0	2	299	0	0	346	96
Total Analysis Volume [veh/h]	733	3	344	0	0	0	8	1197	0	0	1383	385
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	0	0	0	27	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	14	0	0	3	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		C	C	C
C, Cycle Length [s]	60	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	31		21	21	21
g / C, Green / Cycle	0.52	0.52	0.52		0.35	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.43	0.11	0.11		0.24	0.27	0.28
s, saturation flow rate [veh/h]	1714	1534	1530		4903	4903	1560
c, Capacity [veh/h]	889	795	793		1707	1707	543
d1, Uniform Delay [s]	12.15	7.84	7.84		16.86	17.47	17.79
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	8.59	0.63	0.63		0.53	0.79	3.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.22	0.22		0.70	0.78	0.81
d, Delay for Lane Group [s/veh]	20.74	8.47	8.48		17.40	18.26	21.46
Lane Group LOS	C	A	A		B	B	C
Critical Lane Group	Yes	No	No		No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.09	1.05	1.05		3.83	4.42	4.93
50th-Percentile Queue Length [ft/ln]	202.34	26.29	26.31		95.72	110.55	123.23
95th-Percentile Queue Length [veh/ln]	12.76	1.89	1.89		6.89	7.87	8.57
95th-Percentile Queue Length [ft/ln]	318.98	47.33	47.36		172.30	196.77	214.26

Movement, Approach, & Intersection Results

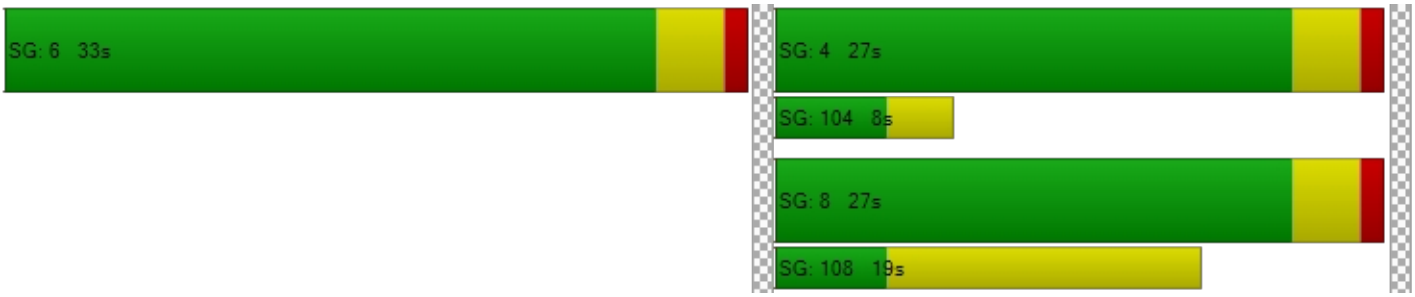
d_M, Delay for Movement [s/veh]	20.74	8.47	8.48	0.00	0.00	0.00	0.00	17.40	0.00	0.00	18.39	21.46
Movement LOS	C	A	A					B			B	C
d_A, Approach Delay [s/veh]	16.80			0.00			17.40			19.06		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	17.96											
Intersection LOS	B											
Intersection V/C	0.711											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.650	1.899	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	0	767	767
d_b, Bicycle Delay [s]	8.01	30.00	11.41	11.41
I_b,int, Bicycle LOS Score for Intersection	3.518	4.132	2.218	2.338
Bicycle LOS	D	D	B	B

Sequence

Ring 1	-	6	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Joshua Rd/Outpost Rd

Control Type:	Two-way stop	Delay (sec / veh):	31.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.304

Intersection Setup

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Base Volume Input [veh/h]	0	0	0	39	0	108	0	90	0	0	117	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	45	0	0	232	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	96	0	0	335	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	41	0	112	0	235	0	0	689	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.6952	0.6952	0.6952	1.0000	0.6992	1.0000	1.0000	0.9126	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	15	0	40	0	84	0	0	189	0
Total Analysis Volume [veh/h]	0	0	0	59	0	161	0	336	0	0	755	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.30	0.00	0.39	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	39.57	21.62	10.07	31.46	21.62	19.24	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	E	C	B	D	C	C		A			A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.22	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	30.55	0.00	45.50	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	23.75			22.52			0.00			0.00		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	3.78											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 11: Joshua St/I-15 SB Off-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	65.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.059

Intersection Setup

Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	1500.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Joshua St		Joshua St		Joshua St	
Base Volume Input [veh/h]	66	207	0	154	30	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	213	0	45	19	0
Site-Generated Trips [veh/h]	0	332	0	96	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	760	0	301	54	0
Peak Hour Factor	0.7147	0.7147	1.0000	0.8556	0.8194	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	266	0	88	16	0
Total Analysis Volume [veh/h]	97	1063	0	352	66	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	1.06	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.22	65.40	0.00	0.00	0.00	0.00
Movement LOS	B	F		A	A	
95th-Percentile Queue Length [veh/ln]	0.58	24.03	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.46	600.79	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	60.95		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	44.81					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 12: Joshua St/I-15 NB On-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.189

Intersection Setup

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Base Volume Input [veh/h]	0	0	107	111	32	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	42	3	19	0
Site-Generated Trips [veh/h]	0	0	95	1	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	248	119	56	12
Peak Hour Factor	1.0000	1.0000	0.8720	0.8720	0.6797	0.6797
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	71	34	21	4
Total Analysis Volume [veh/h]	0	0	284	136	82	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.19	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.95	0.00	0.00	0.00
Movement LOS			A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.69	0.69	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	17.36	17.36	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		5.37		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.34					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Public Rd/North Driveway

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	73	0	0	0	0	0	0	21	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	73	0	0	0	0	0	0	21	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	18	0	0	0	0	0	0	5	0	0
Total Analysis Volume [veh/h]	0	0	73	0	0	0	0	0	0	21	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.34	0.00	0.00	0.00	0.00	0.00	8.78	9.27	8.54
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65	1.65	1.65
d_A, Approach Delay [s/veh]	0.00			2.45			0.00			8.78		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.96											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 14: New Public Rd/South Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	73	73	0	21	0	0	0	0	21	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	73	73	0	21	0	0	0	0	21	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	18	18	0	5	0	0	0	0	5	0	0
Total Analysis Volume [veh/h]	0	73	73	0	21	0	0	0	0	21	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	7.24	0.00	0.00	7.49	0.00	0.00	0.00	0.00	0.00	9.36	9.82	8.90
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.08
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	1.91	1.91
d_A, Approach Delay [s/veh]	0.00			0.00			0.00			9.36		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.05											
Intersection LOS	A											

KISS Warehouse

Vistro File: C:\...\Revised Vistro (Used the same for 22-031 and 21-139) - Revised 8.4.2023.vistro

Scenario 7 Opening Year Plus Project AM

Report File: C:\...\Opening Year Plus Project AM.pdf

8/1/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	US-395/Phelan Rd-Main St	286	808	14	340	1048	63	44	872	193	19	1196	432	5315

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	US-395/Poplar St	55	1136	456	100	1140	27	7	0	19	84	4	14	3042

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	US-395/Three Flags Rd	41	1566	140	36	1340	80	31	3	93	217	4	36	3587

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	US-395/Joshua St	9	1298	112	211	1236	107	19	25	9	364	57	429	3876

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Phelan Rd/New Public Rd	0	0	0	152	0	9	93	949	0	0	964	578	2745

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6	Main St/Mesa Linda St	10	0	68	48	1	17	15	1197	32	296	1677	18	3379

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Main St/Key Pointe Ave	4	12	101	142	27	11	31	1217	8	201	1986	139	3879

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
8	Main St/I-15 SB Off Ramp	322	755	1189	1524	3790

ID	Intersection Name	Northbound			Eastbound	Westbound		Total Volume
		Left	Thru	Right	Thru	Thru	Right	
9	Main St/I-15 NB Ramps	681	3	427	1100	1287	478	3976

ID	Intersection Name	Northbound			Southbound			Eastbound	Westbound	Total Volume
		Left	Thru	Right	Left	Thru	Right	Thru	Thru	
10	Joshua Rd/Outpost Rd	0	0	0	41	0	112	235	689	1077

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
11	Joshua St/I-15 SB Off-Ramp	69	760	301	54	1184

ID	Intersection Name	Eastbound		Westbound		Total Volume
		Left	Thru	Thru	Right	
12	Joshua St/I-15 NB On-Ramp	248	119	56	12	435

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
13	New Public Rd/North Driveway	0	0	73	0	0	0	21	0	0	94

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	New Public Rd/South Driveway	0	73	73	0	21	0	21	0	0	188

KISS Warehouse

Vistro File: C:\...\Revised Vistro (Used the same for 22-031 and 21-139) - Revised 8.4.2023.vistro

Scenario 8 Opening Year Plus Project PM

Report File: C:\...\Opening Year Plus Project PM.pdf

8/1/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	US-395/Phelan Rd-Main St	Signalized	HCM 6th Edition	EB Right	1.227	194.6	F
2	US-395/Poplar St	Two-way stop	HCM 6th Edition	WB Left	37.393	10,000.0	F
3	US-395/Three Flags Rd	Signalized	HCM 6th Edition	SB Left	0.674	21.6	C
4	US-395/Joshua St	Signalized	HCM 6th Edition	NB Thru	0.883	49.2	D
5	Phelan Rd/New Public Rd	Signalized	HCM 6th Edition	SB Left	0.913	35.1	D
6	Main St/Mesa Linda St	Signalized	HCM 6th Edition	EB Right	0.694	50.7	D
7	Main St/Key Pointe Ave	Signalized	HCM 6th Edition	EB Thru	0.944	71.4	E
8	Main St/I-15 SB Off Ramp	Signalized	HCM 6th Edition	SB Right	0.692	13.3	B
9	Main St/I-15 NB Ramps	Signalized	HCM 6th Edition	EB Thru	0.553	14.7	B
10	Joshua Rd/Outpost Rd	Two-way stop	HCM 6th Edition	SB Left	0.420	43.1	E
11	Joshua St/I-15 SB Off-Ramp	Two-way stop	HCM 6th Edition	SB Left	0.085	16.2	C
12	Joshua St/I-15 NB On-Ramp	Two-way stop	HCM 6th Edition	EB Left	0.444	9.3	A
13	New Public Rd/North Driveway	Two-way stop	HCM 6th Edition	WB Left	0.075	8.9	A
14	New Public Rd/South Driveway	Two-way stop	HCM 6th Edition	WB Left	0.088	9.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: US-395/Phelan Rd-Main St

Control Type:	Signalized	Delay (sec / veh):	194.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.227

Intersection Setup

Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	280.00	100.00	100.00	242.00	100.00	100.00	337.00	100.00	100.00	246.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	232.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Phelan Rd			Main St		
Base Volume Input [veh/h]	215	1049	19	205	815	38	36	568	100	8	736	316
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	45	67	10	334	98	0	0	619	93	6	179	80
Site-Generated Trips [veh/h]	35	71	0	13	55	8	17	46	82	0	23	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	12	0	0	70	0	0	106
Total Hourly Volume [veh/h]	304	1229	22	560	1001	36	54	1256	209	14	967	316
Peak Hour Factor	0.9869	0.9869	0.9869	0.9501	0.9501	0.9501	0.8482	0.8482	0.8482	0.9632	0.9632	0.9632
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	311	6	147	263	9	16	370	62	4	251	82
Total Analysis Volume [veh/h]	308	1245	22	589	1054	38	64	1481	246	15	1004	328
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	20	29	0	30	39	0	5	40	0	5	40	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	33	0	34	43	0	9	44	0	9	44	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	29	29	30	39	39	5	40	40	5	40	40
g / C, Green / Cycle	0.17	0.24	0.24	0.25	0.33	0.33	0.04	0.33	0.33	0.04	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.19	0.35	0.35	0.36	0.30	0.31	0.04	0.48	0.50	0.01	0.38	0.39
s, saturation flow rate [veh/h]	1619	1800	1789	1619	1800	1778	1619	1800	1713	1619	1800	1651
c, Capacity [veh/h]	270	435	432	405	585	578	67	600	571	67	600	550
d1, Uniform Delay [s]	50.00	45.50	45.50	45.00	39.29	39.40	57.37	40.00	40.00	55.62	40.00	40.00
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	98.44	218.99	220.55	218.18	24.38	25.58	95.81	211.64	234.49	7.47	86.06	92.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.14	1.46	1.46	1.46	0.94	0.94	0.95	1.45	1.50	0.22	1.15	1.17
d, Delay for Lane Group [s/veh]	148.44	264.49	266.05	263.18	63.67	64.98	153.18	251.64	274.49	63.09	126.06	132.88
Lane Group LOS	F	F	F	F	E	E	F	F	F	E	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	15.07	38.65	38.61	35.85	18.50	18.61	3.66	51.66	52.79	0.56	30.72	29.22
50th-Percentile Queue Length [ft/ln]	376.79	966.37	965.14	896.31	462.61	465.14	91.40	1291.39	1319.73	14.07	768.10	730.60
95th-Percentile Queue Length [veh/ln]	22.83	58.67	58.65	54.83	25.56	25.68	6.58	77.85	80.41	1.01	43.58	41.96
95th-Percentile Queue Length [ft/ln]	570.68	1466.76	1466.17	1370.85	638.98	641.99	164.52	1946.27	2010.28	25.32	1089.55	1048.97

Movement, Approach, & Intersection Results

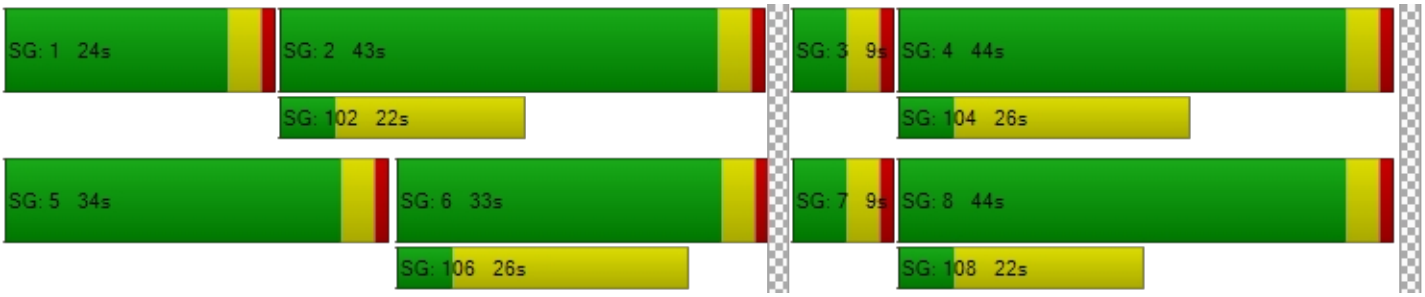
d_M, Delay for Movement [s/veh]	148.44	265.25	266.05	263.18	64.30	64.98	153.18	261.07	274.49	63.09	128.19	132.88
Movement LOS	F	F	F	F	E	E	F	F	F	E	F	F
d_A, Approach Delay [s/veh]	242.42			134.00			259.06			128.60		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	194.60											
Intersection LOS	F											
Intersection V/C	1.227											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	3.388	3.509	3.567	3.677
Crosswalk LOS	C	D	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	650	667	667
d_b, Bicycle Delay [s]	34.50	27.34	26.67	26.67
I_b,int, Bicycle LOS Score for Intersection	2.866	2.956	3.095	2.758
Bicycle LOS	C	C	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: US-395/Poplar St

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	37.393

Intersection Setup

Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	0	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	373.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	510.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	US-395			US-395						Poplar St		
Base Volume Input [veh/h]	0	1157	34	25	976	0	0	0	0	6	0	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	32	37	83	15	168	15	23	0	47	370	18	44
Site-Generated Trips [veh/h]	0	99	11	3	134	0	0	0	0	29	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	1339	129	44	1317	15	23	0	47	405	18	97
Peak Hour Factor	1.0000	0.9433	0.9433	0.9107	0.9107	1.0000	1.0000	1.0000	1.0000	0.7576	1.0000	0.7576
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	355	34	12	362	4	6	0	12	134	5	32
Total Analysis Volume [veh/h]	32	1419	137	48	1446	15	23	0	47	535	18	128
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.01	0.00	0.11	0.01	0.00	0.00	0.00	0.13	37.39	1.86	0.37
d_M, Delay for Movement [s/veh]	13.24	0.00	0.00	14.40	0.00	0.00	10000.0	408.95	16.03	10000.0	1014.98	654.37
Movement LOS	B	A	A	B	A	A	F	F	C	F	F	F
95th-Percentile Queue Length [veh/ln]	0.22	0.00	0.00	0.37	0.00	0.00	4.71	0.43	0.43	68.04	13.98	13.98
95th-Percentile Queue Length [ft/ln]	5.48	0.00	0.00	9.33	0.00	0.00	117.68	10.69	10.69	1700.89	349.41	349.41
d_A, Approach Delay [s/veh]	0.27			0.46			3296.48			8005.92		
Approach LOS	A			A			F			F		
d_I, Intersection Delay [s/veh]	1477.10											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 3: US-395/Three Flags Rd

Control Type:	Signalized	Delay (sec / veh):	21.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	190.00	100.00	190.00	224.00	100.00	224.00	182.00	100.00	100.00	274.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	US-395			US-395			Three Flags Rd			Three Flags Rd		
Base Volume Input [veh/h]	62	1088	108	27	851	95	62	1	95	133	6	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	152	0	0	348	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	105	39	4	159	0	0	0	0	45	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	38	0	0	25	0	0	25	0	0	8
Total Hourly Volume [veh/h]	64	1389	113	32	1392	74	64	1	74	183	6	23
Peak Hour Factor	0.9790	0.9790	0.9790	0.9231	0.9231	0.9231	0.8036	0.8036	0.8036	0.7130	0.7130	0.7130
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	355	29	9	377	20	20	0	23	64	2	8
Total Analysis Volume [veh/h]	65	1419	115	35	1508	80	80	1	92	257	8	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	22	43	0	32	53	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	64	64	3	62	62	26	26	26	26	26
g / C, Green / Cycle	0.05	0.61	0.61	0.03	0.59	0.59	0.25	0.25	0.25	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.04	0.41	0.08	0.02	0.44	0.05	0.06	0.06	0.19	0.00	0.02
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1389	1532	1324	1800	1530
c, Capacity [veh/h]	83	2076	927	52	2011	898	381	379	307	446	379
d1, Uniform Delay [s]	49.24	13.92	8.82	50.25	16.00	9.45	33.44	31.64	43.74	29.85	30.35
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.22	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.77	1.85	0.27	13.76	2.62	0.20	0.27	0.33	11.29	0.02	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.68	0.12	0.67	0.75	0.09	0.21	0.25	0.84	0.02	0.08
d, Delay for Lane Group [s/veh]	64.01	15.77	9.10	64.01	18.62	9.65	33.71	31.97	55.03	29.87	30.45
Lane Group LOS	E	B	A	E	B	A	C	C	E	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.97	10.11	1.05	1.08	12.14	0.76	1.70	1.92	7.67	0.16	0.63
50th-Percentile Queue Length [ft/ln]	49.34	252.64	26.35	27.08	303.52	19.10	42.55	48.05	191.75	3.88	15.82
95th-Percentile Queue Length [veh/ln]	3.55	15.32	1.90	1.95	17.85	1.38	3.06	3.46	12.21	0.28	1.14
95th-Percentile Queue Length [ft/ln]	88.81	382.98	47.42	48.74	446.37	34.39	76.60	86.50	305.30	6.98	28.48

Movement, Approach, & Intersection Results

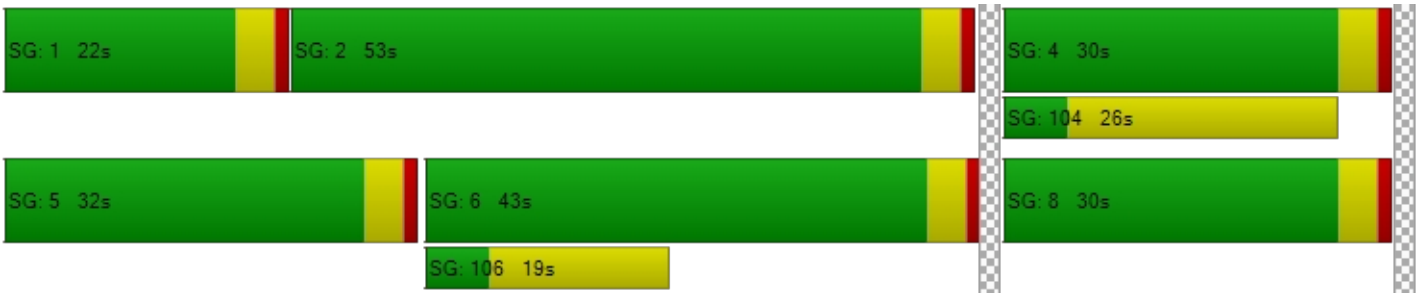
d_M, Delay for Movement [s/veh]	64.01	15.77	9.10	64.01	18.62	9.65	33.71	31.97	31.97	55.03	29.87	30.45
Movement LOS	E	B	A	E	B	A	C	C	C	E	C	C
d_A, Approach Delay [s/veh]	17.25			19.16			32.78			51.70		
Approach LOS	B			B			C			D		
d_I, Intersection Delay [s/veh]	21.59											
Intersection LOS	C											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	43.89	0.00	43.89
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.388	0.000	2.272
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	743	933	495	495
d_b, Bicycle Delay [s]	20.74	14.93	29.72	29.72
I_b,int, Bicycle LOS Score for Intersection	2.910	2.919	1.886	2.063
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: US-395/Joshua St

Control Type:	Signalized	Delay (sec / veh):	49.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.883

Intersection Setup

Name	US-395			US-395			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	191.00	100.00	226.00	200.00	100.00	223.00	140.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	US-395			US-395			Joshua St			Joshua St		
Base Volume Input [veh/h]	24	1112	101	105	925	21	39	51	7	84	26	137
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	96	0	210	232	0	0	0	0	0	0	55
Site-Generated Trips [veh/h]	0	90	212	83	118	3	2	0	0	136	0	52
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	79	0	0	6	0	0	2	0	0	62
Total Hourly Volume [veh/h]	25	1342	238	402	1312	19	43	53	5	223	27	187
Peak Hour Factor	0.9210	0.9210	0.9210	0.9016	0.9016	0.9016	0.7782	0.7782	0.7782	0.9063	0.9063	0.9063
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	364	65	111	364	5	14	17	2	62	7	52
Total Analysis Volume [veh/h]	27	1457	258	446	1455	21	55	68	6	246	30	206
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	38	52	0	38	52	0	0	30	0	0	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	14	0	0	10	0	0	10	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	48	48	34	79	79	26	26	26	26	26
g / C, Green / Cycle	0.03	0.40	0.40	0.28	0.66	0.66	0.22	0.22	0.22	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.02	0.43	0.17	0.28	0.42	0.01	0.05	0.04	0.18	0.02	0.13
s, saturation flow rate [veh/h]	1619	3427	1530	1619	3427	1530	1162	1775	1347	1800	1530
c, Capacity [veh/h]	41	1370	612	459	2253	1006	278	385	285	390	332
d1, Uniform Delay [s]	57.90	35.99	25.98	42.52	12.23	7.13	41.56	38.37	50.84	37.39	42.49
k, delay calibration	0.11	0.50	0.50	0.44	0.50	0.50	0.11	0.11	0.25	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.01	43.10	2.13	33.01	1.44	0.04	0.34	0.24	16.11	0.08	1.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	1.06	0.42	0.97	0.65	0.02	0.20	0.19	0.86	0.08	0.62
d, Delay for Lane Group [s/veh]	73.91	79.09	28.11	75.53	13.67	7.17	41.90	38.61	66.95	37.48	44.45
Lane Group LOS	E	F	C	E	B	A	D	D	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.98	26.96	5.46	16.71	10.35	0.18	1.38	1.77	8.56	0.70	5.54
50th-Percentile Queue Length [ft/ln]	24.45	673.97	136.53	417.81	258.77	4.43	34.61	44.14	213.97	17.41	138.62
95th-Percentile Queue Length [veh/ln]	1.76	37.08	9.29	23.42	15.63	0.32	2.49	3.18	13.36	1.25	9.41
95th-Percentile Queue Length [ft/ln]	44.01	926.91	232.35	585.42	390.68	7.98	62.29	79.46	333.92	31.34	235.17

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.91	79.09	28.11	75.53	13.67	7.17	41.90	38.61	38.61	66.95	37.48	44.45
Movement LOS	E	F	C	E	B	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	71.46			27.95			40.01			55.50		
Approach LOS	E			C			D			E		
d_I, Intersection Delay [s/veh]	49.15											
Intersection LOS	D											
Intersection V/C	0.883											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	51.32	51.32	51.32
I_p,int, Pedestrian LOS Score for Intersectio	0.000	3.459	2.063	2.745
Crosswalk LOS	F	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	800	433	433
d_b, Bicycle Delay [s]	21.59	21.59	36.80	36.80
I_b,int, Bicycle LOS Score for Intersection	3.062	3.150	1.776	2.457
Bicycle LOS	C	C	A	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: Phelan Rd/New Public Rd

Control Type:	Signalized	Delay (sec / veh):	35.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.913

Intersection Setup

Name										Phelan Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name										Phelan Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	704	0	0	988	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	631	0	42	18	77	0	0	129	88
Site-Generated Trips [veh/h]	0	0	0	141	0	8	3	4	0	0	5	61
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	13	0	0	0	0	0	37
Total Hourly Volume [veh/h]	0	0	0	772	0	37	21	813	0	0	1162	112
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	193	0	9	5	203	0	0	291	28
Total Analysis Volume [veh/h]	0	0	0	772	0	37	21	813	0	0	1162	112
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	27	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	7	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	23	23	23	23	23	23
g / C, Green / Cycle	0.48	0.48	0.38	0.38	0.38	0.38	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.00	0.55	0.05	0.23	0.23	0.00	0.36	0.36
s, saturation flow rate [veh/h]	1705	1463	441	1800	1800	682	1800	1745
c, Capacity [veh/h]	884	824	124	690	690	236	690	669
d1, Uniform Delay [s]	0.00	17.18	29.94	14.74	14.74	0.00	17.79	17.82
k, delay calibration	0.11	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	27.18	2.93	3.67	3.67	0.00	21.76	22.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.98	0.17	0.59	0.59	0.00	0.94	0.94
d, Delay for Lane Group [s/veh]	0.00	44.36	32.87	18.40	18.40	0.00	39.56	40.48
Lane Group LOS	A	D	C	B	B	A	D	D
Critical Lane Group	No	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	16.57	0.37	4.11	4.11	0.00	10.70	10.57
50th-Percentile Queue Length [ft/ln]	0.00	414.17	9.28	102.70	102.70	0.00	267.61	264.35
95th-Percentile Queue Length [veh/ln]	0.00	23.24	0.67	7.39	7.39	0.00	16.07	15.91
95th-Percentile Queue Length [ft/ln]	0.00	581.05	16.71	184.87	184.87	0.00	401.75	397.68

Movement, Approach, & Intersection Results

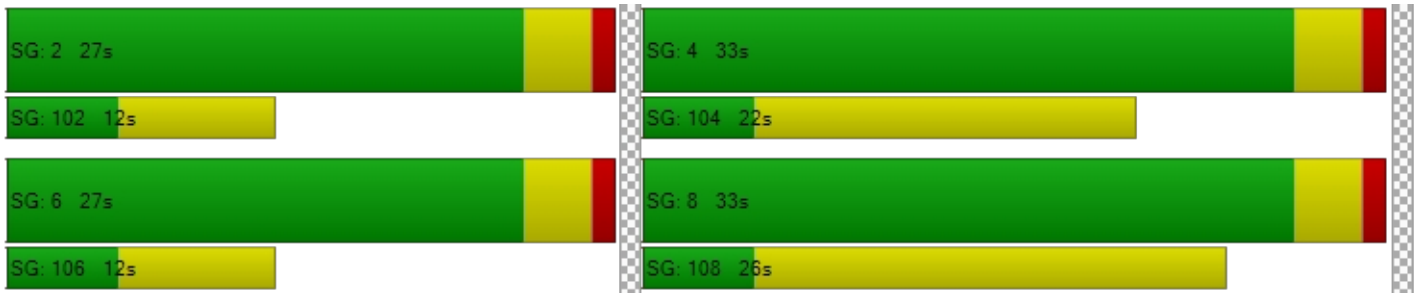
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	44.36	44.36	44.36	32.87	18.40	18.40	0.00	39.97	40.48
Movement LOS	A	A	A	D	D	D	C	B	B	A	D	D
d_A, Approach Delay [s/veh]	0.00			44.36			18.77			40.01		
Approach LOS	A			D			B			D		
d_I, Intersection Delay [s/veh]	35.14											
Intersection LOS	D											
Intersection V/C	0.913											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
I_p,int, Pedestrian LOS Score for Intersectio	1.696	2.227	2.945	4.369
Crosswalk LOS	A	B	C	E
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	767	767
d_b, Bicycle Delay [s]	8.01	8.01	11.41	11.41
I_b,int, Bicycle LOS Score for Intersection	1.560	2.916	2.248	2.641
Bicycle LOS	A	C	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Main St/Mesa Linda St

Control Type:	Signalized	Delay (sec / veh):	50.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	340.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	2	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Mesa Linda St			Mesa Linda St			Main St			Main St		
Base Volume Input [veh/h]	14	5	115	32	3	7	14	804	13	55	948	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	45	0	202	0	0	0	0	957	6	47	221	0
Site-Generated Trips [veh/h]	1	0	6	0	0	0	0	58	1	2	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	82	0	0	2	0	0	5	0	0	13
Total Hourly Volume [veh/h]	61	5	246	33	3	5	15	1851	16	106	1242	39
Peak Hour Factor	0.8449	0.8449	0.8449	0.8400	0.8400	0.8400	0.9320	0.9320	0.9320	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	1	73	10	1	1	4	497	4	28	334	10
Total Analysis Volume [veh/h]	72	6	291	39	4	6	16	1986	17	114	1334	42
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	14	0	9	53	0	17	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	27	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	R
C, Cycle Length [s]	122	122	122	122	122	122	122	122	122	122
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	10	10	5	49	49	13	57	57
g / C, Green / Cycle	0.28	0.28	0.08	0.08	0.04	0.40	0.40	0.11	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.05	0.19	0.03	0.00	0.01	0.41	0.41	0.07	0.29	0.03
s, saturation flow rate [veh/h]	1625	1530	1626	1530	1619	3237	1693	1619	4631	1530
c, Capacity [veh/h]	453	426	133	125	66	1300	680	173	2164	715
d1, Uniform Delay [s]	33.34	39.19	52.81	51.61	56.66	36.50	36.50	52.38	24.32	17.80
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.83	8.56	6.30	0.72	8.41	27.82	37.56	18.16	1.33	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.17	0.68	0.32	0.05	0.24	1.01	1.01	0.66	0.62	0.06
d, Delay for Lane Group [s/veh]	34.16	47.75	59.11	52.33	65.07	64.32	74.06	70.54	25.65	17.96
Lane Group LOS	C	D	E	D	E	F	F	E	C	B
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.87	8.76	1.48	0.20	0.62	22.93	25.82	4.12	9.17	0.65
50th-Percentile Queue Length [ft/ln]	46.76	219.04	37.00	4.88	15.47	573.27	645.55	102.96	229.36	16.18
95th-Percentile Queue Length [veh/ln]	3.37	13.62	2.66	0.35	1.11	31.04	34.46	7.41	14.14	1.16
95th-Percentile Queue Length [ft/ln]	84.16	340.40	66.60	8.78	27.85	776.10	861.62	185.33	353.55	29.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.16	34.16	47.75	59.11	59.11	52.33	65.07	67.61	74.06	70.54	25.65	17.96
Movement LOS	C	C	D	E	E	D	E	F	E	E	C	B
d_A, Approach Delay [s/veh]	44.88			58.28			67.64			28.87		
Approach LOS	D			E			E			C		
d_I, Intersection Delay [s/veh]	50.68											
Intersection LOS	D											
Intersection V/C	0.694											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	52.33	0.00	52.33
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.001	0.000	3.552
Crosswalk LOS	F	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	557	164	803	934
d_b, Bicycle Delay [s]	31.74	51.41	21.84	17.32
I_b,int, Bicycle LOS Score for Intersection	2.304	1.644	2.673	2.386
Bicycle LOS	B	A	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Main St/Key Pointe Ave

Control Type:	Signalized	Delay (sec / veh):	71.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.944

Intersection Setup

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	160.00	100.00	100.00	140.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Key Pointe Ave			Key Pointe Ave			Main St			Main St		
Base Volume Input [veh/h]	31	57	241	237	84	15	46	969	18	294	1112	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	1228	0	0	266	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	64	0	0	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	63	0	0	4	0	0	5	0	0	51
Total Hourly Volume [veh/h]	32	59	188	246	87	12	48	2300	14	306	1459	152
Peak Hour Factor	0.8479	0.8479	0.8479	0.9319	0.9319	0.9319	0.9352	0.9352	0.9352	0.9273	0.9273	0.9273
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	17	55	66	23	3	13	615	4	82	393	41
Total Analysis Volume [veh/h]	38	70	222	264	93	13	51	2459	15	330	1573	164
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	0	0	36	0	10	56	0	28	74	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	27	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	32	32	32	6	52	52	24	70	70
g / C, Green / Cycle	0.27	0.27	0.27	0.27	0.27	0.05	0.43	0.43	0.20	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.03	0.04	0.15	0.24	0.06	0.03	0.50	0.01	0.20	0.34	0.34
s, saturation flow rate [veh/h]	1308	1800	1530	1104	1762	1619	4903	1530	1619	3427	1715
c, Capacity [veh/h]	326	480	408	303	470	81	2125	663	324	1999	1000
d1, Uniform Delay [s]	39.25	33.57	37.74	47.82	34.33	55.91	34.00	19.46	48.00	15.71	15.77
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.73	0.64	5.14	27.17	1.11	31.79	76.56	0.06	54.97	1.22	2.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.15	0.54	0.87	0.23	0.63	1.16	0.02	1.02	0.58	0.58
d, Delay for Lane Group [s/veh]	39.98	34.21	42.88	74.99	35.44	87.70	110.56	19.52	102.97	16.93	18.25
Lane Group LOS	D	C	D	E	D	F	F	B	F	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.99	1.66	6.18	10.31	2.58	2.18	33.93	0.24	14.20	9.13	9.59
50th-Percentile Queue Length [ft/ln]	24.82	41.39	154.52	257.64	64.42	54.57	848.24	6.01	355.08	228.21	239.83
95th-Percentile Queue Length [veh/ln]	1.79	2.98	10.26	15.57	4.64	3.93	48.18	0.43	20.60	14.08	14.67
95th-Percentile Queue Length [ft/ln]	44.67	74.50	256.46	389.25	115.96	98.22	1204.47	10.81	514.89	352.09	366.82

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	39.98	34.21	42.88	74.99	35.44	35.44	87.70	110.56	19.52	102.97	17.28	18.25
Movement LOS	D	C	D	E	D	D	F	F	B	F	B	B
d_A, Approach Delay [s/veh]	40.71			63.66			109.56			31.04		
Approach LOS	D			E			F			C		
d_I, Intersection Delay [s/veh]	71.39											
Intersection LOS	E											
Intersection V/C	0.944											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersectio	2.440	2.192	3.646	4.247
Crosswalk LOS	B	B	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	533	867	1167
d_b, Bicycle Delay [s]	32.27	32.27	19.27	10.42
I_b,int, Bicycle LOS Score for Intersection	2.208	2.177	2.951	2.725
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 8: Main St/I-15 SB Off Ramp

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.692

Intersection Setup

Name	I-15 SB Off Ramp		Main St		Main St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	1100.00	530.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	I-15 SB Off Ramp		Main St		Main St	
Base Volume Input [veh/h]	443	350	0	1273	1255	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	111	0	643	142	0
Site-Generated Trips [veh/h]	0	11	0	40	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	122	0	0	0	0
Total Hourly Volume [veh/h]	461	364	0	2007	1473	0
Peak Hour Factor	0.9115	0.9115	1.0000	0.9495	0.9344	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	126	100	0	528	394	0
Total Analysis Volume [veh/h]	506	399	0	2114	1576	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	46	0	0	14	14	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	33	33
g / C, Green / Cycle	0.32	0.32	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.15	0.26	0.43	0.32
s, saturation flow rate [veh/h]	3329	1530	4903	4903
c, Capacity [veh/h]	1067	490	2678	2678
d1, Uniform Delay [s]	16.34	18.74	10.86	9.10
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.33	3.34	2.45	0.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.81	0.79	0.59
d, Delay for Lane Group [s/veh]	16.67	22.08	13.31	10.06
Lane Group LOS	B	C	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.44	4.77	5.26	3.14
50th-Percentile Queue Length [ft/ln]	60.92	119.37	131.48	78.59
95th-Percentile Queue Length [veh/ln]	4.39	8.36	9.02	5.66
95th-Percentile Queue Length [ft/ln]	109.65	208.95	225.50	141.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	16.67	22.08	0.00	13.31	10.06	0.00
Movement LOS	B	C		B	B	
d_A, Approach Delay [s/veh]	19.05		13.31		10.06	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	13.33					
Intersection LOS	B					
Intersection V/C	0.692					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1400	333	333
d_b, Bicycle Delay [s]	2.70	20.83	20.83
I_b,int, Bicycle LOS Score for Intersection	1.560	2.722	2.426
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 9: Main St/I-15 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.553

Intersection Setup

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	1790.00	100.00	615.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	I-15 NB Off Ramp			I-15 NB On Ramp			Main St			Main St		
Base Volume Input [veh/h]	190	4	773	0	0	0	0	1449	0	0	1531	404
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	115	0	0	0	0	0	0	126	0	0	27	0
Site-Generated Trips [veh/h]	11	0	0	0	0	0	26	14	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	201	0	0	0	0	0	0	0	0	105
Total Hourly Volume [veh/h]	324	4	603	0	0	0	26	1647	0	0	1634	315
Peak Hour Factor	0.9475	0.9475	0.9475	1.0000	1.0000	1.0000	1.0000	0.9761	1.0000	1.0000	0.9692	0.9692
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	1	159	0	0	0	7	422	0	0	421	81
Total Analysis Volume [veh/h]	342	4	636	0	0	0	26	1687	0	0	1686	325
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	0	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	20	0	0	0	0	0	40	0	0	40	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	14	0	0	3	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R		C	C	C
C, Cycle Length [s]	60	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26		26	26	26
g / C, Green / Cycle	0.43	0.43	0.43		0.44	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.20	0.21	0.21		0.34	0.31	0.31
s, saturation flow rate [veh/h]	1714	1533	1530		4903	4903	1616
c, Capacity [veh/h]	734	657	655		2149	2149	708
d1, Uniform Delay [s]	12.25	12.39	12.40		14.43	13.67	13.74
k, delay calibration	0.50	0.50	0.50		0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	2.12	2.58	2.59		0.66	0.42	1.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.49	0.49		0.78	0.70	0.71
d, Delay for Lane Group [s/veh]	14.37	14.97	14.99		15.08	14.09	15.07
Lane Group LOS	B	B	B		B	B	B
Critical Lane Group	No	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.07	2.96	2.97		4.93	4.15	4.34
50th-Percentile Queue Length [ft/ln]	76.64	74.07	74.15		123.17	103.67	108.62
95th-Percentile Queue Length [veh/ln]	5.52	5.33	5.34		8.57	7.46	7.76
95th-Percentile Queue Length [ft/ln]	137.95	133.33	133.46		214.18	186.60	194.09

Movement, Approach, & Intersection Results

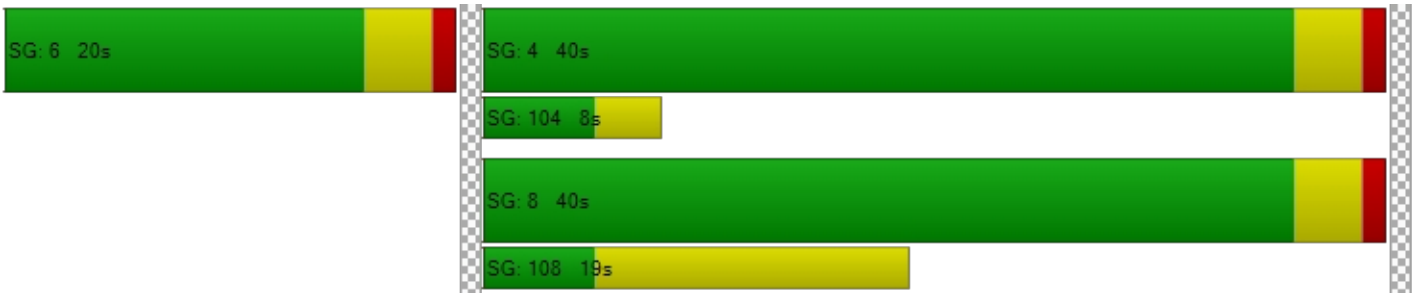
d_M, Delay for Movement [s/veh]	14.37	14.97	14.98	0.00	0.00	0.00	0.00	15.08	0.00	0.00	14.19	15.07
Movement LOS	B	B	B					B			B	B
d_A, Approach Delay [s/veh]	14.77			0.00			15.08			14.34		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	14.70											
Intersection LOS	B											
Intersection V/C	0.553											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.782	1.827	0.000	0.000
Crosswalk LOS	C	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	533	0	1200	1200
d_b, Bicycle Delay [s]	16.13	30.00	4.80	4.80
I_b,int, Bicycle LOS Score for Intersection	3.512	4.132	2.487	2.432
Bicycle LOS	D	D	B	B

Sequence

Ring 1	-	6	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 10: Joshua Rd/Outpost Rd

Control Type:	Two-way stop	Delay (sec / veh):	43.1
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.420

Intersection Setup

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Outpost Rd			Outpost Rd			Joshua St			Joshua St		
Base Volume Input [veh/h]	0	0	0	58	0	105	0	168	0	0	96	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	210	0	0	92	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	295	0	0	188	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	60	0	109	0	680	0	0	380	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.8929	0.8929	0.8929	1.0000	0.8609	1.0000	1.0000	0.8929	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	17	0	31	0	197	0	0	106	0
Total Analysis Volume [veh/h]	0	0	0	67	0	122	0	790	0	0	426	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.42	0.00	0.19	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	35.82	24.71	14.15	43.06	24.71	12.04	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	E	C	B	E	C	B		A			A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.87	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	46.81	0.00	17.72	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	24.90			23.04			0.00			0.00		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	3.10											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 11: Joshua St/I-15 SB Off-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	16.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.085

Intersection Setup

Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	1500.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Joshua St		Joshua St		Joshua St	
Base Volume Input [veh/h]	21	188	0	183	63	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	51	0	210	4	0
Site-Generated Trips [veh/h]	0	185	0	295	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	432	0	695	73	0
Peak Hour Factor	0.7240	0.7240	1.0000	0.9632	0.8289	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	149	0	180	22	0
Total Analysis Volume [veh/h]	30	597	0	722	88	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.61	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	16.17	14.32	0.00	0.00	0.00	0.00
Movement LOS	C	B		A	A	
95th-Percentile Queue Length [veh/ln]	0.28	4.33	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.94	108.29	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.41		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.29					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 12: Joshua St/I-15 NB On-Ramp

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.444

Intersection Setup

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	I-15 NB On-Ramp		Joshua St		Joshua St	
Base Volume Input [veh/h]	0	0	123	84	71	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	193	17	4	0
Site-Generated Trips [veh/h]	0	0	290	5	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	611	109	81	5
Peak Hour Factor	1.0000	1.0000	0.9115	0.9115	0.9048	0.9048
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	168	30	22	1
Total Analysis Volume [veh/h]	0	0	670	120	90	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.44	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	9.27	0.00	0.00	0.00
Movement LOS			A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	2.34	2.34	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	58.49	58.49	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		7.86		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.01					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Public Rd/North Driveway

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.075

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	32	0	0	0	0	0	0	75	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	32	0	0	0	0	0	0	75	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	8	0	0	0	0	0	0	19	0	0
Total Analysis Volume [veh/h]	0	0	32	0	0	0	0	0	0	75	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	7.20	0.00	0.00	7.26	0.00	0.00	0.00	0.00	0.00	8.87	9.37	8.66
Movement LOS	A	A	A	A	A	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.24
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.04	6.04	6.04
d_A, Approach Delay [s/veh]	0.00			2.42			0.00			8.87		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.22											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 14: New Public Rd/South Driveway

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	32	32	0	75	0	0	0	0	75	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	32	32	0	75	0	0	0	0	75	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	8	0	19	0	0	0	0	19	0	0
Total Analysis Volume [veh/h]	0	32	32	0	75	0	0	0	0	75	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance				No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	0.00	7.32	0.00	0.00	0.00	0.00	0.00	9.61	10.07	8.91
Movement LOS	A	A	A	A	A	A				A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.18	7.18	7.18
d_A, Approach Delay [s/veh]	0.00			0.00			0.00			9.61		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.37											
Intersection LOS	A											

KISS Warehouse

Vistro File: C:\...\Revised Vistro (Used the same for 22-031 and 21-139) - Revised 8.4.2023.vistro

Scenario 8 Opening Year Plus Project PM

Report File: C:\...\Opening Year Plus Project PM.pdf

8/1/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	US-395/Phelan Rd-Main St	304	1229	30	560	1001	48	54	1256	279	14	967	422	6164

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	US-395/Poplar St	32	1339	129	44	1317	15	23	0	47	405	18	97	3466

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	US-395/Three Flags Rd	64	1389	151	32	1392	99	64	1	99	183	6	31	3511

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	US-395/Joshua St	25	1342	317	402	1312	25	43	53	7	223	27	249	4025

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Phelan Rd/New Public Rd	0	0	0	772	0	50	21	813	0	0	1162	149	2967

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6	Main St/Mesa Linda St	61	5	328	33	3	7	15	1851	21	106	1242	52	3724

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Main St/Key Pointe Ave	32	59	251	246	87	16	48	2300	19	306	1459	203	5026

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
8	Main St/I-15 SB Off Ramp	461	486	2007	1473	4427

ID	Intersection Name	Northbound			Eastbound	Westbound		Total Volume
		Left	Thru	Right	Thru	Thru	Right	
9	Main St/I-15 NB Ramps	324	4	804	1647	1634	420	4833

ID	Intersection Name	Northbound			Southbound			Eastbound	Westbound	Total Volume
		Left	Thru	Right	Left	Thru	Right	Thru	Thru	
10	Joshua Rd/Outpost Rd	0	0	0	60	0	109	680	380	1229

ID	Intersection Name	Southbound		Eastbound	Westbound	Total Volume
		Left	Right	Thru	Thru	
11	Joshua St/I-15 SB Off-Ramp	22	432	695	73	1222

ID	Intersection Name	Eastbound		Westbound		Total Volume
		Left	Thru	Thru	Right	
12	Joshua St/I-15 NB On-Ramp	611	109	81	5	806

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
13	New Public Rd/North Driveway	0	0	32	0	0	0	75	0	0	107

ID	Intersection Name	Northbound			Southbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	New Public Rd/South Driveway	0	32	32	0	75	0	75	0	0	214

Option 1: Copy of US-395/Phelan Rd-Main St

Number	1											
Intersection	US-395/Phelan Rd-Main St											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	110	645	11	222	870	45	37	688	123	8	377	171
Total Analysis Volume [veh/h]	312	882	11	391	1205	54	53	1060	176	21	1346	365

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	11	34	0	17	40	0	5	43	0	5	43	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	15	33	0	28	46	0	9	49	0	10	50	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.09	0.30	0.30	0.14	0.35	0.35	0.04	0.40	0.40	0.02	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.10	0.18	0.18	0.12	0.37	0.37	0.03	0.26	0.26	0.01	0.42	0.25
so, Base Saturation Flow per Lane [pc/h/ln]	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	3144	3237	1689	3144	1700	1675	1619	3237	1579	1619	3237	1445
c, Capacity [veh/h]	288	961	502	456	595	586	66	1304	636	35	1243	555
X, volume / capacity	1.08	0.61	0.61	0.86	1.06	1.07	0.80	0.64	0.64	0.59	1.08	0.66
d, Delay for Lane Group [s/veh]	104.72	39.12	41.69	54.90	93.33	96.11	83.76	29.29	30.71	72.94	78.33	33.03

Lane Group LOS	F	D	D	D	F	F	F	C	C	E	F	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	6.18	7.34	8.02	5.77	25.15	25.22	2.02	8.95	9.00	0.75	23.80	8.46
50th-Percentile Queue Length [ft/ln]	154.40	183.44	200.47	144.34	628.64	630.51	50.52	223.86	224.94	18.85	595.11	211.45
95th-Percentile Queue Length [veh/ln]	10.54	11.78	12.66	9.71	34.76	35.02	3.64	13.86	13.92	1.36	33.59	13.23
95th-Percentile Queue Length [ft/ln]	263.51	294.50	316.57	242.85	869.10	875.48	90.94	346.55	347.92	33.93	839.82	330.69

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.72	39.98	41.69	54.90	94.65	96.11	83.76	29.60	30.71	72.94	78.33	33.03
Movement LOS	F	D	D	D	F	F	F	C	C	E	F	C
Critical Movement	Yes	No	No	No	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	56.76			85.28			31.97			68.72		
Approach LOS	E			F			C			E		
d_I, Intersection Delay [s/veh]	62.85											
Intersection LOS	E											
Intersection V/C	0.922											

Option 1: Copy of US-395/Phelan Rd-Main St

Number	1											
Intersection	US-395/Phelan Rd-Main St											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	US-395			US-395			Phelan Rd			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	215	1049	19	205	815	38	36	568	100	8	736	316
Total Analysis Volume [veh/h]	308	1245	22	589	1054	38	64	1481	246	15	1004	328

Intersection Settings

Cycle Length [s]	110											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fixed time											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	14	32	0	24	42	0	8	43	0	5	40	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	16	33	0	25	42	0	11	43	0	9	41	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	24	0	0	21	0	0	24	0	0	24	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.11	0.26	0.26	0.19	0.35	0.35	0.06	0.35	0.35	0.05	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.10	0.26	0.26	0.19	0.32	0.32	0.04	0.36	0.36	0.01	0.31	0.23
so, Base Saturation Flow per Lane [pc/h/ln]	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	3144	3237	1685	3144	1700	1679	1619	3237	1579	1619	3237	1445
c, Capacity [veh/h]	343	853	444	600	587	580	103	1148	560	74	1089	486
X, volume / capacity	0.90	0.98	0.98	0.98	0.93	0.94	0.62	1.01	1.01	0.20	0.92	0.67
d, Delay for Lane Group [s/veh]	76.89	65.76	77.40	76.72	58.50	59.78	75.19	64.60	77.06	56.74	49.11	38.66

Lane Group LOS	E	E	E	E	E	E	E	F	F	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.32	13.40	15.39	10.20	16.78	16.89	2.35	18.60	20.08	0.51	13.95	7.89
50th-Percentile Queue Length [ft/ln]	132.96	335.05	384.74	255.10	419.52	422.17	58.84	464.89	502.10	12.66	348.68	197.16
95th-Percentile Queue Length [veh/ln]	9.10	19.41	21.82	15.44	23.50	23.63	4.24	25.85	27.70	0.91	20.07	12.49
95th-Percentile Queue Length [ft/ln]	227.52	485.14	545.58	386.08	587.48	590.65	105.91	646.20	692.46	22.79	501.79	312.30

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	76.89	69.61	77.40	76.72	59.12	59.78	75.19	67.30	77.06	56.74	49.11	38.66
Movement LOS	E	E	E	E	E	E	E	E	E	E	D	D
Critical Movement	No	No	Yes	No	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	71.14			65.30			68.92			46.65		
Approach LOS	E			E			E			D		
d_I, Intersection Delay [s/veh]	63.83											
Intersection LOS	E											
Intersection V/C	0.814											

Option 2: Copy of US-395/Poplar St

Number	1											
Intersection	US-395/Poplar St											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	815	18	28	982	0	0	0	0	8	0	3
Total Analysis Volume [veh/h]	60	1229	370	110	1256	22	7	0	14	183	9	22

Intersection Settings

Cycle Length [s]	80											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Isolated											
Actuation Type	Fixed time											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	55	0	11	57	0	0	14	0	0	14	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.06	0.61	0.61	0.08	0.63	0.00	0.12	0.00	0.12
(v / s)_i Volume / Saturation Flow Rate	0.04	0.45	0.47	0.08	0.71	0.00	0.01	0.11	0.02
so, Base Saturation Flow per Lane [pc/h/ln]	1800	1800	1800	1800	1800	1800	1800	1800	1800
Arrival type	3			3		3		3	
s, saturation flow rate [veh/h]	1440	1800	1661	1440	1795	1714	1530	1714	1600
c, Capacity [veh/h]	137	1093	1009	171	1132	0	182	0	190
X, volume / capacity	0.44	0.75	0.78	0.64	1.13	10000.00	0.08	10000.00	0.16
d, Delay for Lane Group [s/veh]	48.66	16.52	18.11	55.30	85.03	0.00	33.72	0.00	35.07

Lane Group LOS	D	B	B	E	F	F	C	F	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.53	9.78	9.94	2.94	37.35	0.00	0.29	0.00	0.66
50th-Percentile Queue Length [ft/ln]	38.17	244.38	248.42	73.40	933.75	0.00	7.28	0.00	16.38
95th-Percentile Queue Length [veh/ln]	2.75	14.90	15.11	5.28	52.29	0.00	0.52	0.00	1.18
95th-Percentile Queue Length [ft/ln]	68.70	372.56	377.66	132.12	1307.31	0.00	13.11	0.00	29.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.66	17.05	18.11	55.30	85.03	85.03	0.00	33.72	33.72	0.00	35.07	35.07
Movement LOS	D	B	B	E	F	F	A	C	C	A	D	D
Critical Movement	No	No	No	No	Yes	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	18.43			82.67			22.48			5.08		
Approach LOS	B			F			C			A		
d_I, Intersection Delay [s/veh]	44.76											
Intersection LOS	D											
Intersection V/C	0.773											

Option 2: Copy of US-395/Poplar St

Number	1											
Intersection	US-395/Poplar St											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	US-395			US-395						Poplar St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	1157	34	25	976	0	0	0	0	6	0	44
Total Analysis Volume [veh/h]	34	1420	103	48	1446	12	23	0	35	534	24	96

Intersection Settings

Cycle Length [s]	120											
Active Pattern	Pattern 1											
Coordination Type	Time of Day Pattern Isolated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	73	0	9	73	0	0	38	0	0	38	0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.03	0.71	0.71	0.04	0.72	1.00	0.09	1.00	0.09
(v / s)_i Volume / Saturation Flow Rate	0.02	0.43	0.43	0.03	0.81	0.01	0.02	0.31	0.08
so, Base Saturation Flow per Lane [pc/h/ln]	1800	1800	1800	1800	1800	1800	1800	1800	1800
Arrival type	3			3		3		3	
s, saturation flow rate [veh/h]	1440	1800	1758	1440	1797	1714	1530	1714	1577
c, Capacity [veh/h]	76	1271	1241	93	1292	1714	141	1714	146
X, volume / capacity	0.45	0.60	0.61	0.52	1.13	0.01	0.25	0.31	0.82
d, Delay for Lane Group [s/veh]	64.20	11.45	11.61	63.53	85.73	0.00	53.18	0.47	66.26

Lane Group LOS	E	B	B	E	F	A	D	A	E
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.13	9.50	9.44	1.58	52.57	0.00	1.05	0.23	4.13
50th-Percentile Queue Length [ft/ln]	28.24	237.50	235.95	39.47	1314.29	0.04	26.31	5.65	103.30
95th-Percentile Queue Length [veh/ln]	2.03	14.55	14.48	2.84	71.69	0.00	1.89	0.41	7.44
95th-Percentile Queue Length [ft/ln]	50.83	363.86	361.91	71.05	1792.32	0.07	47.37	10.17	185.94

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	64.20	11.52	11.61	63.53	85.73	85.73	0.00	53.18	53.18	0.47	66.26	66.26
Movement LOS	E	B	B	E	F	F	A	D	D	A	E	E
Critical Movement	No	No	No	No	Yes	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	12.68			85.02			32.09			12.55		
Approach LOS	B			F			C			B		
d_I, Intersection Delay [s/veh]	41.82											
Intersection LOS	D											
Intersection V/C	1.169											

Option 1: Copy of Joshua St/I-15 SB Off-Ramp

Number	11					
Intersection	Joshua St/I-15 SB Off-Ramp					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Base Volume Input [veh/h]	66	207	0	154	30	0
Total Analysis Volume [veh/h]	97	798	0	352	66	0

Intersection Settings

Cycle Length [s]	60					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fixed time					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	39	0	0	21	21	0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	7	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.58	0.58	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.06	0.52	0.20	0.04
so, Base Saturation Flow per Lane [pc/h/ln]	1800	1800	1800	1800
Arrival type	3		3	3
s, saturation flow rate [veh/h]	1714	1530	1800	1800
c, Capacity [veh/h]	1000	893	510	510
X, volume / capacity	0.10	0.89	0.69	0.13
d, Delay for Lane Group [s/veh]	5.71	24.20	26.62	16.52

Lane Group LOS	A	C	C	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.40	8.94	4.72	0.65
50th-Percentile Queue Length [ft/ln]	10.03	223.42	118.10	16.21
95th-Percentile Queue Length [veh/ln]	0.72	13.84	8.29	1.17
95th-Percentile Queue Length [ft/ln]	18.05	345.99	207.21	29.17

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.71	24.20	0.00	26.62	16.52	0.00
Movement LOS	A	C		C	B	
Critical Movement	No	No		Yes	No	
d_A, Approach Delay [s/veh]	22.19		26.62		16.52	
Approach LOS	C		C		B	
d_I, Intersection Delay [s/veh]	23.10					
Intersection LOS	C					
Intersection V/C	0.717					

Option 1: Copy of Joshua St/I-15 SB Off-Ramp

Number	11					
Intersection	Joshua St/I-15 SB Off-Ramp					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Joshua St		Joshua St		Joshua St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Base Volume Input [veh/h]	21	188	0	183	63	0
Total Analysis Volume [veh/h]	30	448	0	722	88	0

Intersection Settings

Cycle Length [s]	60					
Active Pattern	Pattern 1					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fixed time					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	10	10	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	27	0	0	33	33	0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	7	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.38	0.38	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.02	0.29	0.40	0.05
so, Base Saturation Flow per Lane [pc/h/ln]	1800	1800	1800	1800
Arrival type	3		3	3
s, saturation flow rate [veh/h]	1714	1530	1800	1800
c, Capacity [veh/h]	657	587	870	870
X, volume / capacity	0.05	0.76	0.83	0.10
d, Delay for Lane Group [s/veh]	11.74	25.27	22.40	8.65

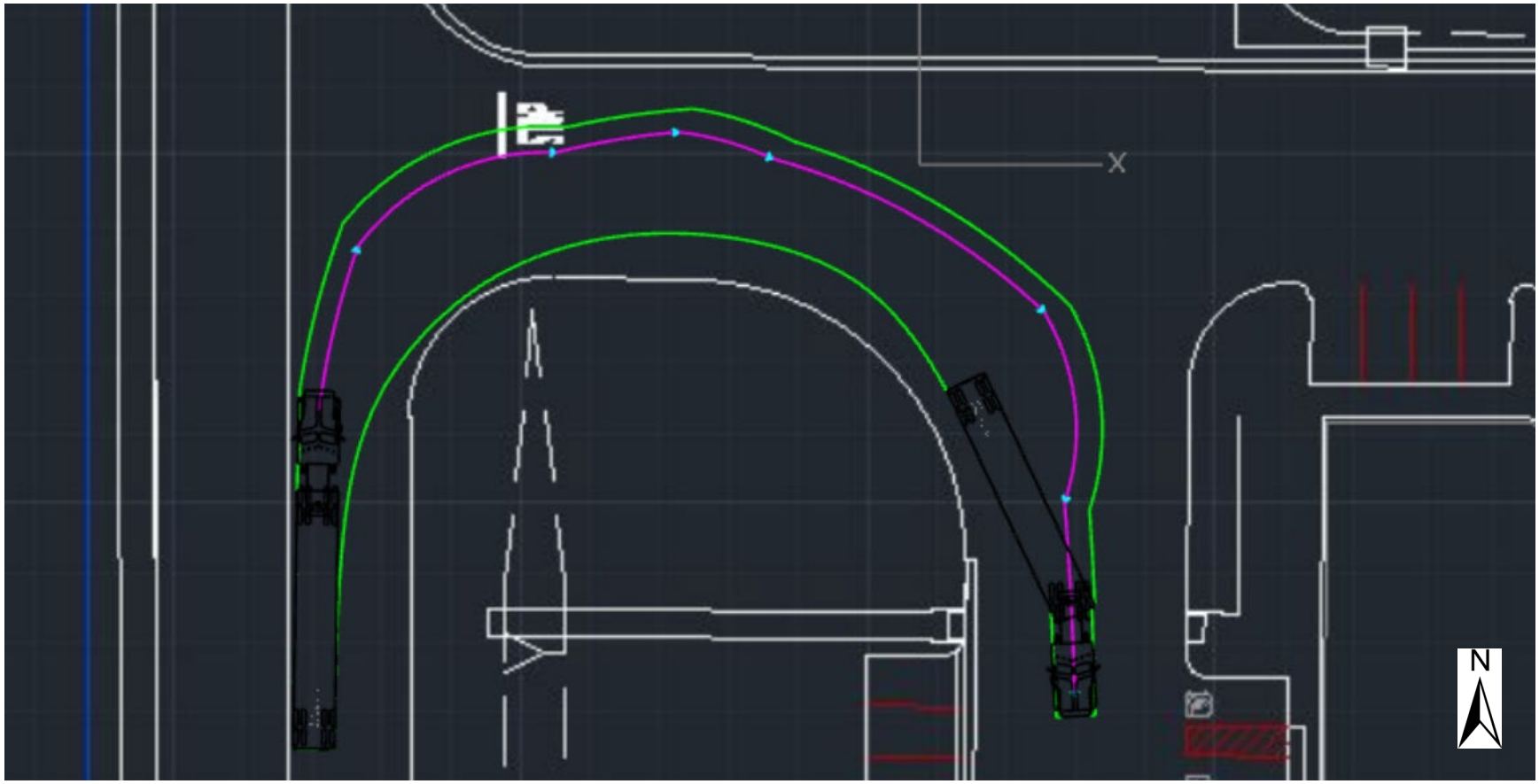
Lane Group LOS	B	C	C	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.23	5.74	8.27	0.52
50th-Percentile Queue Length [ft/ln]	5.72	143.54	206.63	13.08
95th-Percentile Queue Length [veh/ln]	0.41	9.67	12.98	0.94
95th-Percentile Queue Length [ft/ln]	10.30	241.79	324.50	23.54

Movement, Approach, & Intersection Results

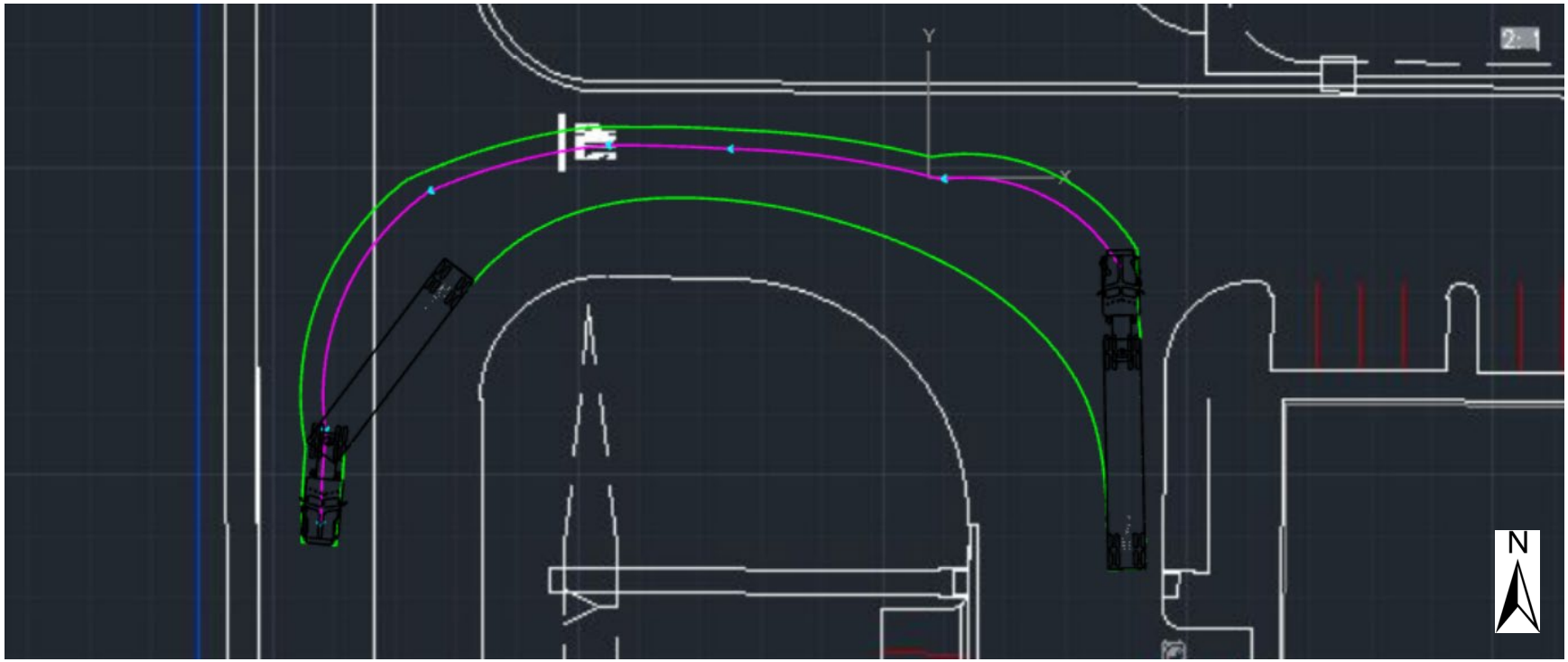
d_M, Delay for Movement [s/veh]	11.74	25.27	0.00	22.40	8.65	0.00
Movement LOS	B	C		C	A	
Critical Movement	No	Yes		No	No	
d_A, Approach Delay [s/veh]	24.42		22.40		8.65	
Approach LOS	C		C		A	
d_I, Intersection Delay [s/veh]	22.21					
Intersection LOS	C					
Intersection V/C	0.694					

APPENDIX D – TRUCK TURNING TEMPLATES

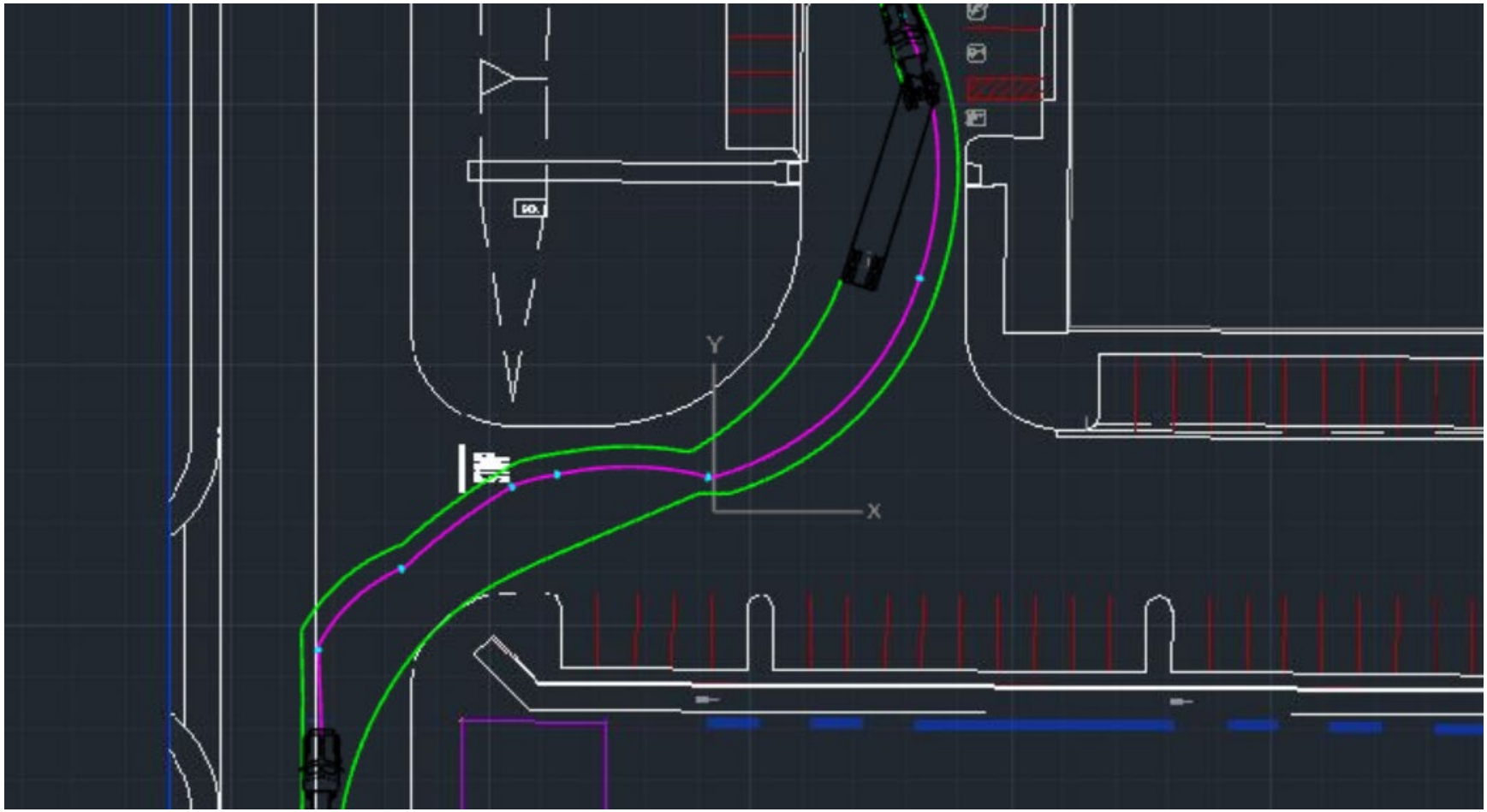
New Public Road/Project North Driveway (Inbound)



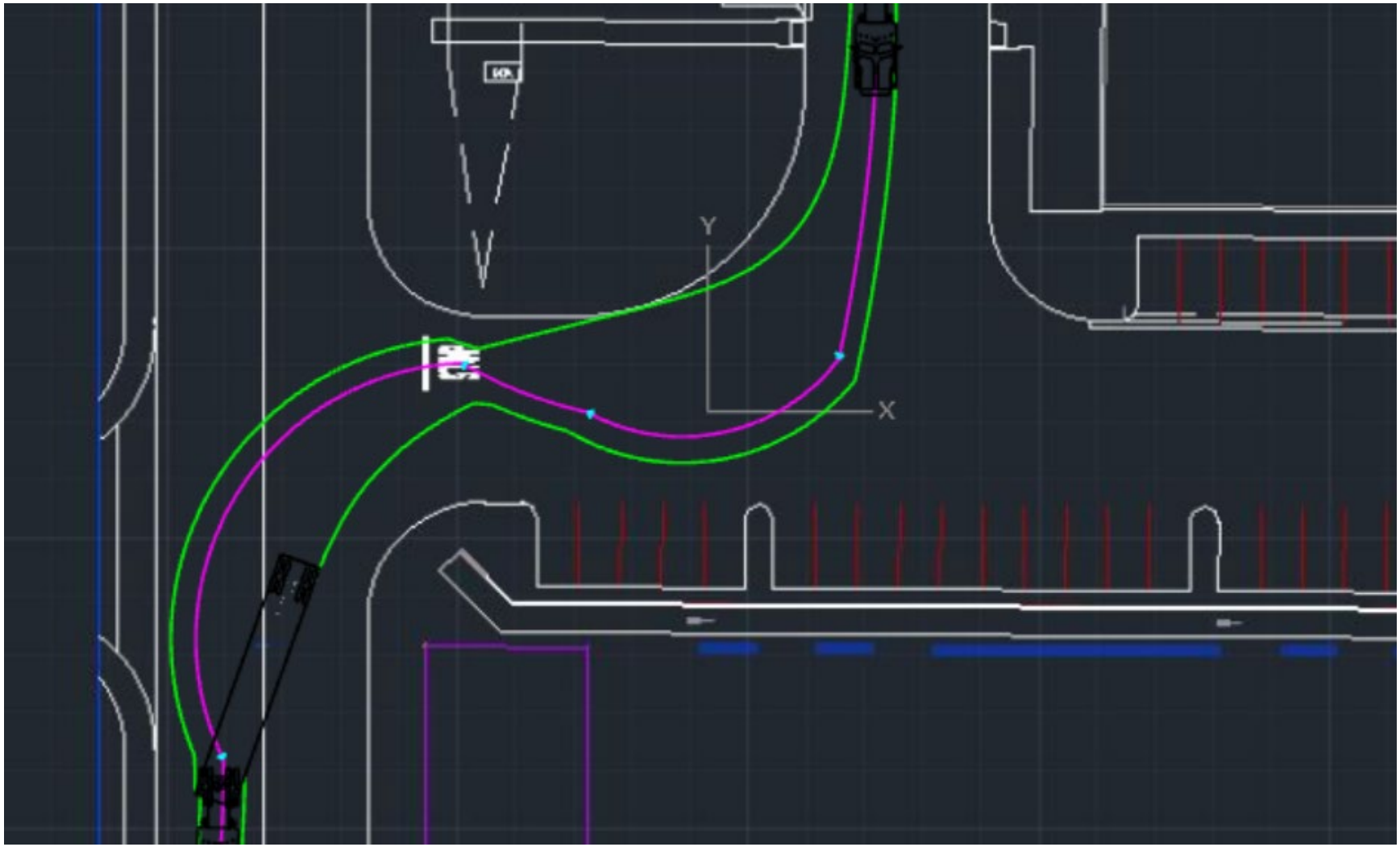
New Public Road/Project North Driveway (Outbound)



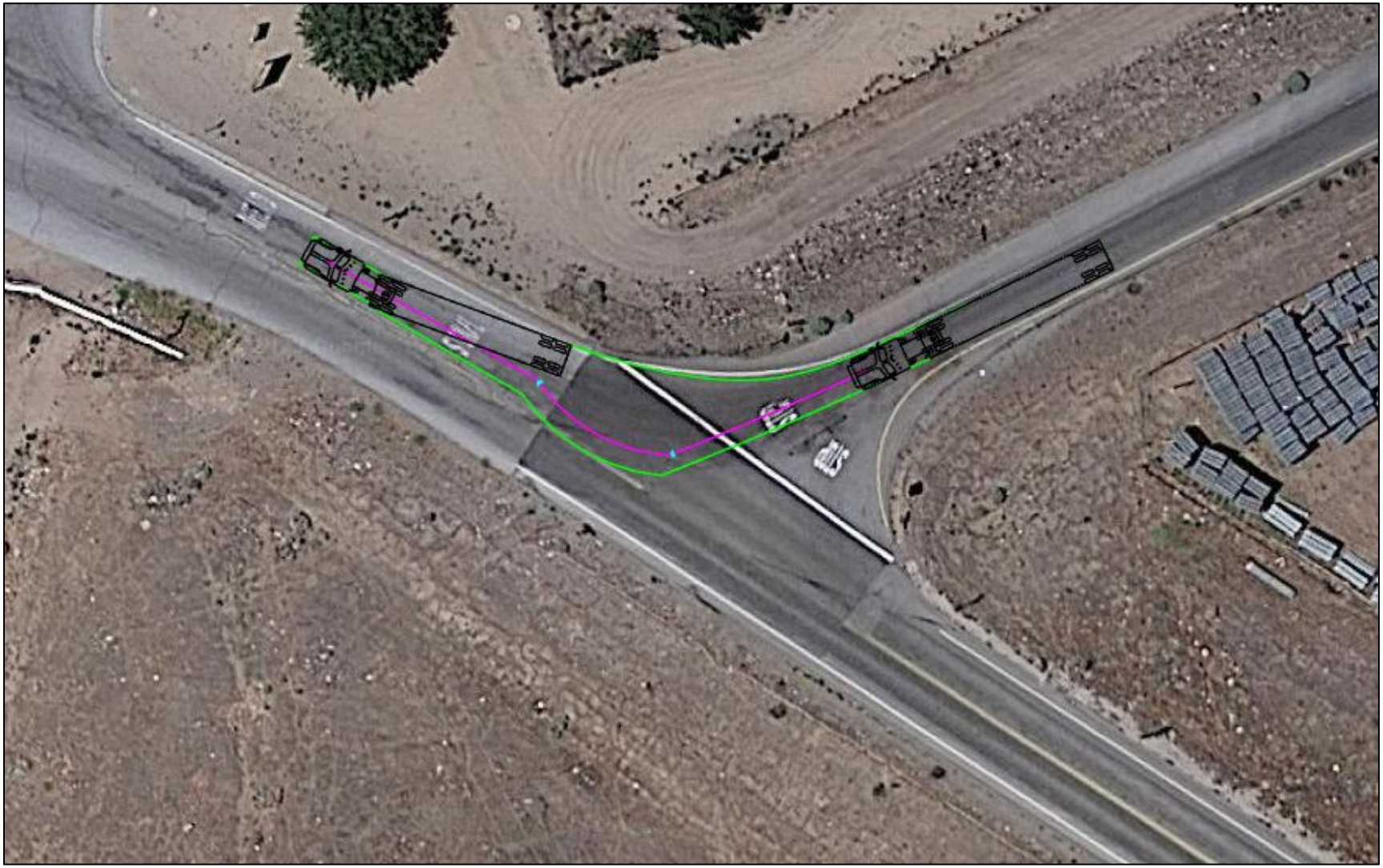
New Public Road/Project South Driveway (Inbound)



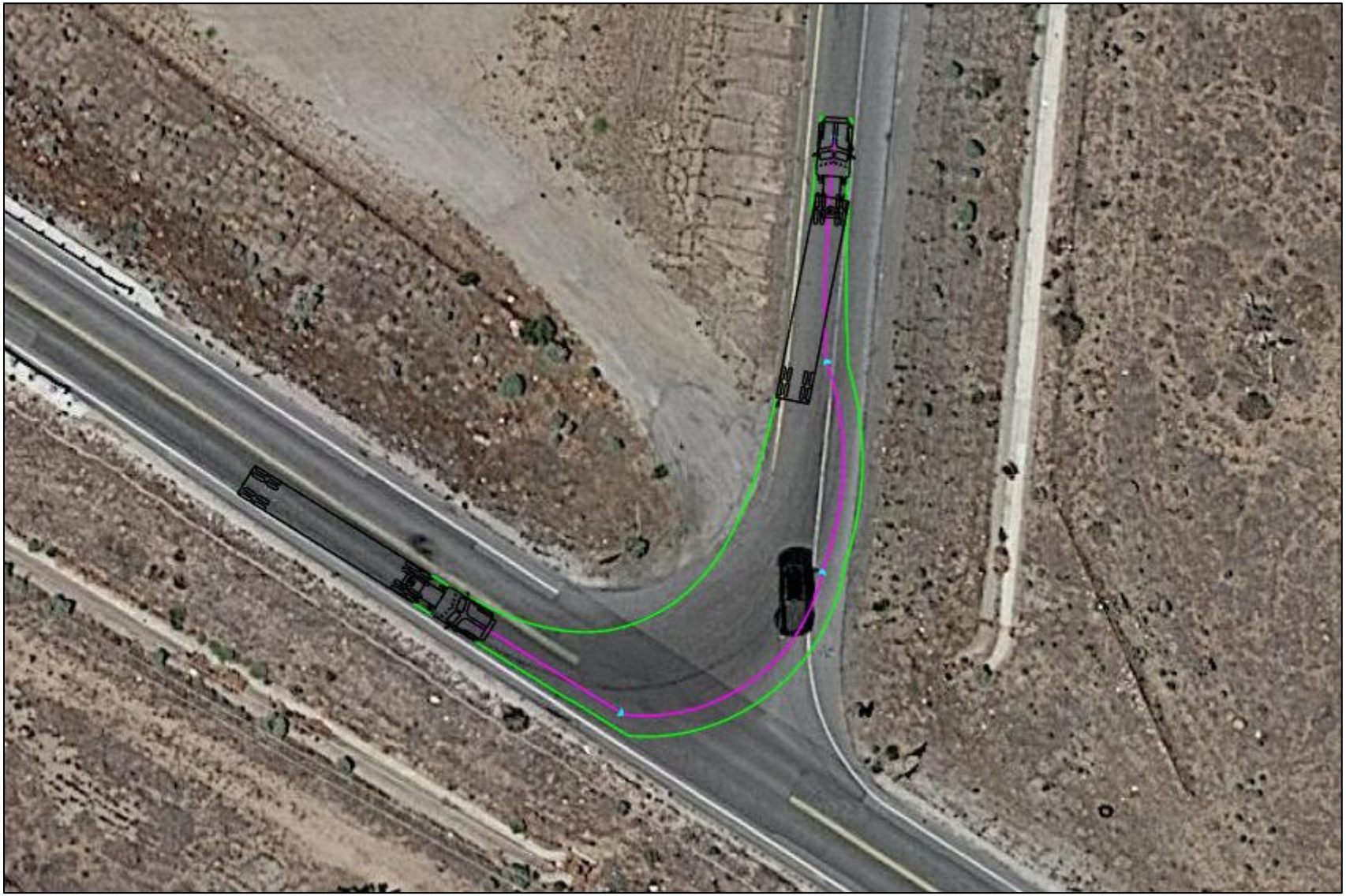
New Public Road/Project South Driveway (Outbound)



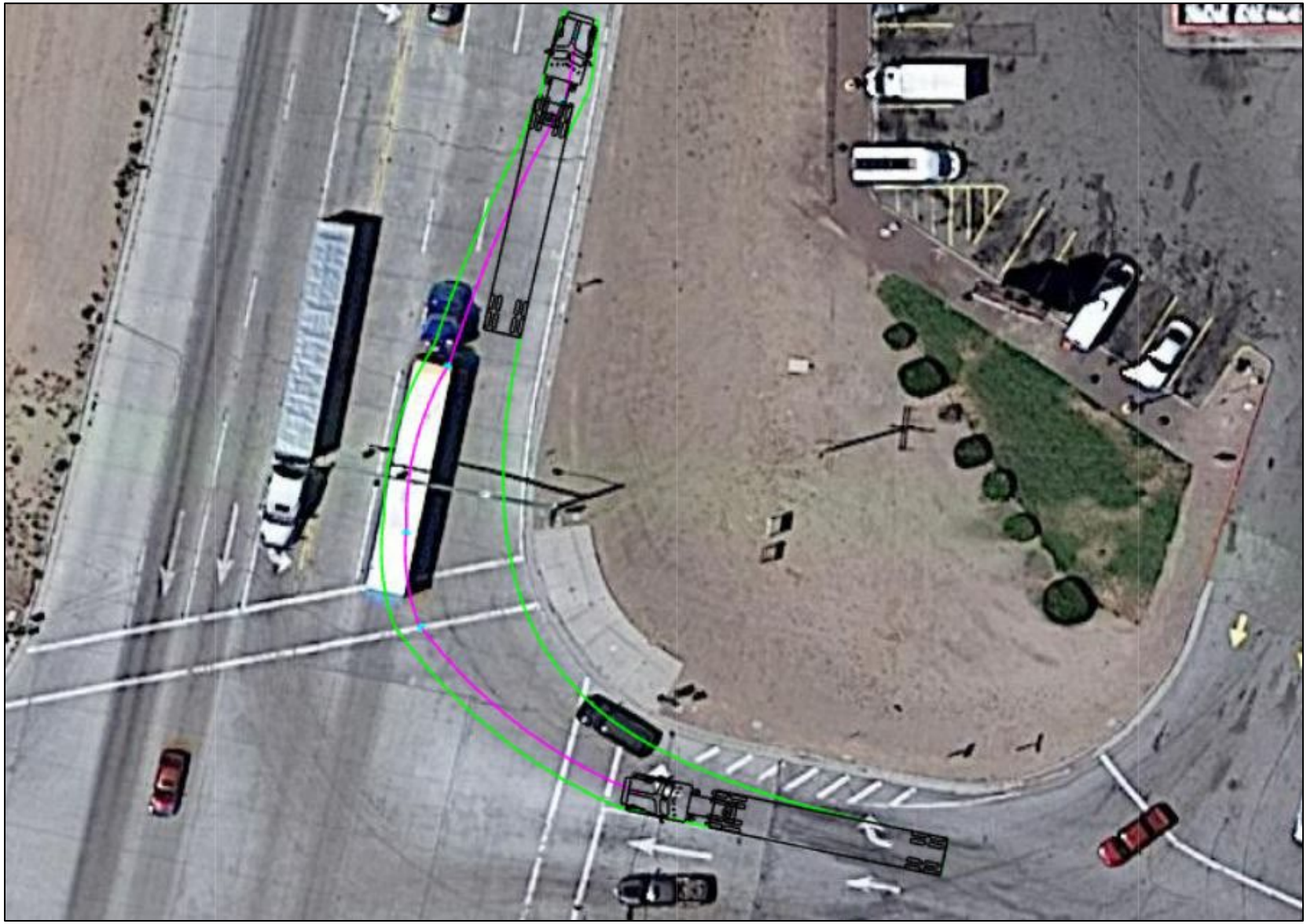
Joshua Street/I-15 SB Off Ramp (Inbound)



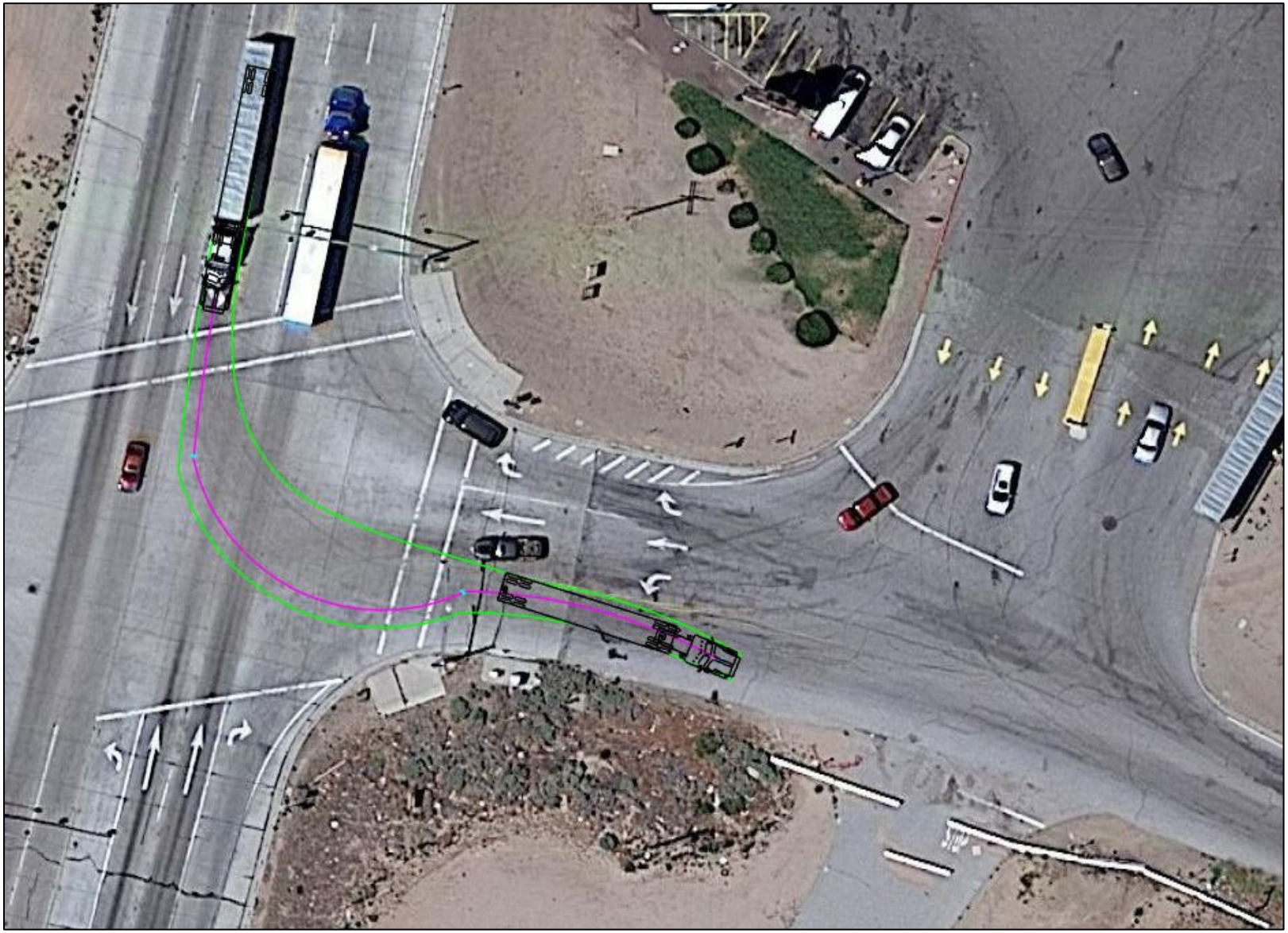
Joshua Street/I-15 NB On Ramp (Outbound)



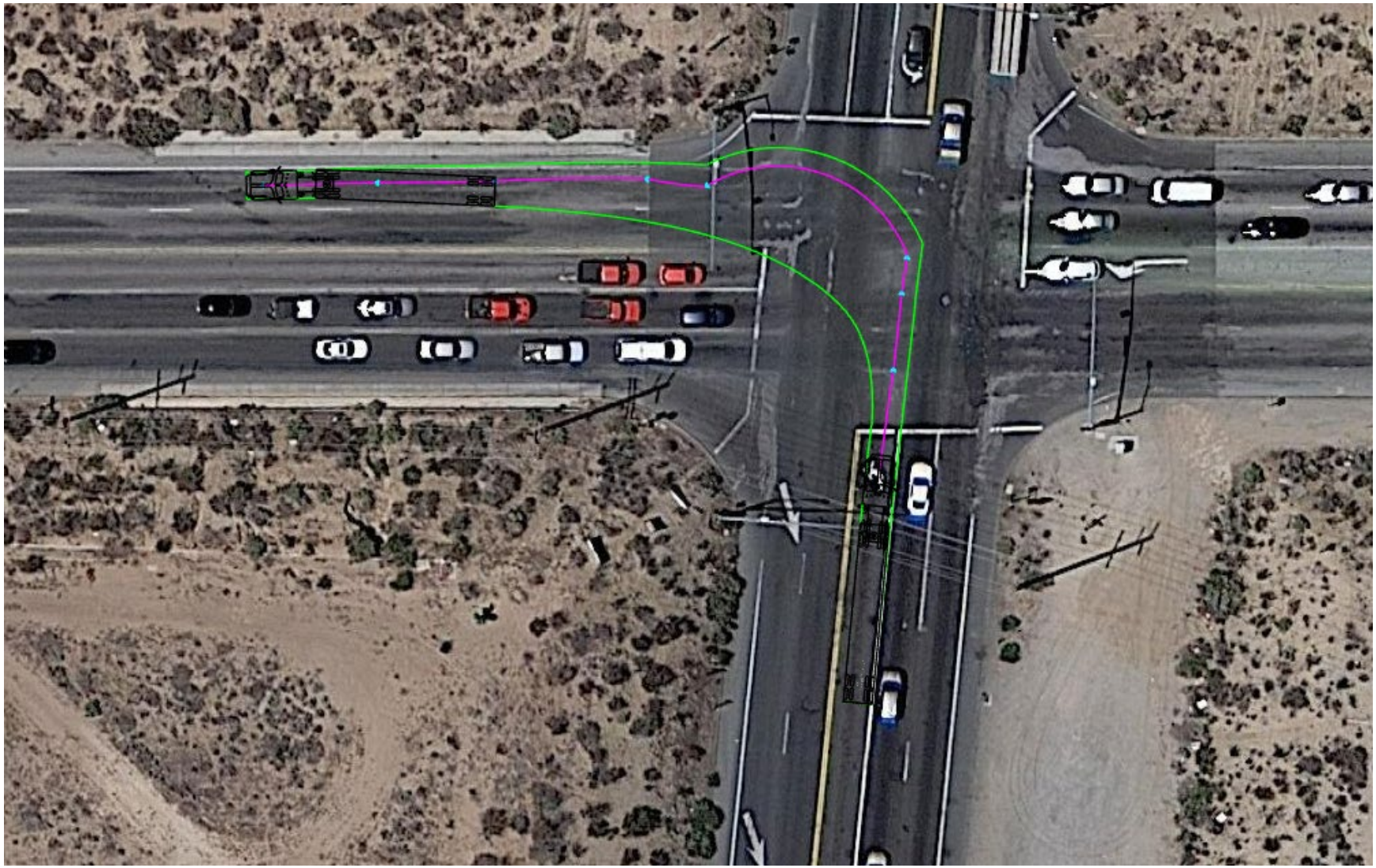
Joshua Street/US-395 (Inbound)



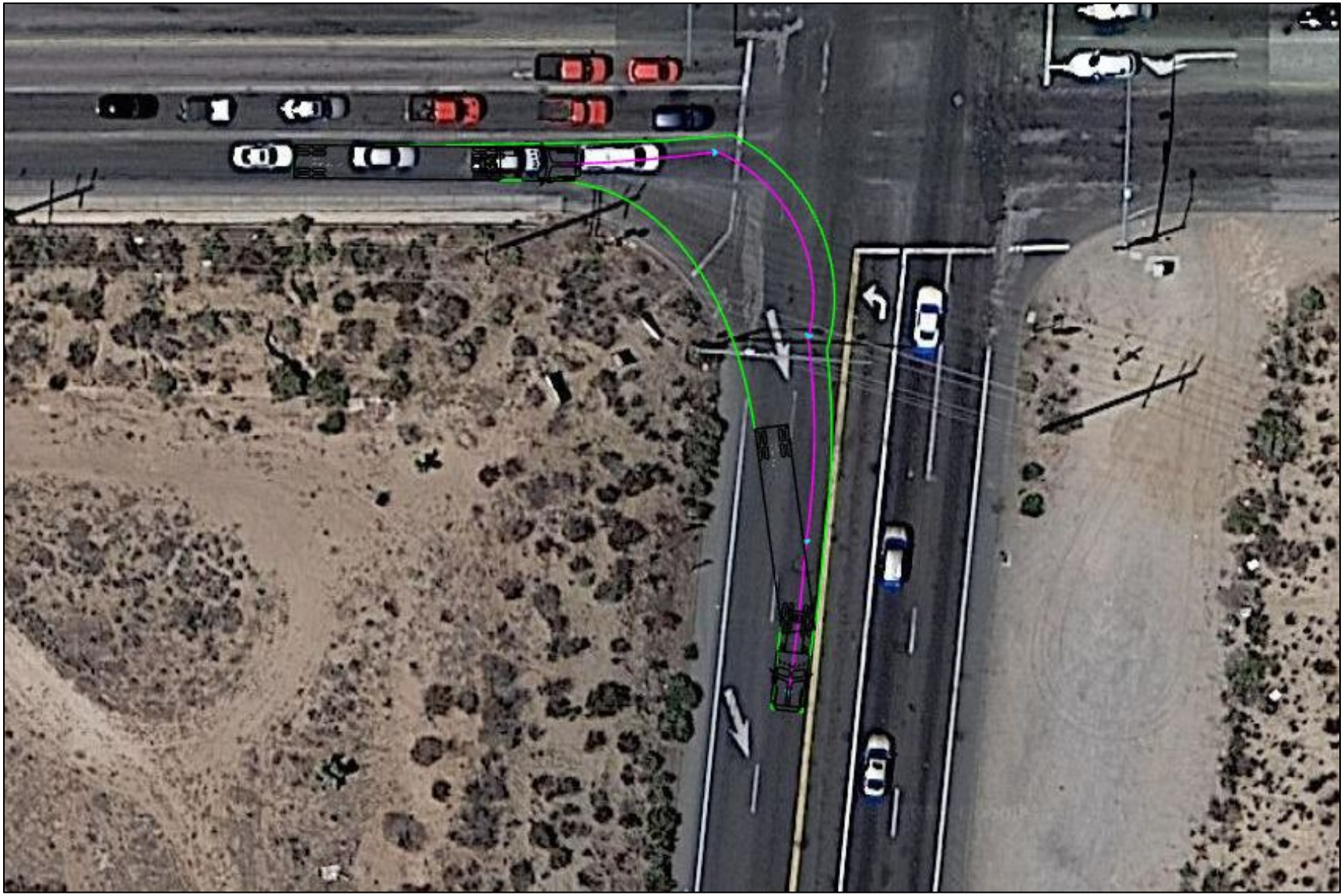
Joshua Street/US-395 (Outbound)



US-395/Phelan Road-Main Street (Inbound)



US-395/Phelan Road-Main Street (Outbound)

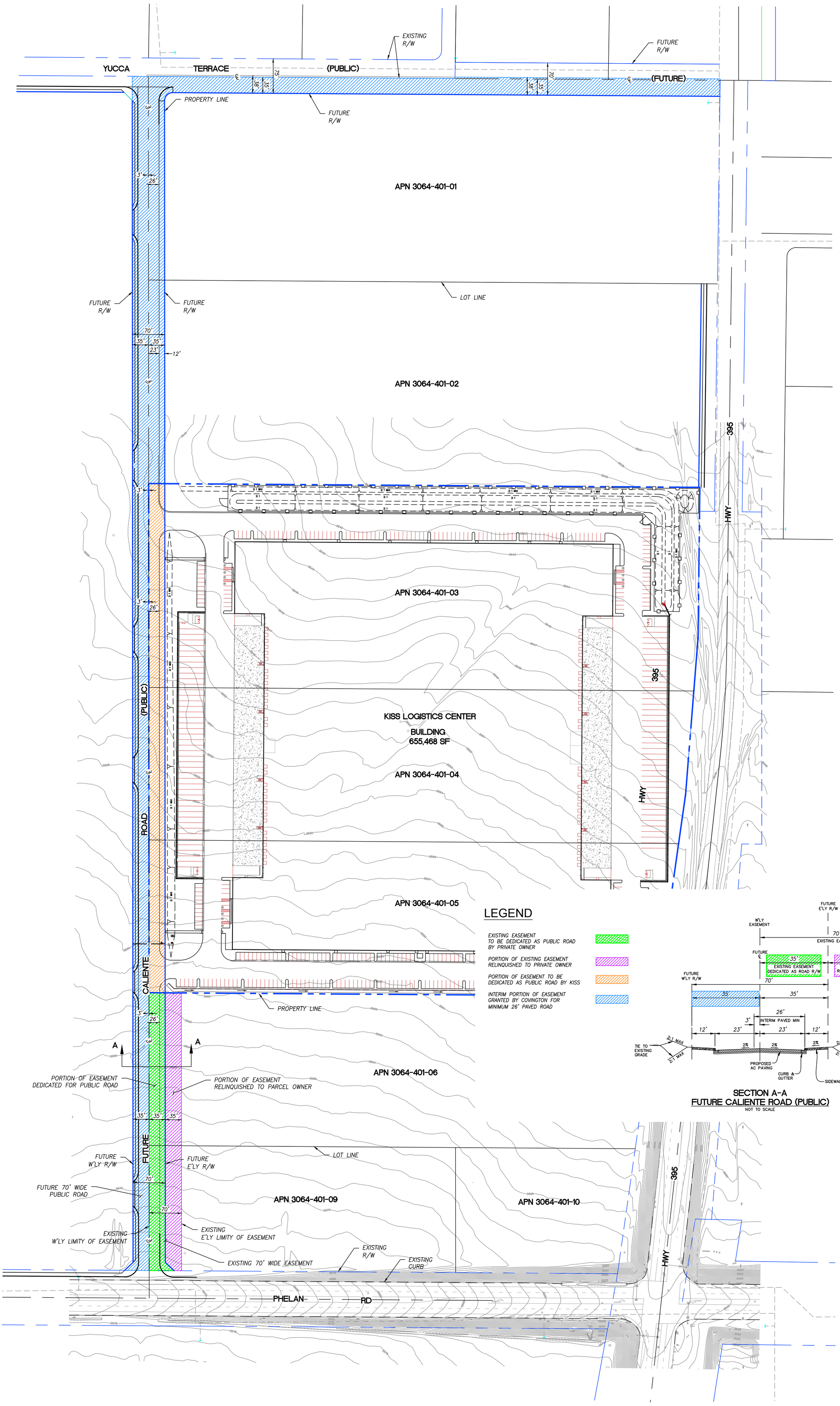


APPENDIX E – ADJACENT ROADWAY EXHIBIT

KISS LOGISTICS CENTER

OFFSITE SHARED EASEMENT EXHIBIT

1/4/23



SECTION A-A
FUTURE CALIENTE ROAD (PUBLIC)
NOT TO SCALE

ALLIANCE
LAND PLANNING & ENGINEERING INC.

2248 FARADAY AVE.
CARLSBAD, CA 92008
TEL: (760) 431-9896
FAX: (760) 431-8802

27413 TOURNEY ROAD
SUITE 120
VALENCIA, CA 91355
TEL: (661) 799-2760

CIVIL ENGINEERING • LAND PLANNING • HILLSIDE DESIGN • SURVEYING

SCALE: 1"=100'

I:\CAD\2178 – HESPERIA 29\EXHIBIT\2178_OFFSITE SHARED EASEMENT EXHIBIT_010423.dwg

APPENDIX F – TRAFFIC SIGNAL WARRANT ASSESSMENTS

Signal Warrants Report For Intersection 2: US-395/Poplar St

Warrants Summary

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

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	N	S	E	W
1	1267	1647	102	26
2	1229	1598	99	25
3	1204	1565	97	25
4	1128	1466	91	23
5	1001	1301	81	21
6	988	1285	80	20
7	976	1268	79	20
8	887	1153	71	18
9	874	1136	70	18
10	862	1120	69	18
11	748	972	60	15
12	697	906	56	14
13	684	889	55	14
14	507	659	41	10
15	507	659	41	10
16	355	461	29	7
17	203	264	16	4
18	203	264	16	4
19	114	148	9	2
20	63	82	5	1
21	38	49	3	1
22	13	16	1	0
23	13	16	1	0
24	13	16	1	0

Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	2914	2	102	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
2	3	2827	2	99	No	No	No	No	No	Yes	Yes	Yes	Yes	No
3	3	2769	2	97	No	No	No	No	No	Yes	Yes	Yes	Yes	No
4	3	2594	2	91	No	No	No	No	No	Yes	Yes	Yes	Yes	No
5	3	2302	2	81	No	No	No	No	No	Yes	Yes	Yes	Yes	No
6	3	2273	2	80	No	No	No	No	No	Yes	Yes	Yes	No	No
7	3	2244	2	79	No	No	No	No	No	No	Yes	Yes	No	No
8	3	2040	2	71	No	No	No	No	No	No	Yes	Yes	No	No
9	3	2010	2	70	No	No	No	No	No	No	Yes	Yes	No	No
10	3	1982	2	69	No	No	No	No	No	No	No	Yes	No	No
11	3	1720	2	60	No	No	No	No	No	No	No	Yes	No	No
12	3	1603	2	56	No	No	No	No	No	No	No	Yes	No	No
13	3	1573	2	55	No	No	No	No	No	No	No	No	No	No
14	3	1166	2	41	No	No	No	No	No	No	No	No	No	No
15	3	1166	2	41	No	No	No	No	No	No	No	No	No	No
16	3	816	2	29	No	No	No	No	No	No	No	No	No	No
17	3	467	2	16	No	No	No	No	No	No	No	No	No	No
18	3	467	2	16	No	No	No	No	No	No	No	No	No	No
19	3	262	2	9	No	No	No	No	No	No	No	No	No	No
20	3	145	2	5	No	No	No	No	No	No	No	No	No	No
21	3	87	2	3	No	No	No	No	No	No	No	No	No	No
22	3	29	2	1	No	No	No	No	No	No	No	No	No	No
23	3	29	2	1	No	No	No	No	No	No	No	No	No	No
24	3	29	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	1	6	9	12	5	1

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	6176.5	184.9
Number of Lanes on Minor Street Approach	2	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	175:00	1:20
Delay Condition Met	Yes	No
Volume on Minor Street Approach During Same Hour	102	26
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	3042	3042
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	**No**	

Signal Warrants Report For Intersection 11: Joshua St/I-15 SB Off-Ramp

Warrants Summary

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

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	54	301	829
2	52	292	804
3	51	286	788
4	48	268	738
5	43	238	655
6	42	235	647
7	42	232	638
8	38	211	580
9	37	208	572
10	37	205	564
11	32	178	489
12	30	166	456
13	29	163	448
14	22	120	332
15	22	120	332
16	15	84	232
17	9	48	133
18	9	48	133
19	5	27	75
20	3	15	41
21	2	9	25
22	1	3	8
23	1	3	8
24	1	3	8

Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	355	2	829	No	No	Yes	Yes	No	No	No	No	Yes	Yes
2	1	344	2	804	No	No	No	Yes	No	No	No	No	Yes	Yes
3	1	337	2	788	No	No	No	Yes	No	No	No	No	Yes	Yes
4	1	316	2	738	No	No	No	Yes	No	No	No	No	Yes	Yes
5	1	281	2	655	No	No	No	Yes	No	No	No	No	Yes	Yes
6	1	277	2	647	No	No	No	No	No	No	No	No	Yes	Yes
7	1	274	2	638	No	No	No	No	No	No	No	No	Yes	Yes
8	1	249	2	580	No	No	No	No	No	No	No	No	Yes	Yes
9	1	245	2	572	No	No	No	No	No	No	No	No	Yes	Yes
10	1	242	2	564	No	No	No	No	No	No	No	No	Yes	Yes
11	1	210	2	489	No	No	No	No	No	No	No	No	Yes	Yes
12	1	196	2	456	No	No	No	No	No	No	No	No	Yes	Yes
13	1	192	2	448	No	No	No	No	No	No	No	No	Yes	Yes
14	1	142	2	332	No	No	No	No	No	No	No	No	Yes	No
15	1	142	2	332	No	No	No	No	No	No	No	No	Yes	No
16	1	99	2	232	No	No	No	No	No	No	No	No	No	No
17	1	57	2	133	No	No	No	No	No	No	No	No	No	No
18	1	57	2	133	No	No	No	No	No	No	No	No	No	No
19	1	32	2	75	No	No	No	No	No	No	No	No	No	No
20	1	18	2	41	No	No	No	No	No	No	No	No	No	No
21	1	11	2	25	No	No	No	No	No	No	No	No	No	No
22	1	4	2	8	No	No	No	No	No	No	No	No	No	No
23	1	4	2	8	No	No	No	No	No	No	No	No	No	No
24	1	4	2	8	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	1	5	0	0	0	0	15	13

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	61
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	14:02
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	829
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1184
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	**Yes**

Signal Warrants Report For Intersection 2: US-395/Poplar St

Warrants Summary

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

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	N	S	E	W
1	1376	1500	520	70
2	1335	1455	504	68
3	1307	1425	494	67
4	1225	1335	463	62
5	1087	1185	411	55
6	1073	1170	406	55
7	1060	1155	400	54
8	963	1050	364	49
9	949	1035	359	48
10	936	1020	354	48
11	812	885	307	41
12	757	825	286	39
13	743	810	281	38
14	550	600	208	28
15	550	600	208	28
16	385	420	146	20
17	220	240	83	11
18	220	240	83	11
19	124	135	47	6
20	69	75	26	4
21	41	45	16	2
22	14	15	5	1
23	14	15	5	1
24	14	15	5	1

Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	2876	2	520	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	2790	2	504	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	2732	2	494	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	2560	2	463	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	3	2272	2	411	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	3	2243	2	406	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	3	2215	2	400	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	3	2013	2	364	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	3	1984	2	359	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	3	1956	2	354	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	3	1697	2	307	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	3	1582	2	286	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	3	1553	2	281	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	3	1150	2	208	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	3	1150	2	208	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	3	805	2	146	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
17	3	460	2	83	No	No	No	No	No	No	No	No	No	No
18	3	460	2	83	No	No	No	No	No	No	No	No	No	No
19	3	259	2	47	No	No	No	No	No	No	No	No	No	No
20	3	144	2	26	No	No	No	No	No	No	No	No	No	No
21	3	86	2	16	No	No	No	No	No	No	No	No	No	No
22	3	29	2	5	No	No	No	No	No	No	No	No	No	No
23	3	29	2	5	No	No	No	No	No	No	No	No	No	No
24	3	29	2	5	No	No	No	No	No	No	No	No	No	No
Hours Met					15	15	16	16	15	16	16	16	16	15

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8005.9	3296.5
Number of Lanes on Minor Street Approach	2	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1156:24	64:05
Delay Condition Met	Yes	Yes
Volume on Minor Street Approach During Same Hour	520	70
High Minor Volume Condition Met	Yes	No
Total Entering Volume on All Approaches During Same Hour	3466	3466
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	Yes	No
Warrant Met for Intersection	**Yes**	

Signal Warrants Report For Intersection 11: Joshua St/I-15 SB Off-Ramp

Warrants Summary

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

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	73	695	454
2	71	674	440
3	69	660	431
4	65	619	404
5	58	549	359
6	57	542	354
7	56	535	350
8	51	486	318
9	50	480	313
10	50	473	309
11	43	410	268
12	40	382	250
13	39	375	245
14	29	278	182
15	29	278	182
16	20	195	127
17	12	111	73
18	12	111	73
19	7	63	41
20	4	35	23
21	2	21	14
22	1	7	5
23	1	7	5
24	1	7	5

Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	768	2	454	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	1	745	2	440	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
3	1	729	2	431	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
4	1	684	2	404	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
5	1	607	2	359	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
6	1	599	2	354	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
7	1	591	2	350	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
8	1	537	2	318	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
9	1	530	2	313	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
10	1	523	2	309	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
11	1	453	2	268	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
12	1	422	2	250	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
13	1	414	2	245	No	Yes	Yes	Yes	No	No	No	No	Yes	No
14	1	307	2	182	No	No	No	Yes	No	No	No	No	No	No
15	1	307	2	182	No	No	No	Yes	No	No	No	No	No	No
16	1	215	2	127	No	No	No	No	No	No	No	No	No	No
17	1	123	2	73	No	No	No	No	No	No	No	No	No	No
18	1	123	2	73	No	No	No	No	No	No	No	No	No	No
19	1	70	2	41	No	No	No	No	No	No	No	No	No	No
20	1	39	2	23	No	No	No	No	No	No	No	No	No	No
21	1	23	2	14	No	No	No	No	No	No	No	No	No	No
22	1	8	2	5	No	No	No	No	No	No	No	No	No	No
23	1	8	2	5	No	No	No	No	No	No	No	No	No	No
24	1	8	2	5	No	No	No	No	No	No	No	No	No	No
Hours Met					10	13	13	15	1	5	9	12	13	7

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:49
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	454
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1222
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	**No**