

TRAFFIC IMPACT ANALYSIS

**TENTATIVE TRACT MAP 37803
CITY OF PERRIS
RIVERSIDE COUNTY, CALIFORNIA**

LSA

April 2020

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RIVERSIDE COUNTY, CALIFORNIA**

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1.0 INTRODUCTION

The Traffic Impact Analysis (TIA) has been prepared to assess the potential circulation impacts associated with the proposed Tentative Tract Map (TTM) 37803 project to be located at the northwest corner of San Jacinto Avenue and “A” Street and vacant land to the west in the City of Perris (City). The project is bounded by San Jacinto Avenue to the south, W Metz Road to the north, and “A” Street to the east. Figure 1-1 illustrates the regional and project location. (Figures and tables are located at the end of each chapter.)

The City does not have its own TIA guidelines but generally follows the Riverside County Transportation Department *Traffic Impact Analysis Preparation Guide*, dated 2008. Therefore, this report is intended to satisfy the requirements established by the County’s TIA guidelines, as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). The scope of work for this TIA, including trip generation, trip distribution, study area, and analysis methodologies, has been approved by City staff via the Scoping Agreement process. A copy of the Scoping Agreement is included as Appendix A.

This study examines traffic operations in the vicinity of the proposed project under the following six scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Project Completion (2021) without Project Conditions;
- Project Completion (2021) with Project Conditions;
- Cumulative (2021) without Project Conditions; and
- Cumulative (2021) with Project Conditions.

Traffic conditions were examined for the weekday a.m. and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

1.1 PROJECT DESCRIPTION

The proposed project consists of the construction of 145 single-family homes on an approximately 22.9 acres site. The project site is designated Residential in the City’s General Plan. Figure 1-2 illustrates the conceptual site plan for the project.

As illustrated in Figure 1-2, access to the project site will be provided via two driveways – Driveway 1, located on W Metz Road; and Driveway 2, located on W San Jacinto Avenue. Both driveways will operate as full-access driveways.

1.2 STUDY AREA

Based on the County's TIA guidelines, the study area shall generally include, at a minimum, any intersection of "Collector" or higher classification streets at which the proposed project will add 50 or more peak hour trips up to a 5 mile radius of the project location or any intersection that the City requested to be analyzed during the scoping agreement process. As such, the following intersections have been included in the analysis:

1. "A" Street / Harvill Avenue (County of Riverside);
2. Project Driveway / W Metz Road (City of Perris/County of Riverside);
3. Project Driveway / W San Jacinto Avenue (City of Perris);
4. "A" Street / Nuevo Road (City of Perris);
5. "A" Street / W Metz Road (City of Perris); and
6. "A" Street / W San Jacinto Avenue (City of Perris).

The study intersections are under the jurisdiction of the City of Perris and the County of Riverside. Figure 1-3 illustrates the locations of all analysis intersections.

1.3 LIST OF CHAPTER 1.0 FIGURES

- Figure 1-1: Regional and Project Location
- Figure 1-2: Conceptual Site Plan
- Figure 1-3: Study Area Intersections

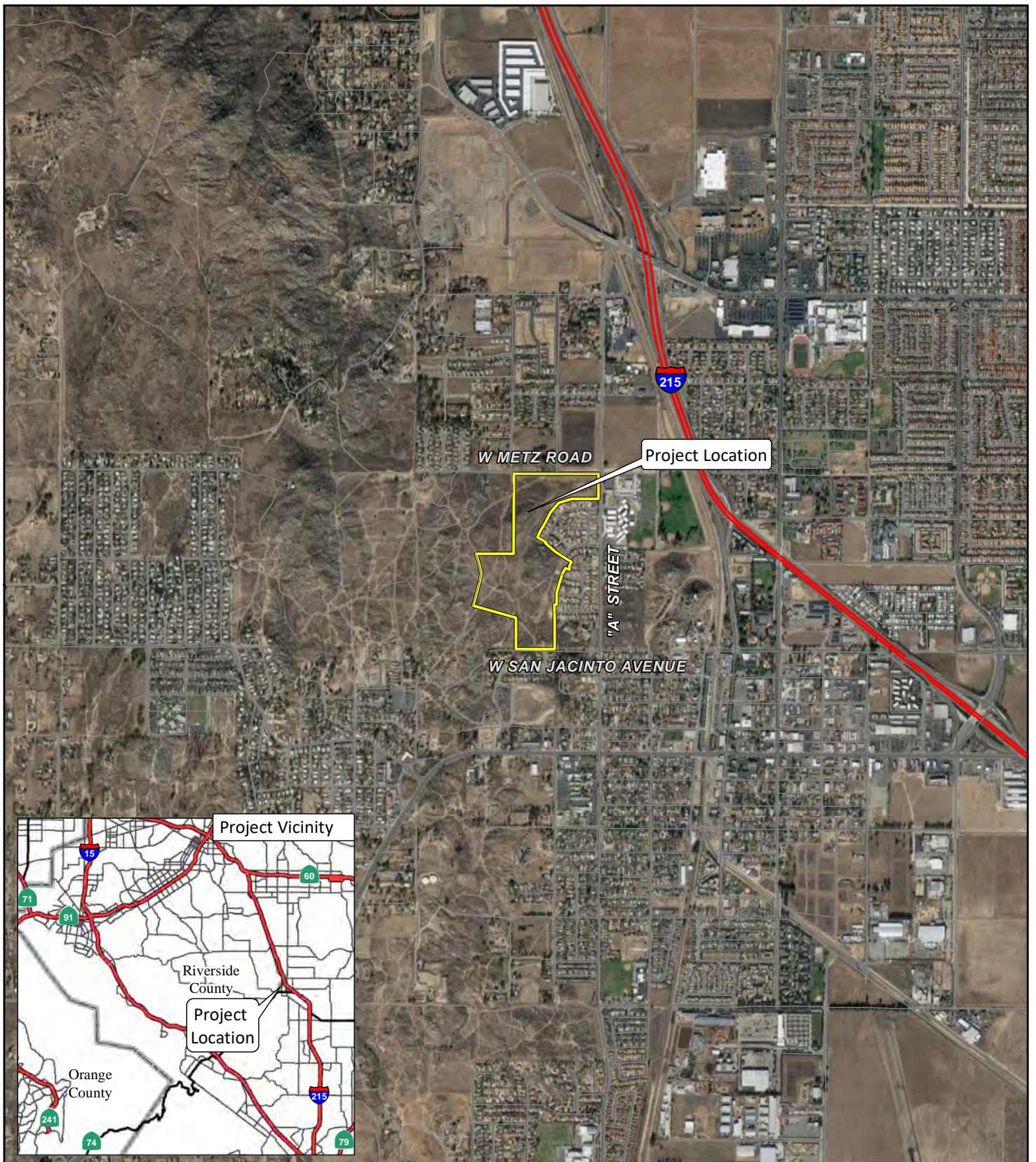
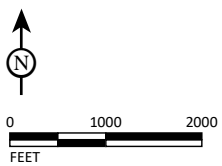


FIGURE 1-1

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SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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TTM 37803 Project
 Traffic Impact Analysis
 Regional and Project Location

RESIDENTIAL LOT SUMMARY

Lot Number	Area (SF)	Volume (CU YD)	Area (SF)	Volume (CU YD)	Area (SF)	Volume (CU YD)		
1	18,810	8,224	7,085	3,108	101	9,914	5,362	
2	13,138	8,229	57	7,051	6,572	307	6,265	4,158
3	13,227	7,821	53	6,900	6,900	293	5,700	4,473
4	10,412	8,331	54	6,182	6,048	264	6,713	6,480
5	10,077	8,421	55	6,644	6,444	269	6,951	5,882
6	10,000	8,415	56	6,413	6,020	269	6,772	7,113
7	10,880	8,225	57	7,017	6,074	267	6,100	6,689
8	10,965	8,481	58	6,999	6,281	289	7,868	6,462
9	12,014	8,250	59	6,812	6,708	289	6,879	6,812
10	12,006	8,189	60	6,812	6,718	210	7,361	6,214
11	10,545	7,513	61	6,895	6,810	211	7,847	7,650
12	10,511	8,229	62	7,015	6,889	211	6,111	7,104
13	11,486	7,819	63	7,081	6,906	211	7,265	6,472
14	12,020	7,117	64	6,118	6,118	214	7,683	7,141
15	12,001	8,991	65	6,844	6,844	215	7,078	6,862
16	10,770	10,770	66	6,816	6,796	215	5,977	6,292
17	12,408	8,914	67	7,000	6,880	217	6,473	6,200
18	11,955	8,481	68	6,970	6,108	218	6,508	6,200
19	12,017	8,291	69	7,187	6,257	219	7,264	6,058
20	10,661	8,381	70	6,810	6,814	220	6,132	6,614
21	10,538	8,431	71	6,811	6,117	273	6,882	6,127
22	10,178	8,351	72	6,207	6,104	275	6,961	6,186
23	10,533	8,482	73	6,906	6,816	275	11,144	6,104
24	10,212	8,461	74	7,283	6,588	274	7,399	6,779
25	10,428	8,361	75	6,816	6,115	275	6,518	6,134
26	11,271	8,431	76	6,928	6,814	275	7,817	7,275
27	13,817	10,120	77	6,718	6,100	277	7,800	6,410
28	13,814	9,771	78	6,172	6,172	274	6,410	6,108
29	13,170	9,869	79	7,112	7,112	278	6,515	6,144
30	13,747	8,461	80	6,116	7,281	280	7,813	6,184
31	10,879	8,671	81	7,140	6,714	281	6,900	6,800
32	12,001	8,181	82	6,816	6,816	281	7,800	7,200
33	13,404	7,348	83	7,485	7,282	273	12,811	11,811
34	6,267	7,654	84	6,518	6,518	284	7,665	7,115
35	6,762	8,181	85	6,268	6,268	281	6,117	6,144
36	8,812	7,817	86	6,906	6,782	280	11,770	10,761
37	11,271	8,214	87	6,810	6,800	281	7,800	7,200
38	6,866	6,975	88	12,454	9,311	330	13,331	11,810
39	6,272	6,518	89	9,617	6,268	280	7,817	6,264
40	11,811	8,271	90	7,799	6,171	281	6,518	6,400
41	11,164	8,461	91	7,910	6,118	281	6,904	6,084
42	11,178	8,361	92	6,816	6,182	281	6,904	6,184
43	11,164	8,671	93	7,810	6,711	281	6,904	6,864
44	11,109	8,211	94	6,906	6,214	281	6,900	6,100
45	11,178	7,711	95	6,412	6,268	281	6,268	6,200
46	11,710	8,461	96	6,000	6,000			
47	11,171	8,461	97	6,000	6,000			
48	8,855	8,710	98	6,000	6,000			
49	6,884	6,884	99	6,000	6,000			
50	6,884	6,884	100	6,000	6,000			

OPEN SPACE LOT SUMMARY

Lot Number	Area (SF)	Volume (CU YD)	Notes
A	28,171	0.05	Storage City of Phoenix
B	40,376	0.00	Storage City of Phoenix
C	89,110	1.85	Landscaping HOA
D	397,114	9.13	Landscaping HOA
E	4,000	0.00	Landscaping HOA
F	5,272	0.01	Landscaping HOA
G	882	0.00	Landscaping HOA
H	5,000	0.07	Landscaping HOA
I	6,471	0.01	Landscaping HOA
J	1,884	0.04	Landscaping HOA

LAND USE SUMMARY

Category	Area (SF)	Volume (CU YD)
Residential	1,231,844	28.28
Commercial/Landscaping	1,811,821	12.84
Open Space	1,178,416	11.92
Total	4,222,081	53.04



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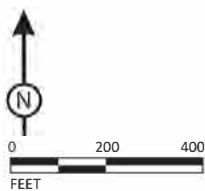


FIGURE 1-2

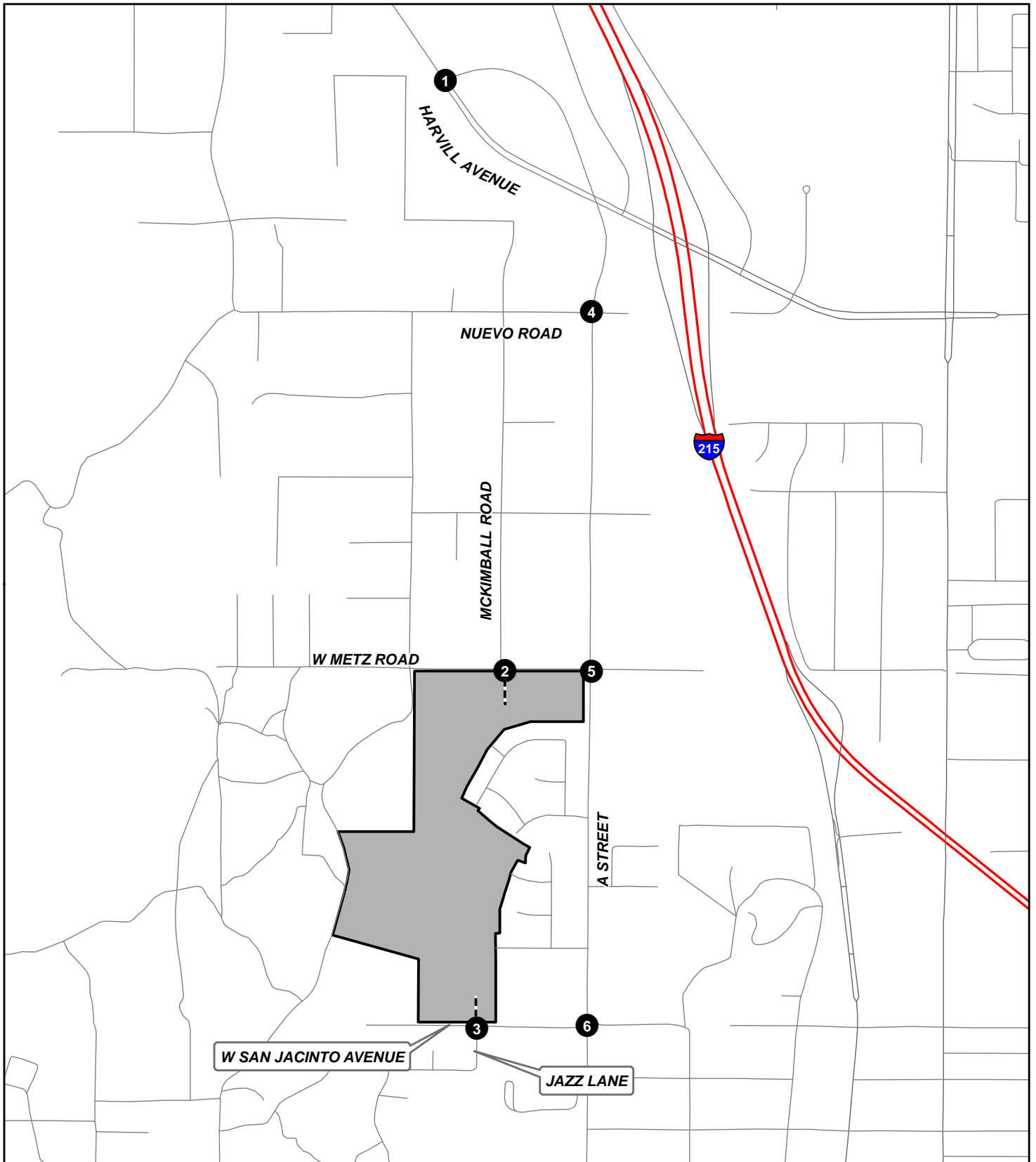


FIGURE 1-3

LSA

LEGEND

- Project Site
- Study Area Intersections
- Project Driveway



SOURCE: ESRI Streetmap, 2013.

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TTM 37803 Project
Traffic Impact Analysis
Study Area Intersections

2.0 ANALYSIS METHODOLOGY

2.1 LEVEL OF SERVICE DEFINITIONS

Level of service (LOS) can be characterized for the whole intersection, each intersection approach, and by each lane group. Control delay alone is used to characterize LOS for the entire intersection. Control delay quantifies the increase in travel time due to the traffic signal control, and is a surrogate measure of driver discomfort and fuel consumption.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 2-A. Table 2-B shows the LOS criteria for unsignalized and signalized intersections.

For all study area intersections, the *Highway Capacity Manual 6th Edition* (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using Synchro 10 software, which uses the HCM 6 methodologies.

2.2 LEVEL OF SERVICE PROCEDURES AND THRESHOLDS

Study intersections analyzed in this report are under the jurisdiction of the City of Perris and the County of Riverside. The City uses LOS D as its minimum level of service criteria for intersections.

2.3 PROJECT SIGNIFICANCE THRESHOLD

Per the City of Perris, a significant impact occurs at a study intersection when it operates at an acceptable Level of Service (LOS) for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection to operate at an unacceptable LOS for existing plus project conditions. Additionally, a significant impact occurs at a study intersection when it operates at an unacceptable LOS for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection delay to increase by 2 seconds or more. A cumulative impact is considered significant when a study intersection is forecast to operate at an unacceptable LOS with the addition of cumulative/background traffic and 50 or more a.m. or p.m. peak hour project trips.

2.4 LIST OF CHAPTER 2.0 TABLES

- Table 2-A: Intersection Level of Service Definitions
- Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Table 2-A: Intersection Level of Service Definitions

LOS	Description
A	Traffic operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	Traffic operations with control delay between 10 seconds per vehicle and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
C	Traffic operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Traffic operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	Traffic operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	Traffic operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: *Highway Capacity Manual* (6th Edition)

Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: *Highway Capacity Manual* (6th Edition)

3.0 CIRCULATION NETWORK SETTING

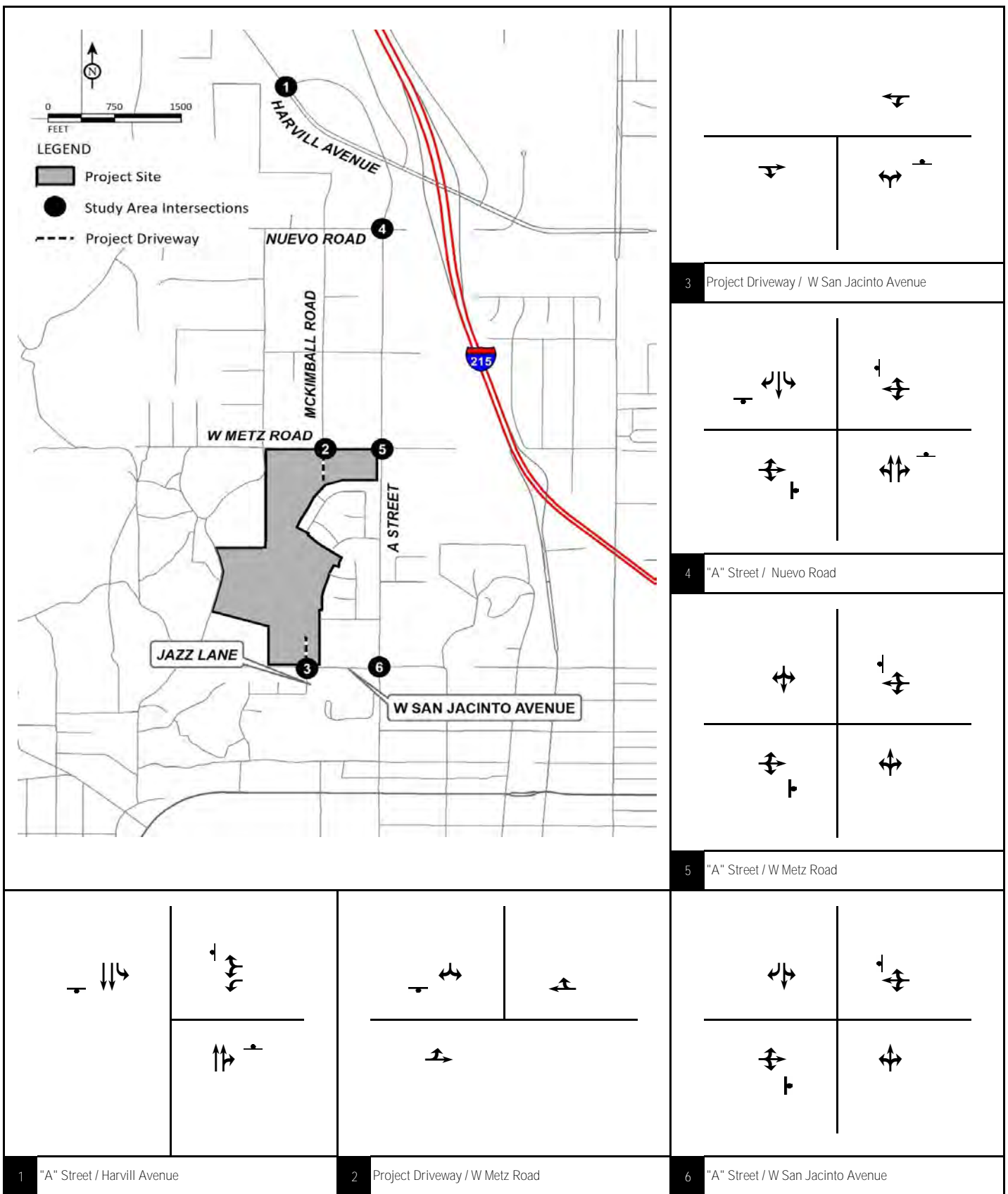
Figure 3-1 illustrates existing study intersection geometrics and traffic control. With the development of the project, each of the proposed driveways will add a leg to an existing intersection. Figure 3-2 illustrates existing with project study intersection geometrics and traffic control.

Within the City of Perris, all major roadways are classified based on the Master Plan of Roadways provided in the Circulation Element of the City's General Plan. Following is a brief description of major roadways within the study area:

- **A Street:** Within the study area, A Street is a two-lane undivided road designated as a 94 feet (ft) Secondary Arterial in the City's General Plan. The posted speed limit is 25 miles per hour (mph).
- **Metz Road:** Within the study area, Metz Road is a two-lane undivided road designated as a 66 ft Collector in the City's General Plan. The posted speed limit is 35 mph.
- **Nuevo Road:** Within the study area, Nuevo Road is a two-lane undivided road designated as a 128 ft Primary Arterial. There posted speed limit is 50 mph.
- **San Jacinto Avenue:** Within the study area, San Jacinto Avenue is a two-lane undivided road designated as a 94 ft secondary arterial. There is no posted speed limit.

3.1 LIST OF CHAPTER 3.0 FIGURES

- Figure 3-1: Existing Study Intersection Geometrics and Traffic Control
- Figure 3-2: Existing with Project Study Intersection Geometrics and Traffic Control



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Legend

— Stop Sign

FIGURE 3-1

TTM 37803 Project
Traffic Impact Analysis

Existing Study Intersection Geometrics and Traffic Control

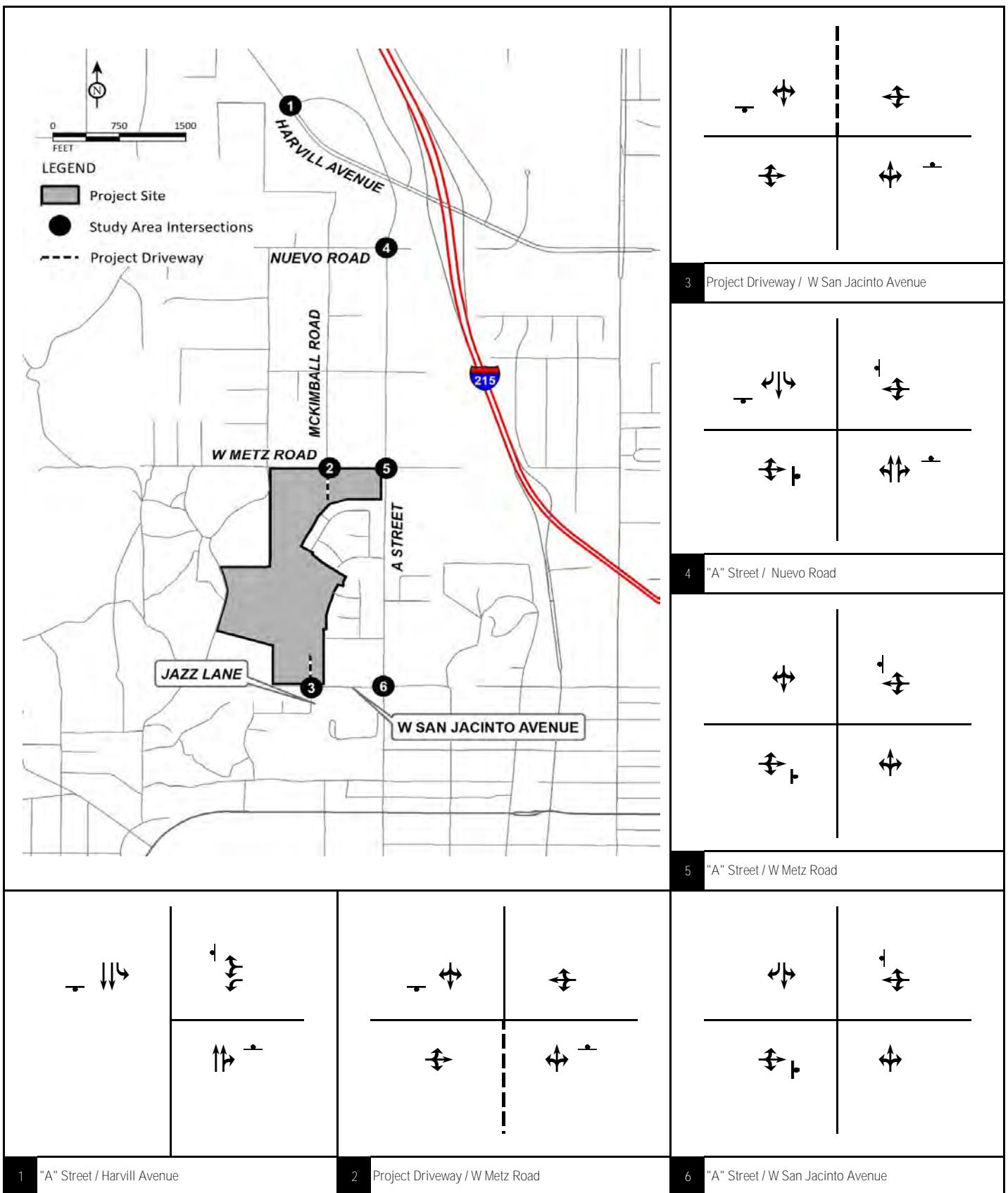


FIGURE 3-2

LSA

Legend

— Stop Sign

--- Project Driveway

TTM 37803 Project
Traffic Impact Analysis

Existing with Project Study Intersection Geometrics and Traffic Control

4.0 TRAFFIC VOLUMES FOR WITHOUT PROJECT SCENARIOS

4.1 EXISTING TRAFFIC VOLUMES

For all intersections, existing traffic volumes are based on counts collected by Counts Unlimited in September 2019. Detailed count sheets are included in Appendix B.

Vehicle classification counts were conducted at the intersection of Harvill Avenue/A Street, Jazz Lane/San Jacinto Avenue and Metz Road/A Street. At these intersections, counts were converted to Passenger Car Equivalent (PCE) volumes. The concept of PCEs accounts for the larger impact of trucks on traffic operations. It does so by assigning each type of truck a PCE factor that represents the number of passenger vehicles that could travel through an intersection in the same time that a particular type of truck could. PCE volumes at study intersections were computed using a factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

The percentage of trucks at the remaining study intersections without classification counts was determined based on truck percentages derived from adjacent intersections with classification counts. At these locations, truck PCE volumes were computed using a PCE factor of 2.0 for all trucks, consistent with the HCM 6 methodologies.

Figure 4-1 illustrates existing peak hour traffic volumes at study intersections.

4.2 PROJECT COMPLETION (2021) WITHOUT PROJECT TRAFFIC VOLUMES

As approved during the City's scoping agreement process (Appendix A), traffic volumes for project completion without project conditions were developed by applying a growth of 3.0 percent per annum to the existing without project traffic volumes for all the study intersections.

Figure 4-2 illustrates peak hour traffic volumes at study intersections for project completion without project conditions.

4.3 CUMULATIVE (2021) WITHOUT PROJECT TRAFFIC VOLUMES

Information concerning cumulative projects in the vicinity of the proposed project was obtained from City staff and the County of Riverside. Figure 4-3 illustrates the cumulative project locations.

The trip generation for cumulative projects was developed either using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition). Table 4-A lists the cumulative projects included in this analysis and shows the cumulative projects are expected to generate 1,874 a.m. peak hour trips, 2,351 p.m. peak hour trips, and 36,706 daily trips.

Cumulative project trips were assigned to the roadway network based on their locations in relation to surrounding land uses and regional arterials. Figure 4-4 illustrates the total peak hour cumulative project trip assignment at study area intersections. Further, cumulative project trips were added to the project completion without project traffic volumes to develop cumulative traffic volumes. Figure 4-5 illustrates the peak hour traffic volumes at study intersections under cumulative conditions.

Detailed volume development worksheets are included in Appendix C.

4.4 LIST OF CHAPTER 4.0 FIGURES AND TABLES

- Figure 4-1: Existing Peak Hour Traffic Volumes
- Figure 4-2: Project Completion (2021) without Project Peak Hour Traffic Volumes
- Figure 4-3: Cumulative Project Locations
- Figure 4-4: Cumulative Projects Trip Assignment
- Figure 4-5: Cumulative (2021) without Project Peak Hour Traffic Volumes
- Table 4-A: Cumulative Projects Trip Generation

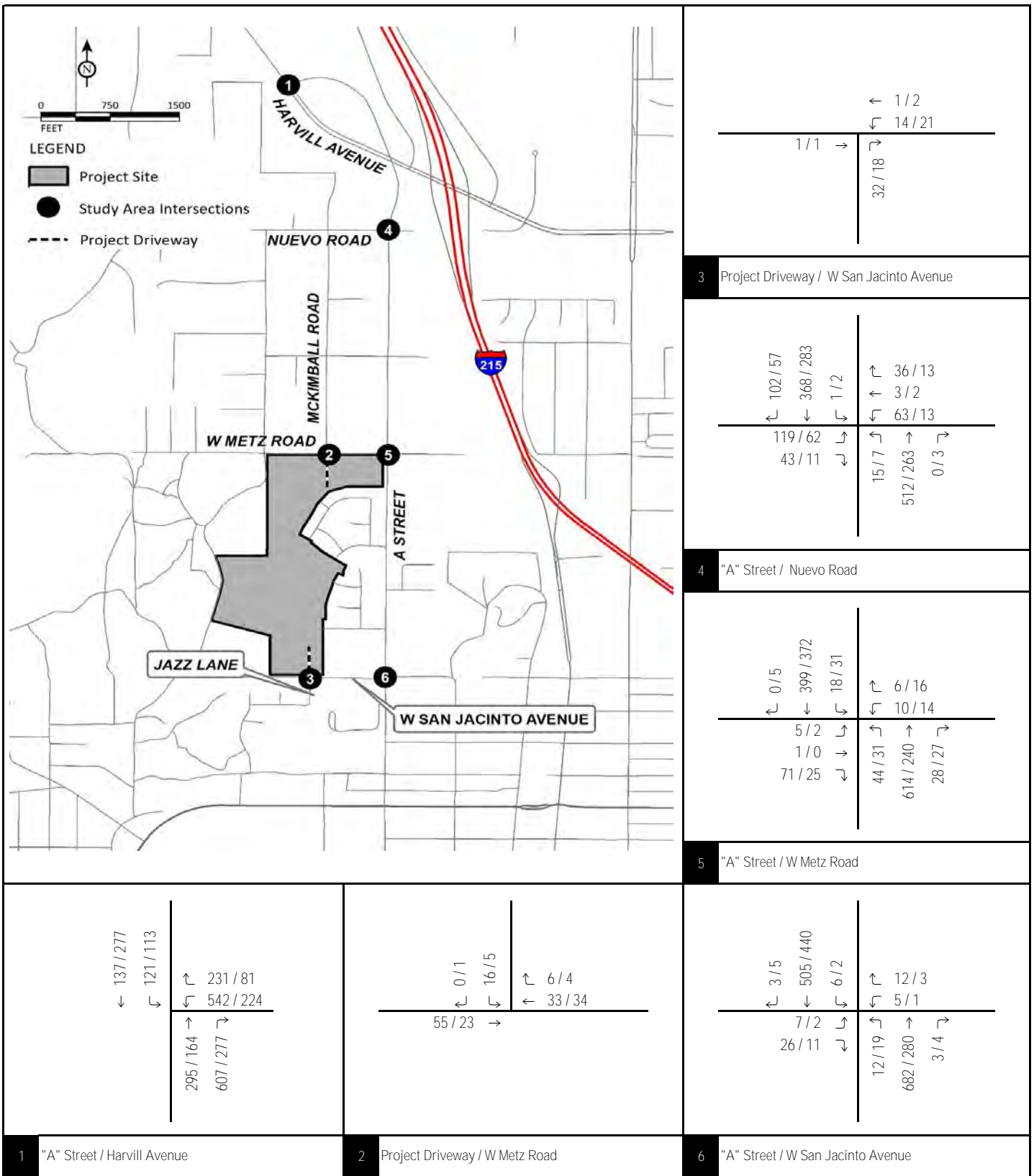


FIGURE 4-1

LSA

XXX / YYY
AM / PM Peak Hour PCE Volumes

TTM 37803 Project
Traffic Impact Analysis

Existing Peak Hour Traffic Volumes

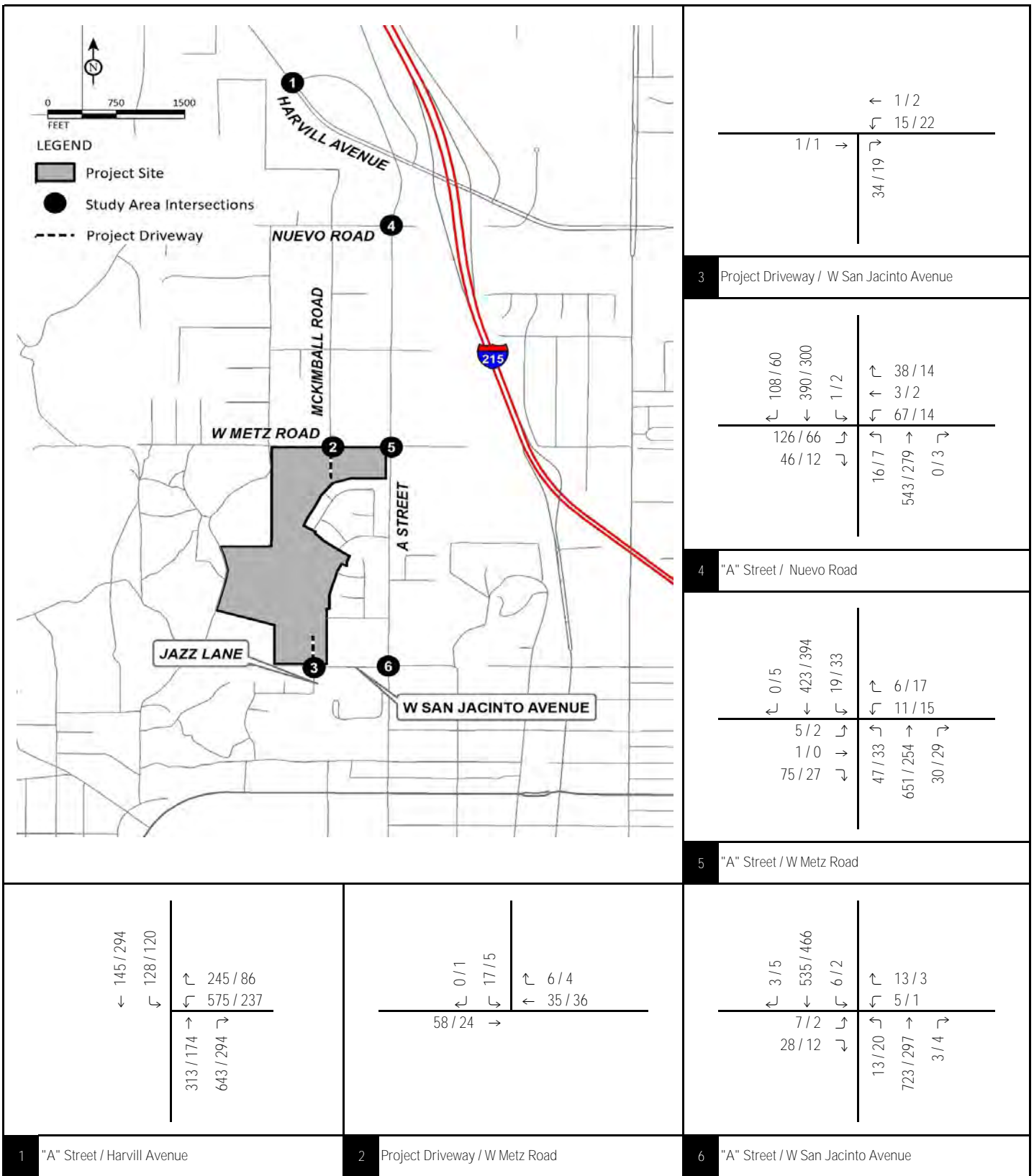


FIGURE 4-2

LSA

XXX / YYY
AM / PM Peak Hour PCE Volumes

TTM 37803 Project
Traffic Impact Analysis

Project Completion Year (2021) Peak Hour Traffic Volumes

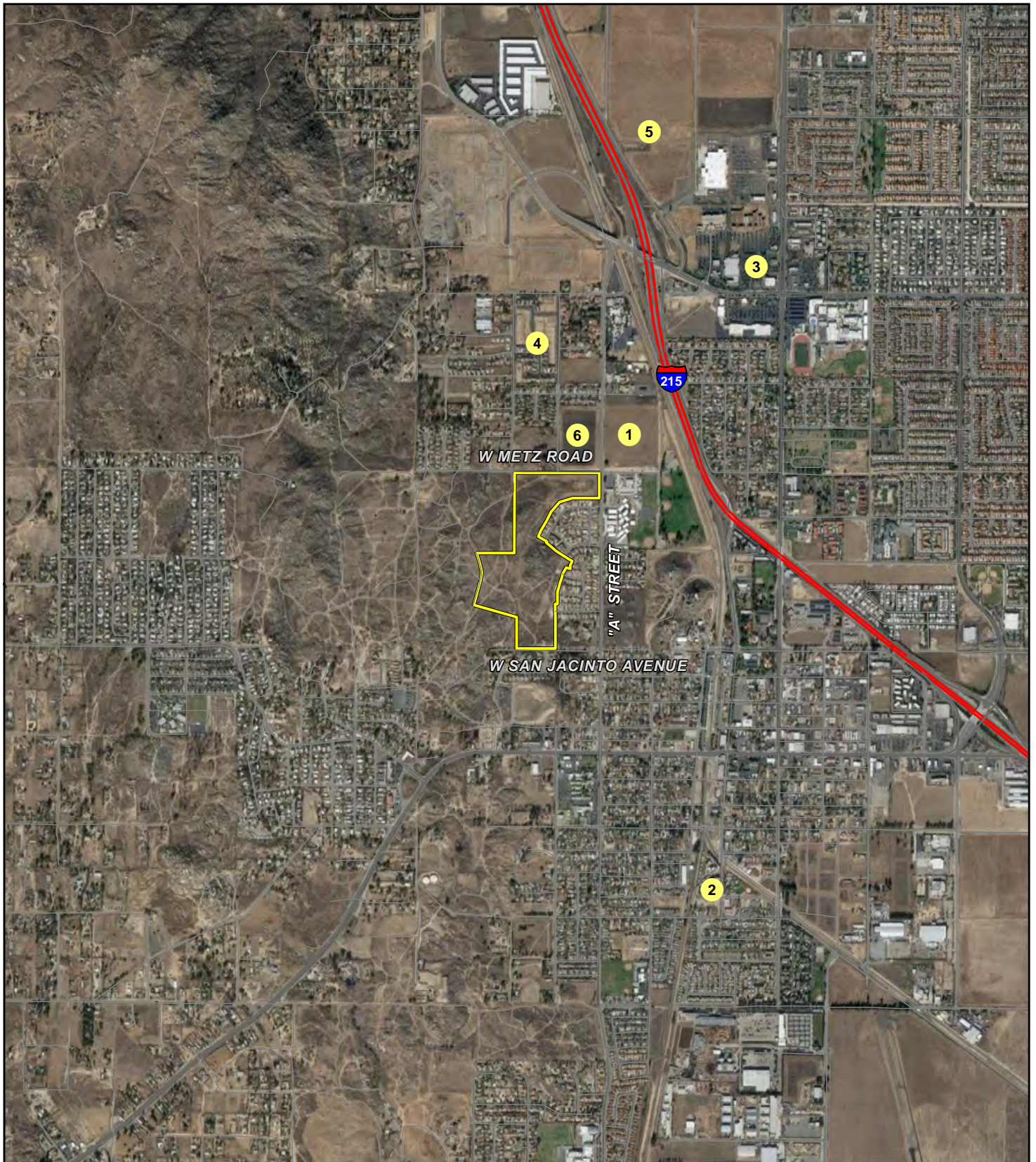
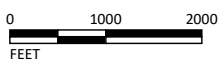


FIGURE 4-3

LSA

LEGEND

- Project Site
- Cumulative Projects



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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TTM 37803 Project
 Traffic Impact Analysis
 Cumulative Project Locations

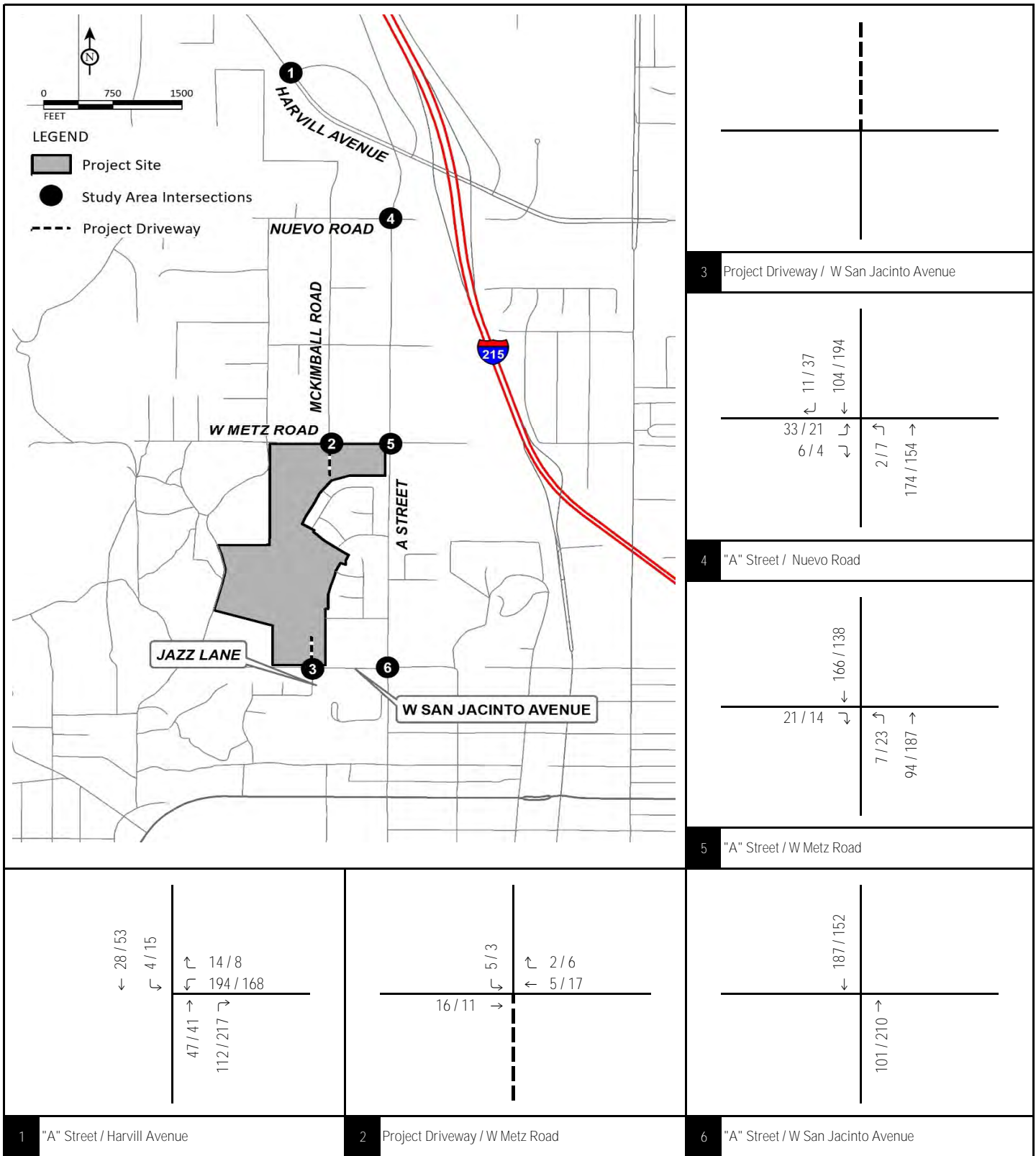


FIGURE 4-4



XXX / YYY

AM / PM Peak Hour Trips

----- Project Driveway

TTM 37803 Project
Traffic Impact Analysis

Cumulative Project Trip Assignment

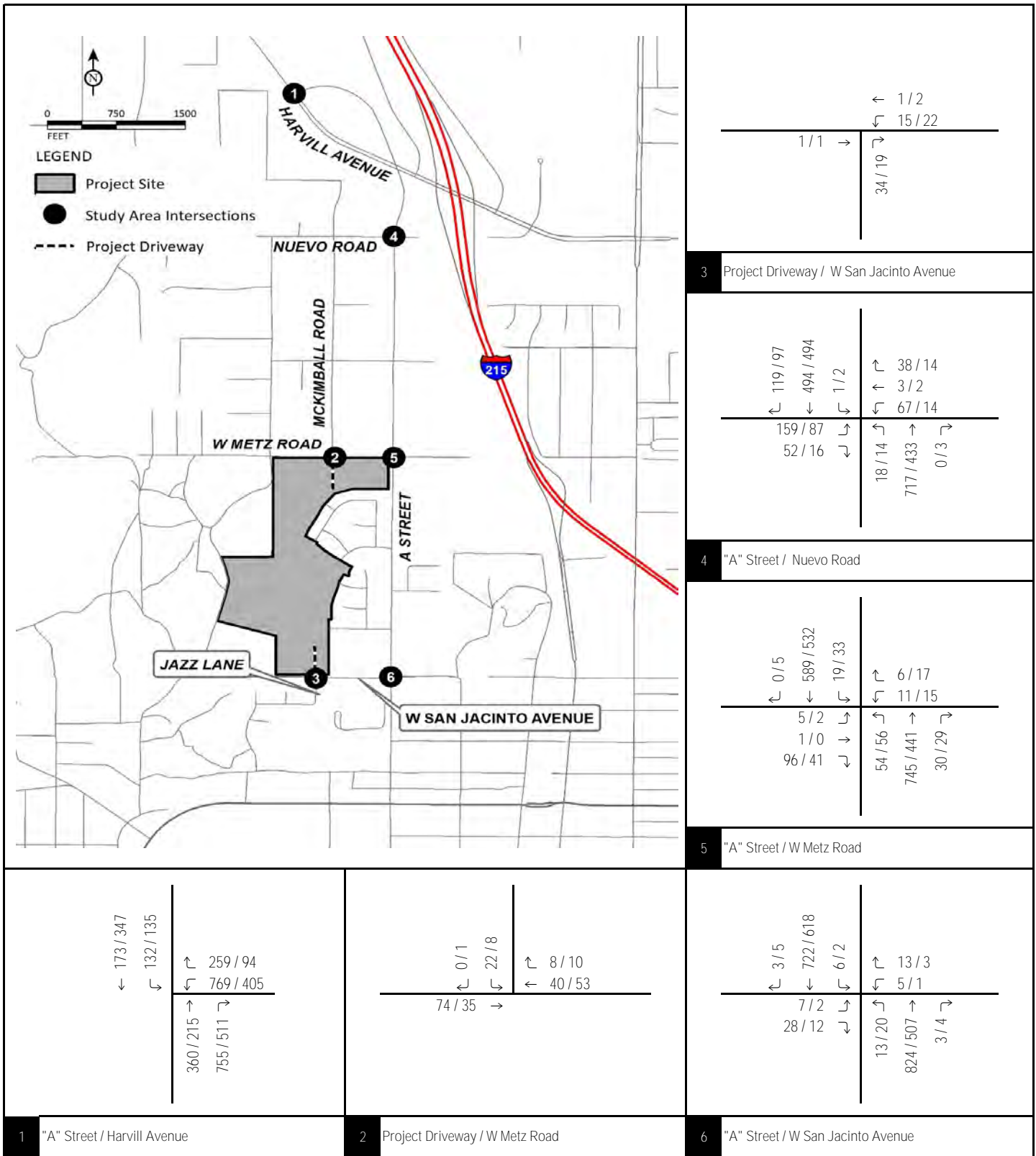


FIGURE 4-5

LSA
 XXX / YYY
 AM / PM Peak Hour PCE Volumes

*TTM 37803 Project
 Traffic Impact Analysis*
 Cumulative (2021) Peak Hour Traffic Volumes

Table 4-A - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
1 . Villa Verona		376 DU							
	North of Metz Road, east of A Street								
	Trips/Unit ¹		0.11	0.35	0.46	0.35	0.21	0.56	7.32
	Trip Generation		40	133	173	133	78	211	2,752
2 . Verano Apartments		40 DU							
	904 D Street								
	Trips/Unit ¹		0.11	0.35	0.46	0.35	0.21	0.56	7.32
	Trip Generation		4	14	18	14	8	22	293
3 . Pacific Meadowood/Pacific Legacy		46 DU							
	West of McKimball Road, between Serrana Road and Nuevo Road								
	Trips/Unit ²		0.19	0.56	0.74	0.62	0.37	0.99	9.44
	Trip Generation		9	26	35	29	17	46	434
4 . Harvest Landing									
	North of Nuevo Road, east of East Frontage Road								
	Land Use								
	Single Family Housing	345 DU							
	Trips/Unit ²		0.19	0.56	0.74	0.62	0.37	0.99	9.44
	Trip Generation		64	191	255	215	126	341	3,257
	Multi-Family Housing	1511 DU							
	Trips/Unit ¹		0.11	0.35	0.46	0.35	0.21	0.56	7.32
	Trip Generation		160	535	695	533	313	846	11,061
	Sports Park	16.70 AC							
	Trips/Unit ³		0.01	0.01	0.02	0.06	0.05	0.11	0.78
	Trip Generation		0	0	0	1	1	2	13
	Business Park	1233.40 TSF							
	Trips/Unit ⁴		0.24	0.16	0.40	0.19	0.23	0.42	12.44
	Trip Generation		301	192	493	238	280	518	15,343
	Commercial	73.18 TSF							
	Trips/Unit ⁵		0.58	0.36	0.94	1.83	1.98	3.81	37.75
	Trip Generation		43	26	69	134	145	279	2,763
	Pass-By Trips ^{6,7}		0	0	0	(46)	(49)	(95)	(939)
	Net Trip Generation		43	26	69	88	96	184	1,824
	Total Trip Generation		568	944	1,512	1,075	816	1,891	31,499
5 . Tentative Tract Map 31650		61 DU							
	Southwest Corner of De Lines Drive and Van Way								
	Trips/Unit ²		0.19	0.56	0.74	0.62	0.37	0.99	9.44
	Trip Generation		11	34	45	38	22	60	576
6 . Pacific Lantana		122 DU							
	Northwest Corner of Metz Road and A Street								
	Trips/Unit ²		0.19	0.56	0.74	0.62	0.37	0.99	9.44
	Trip Generation		23	68	91	76	45	121	1,152
Total Net Trip Generation			655	1,219	1,874	1,365	986	2,351	36,706

Notes:

DU = Dwelling Units; TSF = Thousand Square Feet; AC = Acre.

¹ Rates based on Land Use 220 - "Multifamily Housing (Low-Rise)" from ITE *Trip Generation Manual*, 10th Edition. Setting/Location used is General Urban/Suburban.

² Rates based on Land Use 210 - "Single Family Detached Housing" from ITE *Trip Generation Manual*, 10th Edition. Setting/Location used is General Urban/Suburban.

³ Rates based on Land Use 411 - "Public Park" from ITE *Trip Generation Manual*, 10th Edition. Setting/Location used is General Urban/Suburban.

⁴ Rates based on Land Use 770 - "Business Park" from ITE *Trip Generation Manual*, 10th Edition. Setting/Location used is General Urban/Suburban.

⁵ Rates based on Land Use 820 - "Shopping Center" from ITE *Trip Generation Manual*, 10th Edition. Setting/Location used is General Urban/Suburban.

⁶ Pass-by rates based on Land Use 820 - "Shopping Center" from ITE *Trip Generation Handbook*, 3rd Edition. No pass-by rate was available for the a.m. peak hour. A pass-by rate of 34% was used for the p.m. peak hour

⁷ There is no data available for daily pass-by trips; therefore, the p.m. pass-by rate was applied for the daily trip generation.

5.0 PROJECT TRAFFIC

5.1 PROJECT TRIP GENERATION

The trip generation for the proposed project was developed using rates from the ITE *Trip Generation Manual* (10th Edition) for Land Uses 210 “Single-Family Detached Housing.”

As shown in Table 5-A, the project includes 145 single family dwelling units and is anticipated to generate 108 trips in the a.m. peak hour, 144 trips in the p.m. peak hour, and 1,369 daily trips.

5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of project trips was developed based on the regional roadway network and the locations of residential, employment, and commercial centers in relation to the proposed project. The project trip distribution was confirmed with City staff during the scoping agreement process. Figures 5-1 illustrates the trip distribution for the residential use.

The trip generation was applied to the corresponding trip distribution pattern to develop the trip assignment for the land use. The project trip assignment is the product of the project trip generation and the trip distribution percentages. Figures 5-2 illustrates the project trip assignment.

5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Project Trip Distribution
- Figure 5-2: Project Trip Assignment
- Table 5-A: Project Trip Generation

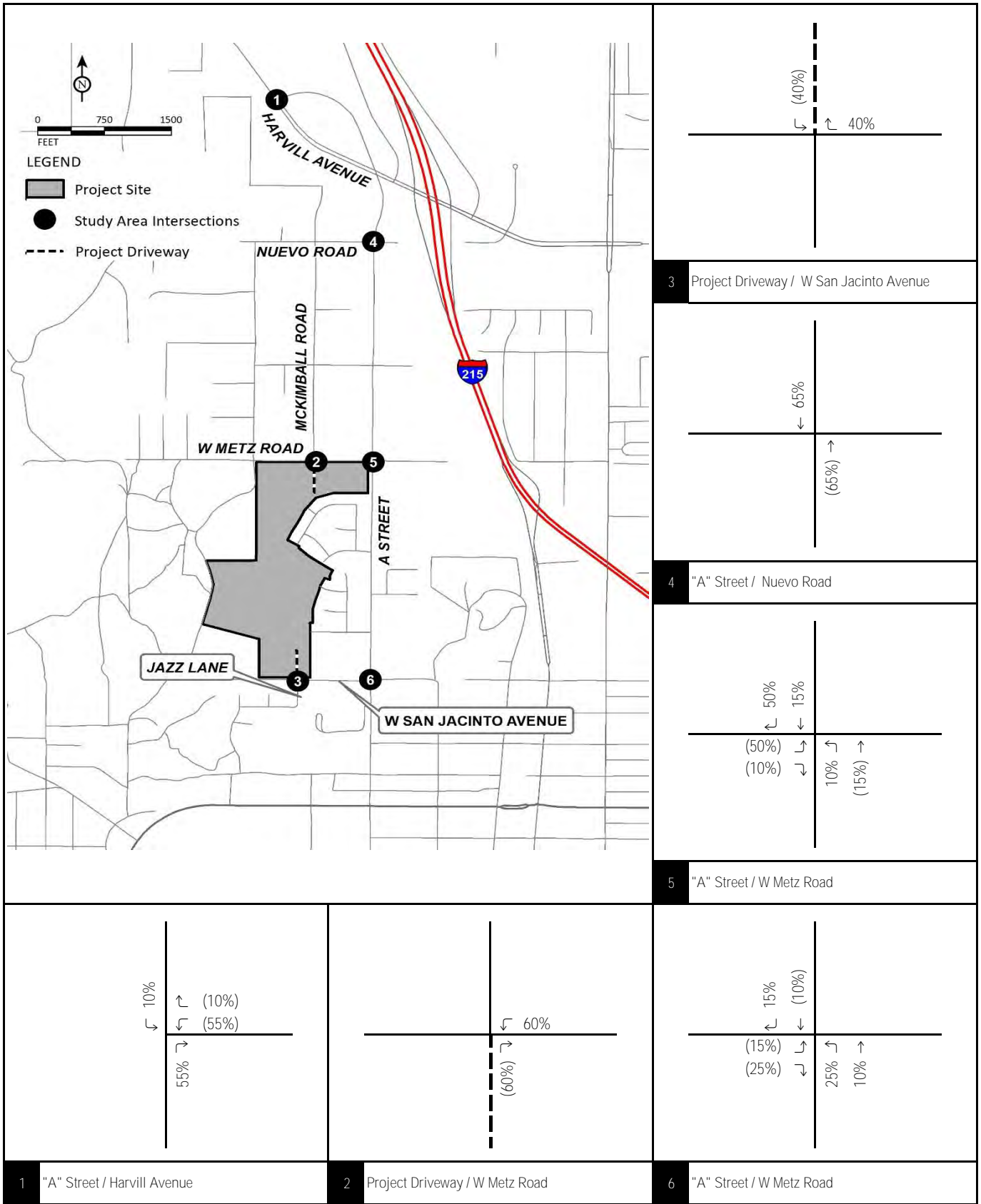


FIGURE 5-1

LSA

XX% (YY%)

Inbound% (Outbound%) Distribution

----- Project Driveway

TTM 37803 Project
Traffic Impact Analysis

Project Trip Distribution

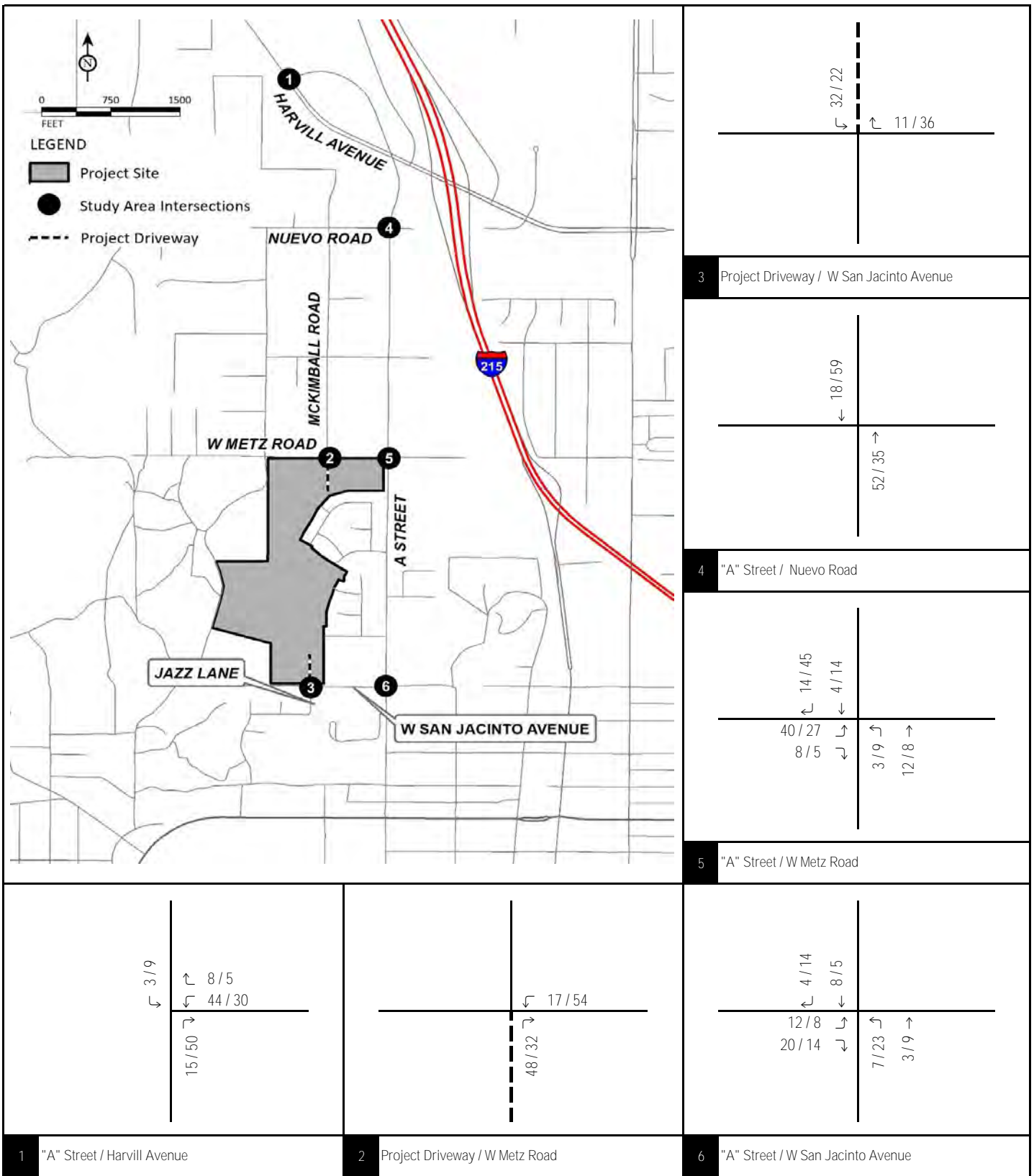


FIGURE 5-2

LSA

XX / YY

AM / PM Peak Hour Trips

----- Project Driveway

*TTM 37803 Project
Traffic Impact Analysis
Project Trip Assignment*

Table 5-A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single-Family Trips/Unit ¹	145 DU	0.19	0.55	0.74	0.62	0.37	0.99	9.44
Trip Generation		28	80	108	90	54	144	1,369

Notes:

DU = Dwelling Units

¹ Rates derived from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 210 - "Single-Family Detached Housing", Setting/Location - "General Urban/Suburban."

6.0 TRAFFIC VOLUMES FOR WITH PROJECT SCENARIOS

Existing, project completion, and cumulative with project traffic volumes were developed by adding project traffic to the corresponding without project scenarios. Figures 6-1, 6-2, and 6-3 illustrate “with project” peak hour traffic volumes at study intersections under existing, project completion, and cumulative conditions, respectively.

Detailed volume development worksheets are included in Appendix C.

6.1 LIST OF CHAPTER 6.0 FIGURES

- Figure 6-1: Existing with Project Peak Hour Traffic Volumes
- Figure 6-2: Project Completion (2021) with Project Peak Hour Traffic Volumes
- Figure 6-3: Cumulative (2021) with Project Peak Hour Traffic Volumes

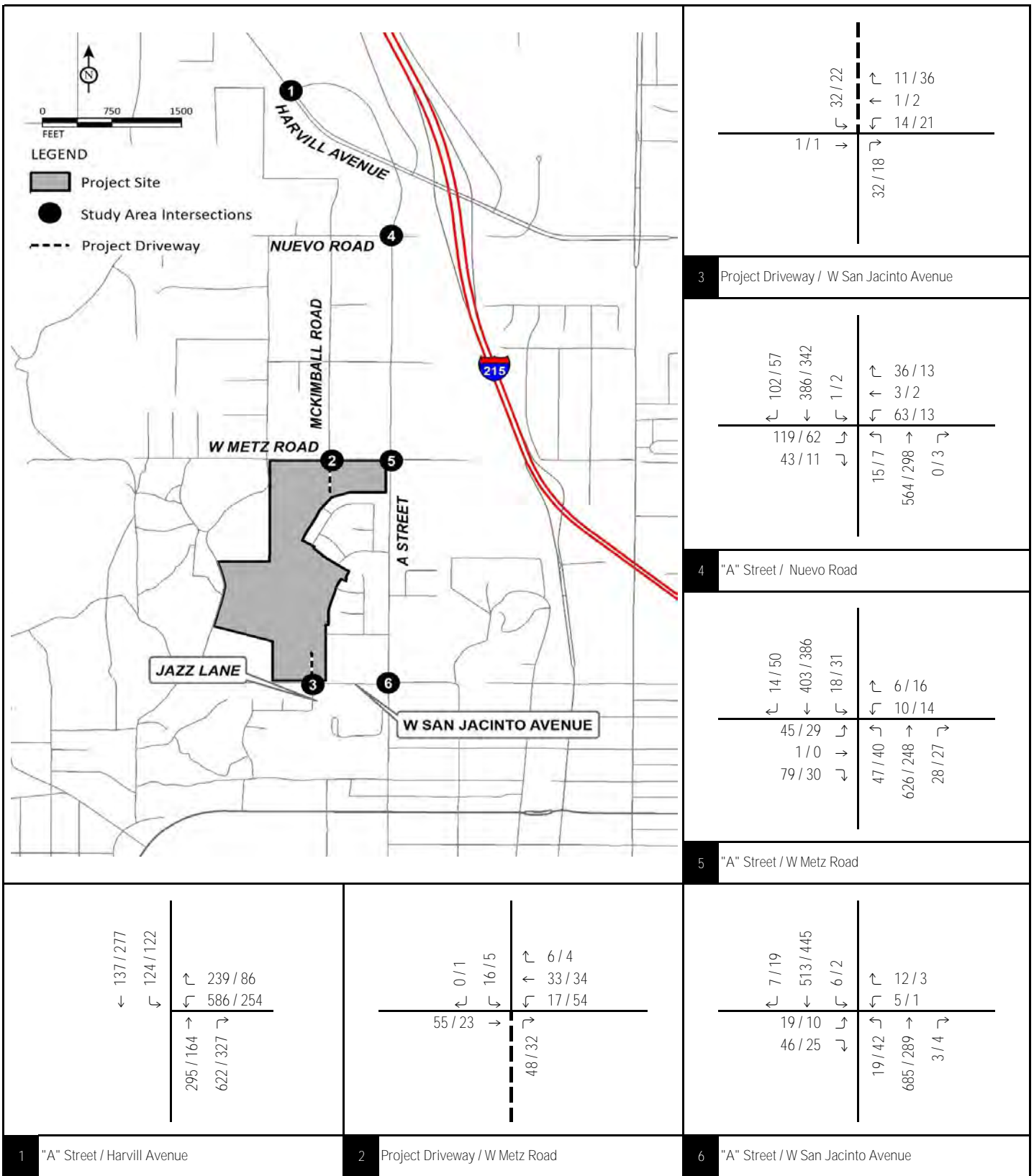


FIGURE 6-1

LSA

XXX / YYY

AM / PM Peak Hour PCE Volumes - - - - Project Driveway

*TTM 37803 Project
Traffic Impact Analysis*

Existing with Project Peak Hour Traffic Volumes

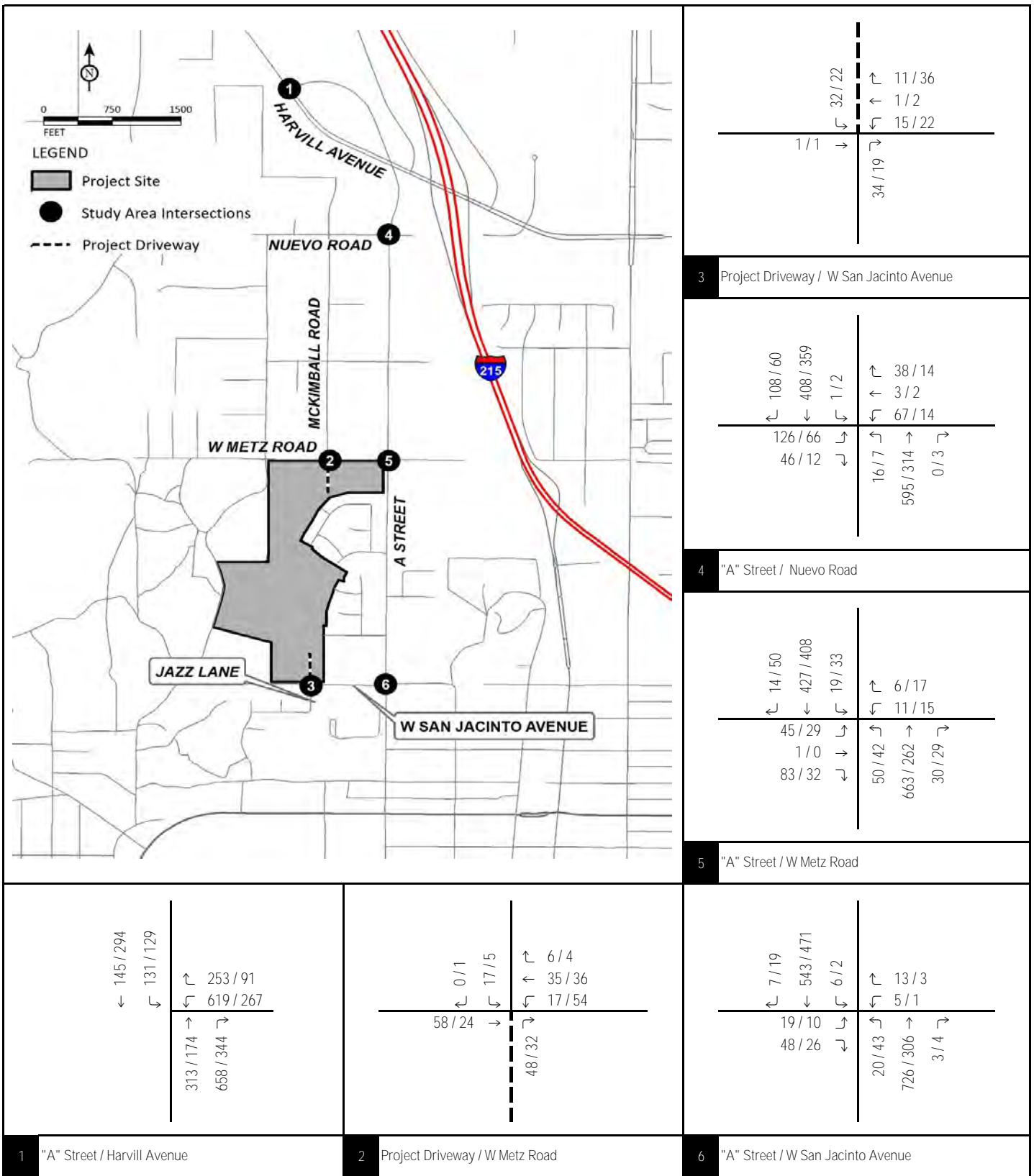


FIGURE 6-2



XXX / YYY
AM / PM Peak Hour PCE Volumes - - - - Project Driveway

TTM 37803 Project
Traffic Impact Analysis

Project Completion Year (2021) with Project Peak Hour Traffic Volumes

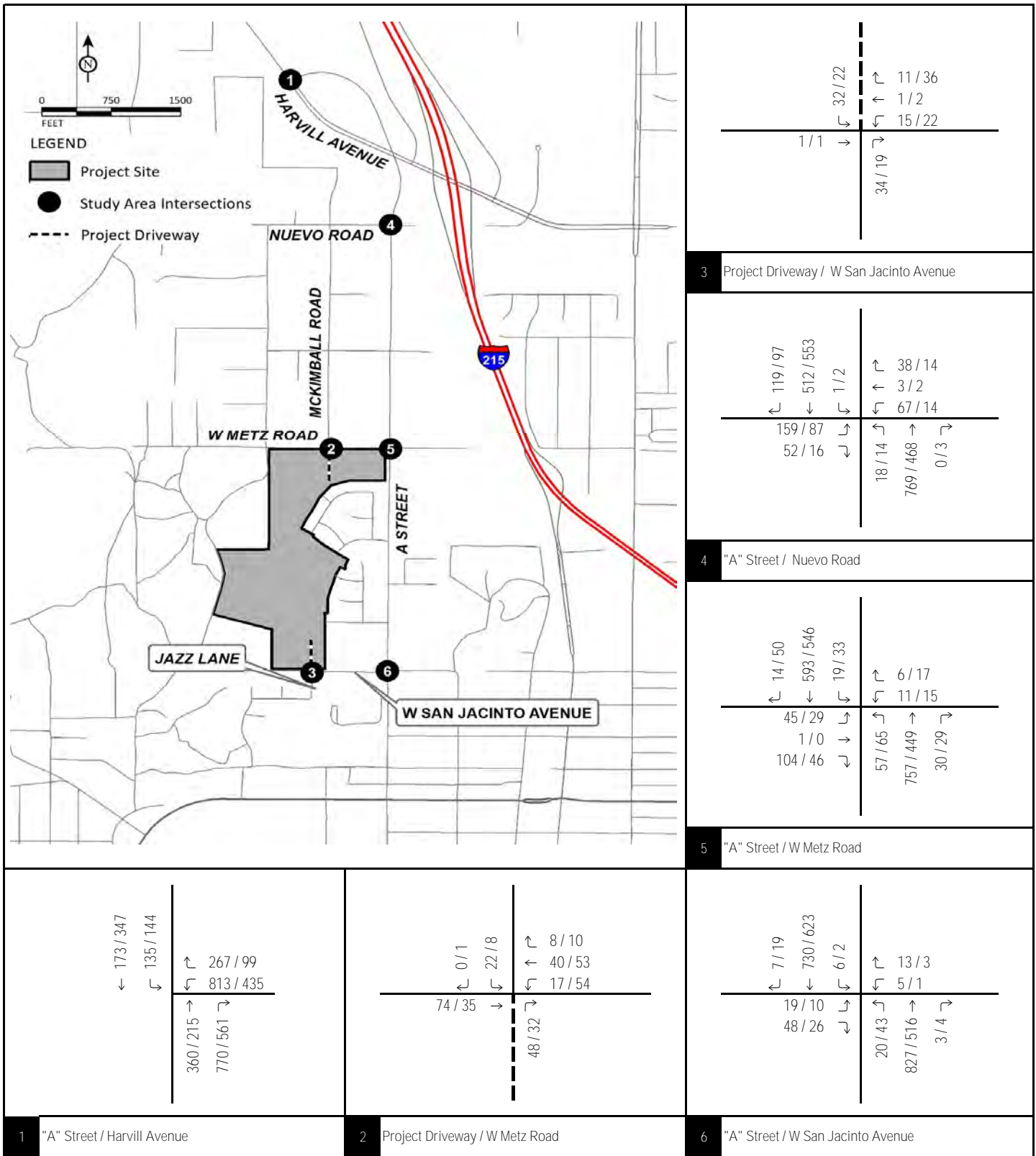


FIGURE 6-3



XXX / YYY
AM / PM Peak Hour PCE Volumes - - - - Project Driveway

TTM 37803 Project
Traffic Impact Analysis

Cumulative (2021) with Project Peak Hour Traffic Volumes

7.0 INTERSECTION LEVELS OF SERVICE

7.1 EXISTING LEVELS OF SERVICE

Figure 3-1 illustrates existing study intersection geometrics and traffic control. An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that the following intersections are currently operating at an unsatisfactory LOS:

- “A” Street/Harvill Avenue (a.m. peak hour);
- “A” Street/Nuevo Road (a.m. peak hour); and
- “A” Street/W Metz Road (a.m. peak hour).

All other study intersections operate at a satisfactory LOS.

7.2 EXISTING WITH PROJECT LEVELS OF SERVICE

Analysis of the existing with project scenario is provided for CEQA compliance to identify direct project impacts if the project were to be built and in operation today. This scenario eliminates the effects of ambient growth and other cumulative projects and deals specifically with project impacts.

An intersection LOS analysis was conducted for existing with project conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that the following intersections are forecast to operate at an unsatisfactory LOS under existing with project conditions:

- “A” Street/Harvill Avenue (a.m. peak hour);
- “A” Street/Nuevo Road (a.m. peak hour); and
- “A” Street/W Metz Road (a.m. peak hour).

Based on City’s criteria for determining impacts (as described in the Methodology section of this report), a significant project impact occurs when the project adds 50 or more trips to an intersection that is operating at an unacceptable LOS and the delay increases by 2 seconds or more due to addition of project traffic. The intersections of “A” Street/Harvill Avenue, “A” Street/Nuevo Road, and “A” Street/W Metz Road operate at an unacceptable LOS under "without project conditions". The project adds to the existing deficiency and will be paying its fair share for implementation of improvements at these three intersections.

All other study intersections are forecast to operate at a satisfactory LOS under existing with project conditions.

7.3 PROJECT COMPLETION (2021) WITHOUT PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for project completion without project conditions using the methodologies previously discussed. Table 7-B summarizes the results of this analysis and shows

that the following intersections are forecast to operate at an unsatisfactory LOS under project completion without project conditions:

- “A” Street/Harvill Avenue (a.m. peak hour);
- “A” Street/Nuevo Road (a.m. peak hour); and
- “A” Street/W Metz Road (a.m. peak hour).

All other study intersections are forecast to operate at a satisfactory LOS.

7.4 PROJECT COMPLETION (2021) WITH PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for project completion with project conditions using the methodologies previously discussed. Table 7-B summarizes the results of this analysis and shows that the following intersections are forecast to operate at an unsatisfactory LOS under project completion with project conditions:

- “A” Street/Harvill Avenue (a.m. peak hour);
- “A” Street/Nuevo Road (a.m. peak hour);
- “A” Street/W Metz Road (a.m. peak hour); and
- “A” Street/W San Jacinto Avenue (a.m. peak hour).

Based on City’s criteria for determining impacts (as described in the Methodology section of this report), a cumulative impact is considered significant when a study intersection is forecast to operate at an unacceptable LOS with the addition of cumulative/background traffic and 50 or more a.m. or p.m. peak hour project trips. The intersections of “A” Street/Harvill Avenue, “A” Street/Nuevo Road, and “A” Street/W Metz Road operate at an unacceptable LOS under without project conditions. “A” Street/W San Jacinto Avenue operates at an acceptable LOS under without project conditions, but has an unsatisfactory LOS under with project conditions with more than 50 peak hour project trips. Hence, “A” Street/W San Jacinto Avenue has a cumulative impact. The project adds to the existing deficiency will be paying its fair share for implementation of improvements at these three intersections.

All other study intersections are projected to operate at a satisfactory LOS.

7.5 CUMULATIVE (2021) WITHOUT PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for cumulative without project conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that the following intersections are forecast to operate at an unsatisfactory LOS under cumulative without project conditions:

- “A” Street/Harvill Avenue (a.m. and p.m. peak hour);
- “A” Street/Nuevo Road (a.m. peak hour);
- “A” Street/W Metz Road (a.m. peak hour); and

- “A” Street/W San Jacinto Avenue (a.m. peak hour).

All other study intersections are projected to operate at a satisfactory LOS.

7.6 CUMULATIVE (2021) WITH PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for cumulative with project conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that the following intersections are forecast to operate at an unsatisfactory LOS under cumulative with project conditions:

- “A” Street/Harvill Avenue (a.m. and p.m. peak hour);
- “A” Street/Nuevo Road (a.m. peak hour);
- “A” Street/W Metz Road (a.m. peak hour); and
- “A” Street/W San Jacinto Avenue (a.m. and p.m. peak hour).

Based on City’s criteria for determining impacts (as described in the Methodology section of this report), a cumulative impact is considered significant when a study intersection is forecast to operate at an unacceptable LOS with the addition of cumulative/background traffic and 50 or more a.m. or p.m. peak hour project trips. The intersections of “A” Street/Harvill Avenue, “A” Street/Nuevo Road, “A” Street/W Metz Road, and “A” Street/W San Jacinto Avenue operate at an unacceptable LOS under without project conditions. The project adds to the existing deficiency and will be paying its fair share for implementation of improvements at these three intersections. All other study intersections are projected to operate at a satisfactory LOS.

Detailed Level of Service Worksheets are included in Appendix D.

7.7 LIST OF CHAPTER 7.0 TABLES

- Table 7-A: Existing Intersection Levels of Service
- Table 7-B: Project Completion (2021) Intersection Levels of Service
- Table 7-C: Cumulative (2021) Intersection Levels of Service

Table 7-A - Existing Intersection Levels of Service

Intersection	Jurisdiction	Control	LOS Standard	Without Project				With Project				A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Significant Impact
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour				
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS			
1 . "A" Street / Harvill Avenue	County of Riverside	AWSC	D	>100	F *	13.4	B	>100	F *	16.0	C	11.3	2.6	Yes
2 . Project Driveway / W Metz Road	City of Perris/County of Riverside	OWSC ¹	D	9.3	A	8.9	A	9.8	A	9.7	A	0.5	0.8	No
3 . Project Driveway / W San Jacinto Avenue	City of Perris	OWSC ¹	D	8.4	A	8.4	A	9.1	A	9.1	A	0.7	0.7	No
4 . "A" Street / Nuevo Road	City of Perris	AWSC	D	36.4	E *	10.7	B	47.4	E *	11.9	B	11.0	1.2	Yes
5 . "A" Street / W Metz Road	City of Perris	TWSC	D	41.5	E *	14.7	B	60.1	F *	17.6	C	18.6	2.9	Yes
6 . "A" Street / W San Jacinto Avenue	City of Perris	TWSC	D	26.5	D	13.6	B	28.8	D	14.6	B	2.3	1.0	No

Notes:

- OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; LOS = Level of Service
- Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).
- ¹ This intersection operates as a TWSC intersection under with project conditions.

Table 7-B - Project Opening Year (2021) Intersection Levels of Service

Intersection	Jurisdiction	Control	LOS Standard	Without Project				With Project				A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Significant Impact
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour				
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS			
1 . "A" Street / Harvill Avenue	County of Riverside	AWSC	D	>100	F *	14.4	B	>100	F *	17.6	C	13.2	3.2	Yes
2 . Project Driveway / W Metz Road	City of Perris/County of Riverside	OWSC ¹	D	9.3	A	8.9	A	9.8	A	9.7	A	0.5	0.8	No
3 . Project Driveway / W San Jacinto Avenue	City of Perris	OWSC ¹	D	8.4	A	8.4	A	9.1	A	9.1	A	0.7	0.7	No
4 . "A" Street / Nuevo Road	City of Perris	AWSC	D	49.5	E *	11.1	B	60.2	F *	12.7	B	10.7	1.6	Yes
5 . "A" Street / W Metz Road	City of Perris	TWSC	D	51.3	F *	15.5	C	83.4	F *	18.6	C	32.1	3.1	Yes
6 . "A" Street / W San Jacinto Avenue	City of Perris	TWSC	D	29.3	D	15.0	B	39.6	E *	15.8	C	10.3	0.8	Yes

Notes:

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; LOS = Level of Service
 Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).
¹ This intersection operates as a TWSC intersection under with project conditions.

Table 7-C - Cumulative (2021) Intersection Levels of Service

Intersection	Jurisdiction	Control	LOS Standard	Without Project				With Project				A.M. Peak Hour Increase in Delay (sec.)	P.M. Peak Hour Increase in Delay (sec.)	Significant Impact
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour				
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS			
1 . "A" Street / Harvill Avenue	County of Riverside	AWSC	D	>100	F *	64.7	F *	>100	F *	87.2	F *	17.2	22.5	Yes
2 . Project Driveway / W Metz Road	City of Perris/County of Riverside	OWSC ¹	D	9.5	A	9.1	A	10.0	B	10.0	B	0.5	0.9	No
3 . Project Driveway / W San Jacinto Avenue	City of Perris	OWSC ¹	D	8.4	A	8.4	A	9.1	A	9.1	A	0.7	0.7	No
4 . "A" Street / Nuevo Road	City of Perris	AWSC	D	>100	F *	22.6	C	>100	F *	33.4	C	20.9	10.8	Yes
5 . "A" Street / W Metz Road	City of Perris	TWSC	D	>100	F *	26.6	D	>100	F *	32.6	D	204.9	6.0	Yes
6 . "A" Street / W San Jacinto Avenue	City of Perris	TWSC	D	47.8	E *	34.5	D	>100	F *	40.7	E *	59.4	6.2	Yes

Notes:

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).

¹ This intersection operates as a TWSC intersection under with project conditions.

8.0 CIRCULATION IMPROVEMENTS, SIGNAL WARRANT ANALYSIS, AND FUNDING SOURCES

8.1 RECOMMENDED IMPROVEMENTS

At intersections where the level of service is forecast to be unsatisfactory or where the project would have a significant impact, the City requires that improvements be identified to improve the intersection LOS to D or better. Based on the results, the recommended improvements are as follows.

8.1.1 Existing with Project Conditions

- **“A” Street/Harvill Avenue:** Proposed improvements recommended at this intersection include installation of a traffic signal. The project will be responsible for payment of its fair share for implementation of the proposed improvements.
- **“A” Street/Nuevo Road:** Proposed improvements recommended at this intersection include the restriping of the northbound lanes to include left-turn lane. There is adequate width available to add a northbound left-turn lane while having enough lane width available for the southbound departure lane. Additionally, the southbound departure lane will continue to align with the southbound approach lane after restriping. The project will be responsible for payment of its fair share for implementation of the proposed improvements.
- **“A” Street/W Metz Road:** Proposed improvements recommended at this intersection include installation of a traffic signal. The project will be responsible for payment of its fair share for implementation of the proposed improvements.

8.1.2 Project Completion Year (2021) with Project Conditions

- **“A” Street/Harvill Avenue:** Proposed improvements recommended at this intersection include installation of a traffic signal. The project will be responsible for payment of its fair share for implementation of the proposed improvements.
- **“A” Street/Nuevo Road:** Proposed improvements recommended at this intersection include installation of a traffic signal and the restriping of the northbound lanes to include a left-turn lane. There is adequate width available to add a northbound left-turn lane while having enough lane width available for the southbound departure lane. Additionally, the southbound departure lane will continue to align with the southbound approach lane after restriping. The project will be responsible for payment of its fair share for implementation of the proposed improvements.
- **“A” Street/W Metz Road:** Proposed improvements recommended at this intersection include installation of a traffic signal. The project will be responsible for payment of its fair share for implementation of the proposed improvements.

- **“A” Street/W San Jacinto Avenue:** Proposed improvements recommended at this intersection include installation of a traffic signal. The project will be responsible for payment of its fair share for implementation of the proposed improvements.

8.1.3 Cumulative (2021) with Project Conditions

- **“A” Street/Harvill Avenue:** Proposed improvements recommended at this intersection include installation of a traffic signal and the addition of a westbound right-turn lane. There is available right-of-way for adding a westbound right-turn lane at this intersection. The project will be responsible for payment of its fair share for implementation of the proposed improvements.
- **“A” Street/Nuevo Road:** Proposed improvements recommended at this intersection include installation of a traffic signal and the restriping of the northbound lanes to include a left-turn lane. There is adequate width available to add a northbound left-turn lane while having enough lane width available for the southbound departure lane. Additionally, the southbound departure lane will continue to align with the southbound approach lane after restriping. The project will be responsible for payment of its fair share for implementation of the proposed improvements.
- **“A” Street/W Metz Road:** Proposed improvements recommended at this intersection include installation of a traffic signal. The project will be responsible for payment of its fair share for implementation of the proposed improvements.
- **“A” Street/W San Jacinto Avenue:** Proposed improvements recommended at this intersection include installation of a traffic signal. The project will be responsible for payment of its fair share for implementation of the proposed improvements.

Table 8-A lists the intersection improvements required to meet the City’s LOS standards. Table 8-A also summarizes the project fair share corresponding to the improvement recommended and the funding programs in place that covers recommended improvements. Table 8-B summarizes the project contribution to total new intersection traffic volumes and the fair share calculations. Tables 8-C, 8-D, and 8-E summarize the LOS at study area intersections with the recommended improvements under existing, project completion (2021), and cumulative (2021) with project conditions.

8.2 SIGNAL WARRANT ANALYSIS

A peak hour signal warrant analysis was conducted for the intersection of “A” Street/Harvill Avenue, “A” Street/Nuevo Road, “A” Street/W Metz Road and “A” Street/W San Jacinto Avenue. The peak hour warrant analysis utilizes the peak hour signal warrant from the most recent edition of the California Manual on Uniform Traffic Control Devices (CAMUTCD). The speed limit on the major street (A Street) is 25 miles per hour (mph). Therefore, this analysis is based on the provisions of the CAMUTCD, 2014, Chapter 4C – Traffic Control Signals Needs Study for Warrant 3 – Peak Hour. Figure 8-2, Figure 8-3, Figure 8-4 and Figure 8-5 illustrate the peak hour signal warrant analysis. As shown in Figure 8-2, Figure 8-3 and Figure 8-4, traffic signal would be warranted at the intersection of “A” Street/Harvill Avenue, “A” Street/Nuevo Road and “A” Street/W Metz Road under cumulative (2021) conditions. As shown in Figure 8-5, a traffic signal is not warranted at the intersection of “A”

Street/W San Jacinto Avenue. However, a traffic signal is recommended at this intersection for the following reasons:

- Signalization helps this intersection reduce the delay to an acceptable LOS.
- There are multiple schools located within walking distance from this intersection. Therefore, it is anticipated that this intersection will experience pedestrian traffic travelling to and from these schools. The addition of a traffic signal along with crosswalks will help alleviate safety concerns.
- Considering the proximity to nearby intersections that meet signal warrant, the proposed traffic signal will establish an appropriate pattern of signal control along “A” Street corridor.

8.3 FUNDING SOURCES AND MECHANISMS

Where there is a funding mechanism (fee program) for the recommended improvements, payment into the fee program would be considered sufficient project obligation to alleviate project impacts. At study locations where the addition of project traffic creates a direct significant impact (existing with project conditions) and there is no funding mechanism in place, the project will be responsible for the implementation of the improvement. At locations where the project adds to or creates a forecast deficiency and there is no funding mechanism in place (project completion and cumulative conditions), the project is responsible for its fair-share payment.

8.3.1 Transportation Uniform Mitigation Fee (TUMF) Program

The underlying purpose of the TUMF program is “the need to establish a comprehensive funding source to mitigate the cumulative regional transportation impacts of new development on regional arterial highways.” As new development occurs in western Riverside County, the cumulative transportation impacts of this new development are reflected in increased demand for transportation infrastructure leading to decreased levels of service, increased delay and increased congestion on regional transportation facilities, and an overall decline in regional mobility. Therefore, the need to invest in additional transportation infrastructure to meet the increased travel demand and to sustain pre-development traffic conditions to “keep traffic flowing” represents the fundamental premise of the TUMF program.

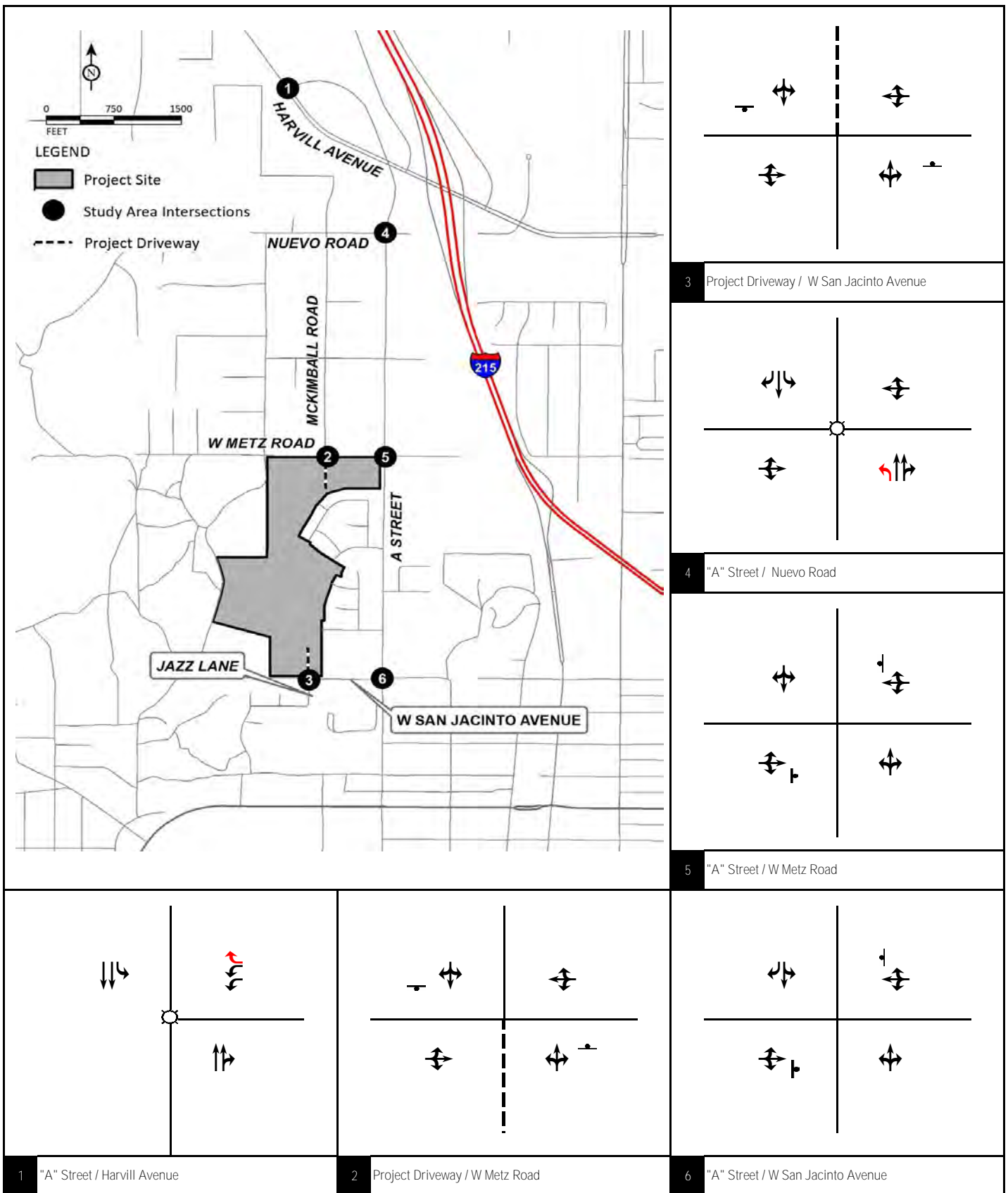
8.3.2 Project Fair Share

In the absence of a fee program where the project has an impact on the roadway network, the project shall pay its fair share of the cost required to mitigate the impacts. The project’s fair share has been calculated based on project traffic as a percentage of total growth from existing to cumulative (2021) conditions. Since the project has a cumulative, significant impact at the intersections of “A” Street/Harvill Avenue, “A” Street/Nuevo Road, “A” Street/W Metz Road and “A” Street/W San Jacinto Avenue, the project will be required to pay its fair share. Previously referenced Table 8-A summarizes the project fair share for the recommended improvements.

8.4 LIST OF CHAPTER 8.0 FIGURES AND TABLES

- Figure 8-1: Cumulative (2021) with Project with Improvements Intersection Geometrics and Traffic Control

- Figure 8-2: “A” Street/Harvill Avenue: Cumulative (2021) Conditions Peak Hour Signal Warrant
- Figure 8-3: “A” Street/Nuevo Road: Cumulative (2021) Conditions Peak Hour Signal Warrant
- Figure 8-4: “A” Street/W Metz Road: Cumulative (2021) Conditions Peak Hour Signal Warrant
- Figure 8-5: “A” Street/W San Jacinto Avenue: Cumulative (2021) Conditions Peak Hour Signal Warrant
- Table 8-A: Recommended Project Intersection Improvements and Fair Share
- Table 8-B: Project Contribution to Total New Intersection Traffic Volumes
- Table 8-C: Existing with Project Recommended Improvements Intersection Levels of Service
- Table 8-D: Project Completion Year (2021) with Project Recommended Improvements Intersection Levels of Service
- Table 8-E: Cumulative (2021) with Project Recommended Improvements Intersection Levels of Service



LSA

Legend

- Stop Sign
- Project Driveway
- Recommended Improvements
- New Signal

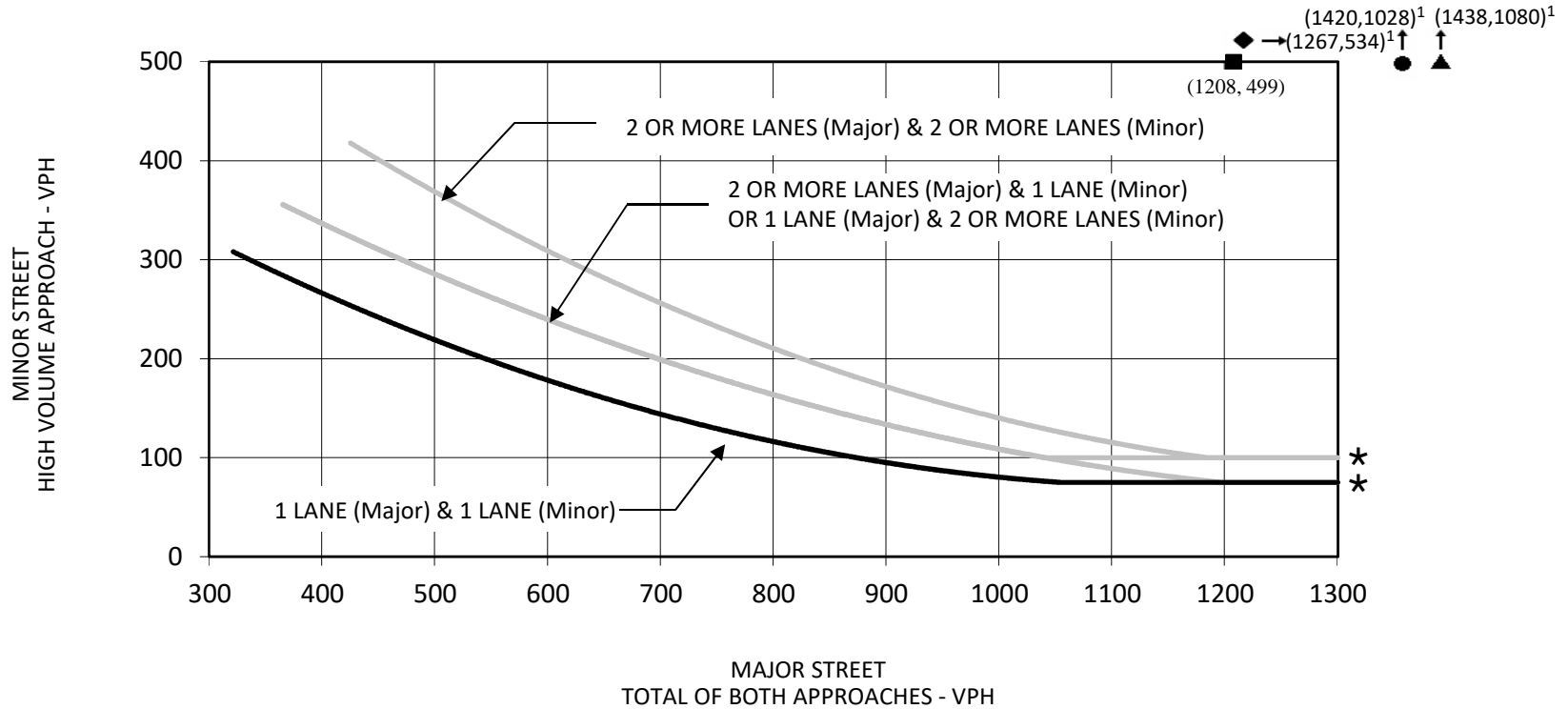
Cumulative (2021) with Project with Improvements Intersection Geometrics and Traffic Control

TTM 37803 Project
Traffic Impact Analysis

FIGURE 8-1

WARRANT 3, PEAK HOUR (70% FACTOR)

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



★ 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.



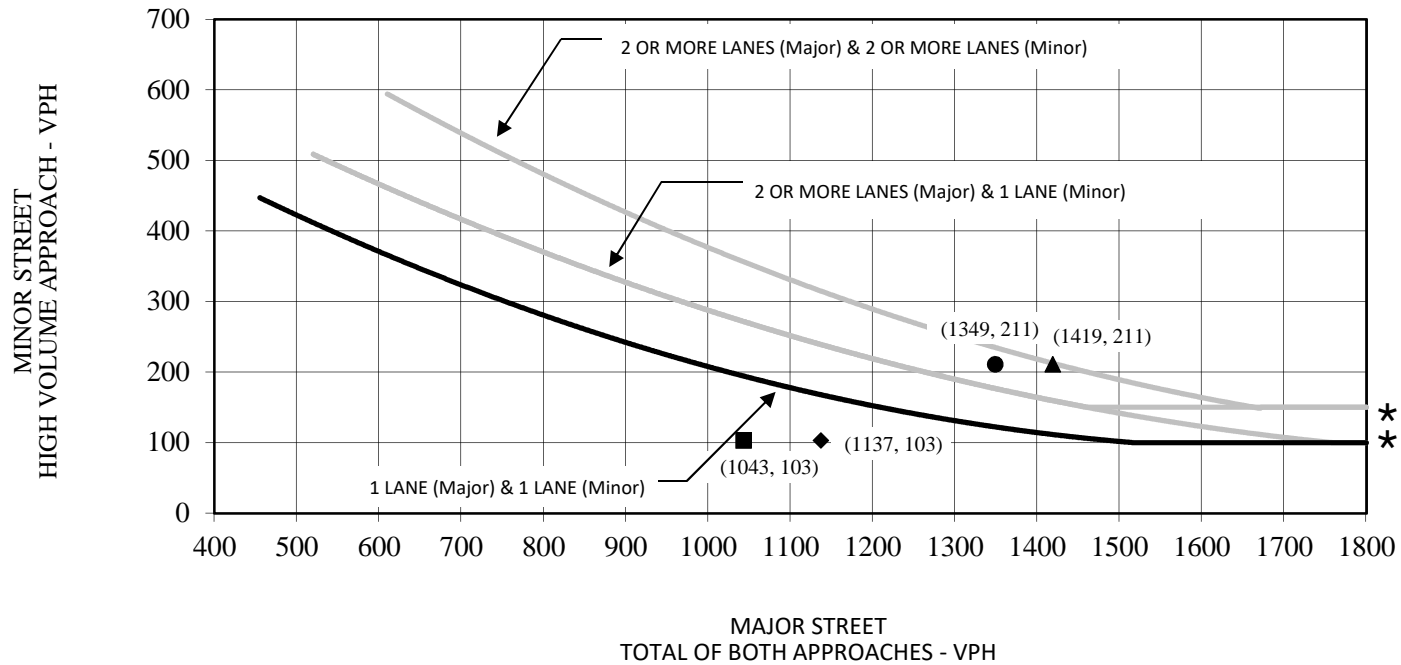
FIGURE 8-2

- No Project AM Peak Hour
- ▲ With Project AM Peak Hour
- No Project PM Peak Hour
- ◆ With Project PM Peak Hour

TTM 37803 Project
 "A" Street / Harvill Avenue
 Signal Warrant (Peak Hour)

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

WARRANT 3, PEAK HOUR



* 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.



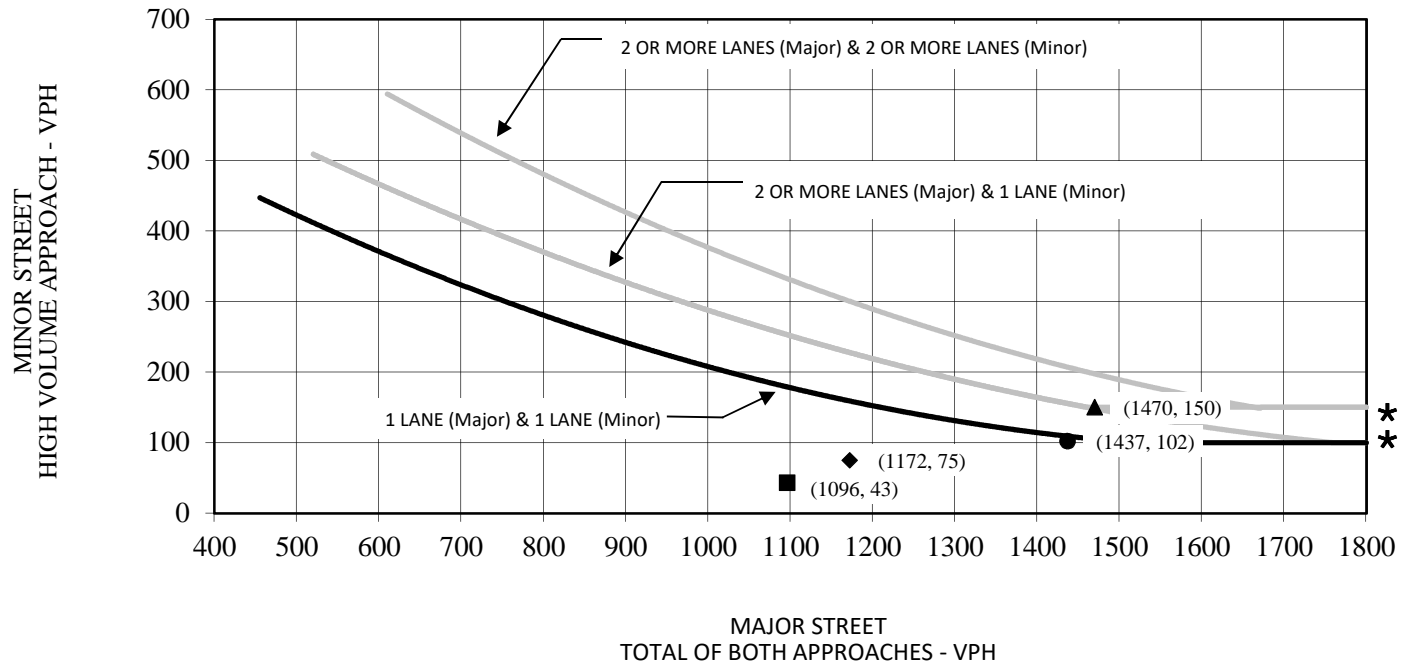
FIGURE 8-3

- No Project AM Peak Hour
- ▲ With Project AM Peak Hour
- No Project PM Peak Hour
- ◆ With Project PM Peak Hour

TTM 37803 Project
 "A" Street / Nuevo Road
 Signal Warrant (Peak Hour)

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

WARRANT 3, PEAK HOUR



* 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.



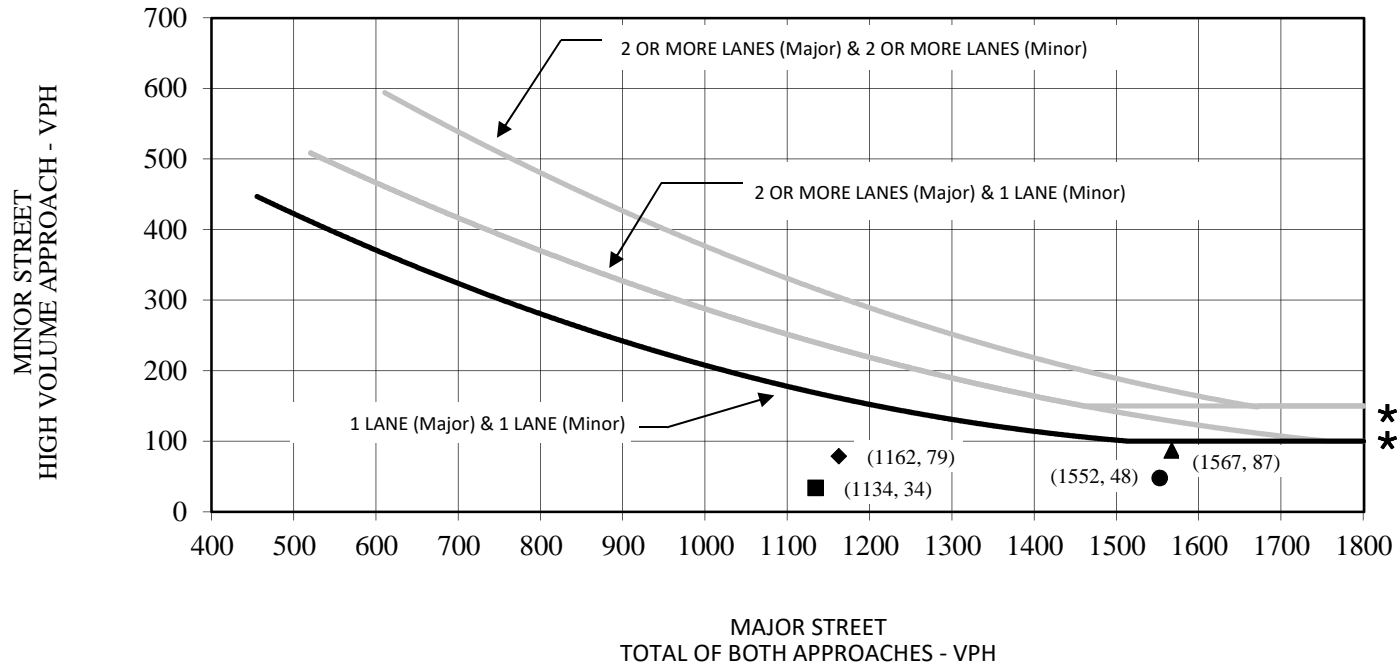
FIGURE 8-4

- No Project AM Peak Hour
- ▲ With Project AM Peak Hour
- No Project PM Peak Hour
- ◆ With Project PM Peak Hour

TTM 37803 Project
 "A" Street / W Metz Road
 Signal Warrant (Peak Hour)

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

WARRANT 3, PEAK HOUR



* 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.



FIGURE 8-5

- No Project AM Peak Hour
- ▲ With Project AM Peak Hour
- No Project PM Peak Hour
- ◆ With Project PM Peak Hour

TTM 37803 Project
 "A" Street / W San Jacinto Avenue
 Signal Warrant (Peak Hour)

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

Table 8-A - Recommended Project Intersection Improvements and Fair Share

Intersection	Jurisdiction	Existing with Project Improvements	Project Completion Year (2021) with Project Improvements	Cumulative (2021) with Project Improvements	Funded Improvements (WRCOG TUMF) ¹	Improvements Not Funded	Project Fair Share ²
1 . "A" Street / Harvill Avenue	County of Riverside	Install a traffic signal.	Install a traffic signal.	Add a WBR. Install a traffic signal.	None	Add a WBR. Install a traffic signal.	14.14%
4 . "A" Street / Nuevo Road	City of Perris	Add a NBL.	Add a NBL, Install a traffic signal.	Add a NBL, Install a traffic signal.	None	Add a NBL, Install a traffic signal.	16.97%
5 . "A" Street / W Metz Road	City of Perris	Install a traffic signal.	Install a traffic signal.	Install a traffic signal.	None	Install a traffic signal.	20.93%
6 . "A" Street / W San Jacinto Avenue	City of Perris	None	Install a traffic signal.	Install a traffic signal.	None	Install a traffic signal.	15.21%

Notes:

NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound

L, T, R = Left, Through, Right

WRCOG TUMF = Western Riverside County Council of Governments Transportation Uniform Mitigation Fee

¹ All improvements are covered through the WRCOG TUMF Nexus Study program. The project would contribute its assessed fee to the fee program.

² The project's fair share has been calculated based on project traffic as a percentage of total growth from existing to cumulative (2021) conditions.

Table 8-B - Project Contribution to Total New Intersection Traffic Volumes

Intersection	A.M. Peak Hour					P.M. Peak Hour					Project Fair Share %
	Total Volume		Total Growth	Project Trips	AM Fair Share %	Total Volume		Total Growth	Project Trips	PM Fair Share %	
	Existing	Cumul + Project				Existing	Cumul + Project				
1 . "A" Street / Harvill Avenue	1,933	2,518	585	70	11.97%	1,136	1,801	665	94	14.14%	14.14%
4 . "A" Street / Nuevo Road	1,262	1,738	476	70	14.71%	716	1,270	554	94	16.97%	16.97%
5 . "A" Street / W Metz Road	1,196	1,637	441	81	18.37%	763	1,279	516	108	20.93%	20.93%
6 . "A" Street / W San Jacinto Avenue	1,261	1,678	417	54	12.95%	767	1,247	480	73	15.21%	15.21%

Notes:

Bold = Project Fair Share Percentage is the highest fair share value of the AM and PM peak hour when both peak hours are impacted by the project, or only in the peak hour where the project has an impact.

Table 8-C - Existing with Project Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	With Project Without Improvements						With Project With Improvements								
		Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour			P.M. Peak Hour			
			Delay (sec.)	LOS		Delay (sec.)	LOS			Delay (sec.)	LOS		Delay (sec.)	LOS		
1 . "A" Street / Harvill Avenue	County of Riverside	AWSC	>100	F	*		16.0	C		Signal	35.5	D		20.3	C	
4 . "A" Street / Nuevo Road	City of Perris	AWSC	47.4	E	*		11.9	B		AWSC	28.2	D		13.1	B	
5 . "A" Street / W Metz Road	City of Perris	TWSC	60.1	F	*		17.6	C		Signal	8.9	A		5.2	A	

Notes:

LOS = Level of Service

Delay = Average control delay in seconds.

* Exceeds LOS Standard

Table 8-D - Project Completion Year (2021) with Project Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	With Project Without Improvements						With Project With Improvements							
		Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour			P.M. Peak Hour		
			Delay (sec.)	LOS	*	Delay (sec.)	LOS	*		Delay (sec.)	LOS	*	Delay (sec.)	LOS	*
1 . "A" Street / Harvill Avenue	County of Riverside	AWSC	>100	F	*	17.6	C	Signal	46.6	D		20.4	C		
4 . "A" Street / Nuevo Road	City of Perris	AWSC	60.2	F	*	12.7	B	Signal	14.6	B		11.1	B		
5 . "A" Street / W Metz Road	City of Perris	TWSC	83.4	F	*	18.6	C	Signal	9.3	A		6.4	A		
6 . "A" Street / W San Jacinto Avenue	City of Perris	TWSC	39.6	E	*	15.8	C	Signal	9.0	A		5.4	A		

Notes:
 LOS = Level of Service
 Delay = Average control delay in seconds.
 * Exceeds LOS Standard

Table 8-E - Cumulative (2021) with Project Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	With Project Without Improvements						With Project With Improvements					
		Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour		P.M. Peak Hour	
			Delay (sec.)	LOS		Delay (sec.)	LOS			Delay (sec.)	LOS	Delay (sec.)	LOS
1 . "A" Street / Harvill Avenue	County of Riverside	AWSC	>100	F	*	87.2	F	*	Signal	45.9	D	21.5	C
4 . "A" Street / Nuevo Road	City of Perris	AWSC	>100	F	*	33.4	C		Signal	13.2	B	12.4	B
5 . "A" Street / W Metz Road	City of Perris	TWSC	>100	F	*	32.6	D		Signal	10.8	B	6.0	A
6 . "A" Street / W San Jacinto Avenue	City of Perris	TWSC	>100	F	*	40.7	E	*	Signal	10.1	B	5.6	A

Notes:
 LOS = Level of Service
 Delay = Average control delay in seconds.
 * Exceeds LOS Standard

9.0 SUMMARY AND CONCLUSIONS

The proposed TTM37803 project will consist of single family homes that will have a total of 145 dwelling units. The total area of the single family homes will be 22.9 acres. The project is forecast to generate 108 trips in the a.m. peak hour, 144 trips in the p.m. peak hour, and 1,369 daily trips.

9.1 EXISTING CONDITIONS SUMMARY

Based on the significance criteria as discussed in the “Project Significance Threshold” section of this report, under existing conditions, a direct project impact occurs at three intersections. However, with the implementation of the improvements listed in Section 8.1.1, the intersections of “A” Street/Harvill Avenue, “A” Street/Nuevo Road and “A” Street/W Metz Road are forecast to operate at a satisfactory LOS.

9.2 PROJECT COMPLETION (2021) CONDITIONS SUMMARY

Based on the significance criteria as discussed in the “Project Significance Threshold” section of this report, under project completion conditions, a cumulative project impact occurs at four intersections. However, with the implementation of the improvements listed in Section 8.1.2, the intersections of “A” Street/Harvill Avenue, “A” Street/Nuevo Road, “A” Street/W Metz Road and “A” Street/W San Jacinto Avenue are forecast to operate at a satisfactory LOS.

9.3 CUMULATIVE (2021) CONDITIONS SUMMARY

Based on the significance criteria as discussed in the “Project Significance Threshold” section of this report, under cumulative conditions, a cumulative project impact occurs at four intersections. However, with the implementation of the improvements listed in Section 8.1.3, the intersections of “A” Street/Harvill Avenue, “A” Street/Nuevo Road, “A” Street/W Metz Road and “A” Street/W San Jacinto Avenue are forecast to operate at a satisfactory LOS.

APPENDIX A:

SCOPING AGREEMENT



CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

April 13, 2020

Mr. Nathan Perez
Senior Planner
City of Perris
101 N D Street
Perris, California 92570

Subject: Scope of Work for Tentative Tract Map 37803 (PLN20-05004) (LSA Project No. UCP1901)

Dear Mr. Nathan:

LSA is under contract to prepare a traffic impact analysis (TIA) for the proposed Tentative Tract Map (TTM) 37803 project to be located northwest corner of San Jacinto Avenue and "A" Street in the City of Perris (City). The project is bounded by San Jacinto Avenue to the south, W Metz Road to the north, and "A" street to the east.

The site is currently undeveloped and the proposed project will add 145 single-family homes. Figure 1 (all figures attached) illustrates the regional and project location. Figure 2 illustrates the conceptual site plan. As illustrated in Figure 2, access to the project will be provided via two driveways. One of the proposed driveways will be located along W Metz Road, and will add a 4th leg to the intersection of Mckimball Road and West Metz Road. The second driveway will be located along San Jacinto Avenue, and would add a 4th leg to the intersection of Jazz Lane and San Jacinto Avenue. The City's Level of service (LOS) and significance standards are attached.

The City does not have its own traffic study guidelines and relies upon the *Riverside County Transportation Department's Traffic Impact Analysis Guidelines*, dated 2008. Therefore, the TIA for the proposed project will be based on the County's TIA guidelines and will be prepared to meet the requirements of the City and applicable provisions of the California Environmental Quality Act (CEQA).

LSA anticipates that the following scope of work will be required to prepare the TIA for the proposed project.

SCOPE OF WORK

Study Intersection Analysis

All study intersections will be analyzed during the weekday a.m. and p.m. peak hours while school is session. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. while the p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m. Intersection levels of service (LOS) will be calculated using the

Highway Capacity Manual 6 (HCM 6) analysis methodologies and using Synchro 10 software. Based on discussion with City staff, the TIS will examine the following intersections:

1. "A" Street / Harvill Avenue (County of Riverside);
2. Project Driveway / W Metz Road (County of Riverside/City of Perris);
3. Project Driveway / W San Jacinto Avenue (City of Perris);
4. "A" Street / Nuevo Road (City of Perris);
5. "A" Street / W Metz Road (City of Perris);
6. "A" Street / W San Jacinto Avenue (City of Perris).

Figure 3 illustrates the study area intersections.

Trip Generation

The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 210 – "Single-Family Detached housing". Table A summarizes the daily, a.m., and p.m. peak hour project trip generation. The proposed project is estimated to generate 1,369 daily total, with 108 trips occurring during the a.m. peak hour and 144 trips occurring during the p.m. peak hour.

Generalized trip distribution patterns were developed based on the location of the proposed project in relation to surrounding land uses and the regional roadway network. Figure 4 illustrates the trip distribution for the residential project. The project trip generation was applied to the trip distribution patterns to develop the trip assignment. The trip assignment for the residential project is illustrated in Figure 5.

Analysis Scenarios

The TIA will satisfy the requirements established in the County's TIA guidelines as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to CEQA. The project opening year is anticipated to be 2021. The TIA will examine traffic conditions and project related impacts under the following scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Project Completion (2021) without Project Conditions;
- Project Completion (2021) with Project Conditions;
- Cumulative (2021) without Project Conditions; and
- Cumulative (2021) with Project Conditions.

Volume Development and Analysis Methodology

Traffic volumes for existing year traffic conditions will be based on existing count data collected at study intersections and roadway segments. Project completion year traffic conditions will be developed by applying a 3 percent per annum growth rate to existing traffic volumes. Cumulative traffic conditions will be developed by adding trips from other projects in the vicinity to the project completion year volumes. Table B includes a list of cumulative projects obtained from City's and County's Planning Department.

Existing, project completion year, and cumulative with project volumes will be developed by adding project traffic to the corresponding without project scenarios.

As previously stated, the TIA will analyze study intersections during the a.m. and p.m. peak hours. Intersection LOS will be calculated using HCM 6 analysis methodologies by using the Synchro 10 software.

Project Impact Assessment and Mitigation Measures

Levels of service without the project will be compared to levels of service with the project for all analysis scenarios to determine potential project impacts. Determination of significant project impacts will be made based on the City's LOS standards and threshold of significance criteria.

Mitigation measures will be recommended at locations operating at an unsatisfactory LOS or where the project causes significant impacts. Mitigation measures may include addition of intersection turn lanes, and signalization. The LOS with mitigation will be calculated and summarized along with a comparison of the LOS without mitigation.

TUMF/DIF/Mitigation Fair Share

LSA will evaluate whether the mitigation measures identified in the TIA are included as part of the Western Riverside Council of Governments Transportation Uniform Mitigation Fee (TUMF), or the City's Development Impact Fee (DIF) programs.

For improvements not included in any fee program, LSA will calculate the project's fair share percentage to total new traffic. A table with recommended mitigations will be prepared and will include mitigation measures required under cumulative (2021) conditions. The fair share will be based on project traffic as a percentage of total growth from existing to year 2021.

Signal Warrant Analysis

A signal warrant analysis would be conducted at unsignalized intersections if a signal is recommended as a mitigation measure. Peak hour approach volumes for the study intersections will be examined to determine whether signalization may be warranted per the criteria defined in the California supplement of the Manual on Uniform Traffic Control Devices (CAMUTCD).

Signage and Striping

LSA will identify any changes to striping and signage at the two project driveways.

Should you have any questions, please do not hesitate to contact me at (951) 781-9310 or email me at Ambarish.Mukherjee@lsa.net.

Sincerely,

LSA ASSOCIATES, INC.



Ambarish Mukherjee, AICP, PE
Associate/Senior Transportation Planner

Attachments:

Table A: Project Trip Generation

Table B: Cumulative Projects

Figure 1: Regional and Project Location

Figure 2: Conceptual Site Plan

Figure 3: Study Area Intersections

Figure 4: Project Trip Distribution

Figure 5: Project Trip Assignment

Appendix A: City of Perris LOS Standards and Threshold of Significance

TABLES

Table A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single-Family Trips/Unit ¹	145 DU	0.19	0.55	0.74	0.62	0.37	0.99	9.44
Trip Generation		28	80	108	90	54	144	1,369

Notes:

DU = Dwelling Units

¹ Rates derived from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition) for Land Use 210 - "Single-Family Detached Housing", Setting/Location - "General Urban/Suburban."

Table B - Cumulative Projects

Project No.	Project Name	Address	Project Description	Building Total Square Feet/Dwelling Units/Other
1	Villa Verona	North of Metz Road, east of A Street	Multi-family Residential Apartments	376 DU
2	Verano Apartments	904 D Street	Apartment Complex	40 DU
3	Pacific Meadowood/Pacific Legacy	West of McKimball Road, between Serrana Road and Nuevo Road	Residential development including 46 detached single-family residences on Tract No. 31226.	46 DU
4	Harvest Landing	North of Nuevo Road, east of East Frontage Road	Residential development, business development, parks and recreation center	345 DU single family, 1511 DU multi-family, 16.7 AC sports park, 1233.4 TSF business park, 73.18 TSF commercial
5	Tentative Tract Map 31650	Southwest Corner of De Lines Drive and Van Way	Single Family Residential	61 DU
6	Pacific Lantana	Northwest Coner of Metz Road and A Street	Single Family Residential	122 DU

FIGURES

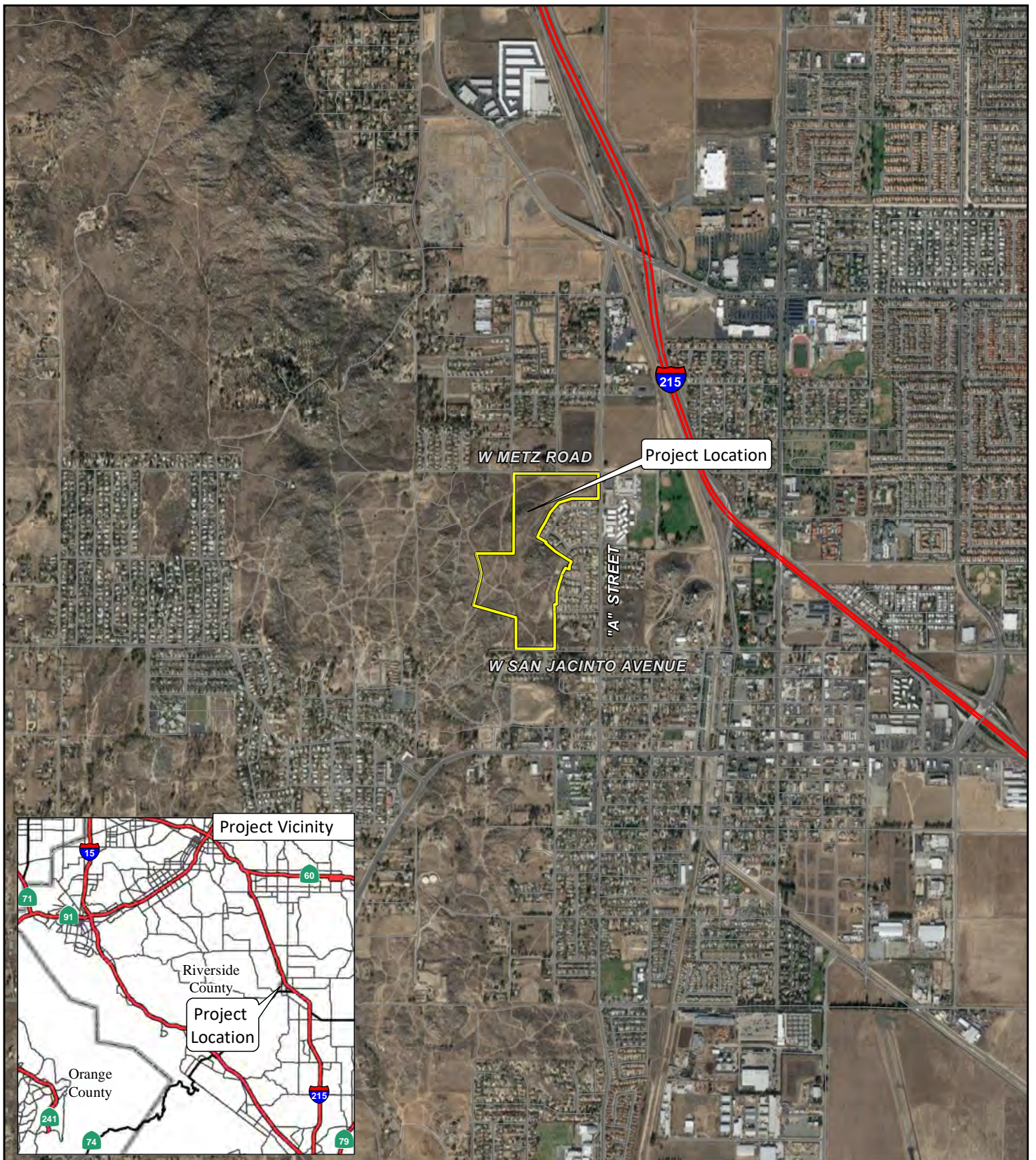
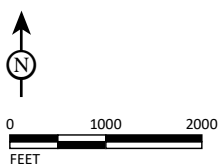


FIGURE 1-1

LSA



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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TTM 37803 Project
 Traffic Impact Analysis
 Regional and Project Location

RESIDENTIAL LOT SUMMARY

Lot Number	Area SF	Volume	Area SF	Volume	Area SF	Volume		
1	18,810	8,224	31	7,049	4,792	303	5,954	5,661
2	13,188	8,278	41	7,021	4,272	167	6,730	5,158
3	13,227	7,811	39	5,007	3,898	289	6,700	4,413
4	9,612	8,338	39	5,343	4,048	184	6,722	4,439
5	10,727	8,421	39	5,496	4,406	271	6,851	4,812
6	10,000	8,415	39	5,472	4,029	300	6,872	4,711
7	10,880	8,225	47	14,832	10,044	167	6,800	4,885
8	10,965	8,461	39	5,790	4,281	339	7,890	5,481
9	7,214	8,250	39	14,132	7,348	488	8,170	4,434
10	10,906	8,489	49	19,914	7,918	210	7,881	5,114
11	8,545	7,517	31	5,850	4,850	221	7,847	7,443
12	10,514	8,224	41	7,747	4,889	332	8,914	7,297
13	8,488	7,819	39	7,880	5,981	219	7,900	4,472
14	7,208	7,119	49	11,120	5,144	119	7,892	5,143
15	12,288	8,881	47	9,860	6,946	233	7,070	4,847
16	16,770	10,770	49	18,236	8,296	218	7,897	5,282
17	20,408	8,914	41	7,081	4,580	379	8,471	5,280
18	10,205	8,481	49	6,790	4,281	118	8,006	5,220
19	7,807	8,279	49	11,147	10,072	119	7,998	5,081
20	10,481	8,381	39	12,018	4,914	320	9,122	6,834
21	6,538	8,438	37	8,414	4,131	323	8,282	4,231
22	6,178	8,351	37	8,297	4,154	277	8,481	4,268
23	6,533	8,462	39	6,668	4,154	323	11,144	4,444
24	6,242	8,481	36	7,283	4,268	284	4,208	4,179
25	6,478	8,481	37	8,414	4,154	323	8,518	6,134
26	1,273	1,481	76	19,240	10,810	320	2,837	2,719
27	14,487	10,520	37	8,170	4,800	437	7,800	4,433
28	13,874	9,271	38	6,170	4,172	219	6,400	5,708
29	13,225	8,989	39	7,132	5,212	219	8,915	5,184
30	14,747	8,481	49	8,196	7,918	180	7,833	5,183
31	8,878	8,323	41	7,440	4,750	432	4,900	4,880
32	7,089	8,288	41	8,414	4,444	432	11,144	11,811
33	14,414	7,348	41	7,485	7,292	273	14,811	11,811
34	6,287	7,454	41	6,018	4,338	434	7,495	7,105
35	8,782	8,191	49	6,200	4,248	193	6,117	4,144
36	8,812	7,817	49	8,906	4,780	180	11,170	10,761
37	8,173	8,274	47	14,199	4,800	180	7,800	5,200
38	8,180	8,005	48	12,814	9,131	130	13,131	11,810
39	6,274	6,328	39	9,417	4,268	130	7,811	4,847
40	5,181	8,479	49	7,799	4,278	143	6,708	4,888
41	7,104	8,481	41	7,739	4,130	143	6,098	5,084
42	7,104	8,481	41	8,196	4,130	143	6,098	5,084
43	5,184	8,479	39	7,020	4,131	143	6,043	4,846
44	11,700	8,249	41	7,096	4,130	144	6,098	5,026
45	23,178	10,211	45	8,412	4,130	143	7,114	7,229
46	19,710	8,481	39	6,000	4,000			
47	11,474	8,445	37	6,000	4,000			
48	8,850	8,700	39	6,000	4,000			
49	8,488	8,488	39	6,000	4,000			
50	6,484	8,327	100	6,000	4,000			

OPEN SPACE LOT SUMMARY

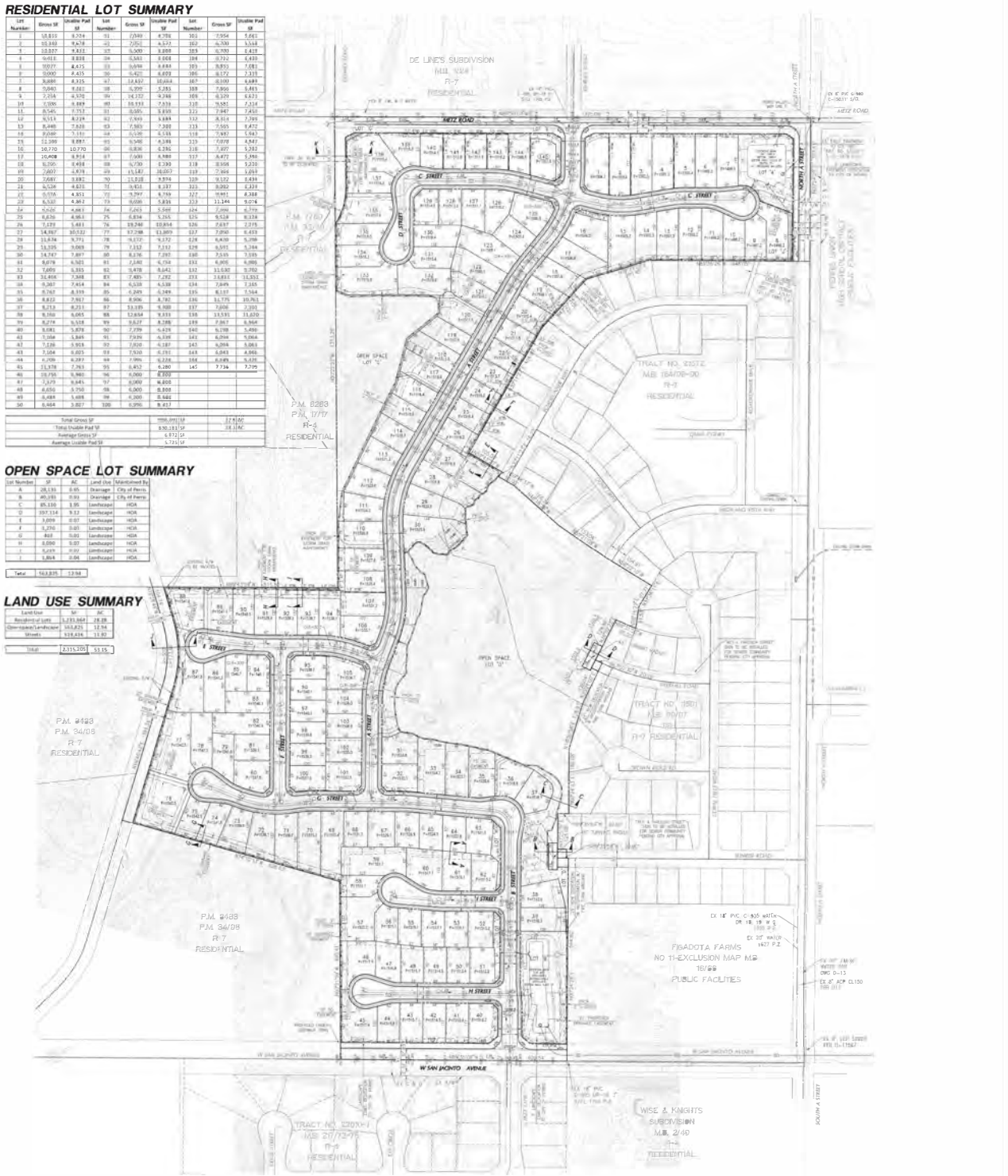
Lot Number	Area SF	Volume	Area SF	Volume
A	28,131	0.45	Design	City of Peris
B	40,191	0.92	Design	City of Peris
C	85,110	1.95	Design	HCA
D	107,114	1.12	Design	HCA
E	1,000	0.02	Design	HCA
F	8,272	0.40	Design	HCA
G	881	0.02	Design	HCA
H	8,880	0.07	Design	HCA
I	4,071	0.01	Design	HCA
J	4,884	0.06	Design	HCA

Total: 163,251 12.94

LAND USE SUMMARY

Land Use	Area SF	Volume
Residential	1,231,844	28.28
Open Space/Landscape	151,421	12.94
Total	1,383,265	41.22

Total: 231,821 55.14



LSA

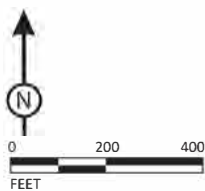


FIGURE 2

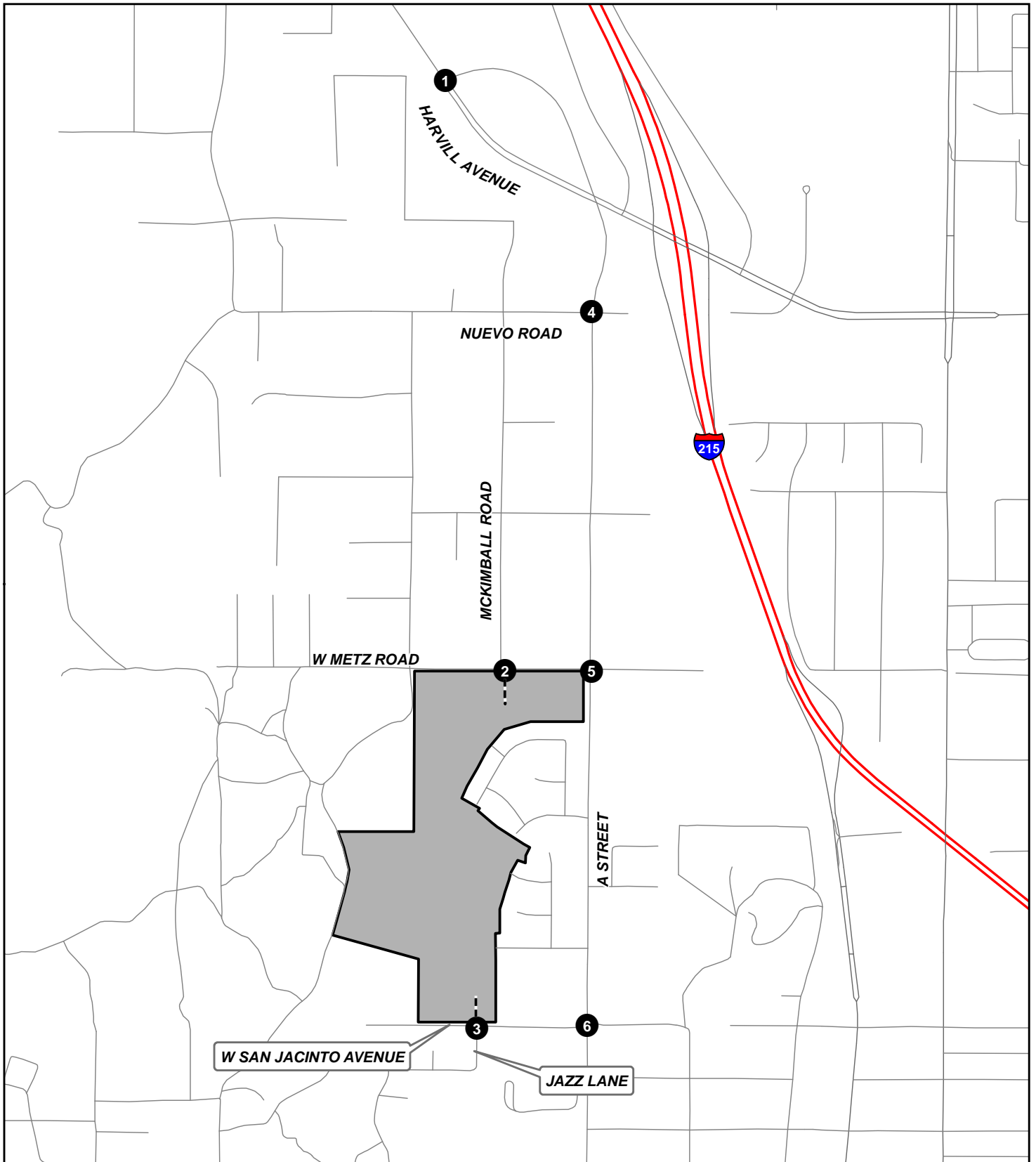


FIGURE 1-3

LSA

LEGEND

- Project Site
- Study Area Intersections
- Project Driveway



SOURCE: ESRI Streetmap, 2013.

I:\UCP1901\Reports\Traffic\fig1-3_StudyIntersections.mxd (3/3/2020)

*TTM 37803 Project
Traffic Impact Analysis*
Study Area Intersections

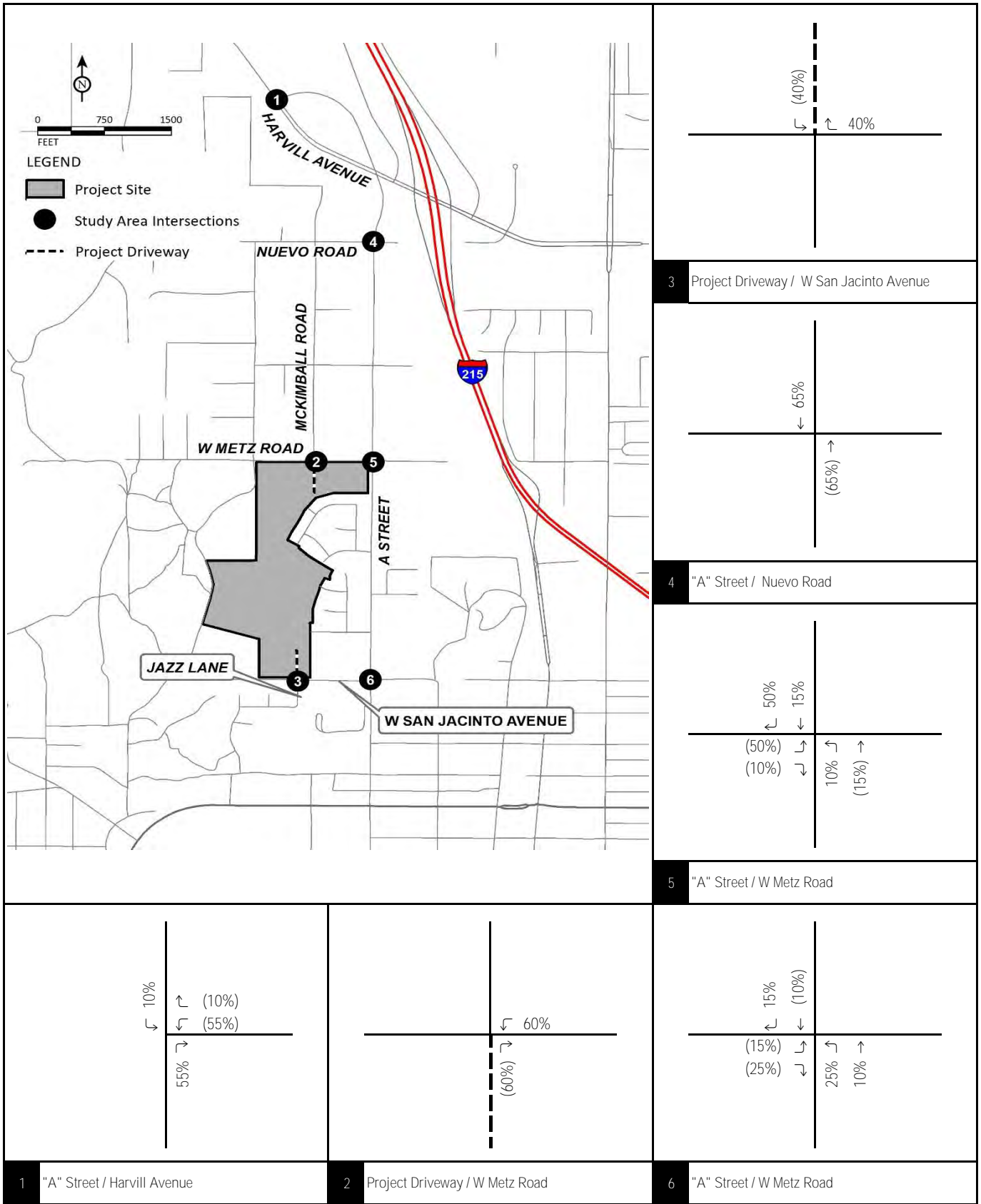


FIGURE 4

LSA

XX% (YY%)
Inbound% (Outbound%) Distribution

----- Project Driveway

TTM 37803 Project
Traffic Impact Analysis
Project Trip Distribution

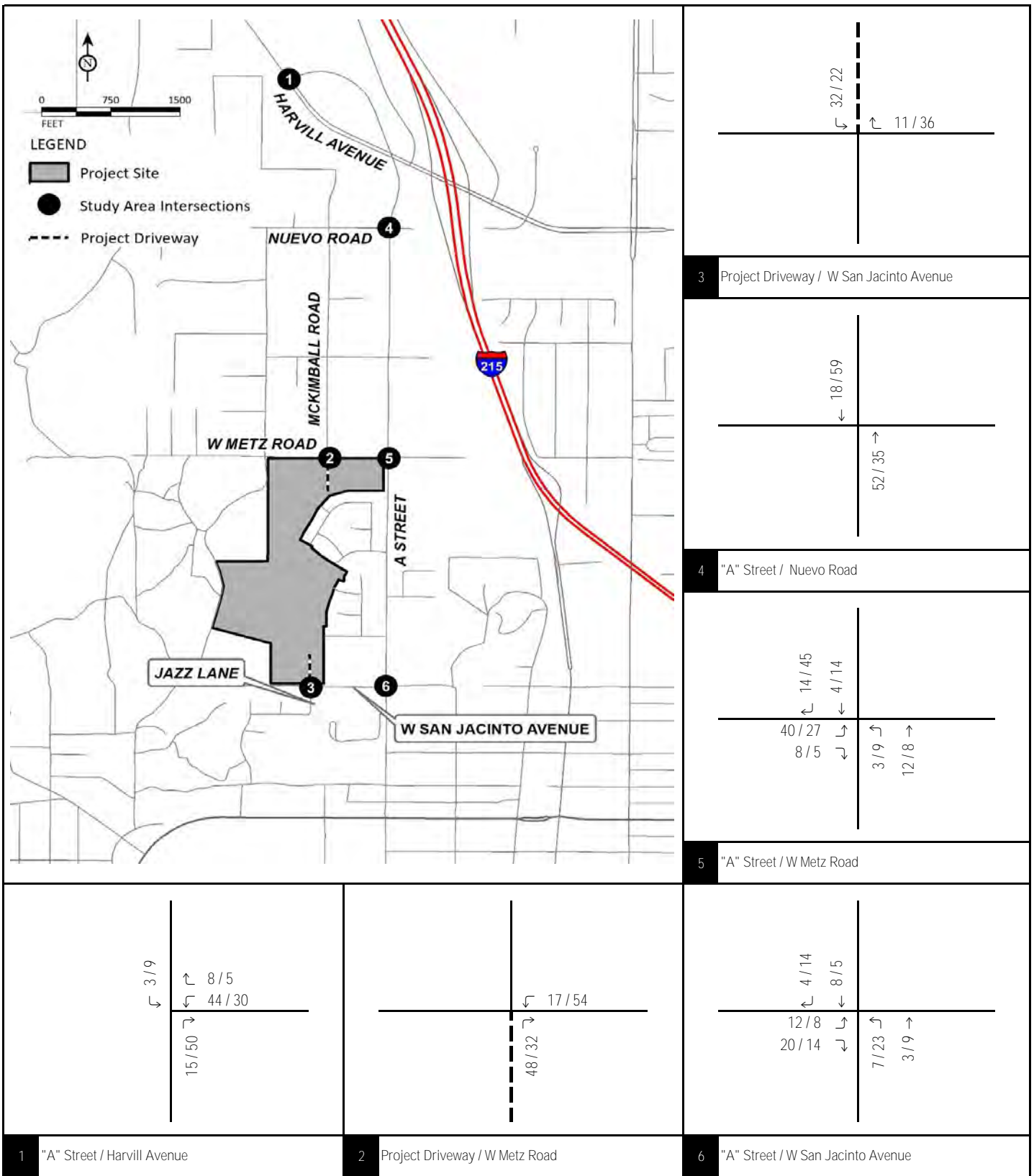


FIGURE 5

LSA

XX / YY

AM / PM Peak Hour Trips

----- Project Driveway

*TTM 37803 Project
Traffic Impact Analysis
Project Trip Assignment*

APPENDIX A

City of Perris LOS Standards and Threshold of Significance

**City of Perris
LOS Standards**



- I.A.5 Consider ancillary parking facilities with transit connections to activity centers such as downtown.
- I.A.6 Require parking facility design that minimizes visual and physical impacts while maintaining pedestrian and motorist safety and supporting adjacent activities.

Policy I.B

Support development of a variety of transportation options for major employment and activity centers including direct access to commuter facilities, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities.

- I.B.1 Require on-site improvements that accommodate public transit vehicles (i.e. bus pullouts and transit stops and cueing lanes, bus turnarounds and other improvements) at major trip attractions (i.e. community centers, tourist and employment centers, etc.).

Policy I.C

Cooperate with local, regional, State and federal agencies to establish an efficient multi-modal circulation system.

Policy I.D

Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation.

Goal II

A well planned, designed, constructed and maintained street and highway system that facilitates the movement of vehicles and provides safe and convenient access to surrounding developments.

Policy II.A

Maintain the following target Levels of Service:

- ❖ LOS “D” along all City maintained roads (including intersections) and LOS “D” along I-215 and SR 74 (including intersections with local streets and roads). An exception to the local road standard is LOS “E”, at intersections of any Arterials and Expressways with SR 74, the Ramona-Cajalco Expressway or at I-215 freeway ramps.
- ❖ LOS “E” may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations.

Implementation Measures

- II.A.1 Utilize existing infrastructure (lanes, median islands, turn lanes, available right-of-way) and rights-of-way to the maximum extent practicable.

Threshold of Significance

**Table 1
LOS & Delay Ranges**

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

Source: 2000 Highway Capacity Manual

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

Peak Hour Performance Criteria

Level of Service (LOS) D or better is generally considered acceptable based on City of Perris, Caltrans, and County of Riverside performance criteria, except at the following intersections for which LOS E or better shall be considered acceptable based the City of Perris General Plan Circulation Element Policy II.A:

- I-215 Southbound Ramps/Harley Knox Boulevard;
- I-215 Northbound Ramps/Harley Knox Boulevard;
- I-215 Southbound Ramps/Cajalco Expressway;
- I-215 Northbound Ramps/Ramona Expressway;
- Webster Avenue/Ramona Expressway;
- Indian Street/Ramona Expressway;
- Perris Boulevard/Ramona Expressway;
- Redlands Avenue/Ramona Expressway; and
- Evans Road/Ramona Expressway.

Thresholds of Significance

To determine whether the addition of project-generated trips (or alternative-generated trips) results in a significant impact, and thus requires mitigation, the analysis shall evaluate significant impacts based on the following criteria:

- A project-related impact is considered direct and significant when a study intersection operates at an acceptable Level of Service for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection to operate at an unacceptable Level of Service for existing plus project conditions.

- A project-related impact is considered direct and significant when a study intersection operates at an unacceptable Level of Service for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection delay to increase by 2 seconds or more.
- A cumulative impact is considered significant when a study intersection is forecast to operate at an unacceptable Level of Service with the addition of cumulative/background traffic and 50 or more a.m. or p.m. peak hour project trips.

EXISTING CONDITIONS

Roadway Description

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

I-215 Freeway provides regional access for the project site as a freeway facility, traversing the Inland Empire in a north-south direction. I-215 begins at its southern terminus at the junction with I-15 in Murrieta and continues northbound through Perris. I-215 merges with SR-60 from Moreno Valley to Riverside, splits at SR-90, continues northbound through San Bernardino and terminates at the junction with I-15 just before the Cajon Pass. In the project vicinity, I-215 is a six-lane freeway providing access to the project site via the Harley Knox Boulevard and Cajalco/Ramona Expressway interchanges.

Day Street is a two-lane undivided roadway trending in a north-south direction within the project vicinity. Day Street is unpaved south of Cajalco Expressway. The posted speed limit on Day Street is 45 miles per hour; on-street parking is permitted.

Decker Road is a two-lane undivided roadway trending in a north-south direction. There is no posted speed limit on Decker Road within the project vicinity; on-street parking is permitted.

Seaton Avenue is a two-lane undivided roadway trending in a north-south direction. There is no posted speed limit on Seaton Avenue within the project vicinity; on-street parking is permitted.

Harvill Avenue is a four-lane divided roadway with a painted median trending in a north-south direction. The posted speed limit on Harvill Avenue is 50 miles per hour within the project vicinity; on-street parking is permitted.

Webster Avenue is a two-lane undivided roadway north of Ramona Expressway and a four-lane divided roadway with a painted median trending in a north-south direction. The posted speed limit on Webster Avenue is 35 miles per hour within the project vicinity; on-street parking is permitted north of Ramona Expressway only.

Western Way is a two-lane undivided roadway trending in a north-south direction. There is no visible posted speed limit on Western Way within the project vicinity; on-street parking is permitted.

Indian Street is a four-lane divided roadway with a raised median trending in a north-south direction. The posted speed limit on Indian Street is 40 miles per hour within the project vicinity; on-street parking is permitted.

APPENDIX B:

TRAFFIC COUNT SHEETS

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

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

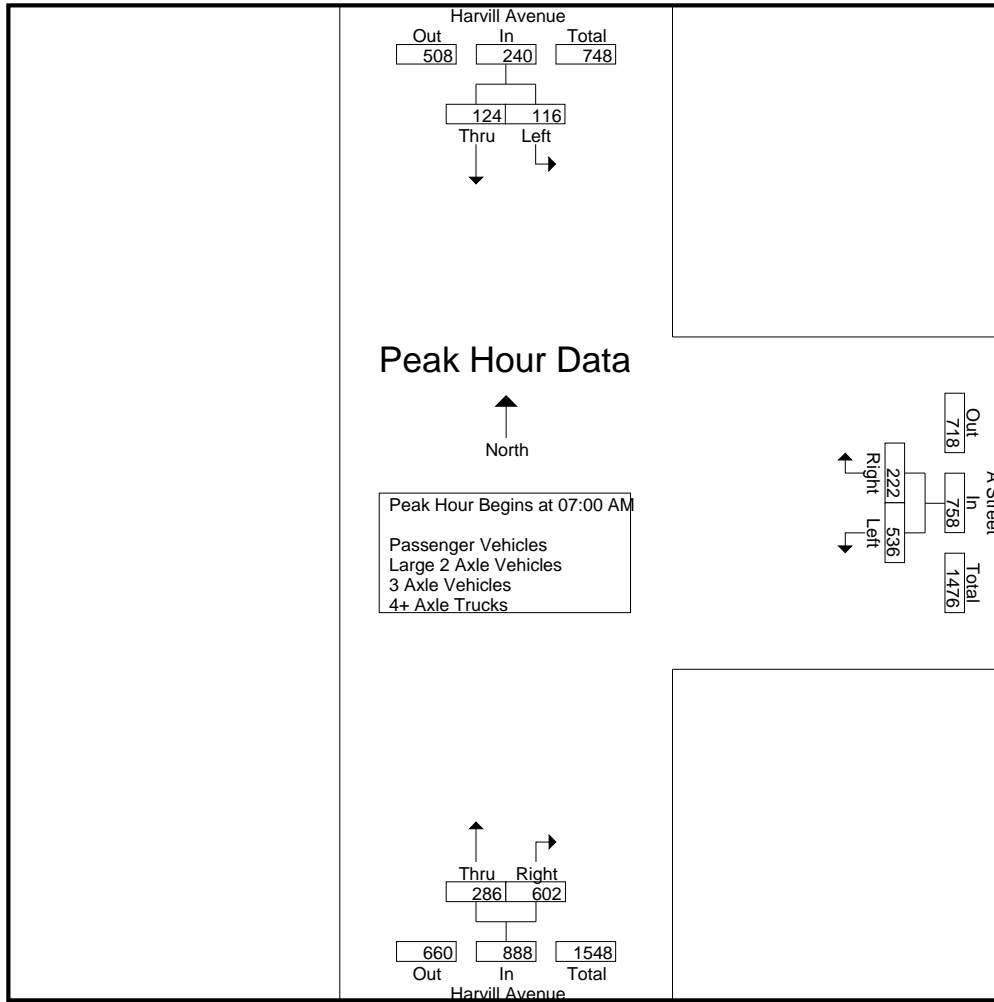
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	33	22	55	77	57	134	101	121	222	411
07:15 AM	38	27	65	146	56	202	77	169	246	513
07:30 AM	20	40	60	163	70	233	54	154	208	501
07:45 AM	25	35	60	150	39	189	54	158	212	461
Total	116	124	240	536	222	758	286	602	888	1886
08:00 AM	3	34	37	72	28	100	45	49	94	231
08:15 AM	16	25	41	36	26	62	34	27	61	164
08:30 AM	10	21	31	35	12	47	39	35	74	152
08:45 AM	11	29	40	33	18	51	40	36	76	167
Total	40	109	149	176	84	260	158	147	305	714
Grand Total	156	233	389	712	306	1018	444	749	1193	2600
Apprch %	40.1	59.9		69.9	30.1		37.2	62.8		
Total %	6	9	15	27.4	11.8	39.2	17.1	28.8	45.9	
Passenger Vehicles	144	205	349	704	286	990	418	730	1148	2487
% Passenger Vehicles	92.3	88	89.7	98.9	93.5	97.2	94.1	97.5	96.2	95.7
Large 2 Axle Vehicles	10	17	27	6	16	22	12	17	29	78
% Large 2 Axle Vehicles	6.4	7.3	6.9	0.8	5.2	2.2	2.7	2.3	2.4	3
3 Axle Vehicles	0	4	4	1	3	4	4	2	6	14
% 3 Axle Vehicles	0	1.7	1	0.1	1	0.4	0.9	0.3	0.5	0.5
4+ Axle Trucks	2	7	9	1	1	2	10	0	10	21
% 4+ Axle Trucks	1.3	3	2.3	0.1	0.3	0.2	2.3	0	0.8	0.8

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	33	22	55	77	57	134	101	121	222	411
07:15 AM	38	27	65	146	56	202	77	169	246	513
07:30 AM	20	40	60	163	70	233	54	154	208	501
07:45 AM	25	35	60	150	39	189	54	158	212	461
Total Volume	116	124	240	536	222	758	286	602	888	1886
% App. Total	48.3	51.7		70.7	29.3		32.2	67.8		
PHF	.763	.775	.923	.822	.793	.813	.708	.891	.902	.919

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

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	33	22	55	77	57	134	101	121	222
+15 mins.	38	27	65	146	56	202	77	169	246
+30 mins.	20	40	60	163	70	233	54	154	208
+45 mins.	25	35	60	150	39	189	54	158	212
Total Volume	116	124	240	536	222	758	286	602	888
% App. Total	48.3	51.7		70.7	29.3		32.2	67.8	
PHF	.763	.775	.923	.822	.793	.813	.708	.891	.902

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	33	19	52	75	51	126	98	117	215	393
07:15 AM	36	22	58	144	53	197	72	168	240	495
07:30 AM	18	37	55	161	67	228	53	153	206	489
07:45 AM	25	34	59	149	38	187	52	155	207	453
Total	112	112	224	529	209	738	275	593	868	1830
08:00 AM	3	28	31	71	25	96	44	47	91	218
08:15 AM	13	20	33	36	24	60	33	25	58	151
08:30 AM	9	18	27	35	12	47	32	33	65	139
08:45 AM	7	27	34	33	16	49	34	32	66	149
Total	32	93	125	175	77	252	143	137	280	657
Grand Total	144	205	349	704	286	990	418	730	1148	2487
Apprch %	41.3	58.7		71.1	28.9		36.4	63.6		
Total %	5.8	8.2	14	28.3	11.5	39.8	16.8	29.4	46.2	

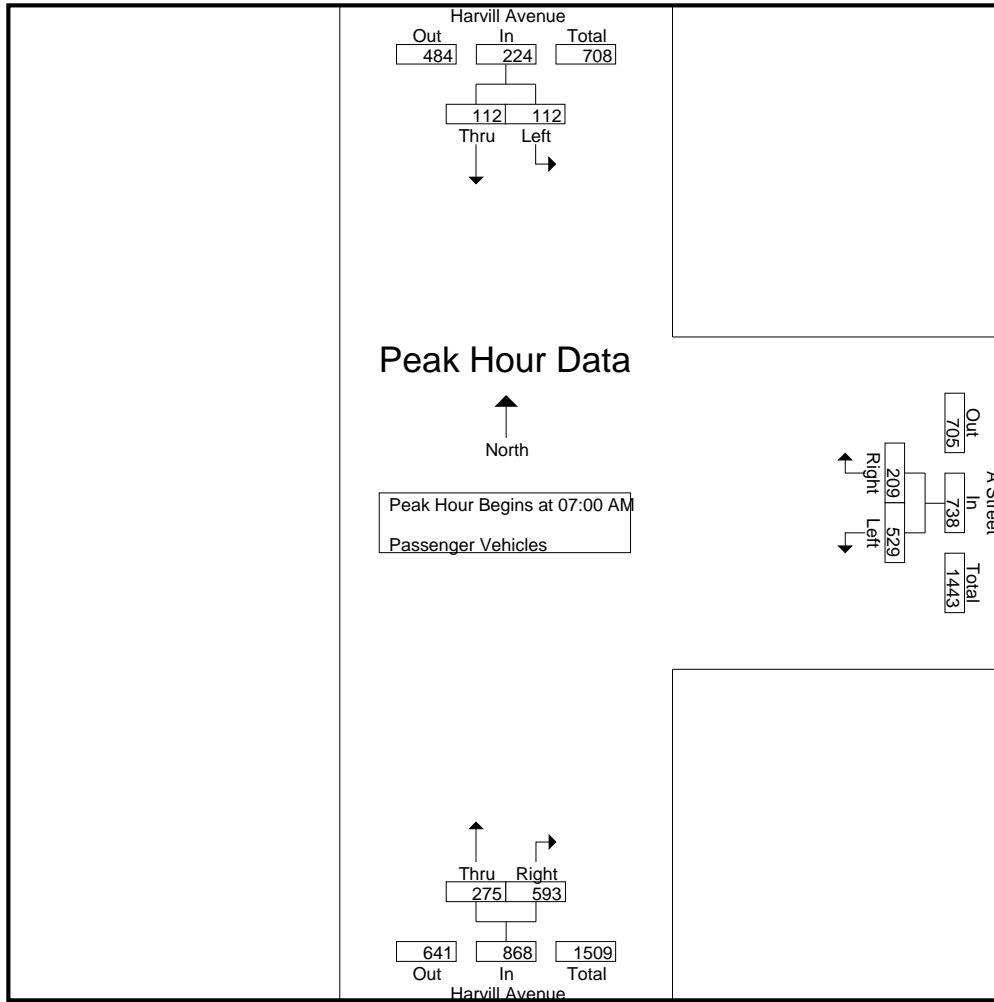
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	33	19	52	75	51	126	98	117	215	393
07:15 AM	36	22	58	144	53	197	72	168	240	495
07:30 AM	18	37	55	161	67	228	53	153	206	489
07:45 AM	25	34	59	149	38	187	52	155	207	453
Total Volume	112	112	224	529	209	738	275	593	868	1830
% App. Total	50	50		71.7	28.3		31.7	68.3		
PHF	.778	.757	.949	.821	.780	.809	.702	.882	.904	.924

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

Peak Hour for Entire Intersection Begins at 07:00 AM

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	33	19	52	75	51	126	98	117	215
+15 mins.	36	22	58	144	53	197	72	168	240
+30 mins.	18	37	55	161	67	228	53	153	206
+45 mins.	25	34	59	149	38	187	52	155	207
Total Volume	112	112	224	529	209	738	275	593	868
% App. Total	50	50		71.7	28.3		31.7	68.3	
PHF	.778	.757	.949	.821	.780	.809	.702	.882	.904

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

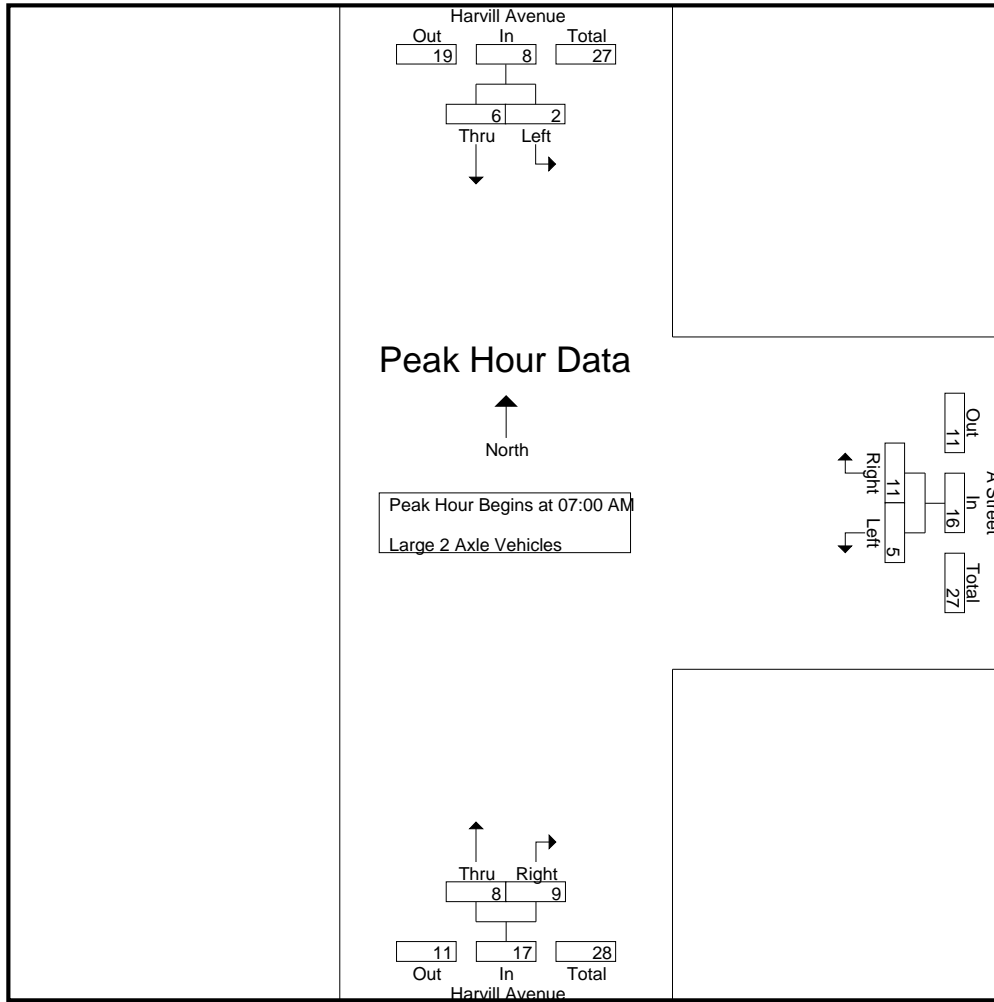
Groups Printed- Large 2 Axle Vehicles

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	1	1	2	4	6	2	4	6	13
07:15 AM	1	2	3	2	3	5	5	1	6	14
07:30 AM	1	2	3	1	3	4	1	1	2	9
07:45 AM	0	1	1	0	1	1	0	3	3	5
Total	2	6	8	5	11	16	8	9	17	41
08:00 AM	0	4	4	1	2	3	1	2	3	10
08:15 AM	3	3	6	0	2	2	0	2	2	10
08:30 AM	1	3	4	0	0	0	1	0	1	5
08:45 AM	4	1	5	0	1	1	2	4	6	12
Total	8	11	19	1	5	6	4	8	12	37
Grand Total	10	17	27	6	16	22	12	17	29	78
Apprch %	37	63		27.3	72.7		41.4	58.6		
Total %	12.8	21.8	34.6	7.7	20.5	28.2	15.4	21.8	37.2	

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	1	1	2	4	6	2	4	6	13
07:15 AM	1	2	3	2	3	5	5	1	6	14
07:30 AM	1	2	3	1	3	4	1	1	2	9
07:45 AM	0	1	1	0	1	1	0	3	3	5
Total Volume	2	6	8	5	11	16	8	9	17	41
% App. Total	25	75		31.2	68.8		47.1	52.9		
PHF	.500	.750	.667	.625	.688	.667	.400	.563	.708	.732

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

Peak Hour for Entire Intersection Begins at 07:00 AM



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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	1	1	2	4	6	2	4	6
+15 mins.	1	2	3	2	3	5	5	1	6
+30 mins.	1	2	3	1	3	4	1	1	2
+45 mins.	0	1	1	0	1	1	0	3	3
Total Volume	2	6	8	5	11	16	8	9	17
% App. Total	25	75		31.2	68.8		47.1	52.9	
PHF	.500	.750	.667	.625	.688	.667	.400	.563	.708

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	1	0	0	0	1
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	1	0	1	1	0	1	2
Total	0	2	2	1	1	2	1	0	1	5
08:00 AM	0	1	1	0	1	1	0	0	0	2
08:15 AM	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	1	2	3	3
08:45 AM	0	1	1	0	1	1	1	0	1	3
Total	0	2	2	0	2	2	3	2	5	9
Grand Total	0	4	4	1	3	4	4	2	6	14
Apprch %	0	100		25	75		66.7	33.3		
Total %	0	28.6	28.6	7.1	21.4	28.6	28.6	14.3	42.9	

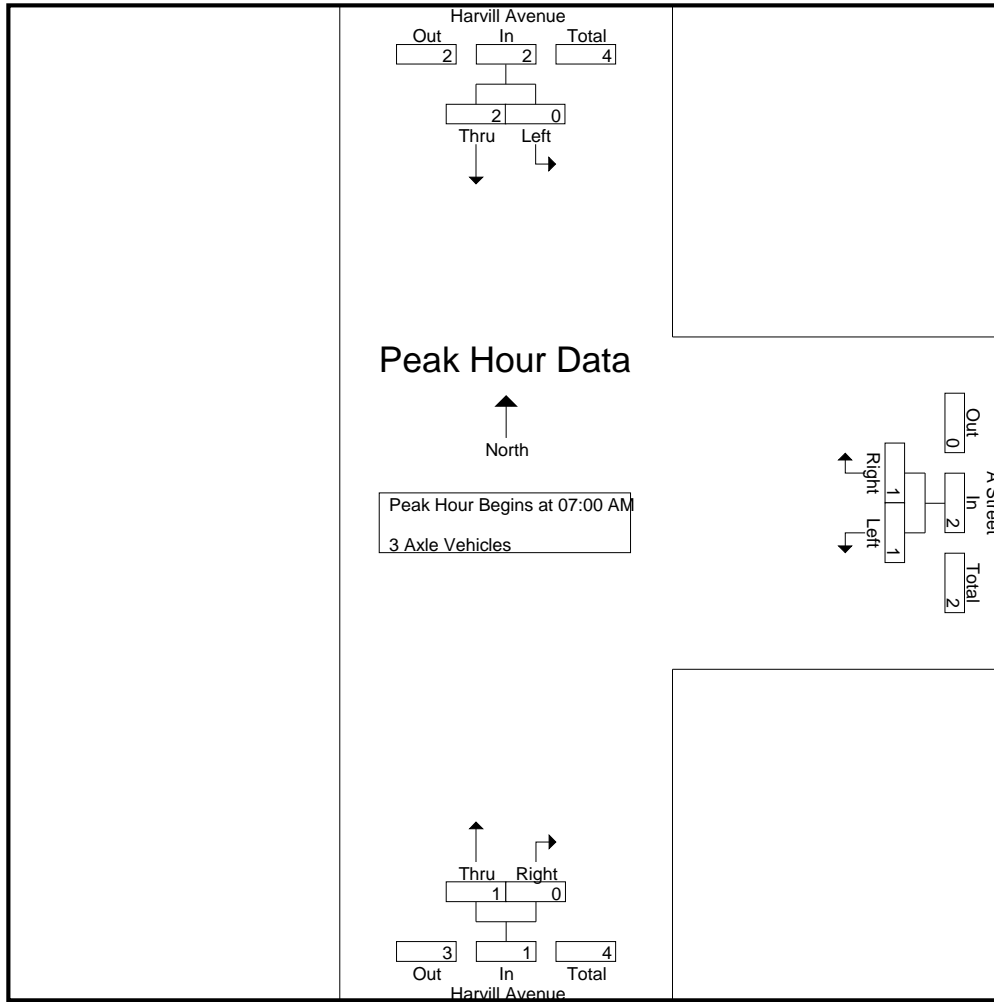
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	1	0	0	0	1
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	1	0	1	1	0	1	2
Total Volume	0	2	2	1	1	2	1	0	1	5
% App. Total	0	100		50	50		100	0		
PHF	.000	.500	.500	.250	.250	.500	.250	.000	.250	.625

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

Peak Hour for Entire Intersection Begins at 07:00 AM

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	1	1	0	0	0
+15 mins.	0	1	1	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	1	0	1	1	0	1
Total Volume	0	2	2	1	1	2	1	0	1
% App. Total	0	100		50	50		100	0	
PHF	.000	.500	.500	.250	.250	.500	.250	.000	.250

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	1	1	1	0	1	4
07:15 AM	1	2	3	0	0	0	0	0	0	3
07:30 AM	1	0	1	1	0	1	0	0	0	2
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	2	4	6	1	1	2	2	0	2	10
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	2	2	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	5	0	5	5
08:45 AM	0	0	0	0	0	0	3	0	3	3
Total	0	3	3	0	0	0	8	0	8	11
Grand Total	2	7	9	1	1	2	10	0	10	21
Apprch %	22.2	77.8		50	50		100	0		
Total %	9.5	33.3	42.9	4.8	4.8	9.5	47.6	0	47.6	

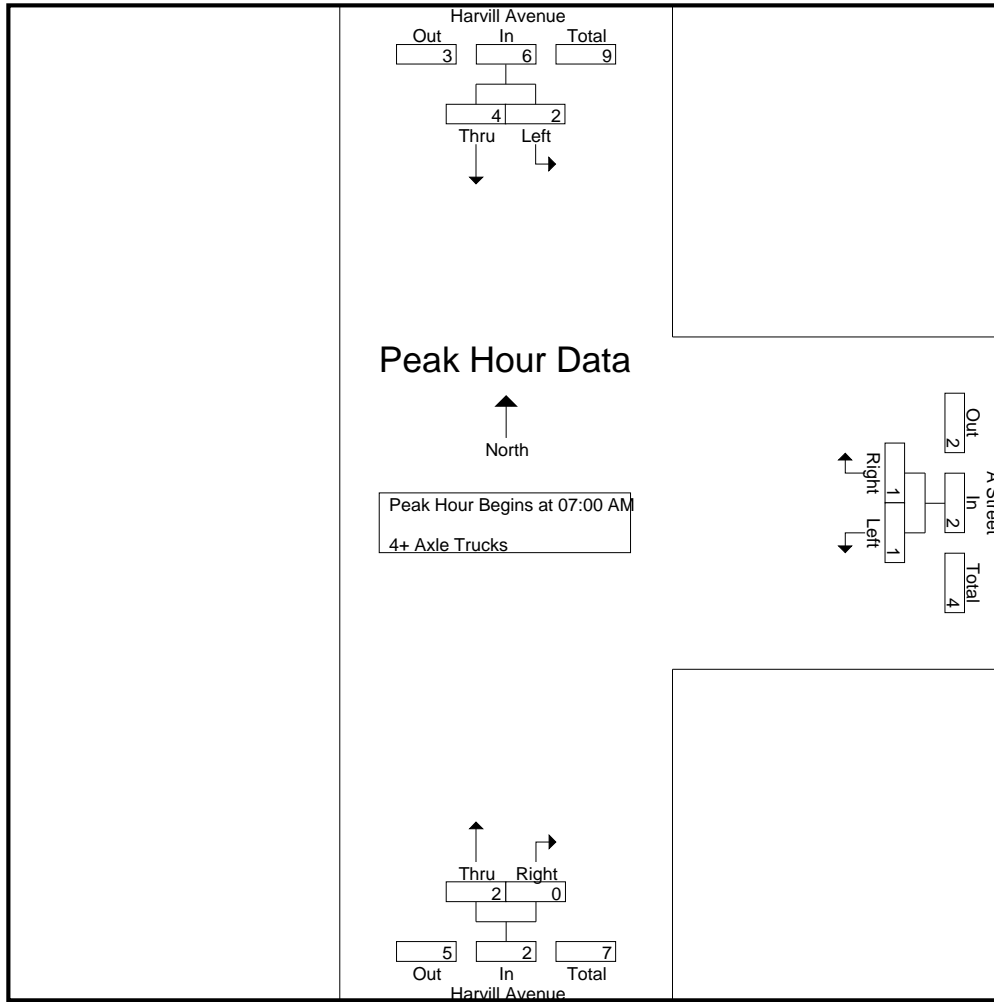
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	1	1	1	0	1	4
07:15 AM	1	2	3	0	0	0	0	0	0	3
07:30 AM	1	0	1	1	0	1	0	0	0	2
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	2	4	6	1	1	2	2	0	2	10
% App. Total	33.3	66.7		50	50		100	0		
PHF	.500	.500	.500	.250	.250	.500	.500	.000	.500	.625

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

Peak Hour for Entire Intersection Begins at 07:00 AM

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	0	1	1	0	0	1
+15 mins.	1	2	3	0	0	0	0	0	0
+30 mins.	1	0	1	1	0	1	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	2	4	6	1	1	2	2	0	2
% App. Total	33.3	66.7		50	50		100	0	
PHF	.500	.500	.500	.250	.250	.500	.500	.000	.500

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

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

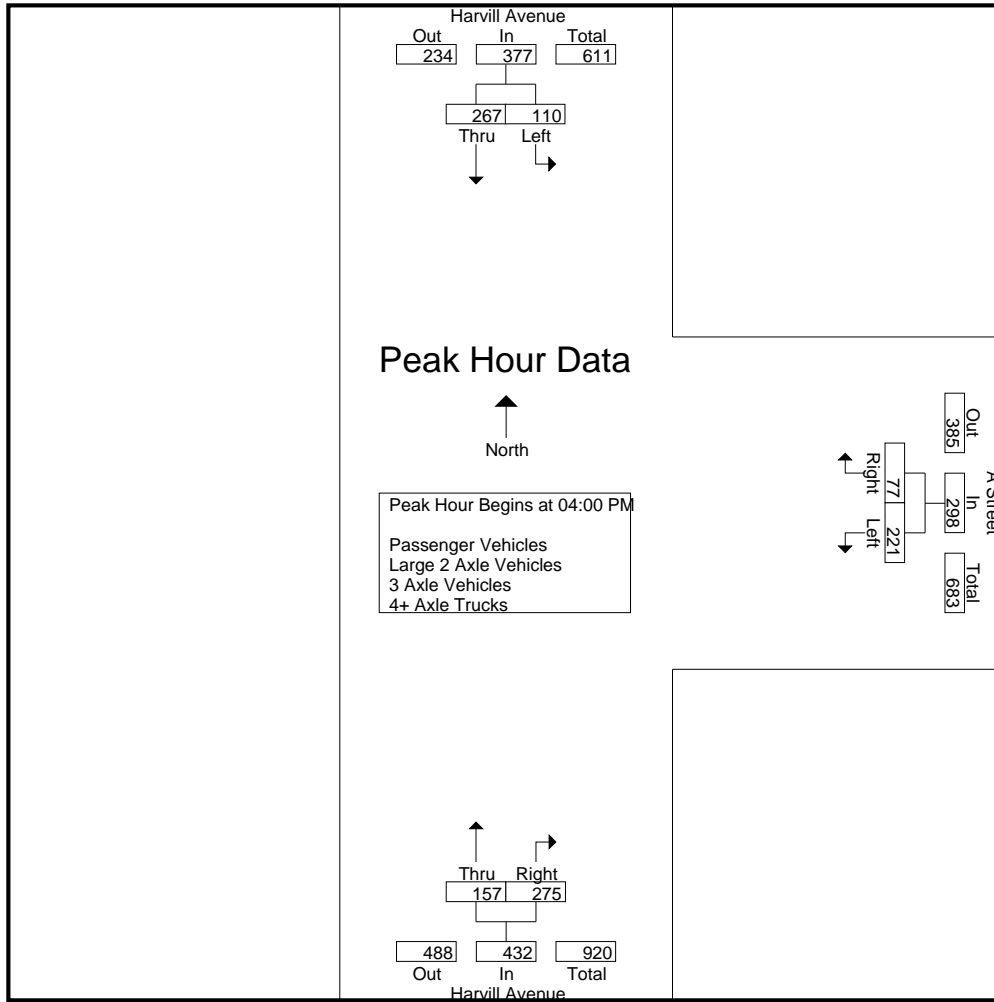
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	24	69	93	58	21	79	43	69	112	284
04:15 PM	25	75	100	56	21	77	46	65	111	288
04:30 PM	39	62	101	50	18	68	30	75	105	274
04:45 PM	22	61	83	57	17	74	38	66	104	261
Total	110	267	377	221	77	298	157	275	432	1107
05:00 PM	19	64	83	74	16	90	24	57	81	254
05:15 PM	35	61	96	49	26	75	36	89	125	296
05:30 PM	18	57	75	54	33	87	30	59	89	251
05:45 PM	22	54	76	57	24	81	22	62	84	241
Total	94	236	330	234	99	333	112	267	379	1042
Grand Total	204	503	707	455	176	631	269	542	811	2149
Apprch %	28.9	71.1		72.1	27.9		33.2	66.8		
Total %	9.5	23.4	32.9	21.2	8.2	29.4	12.5	25.2	37.7	
Passenger Vehicles	196	485	681	451	165	616	261	534	795	2092
% Passenger Vehicles	96.1	96.4	96.3	99.1	93.8	97.6	97	98.5	98	97.3
Large 2 Axle Vehicles	8	15	23	3	7	10	3	8	11	44
% Large 2 Axle Vehicles	3.9	3	3.3	0.7	4	1.6	1.1	1.5	1.4	2
3 Axle Vehicles	0	0	0	0	3	3	0	0	0	3
% 3 Axle Vehicles	0	0	0	0	1.7	0.5	0	0	0	0.1
4+ Axle Trucks	0	3	3	1	1	2	5	0	5	10
% 4+ Axle Trucks	0	0.6	0.4	0.2	0.6	0.3	1.9	0	0.6	0.5

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	24	69	93	58	21	79	43	69	112	284
04:15 PM	25	75	100	56	21	77	46	65	111	288
04:30 PM	39	62	101	50	18	68	30	75	105	274
04:45 PM	22	61	83	57	17	74	38	66	104	261
Total Volume	110	267	377	221	77	298	157	275	432	1107
% App. Total	29.2	70.8		74.2	25.8		36.3	63.7		
PHF	.705	.890	.933	.953	.917	.943	.853	.917	.964	.961

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

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	04:00 PM			05:00 PM			04:00 PM		
+0 mins.	24	69	93	74	16	90	43	69	112
+15 mins.	25	75	100	49	26	75	46	65	111
+30 mins.	39	62	101	54	33	87	30	75	105
+45 mins.	22	61	83	57	24	81	38	66	104
Total Volume	110	267	377	234	99	333	157	275	432
% App. Total	29.2	70.8		70.3	29.7		36.3	63.7	
PHF	.705	.890	.933	.791	.750	.925	.853	.917	.964

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	23	65	88	56	18	74	41	67	108	270
04:15 PM	23	70	93	56	21	77	44	65	109	279
04:30 PM	37	60	97	49	17	66	30	75	105	268
04:45 PM	21	61	82	57	15	72	38	65	103	257
Total	104	256	360	218	71	289	153	272	425	1074
05:00 PM	18	60	78	74	15	89	24	56	80	247
05:15 PM	35	59	94	49	24	73	34	87	121	288
05:30 PM	17	56	73	53	33	86	28	58	86	245
05:45 PM	22	54	76	57	22	79	22	61	83	238
Total	92	229	321	233	94	327	108	262	370	1018
Grand Total	196	485	681	451	165	616	261	534	795	2092
Apprch %	28.8	71.2		73.2	26.8		32.8	67.2		
Total %	9.4	23.2	32.6	21.6	7.9	29.4	12.5	25.5	38	

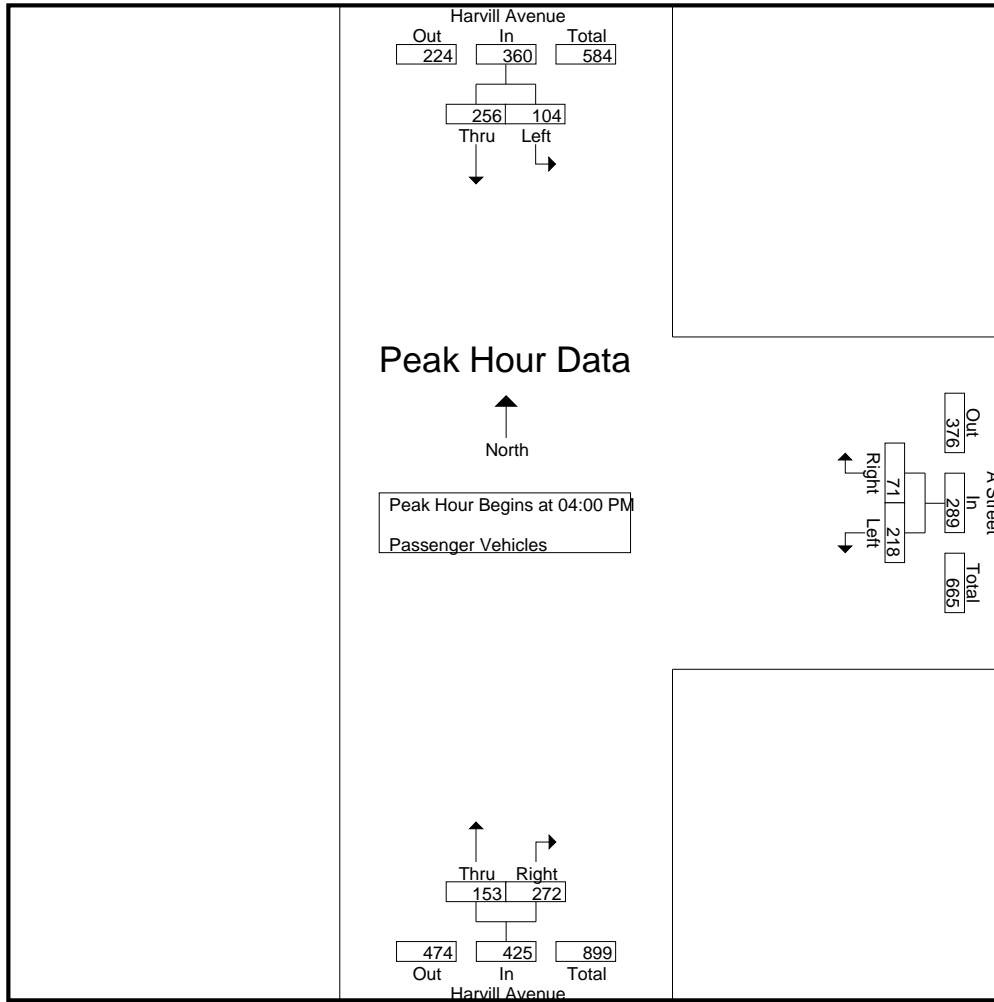
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	23	65	88	56	18	74	41	67	108	270
04:15 PM	23	70	93	56	21	77	44	65	109	279
04:30 PM	37	60	97	49	17	66	30	75	105	268
04:45 PM	21	61	82	57	15	72	38	65	103	257
Total Volume	104	256	360	218	71	289	153	272	425	1074
% App. Total	28.9	71.1		75.4	24.6		36	64		
PHF	.703	.914	.928	.956	.845	.938	.869	.907	.975	.962

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

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	23	65	88	56	18	74	41	67	108
+15 mins.	23	70	93	56	21	77	44	65	109
+30 mins.	37	60	97	49	17	66	30	75	105
+45 mins.	21	61	82	57	15	72	38	65	103
Total Volume	104	256	360	218	71	289	153	272	425
% App. Total	28.9	71.1		75.4	24.6		36	64	
PHF	.703	.914	.928	.956	.845	.938	.869	.907	.975

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	1	4	5	2	1	3	1	2	3	11
04:15 PM	2	3	5	0	0	0	0	0	0	5
04:30 PM	2	1	3	0	1	1	0	0	0	4
04:45 PM	1	0	1	0	2	2	0	1	1	4
Total	6	8	14	2	4	6	1	3	4	24
05:00 PM	1	4	5	0	1	1	0	1	1	7
05:15 PM	0	2	2	0	0	0	0	2	2	4
05:30 PM	1	1	2	1	0	1	2	1	3	6
05:45 PM	0	0	0	0	2	2	0	1	1	3
Total	2	7	9	1	3	4	2	5	7	20
Grand Total	8	15	23	3	7	10	3	8	11	44
Apprch %	34.8	65.2		30	70		27.3	72.7		
Total %	18.2	34.1	52.3	6.8	15.9	22.7	6.8	18.2	25	

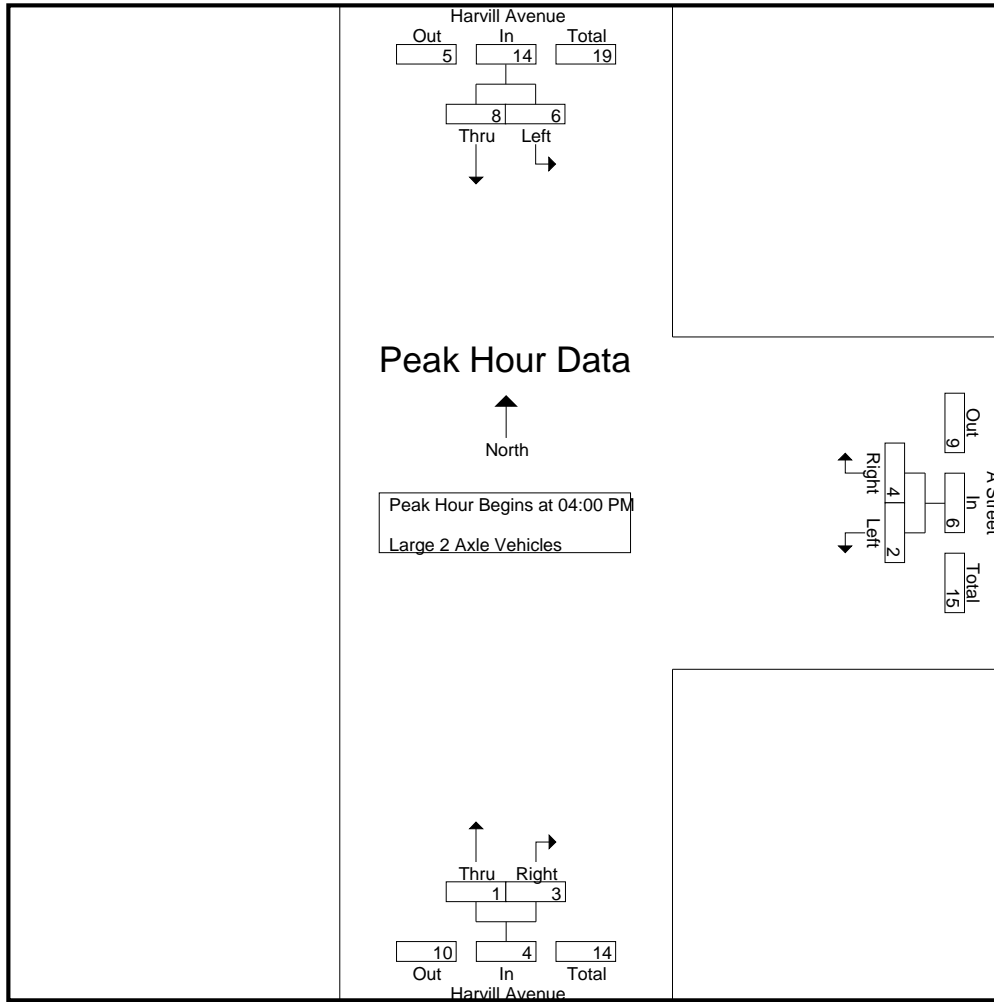
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	1	4	5	2	1	3	1	2	3	11
04:15 PM	2	3	5	0	0	0	0	0	0	5
04:30 PM	2	1	3	0	1	1	0	0	0	4
04:45 PM	1	0	1	0	2	2	0	1	1	4
Total Volume	6	8	14	2	4	6	1	3	4	24
% App. Total	42.9	57.1		33.3	66.7		25	75		
PHF	.750	.500	.700	.250	.500	.500	.250	.375	.333	.545

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

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	1	4	5	2	1	3	1	2	3
+15 mins.	2	3	5	0	0	0	0	0	0
+30 mins.	2	1	3	0	1	1	0	0	0
+45 mins.	1	0	1	0	2	2	0	1	1
Total Volume	6	8	14	2	4	6	1	3	4
% App. Total	42.9	57.1		33.3	66.7		25	75	
PHF	.750	.500	.700	.250	.500	.500	.250	.375	.333

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	2	2	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	2	2	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	1	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	1
Grand Total	0	0	0	0	3	3	0	0	0	3
Apprch %	0	0		0	100		0	0		
Total %	0	0		0	100	100	0	0		

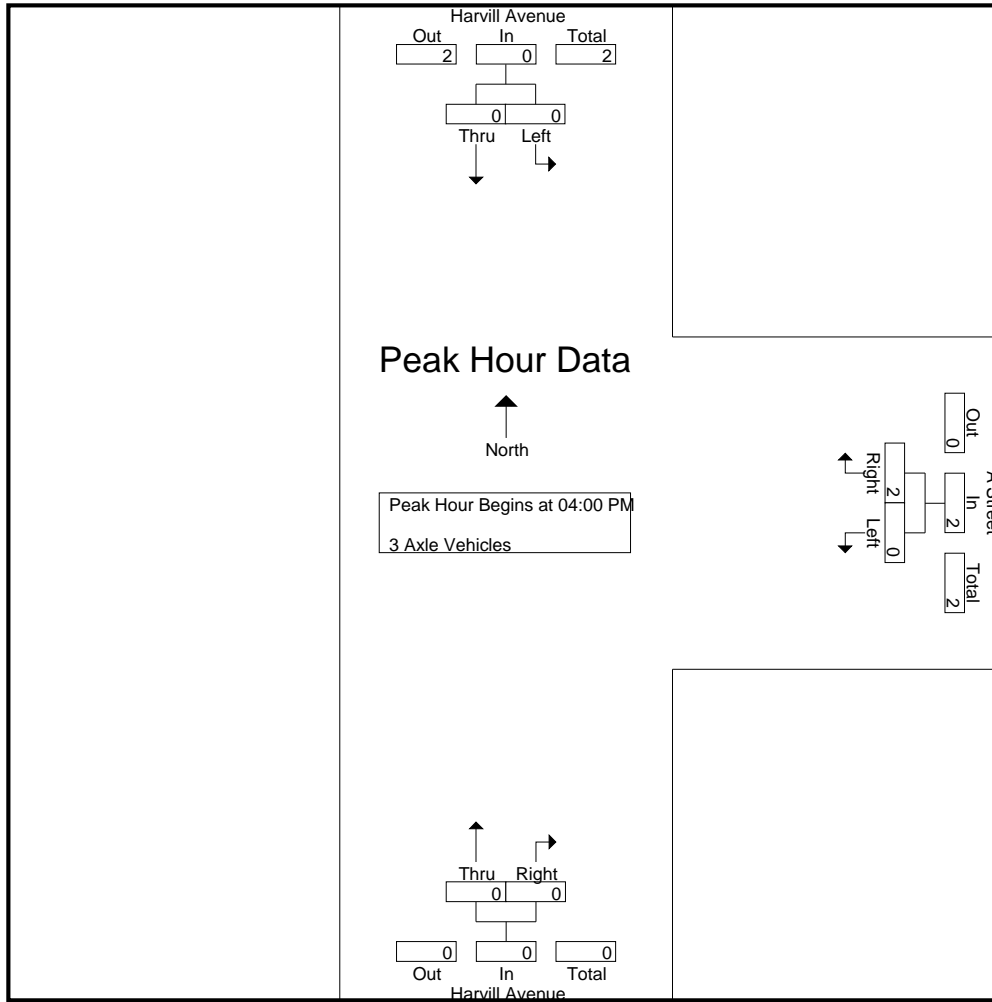
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	2	2	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	2	2	0	0	0	2
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

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

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	2	2	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	2	2	0	0	0
% App. Total	0	0	0	0	100		0	0	0
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

Groups Printed- 4+ Axle Trucks

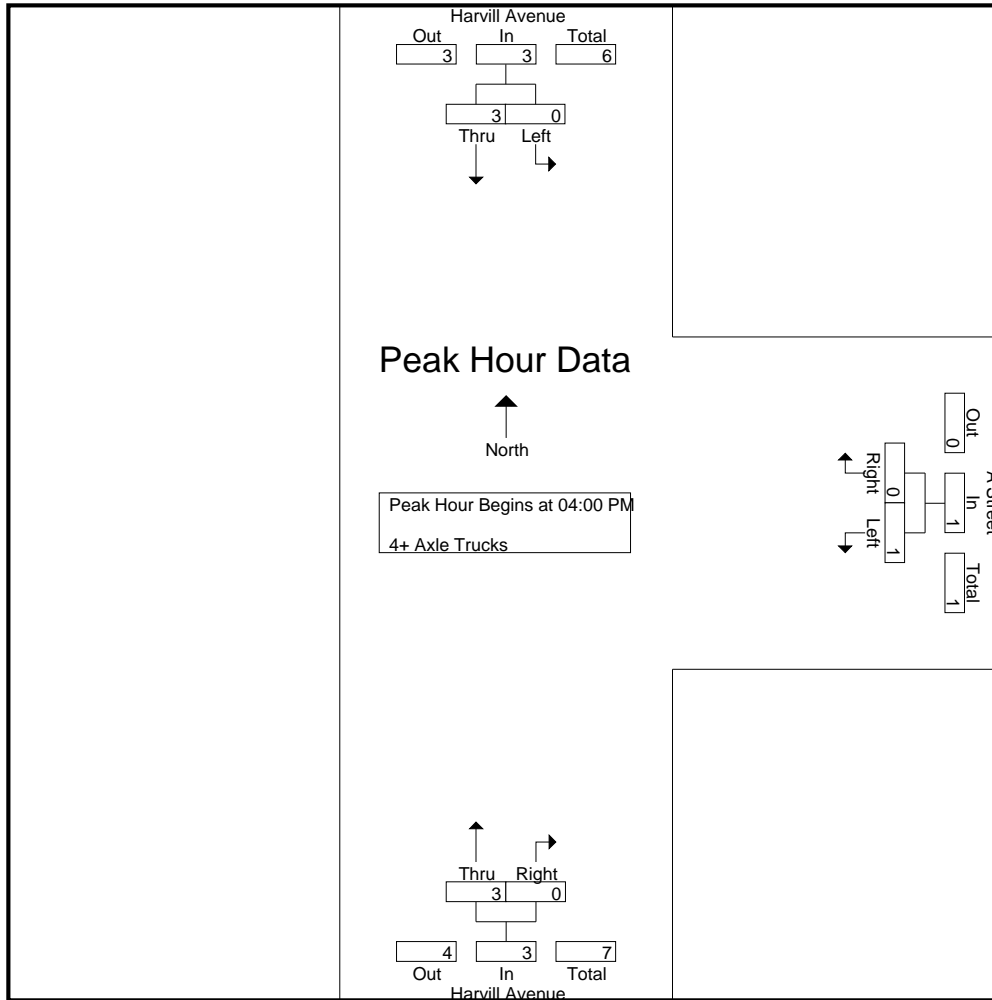
Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	2	2	0	0	0	2	0	2	4
04:30 PM	0	1	1	1	0	1	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	3	3	1	0	1	3	0	3	7
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	1	2	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	2	0	2	3
Grand Total	0	3	3	1	1	2	5	0	5	10
Apprch %	0	100		50	50		100	0		
Total %	0	30	30	10	10	20	50	0	50	

Start Time	Harvill Avenue Southbound			A Street Westbound			Harvill Avenue Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	2	2	0	0	0	2	0	2	4
04:30 PM	0	1	1	1	0	1	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	3	3	1	0	1	3	0	3	7
% App. Total	0	100		100	0		100	0		
PHF	.000	.375	.375	.250	.000	.250	.375	.000	.375	.438

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

City of Perris
 N/S: Harvill Avenue
 E/W: A Street
 Weather: Clear

File Name : 05_PER_Harvill_A St PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	2	2	0	0	0	2	0	2
+30 mins.	0	1	1	1	0	1	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	3	3	1	0	1	3	0	3
% App. Total	0	100		100	0		100	0	
PHF	.000	.375	.375	.250	.000	.250	.375	.000	.375

Location: Perris
 N/S: Harvill Avenue
 E/W: A Street



Date: 9/18/2019
 Day: Wednesday

PEDESTRIANS

	North Leg Harvill Avenue	East Leg A Street	South Leg Harvill Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Harvill Avenue	East Leg A Street	South Leg Harvill Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Perris
 N/S: Harvill Avenue
 E/W: A Street



Date: 9/18/2019
 Day: Wednesday

BICYCLES

	Southbound Harvill Avenue			Westbound A Street			Northbound Harvill Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Harvill Avenue			Westbound A Street			Northbound Harvill Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	1	0	0	0	1

City of Perris
 N/S: McKimball Road/Project Driveway
 E/W: Metz Road
 Weather: Clear

File Name : 01_PER_McKimball_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

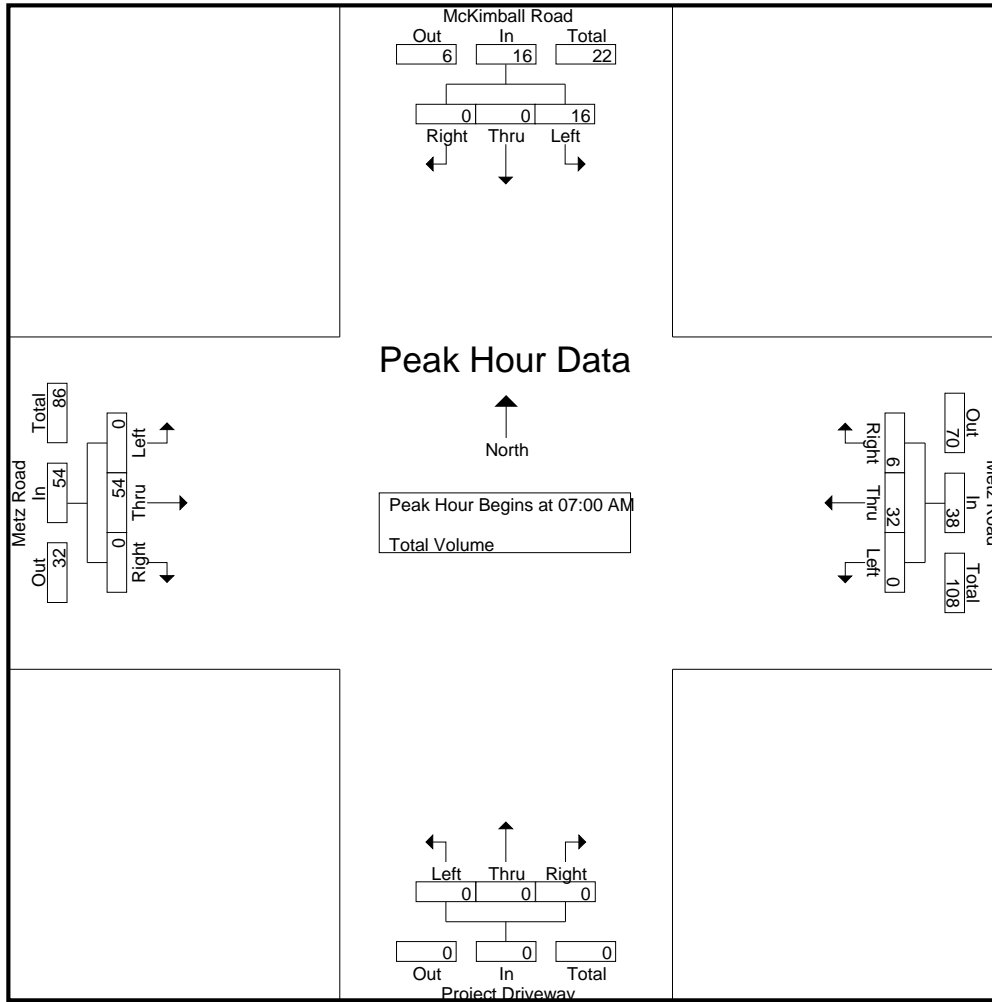
Groups Printed- Total Volume

Start Time	McKimball Road Southbound				Metz Road Westbound				Project Driveway Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	0	0	4	0	2	1	3	0	0	0	0	0	8	0	8	15
07:15 AM	5	0	0	5	0	12	2	14	0	0	0	0	0	17	0	17	36
07:30 AM	5	0	0	5	0	11	2	13	0	0	0	0	0	17	0	17	35
07:45 AM	2	0	0	2	0	7	1	8	0	0	0	0	0	12	0	12	22
Total	16	0	0	16	0	32	6	38	0	0	0	0	0	54	0	54	108
08:00 AM	5	0	0	5	0	4	0	4	0	0	0	0	0	2	0	2	11
08:15 AM	1	0	0	1	0	4	1	5	0	0	0	0	0	2	0	2	8
08:30 AM	1	0	1	2	0	5	1	6	0	0	0	0	0	0	0	0	8
08:45 AM	1	0	0	1	0	5	0	5	0	0	0	0	0	2	0	2	8
Total	8	0	1	9	0	18	2	20	0	0	0	0	0	6	0	6	35
Grand Total	24	0	1	25	0	50	8	58	0	0	0	0	0	60	0	60	143
Apprch %	96	0	4		0	86.2	13.8		0	0	0		0	100	0		
Total %	16.8	0	0.7	17.5	0	35	5.6	40.6	0	0	0	0	0	42	0	42	

Start Time	McKimball Road Southbound				Metz Road Westbound				Project Driveway Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	0	0	4	0	2	1	3	0	0	0	0	0	8	0	8	15
07:15 AM	5	0	0	5	0	12	2	14	0	0	0	0	0	17	0	17	36
07:30 AM	5	0	0	5	0	11	2	13	0	0	0	0	0	17	0	17	35
07:45 AM	2	0	0	2	0	7	1	8	0	0	0	0	0	12	0	12	22
Total Volume	16	0	0	16	0	32	6	38	0	0	0	0	0	54	0	54	108
% App. Total	100	0	0		0	84.2	15.8		0	0	0		0	100	0		
PHF	.800	.000	.000	.800	.000	.667	.750	.679	.000	.000	.000	.000	.000	.794	.000	.794	.750

City of Perris
 N/S: McKimball Road/Project Driveway
 E/W: Metz Road
 Weather: Clear

File Name : 01_PER_McKimball_Metz AM
 Site Code : 00319604
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:00 AM			
+0 mins.	5	0	0	5	0	12	2	14	0	0	0	0	0	8	0	8
+15 mins.	5	0	0	5	0	11	2	13	0	0	0	0	0	17	0	17
+30 mins.	2	0	0	2	0	7	1	8	0	0	0	0	0	17	0	17
+45 mins.	5	0	0	5	0	4	0	4	0	0	0	0	0	12	0	12
Total Volume	17	0	0	17	0	34	5	39	0	0	0	0	0	54	0	54
% App. Total	100	0	0		0	87.2	12.8		0	0	0		0	100	0	
PHF	.850	.000	.000	.850	.000	.708	.625	.696	.000	.000	.000	.000	.000	.794	.000	.794

City of Perris
 N/S: McKimball Road/Project Driveway
 E/W: Metz Road
 Weather: Clear

File Name : 01_PER_McKimball_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

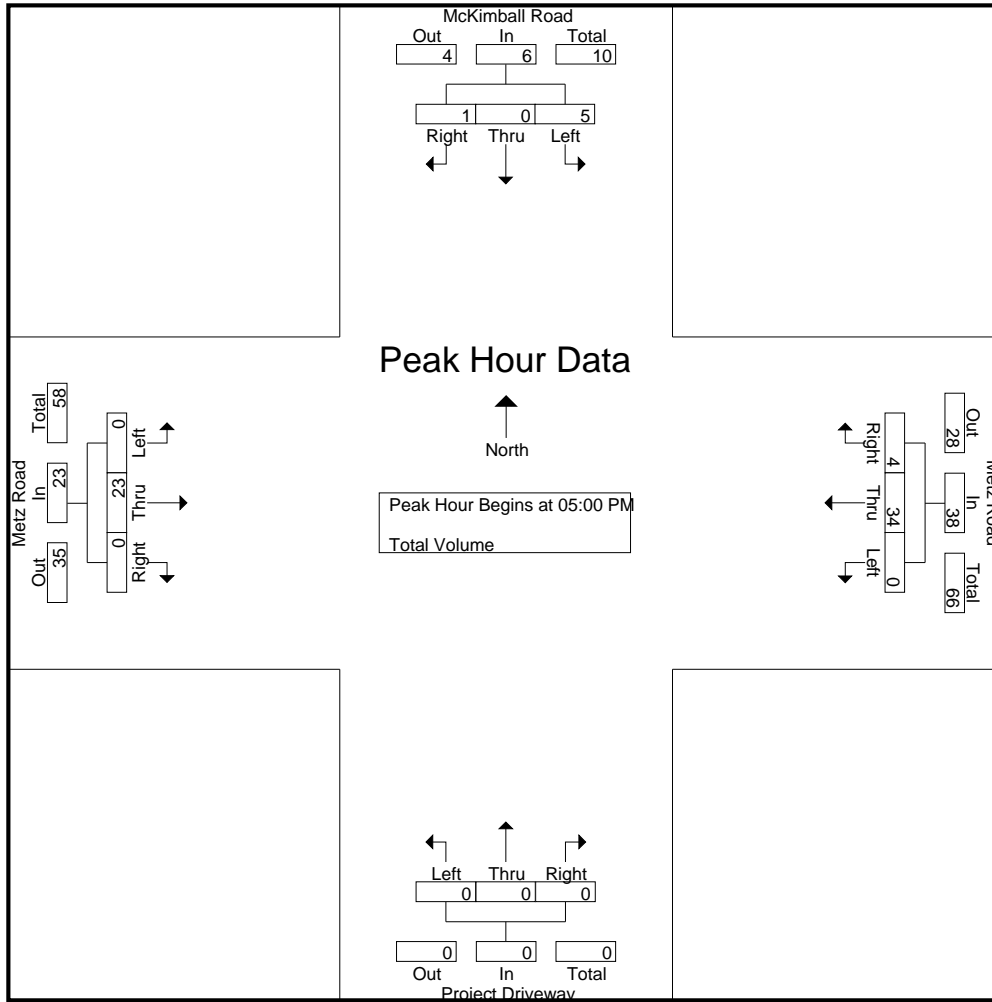
Groups Printed- Total Volume

Start Time	McKimball Road Southbound				Metz Road Westbound				Project Driveway Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	0	0	1	0	8	0	8	0	0	0	0	0	3	0	3	12
04:15 PM	2	0	0	2	0	13	0	13	0	0	0	0	0	4	0	4	19
04:30 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
04:45 PM	2	0	0	2	0	3	0	3	0	0	0	0	0	7	0	7	12
Total	5	0	0	5	0	30	0	30	0	0	0	0	0	16	0	16	51
05:00 PM	0	0	0	0	0	11	1	12	0	0	0	0	0	5	0	5	17
05:15 PM	5	0	1	6	0	11	2	13	0	0	0	0	0	4	0	4	23
05:30 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	7	0	7	11
05:45 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	7	0	7	16
Total	5	0	1	6	0	34	4	38	0	0	0	0	0	23	0	23	67
Grand Total	10	0	1	11	0	64	4	68	0	0	0	0	0	39	0	39	118
Apprch %	90.9	0	9.1		0	94.1	5.9		0	0	0		0	100	0		
Total %	8.5	0	0.8	9.3	0	54.2	3.4	57.6	0	0	0	0	0	33.1	0	33.1	

Start Time	McKimball Road Southbound				Metz Road Westbound				Project Driveway Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	11	1	12	0	0	0	0	0	5	0	5	17
05:15 PM	5	0	1	6	0	11	2	13	0	0	0	0	0	4	0	4	23
05:30 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	7	0	7	11
05:45 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	7	0	7	16
Total Volume	5	0	1	6	0	34	4	38	0	0	0	0	0	23	0	23	67
% App. Total	83.3	0	16.7		0	89.5	10.5		0	0	0		0	100	0		
PHF	.250	.000	.250	.250	.000	.773	.500	.731	.000	.000	.000	.000	.000	.821	.000	.821	.728

City of Perris
 N/S: McKimball Road/Project Driveway
 E/W: Metz Road
 Weather: Clear

File Name : 01_PER_McKimball_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:00 PM				04:45 PM				
+0 mins.	0	0	0	0	0	11	1	12	0	0	0	0	0	0	7	0	7
+15 mins.	2	0	0	2	0	11	2	13	0	0	0	0	0	0	5	0	5
+30 mins.	0	0	0	0	0	3	1	4	0	0	0	0	0	0	4	0	4
+45 mins.	5	0	1	6	0	9	0	9	0	0	0	0	0	0	7	0	7
Total Volume	7	0	1	8	0	34	4	38	0	0	0	0	0	23	0	23	
% App. Total	87.5	0	12.5		0	89.5	10.5		0	0	0		0	100	0		
PHF	.350	.000	.250	.333	.000	.773	.500	.731	.000	.000	.000	.000	.000	.821	.000	.821	

Location: Perris
 N/S: McKimball Road/Project Driveway
 E/W: Metz Road



Date: 9/10/2019
 Day: Tuesday

PEDESTRIANS

	North Leg McKimball Road	East Leg Metz Road	South Leg Project Driveway	West Leg Metz Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	1	0	0	0	1
7:30 AM	4	0	0	0	4
7:45 AM	0	0	0	0	0
8:00 AM	1	0	0	0	1
8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	7	0	0	0	7

	North Leg McKimball Road	East Leg Metz Road	South Leg Project Driveway	West Leg Metz Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	15	0	15
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	1	0	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	15	0	16

Location: Perris
 N/S: McKimball Road/Project Driveway
 E/W: Metz Road



Date: 9/10/2019
 Day: Tuesday

BICYCLES

	Southbound McKimball Road			Westbound Metz Road			Northbound Project Driveway			Eastbound Metz Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound McKimball Road			Westbound Metz Road			Northbound Project Driveway			Eastbound Metz Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

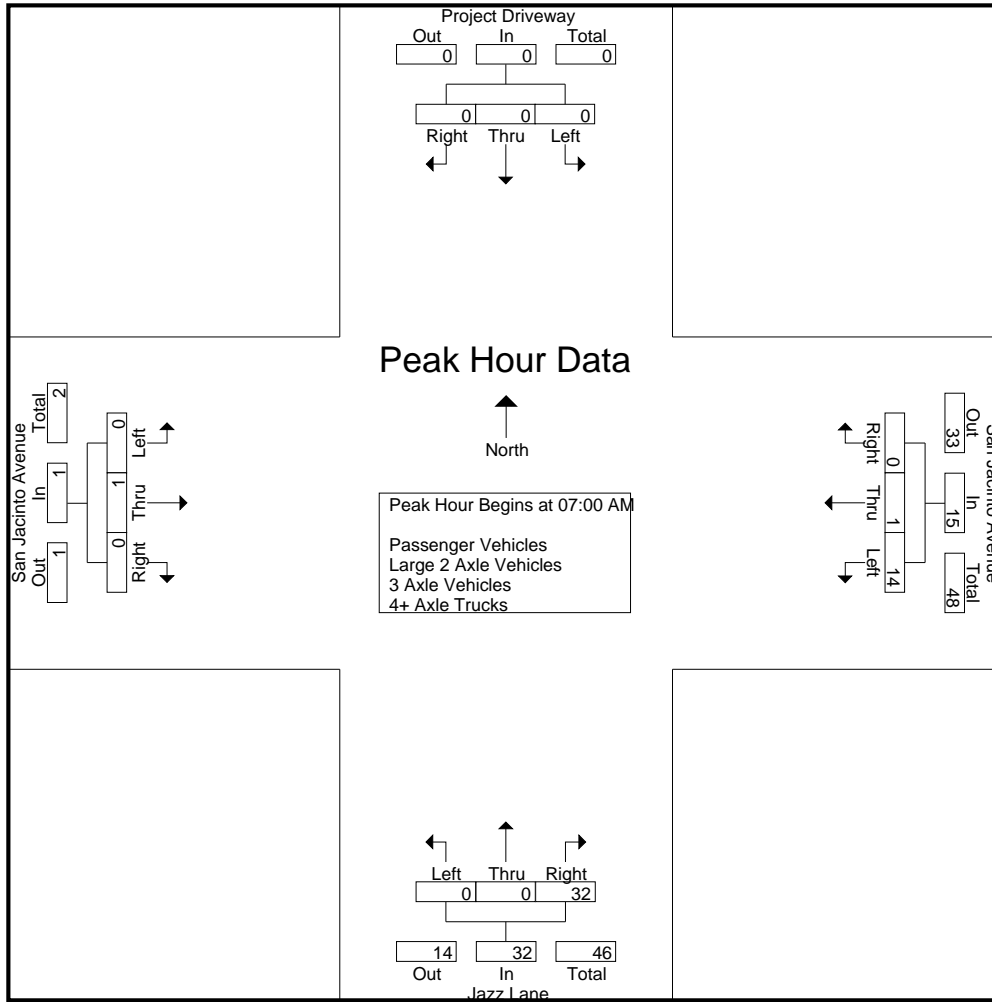
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	2	1	0	3	0	0	6	6	0	0	0	0	9
07:15 AM	0	0	0	0	6	0	0	6	0	0	9	9	0	0	0	0	15
07:30 AM	0	0	0	0	2	0	0	2	0	0	12	12	0	0	0	0	14
07:45 AM	0	0	0	0	4	0	0	4	0	0	5	5	0	1	0	1	10
Total	0	0	0	0	14	1	0	15	0	0	32	32	0	1	0	1	48
08:00 AM	0	0	0	0	4	0	0	4	0	0	4	4	0	0	0	0	8
08:15 AM	0	0	0	0	3	1	0	4	0	0	4	4	0	0	0	0	8
08:30 AM	0	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	8	1	0	9	0	0	11	11	0	0	0	0	20
Grand Total	0	0	0	0	22	2	0	24	0	0	43	43	0	1	0	1	68
Apprch %	0	0	0		91.7	8.3	0		0	0	100		0	100	0		
Total %	0	0	0	0	32.4	2.9	0	35.3	0	0	63.2	63.2	0	1.5	0	1.5	
Passenger Vehicles	0	0	0	0	22	2	0	24	0	0	41	41	0	1	0	1	66
% Passenger Vehicles	0	0	0	0	100	100	0	100	0	0	95.3	95.3	0	100	0	100	97.1
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	4.7	4.7	0	0	0	0	2.9
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	2	1	0	3	0	0	6	6	0	0	0	0	9
07:15 AM	0	0	0	0	6	0	0	6	0	0	9	9	0	0	0	0	15
07:30 AM	0	0	0	0	2	0	0	2	0	0	12	12	0	0	0	0	14
07:45 AM	0	0	0	0	4	0	0	4	0	0	5	5	0	1	0	1	10
Total Volume	0	0	0	0	14	1	0	15	0	0	32	32	0	1	0	1	48
% App. Total	0	0	0		93.3	6.7	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.583	.250	.000	.625	.000	.000	.667	.667	.000	.250	.000	.250	.800

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	6	0	0	6	0	0	6	6	0	0	0	0
+15 mins.	0	0	0	0	2	0	0	2	0	0	9	9	0	0	0	0
+30 mins.	0	0	0	0	4	0	0	4	0	0	12	12	0	0	0	0
+45 mins.	0	0	0	0	4	0	0	4	0	0	5	5	0	1	0	1
Total Volume	0	0	0	0	16	0	0	16	0	0	32	32	0	1	0	1
% App. Total	0	0	0	0	100	0	0	100	0	0	100	100	0	100	0	100
PHF	.000	.000	.000	.000	.667	.000	.000	.667	.000	.000	.667	.667	.000	.250	.000	.250

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

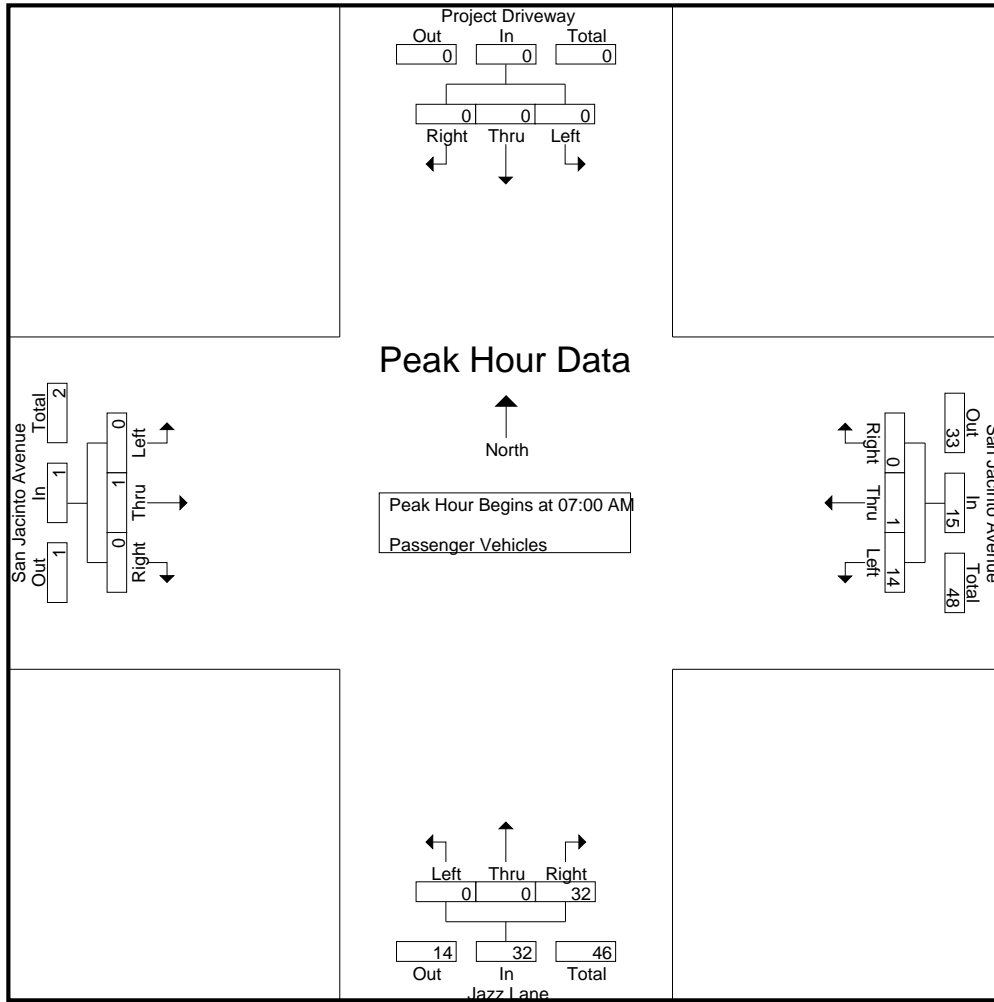
Groups Printed- Passenger Vehicles

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	2	1	0	3	0	0	6	6	0	0	0	0	9
07:15 AM	0	0	0	0	6	0	0	6	0	0	9	9	0	0	0	0	15
07:30 AM	0	0	0	0	2	0	0	2	0	0	12	12	0	0	0	0	14
07:45 AM	0	0	0	0	4	0	0	4	0	0	5	5	0	1	0	1	10
Total	0	0	0	0	14	1	0	15	0	0	32	32	0	1	0	1	48
08:00 AM	0	0	0	0	4	0	0	4	0	0	3	3	0	0	0	0	7
08:15 AM	0	0	0	0	3	1	0	4	0	0	3	3	0	0	0	0	7
08:30 AM	0	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	8	1	0	9	0	0	9	9	0	0	0	0	18
Grand Total	0	0	0	0	22	2	0	24	0	0	41	41	0	1	0	1	66
Apprch %	0	0	0		91.7	8.3	0		0	0	100		0	100	0		
Total %	0	0	0		33.3	3	0	36.4	0	0	62.1	62.1	0	1.5	0	1.5	

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	2	1	0	3	0	0	6	6	0	0	0	0	9
07:15 AM	0	0	0	0	6	0	0	6	0	0	9	9	0	0	0	0	15
07:30 AM	0	0	0	0	2	0	0	2	0	0	12	12	0	0	0	0	14
07:45 AM	0	0	0	0	4	0	0	4	0	0	5	5	0	1	0	1	10
Total Volume	0	0	0	0	14	1	0	15	0	0	32	32	0	1	0	1	48
% App. Total	0	0	0		93.3	6.7	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.583	.250	.000	.625	.000	.000	.667	.667	.000	.250	.000	.250	.800

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	2	1	0	3	0	0	6	6	0	0	0	0
+15 mins.	0	0	0	0	6	0	0	6	0	0	9	9	0	0	0	0
+30 mins.	0	0	0	0	2	0	0	2	0	0	12	12	0	0	0	0
+45 mins.	0	0	0	0	4	0	0	4	0	0	5	5	0	1	0	1
Total Volume	0	0	0	0	14	1	0	15	0	0	32	32	0	1	0	1
% App. Total	0	0	0	0	93.3	6.7	0		0	0	100		0	100	0	
PHF	.000	.000	.000	.000	.583	.250	.000	.625	.000	.000	.667	.667	.000	.250	.000	.250

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

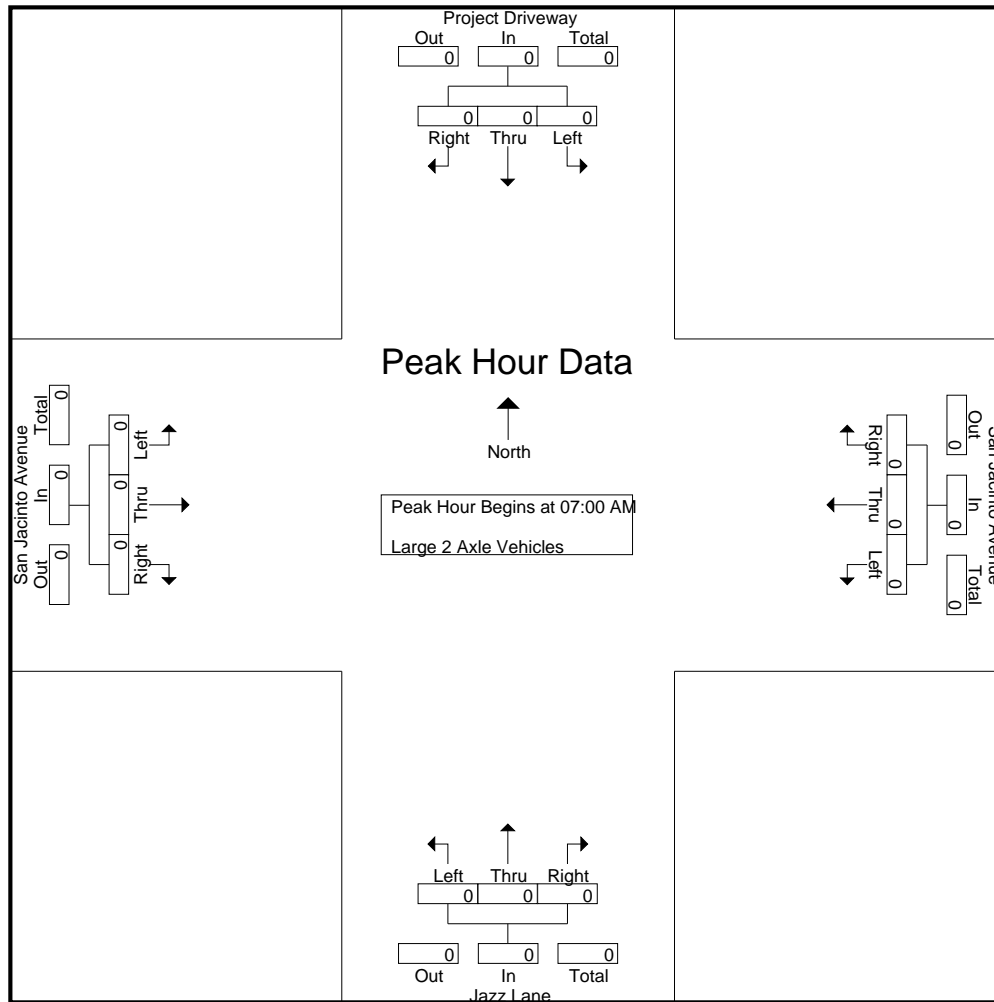
Groups Printed- Large 2 Axle Vehicles

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
Apprch %	0	0	0		0	0	0		0	0	100		0	0	0		
Total %	0	0	0		0	0	0		0	0	100	100	0	0	0		

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

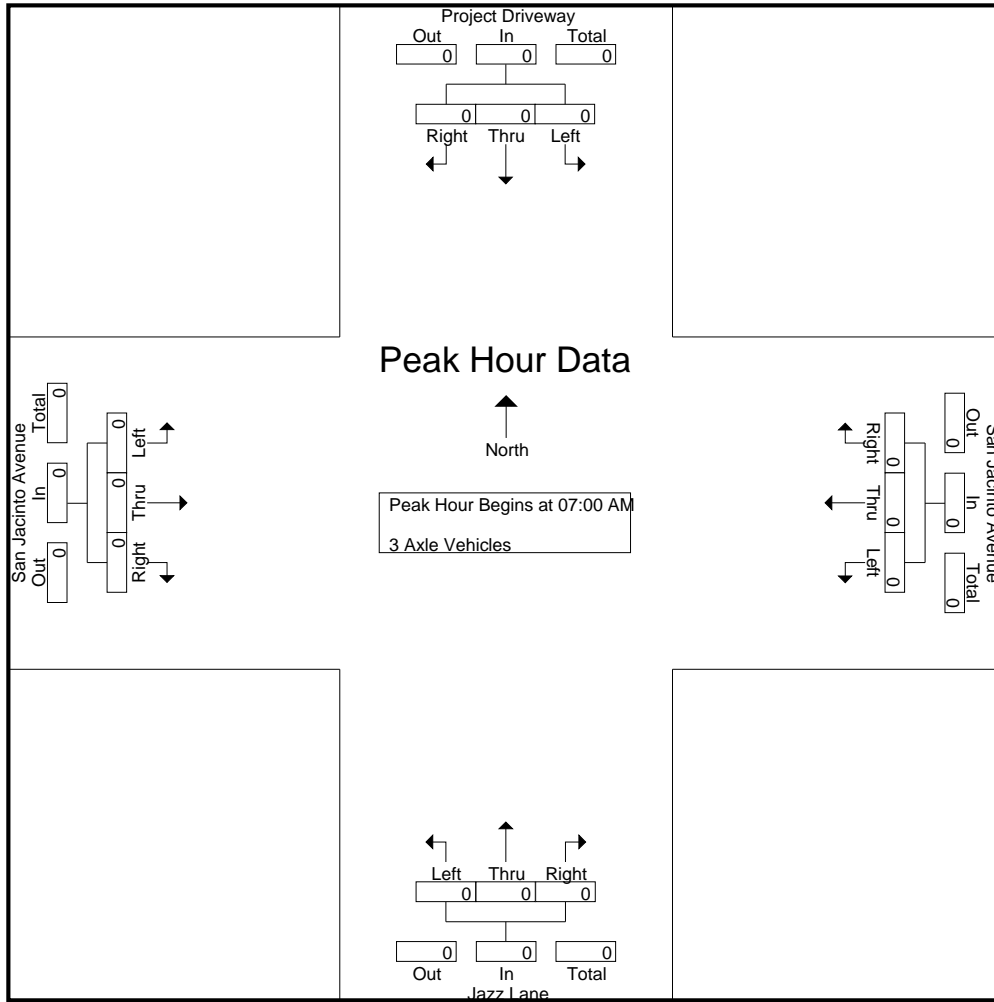
Groups Printed- 3 Axle Vehicles

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

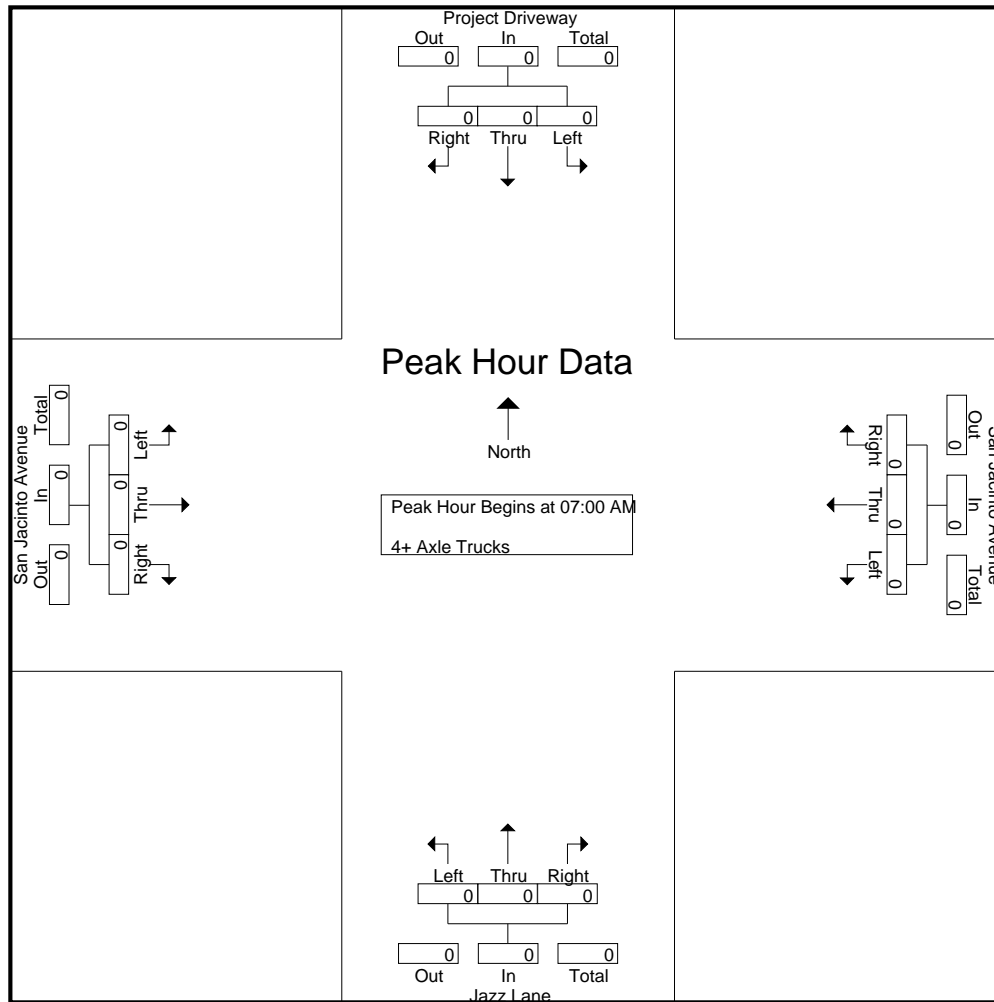
Groups Printed- 4+ Axle Trucks

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

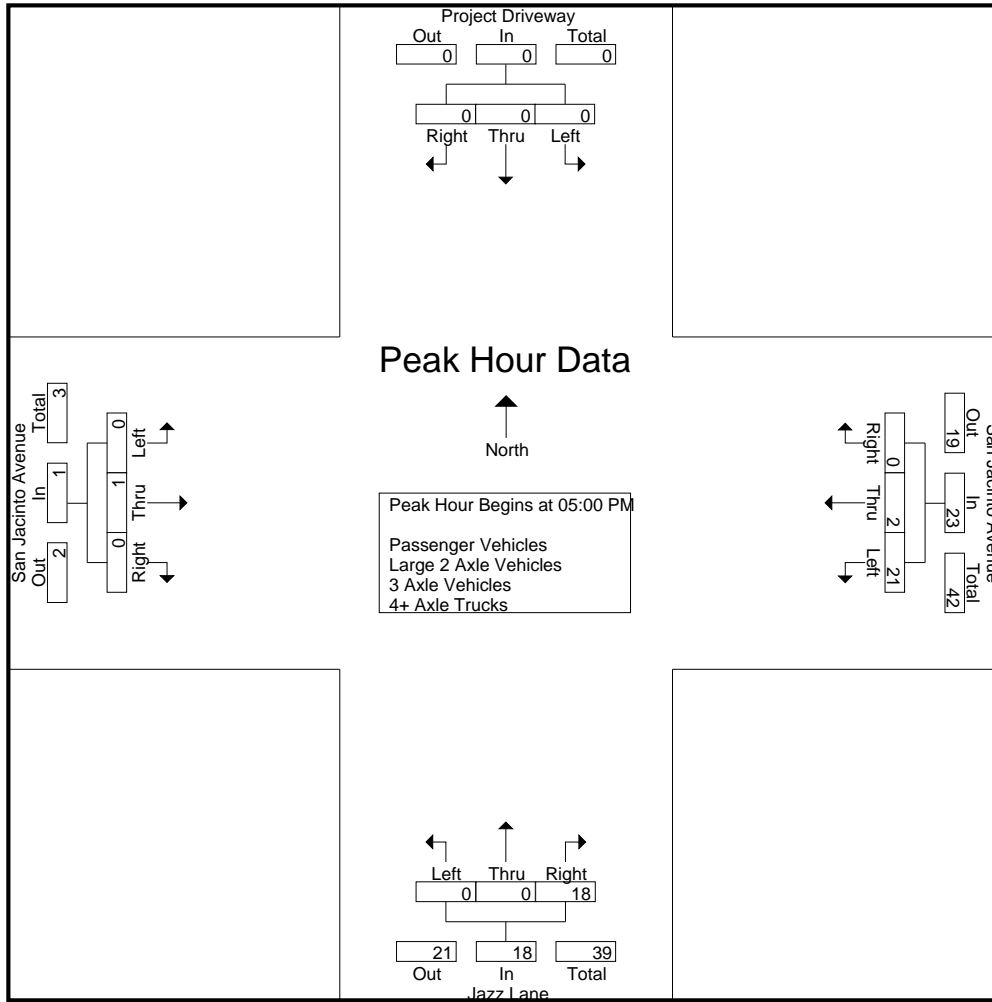
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	6	2	0	8	0	0	2	2	0	1	0	1	11
04:15 PM	0	0	0	0	5	0	0	5	0	0	5	5	0	0	0	0	10
04:30 PM	0	0	0	0	5	0	0	5	0	0	1	1	0	0	0	0	6
04:45 PM	0	0	0	0	7	0	0	7	0	0	1	1	0	0	0	0	8
Total	0	0	0	0	23	2	0	25	0	0	9	9	0	1	0	1	35
05:00 PM	0	0	0	0	6	0	0	6	0	0	6	6	0	0	0	0	12
05:15 PM	0	0	0	0	4	0	0	4	0	0	3	3	0	0	0	0	7
05:30 PM	0	0	0	0	6	2	0	8	0	0	2	2	0	1	0	1	11
05:45 PM	0	0	0	0	5	0	0	5	0	0	7	7	0	0	0	0	12
Total	0	0	0	0	21	2	0	23	0	0	18	18	0	1	0	1	42
Grand Total	0	0	0	0	44	4	0	48	0	0	27	27	0	2	0	2	77
Apprch %	0	0	0		91.7	8.3	0		0	0	100		0	100	0		
Total %	0	0	0	0	57.1	5.2	0	62.3	0	0	35.1	35.1	0	2.6	0	2.6	
Passenger Vehicles	0	0	0	0	44	4	0	48	0	0	27	27	0	2	0	2	77
% Passenger Vehicles	0	0	0	0	100	100	0	100	0	0	100	100	0	100	0	100	100
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	6	0	0	6	0	0	6	6	0	0	0	0	12
05:15 PM	0	0	0	0	4	0	0	4	0	0	3	3	0	0	0	0	7
05:30 PM	0	0	0	0	6	2	0	8	0	0	2	2	0	1	0	1	11
05:45 PM	0	0	0	0	5	0	0	5	0	0	7	7	0	0	0	0	12
Total Volume	0	0	0	0	21	2	0	23	0	0	18	18	0	1	0	1	42
% App. Total	0	0	0		91.3	8.7	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.875	.250	.000	.719	.000	.000	.643	.643	.000	.250	.000	.250	.875

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	04:00 PM				04:00 PM				05:00 PM				04:00 PM			
+0 mins.	0	0	0	0	6	2	0	8	0	0	6	6	0	1	0	1
+15 mins.	0	0	0	0	5	0	0	5	0	0	3	3	0	0	0	0
+30 mins.	0	0	0	0	5	0	0	5	0	0	2	2	0	0	0	0
+45 mins.	0	0	0	0	7	0	0	7	0	0	7	7	0	0	0	0
Total Volume	0	0	0	0	23	2	0	25	0	0	18	18	0	1	0	1
% App. Total	0	0	0	0	92	8	0	100	0	0	100	100	0	100	0	100
PHF	.000	.000	.000	.000	.821	.250	.000	.781	.000	.000	.643	.643	.000	.250	.000	.250

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

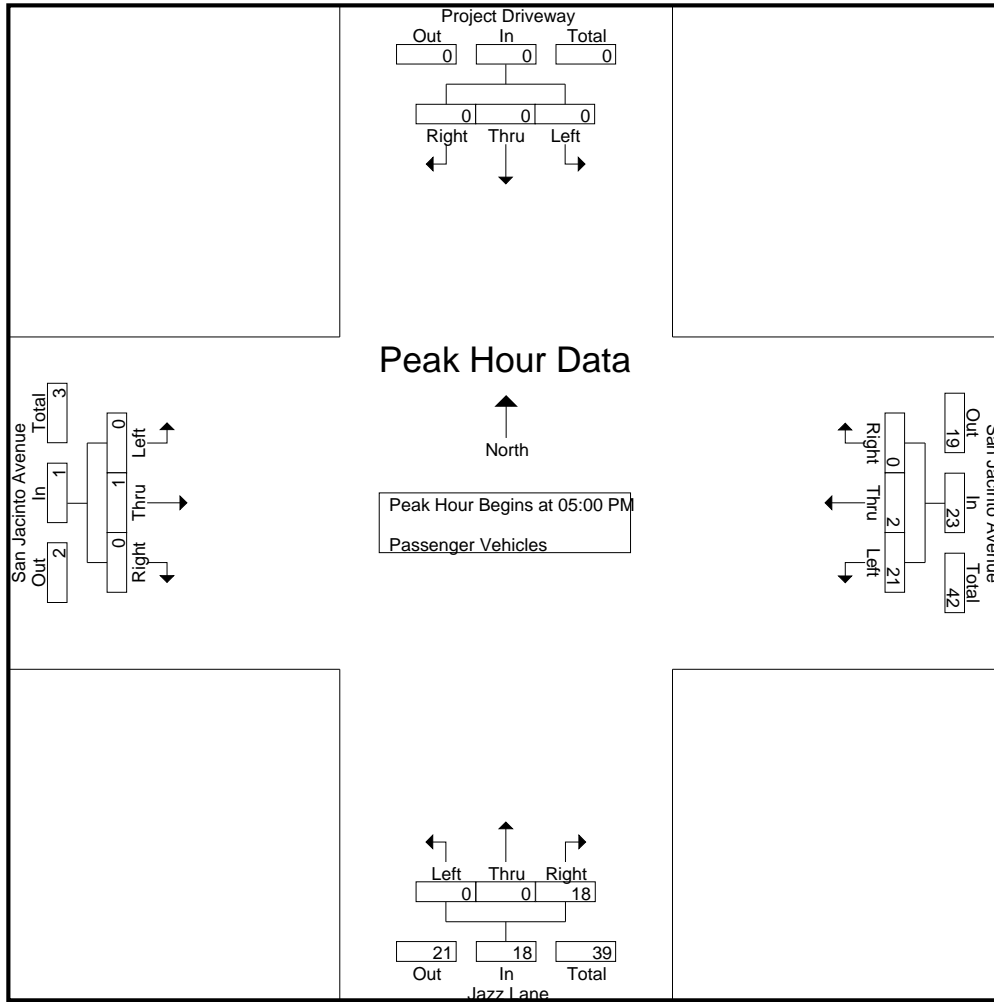
Groups Printed- Passenger Vehicles

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	6	2	0	8	0	0	2	2	0	1	0	1	11
04:15 PM	0	0	0	0	5	0	0	5	0	0	5	5	0	0	0	0	10
04:30 PM	0	0	0	0	5	0	0	5	0	0	1	1	0	0	0	0	6
04:45 PM	0	0	0	0	7	0	0	7	0	0	1	1	0	0	0	0	8
Total	0	0	0	0	23	2	0	25	0	0	9	9	0	1	0	1	35
05:00 PM	0	0	0	0	6	0	0	6	0	0	6	6	0	0	0	0	12
05:15 PM	0	0	0	0	4	0	0	4	0	0	3	3	0	0	0	0	7
05:30 PM	0	0	0	0	6	2	0	8	0	0	2	2	0	1	0	1	11
05:45 PM	0	0	0	0	5	0	0	5	0	0	7	7	0	0	0	0	12
Total	0	0	0	0	21	2	0	23	0	0	18	18	0	1	0	1	42
Grand Total	0	0	0	0	44	4	0	48	0	0	27	27	0	2	0	2	77
Apprch %	0	0	0		91.7	8.3	0		0	0	100		0	100	0		
Total %	0	0	0		57.1	5.2	0	62.3	0	0	35.1	35.1	0	2.6	0	2.6	

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	6	0	0	6	0	0	6	6	0	0	0	0	12
05:15 PM	0	0	0	0	4	0	0	4	0	0	3	3	0	0	0	0	7
05:30 PM	0	0	0	0	6	2	0	8	0	0	2	2	0	1	0	1	11
05:45 PM	0	0	0	0	5	0	0	5	0	0	7	7	0	0	0	0	12
Total Volume	0	0	0	0	21	2	0	23	0	0	18	18	0	1	0	1	42
% App. Total	0	0	0		91.3	8.7	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.875	.250	.000	.719	.000	.000	.643	.643	.000	.250	.000	.250	.875

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	6	0	0	6	0	0	6	6	0	0	0	0
+15 mins.	0	0	0	0	4	0	0	4	0	0	3	3	0	0	0	0
+30 mins.	0	0	0	0	6	2	0	8	0	0	2	2	0	1	0	1
+45 mins.	0	0	0	0	5	0	0	5	0	0	7	7	0	0	0	0
Total Volume	0	0	0	0	21	2	0	23	0	0	18	18	0	1	0	1
% App. Total	0	0	0	0	91.3	8.7	0		0	0	100		0	100	0	
PHF	.000	.000	.000	.000	.875	.250	.000	.719	.000	.000	.643	.643	.000	.250	.000	.250

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
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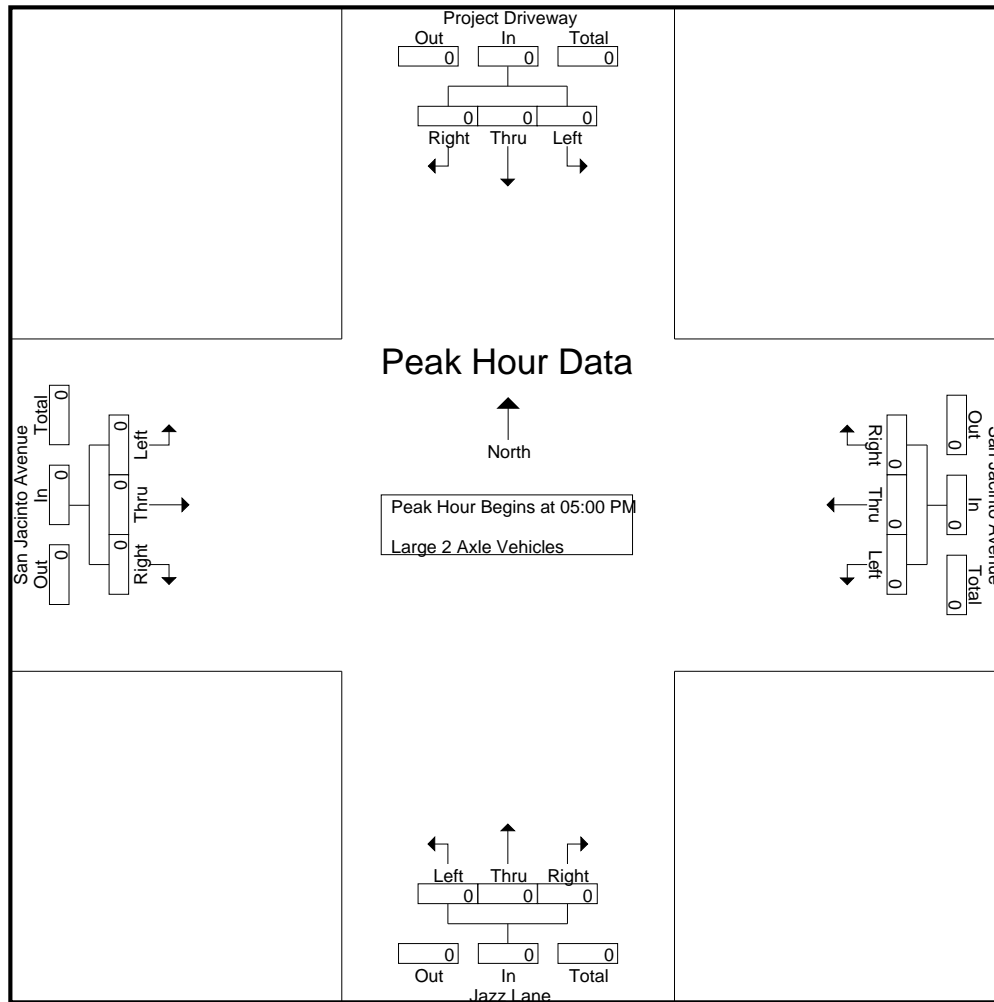
Groups Printed- Large 2 Axle Vehicles

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

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

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

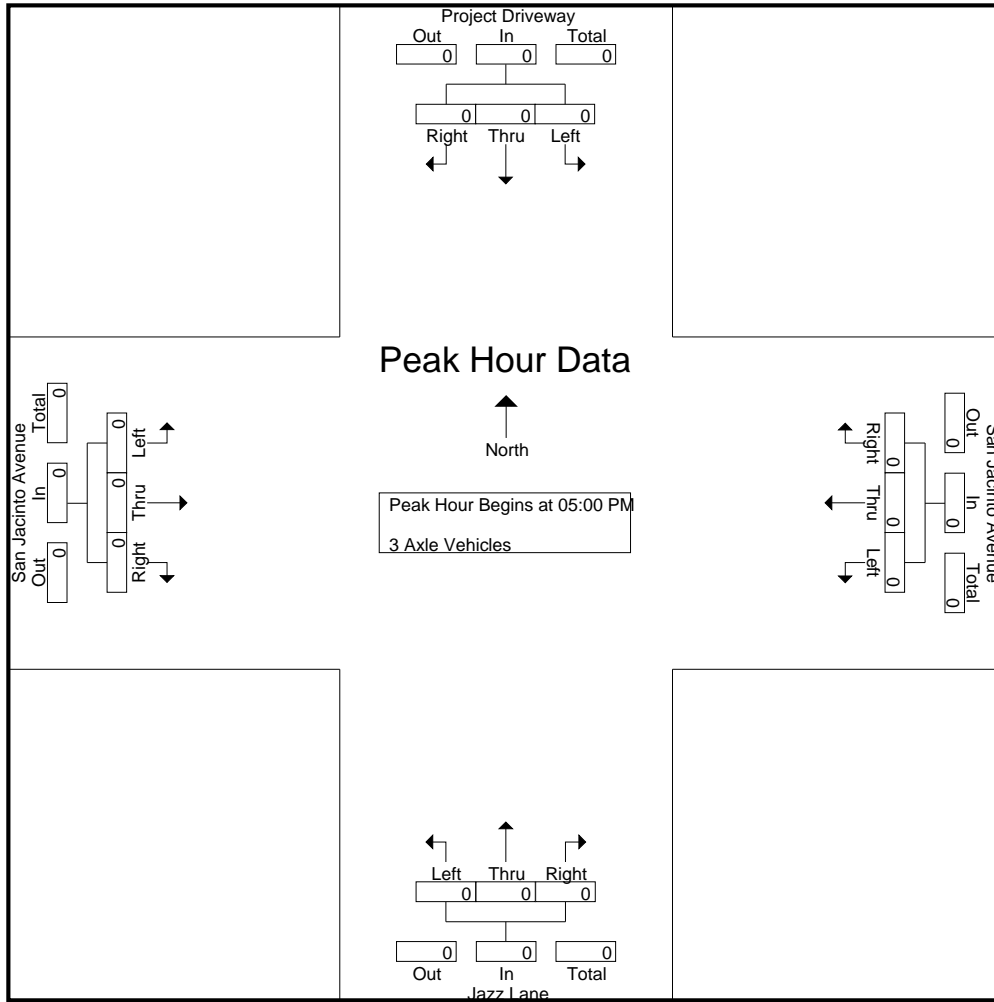
Groups Printed- 3 Axle Vehicles

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

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

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

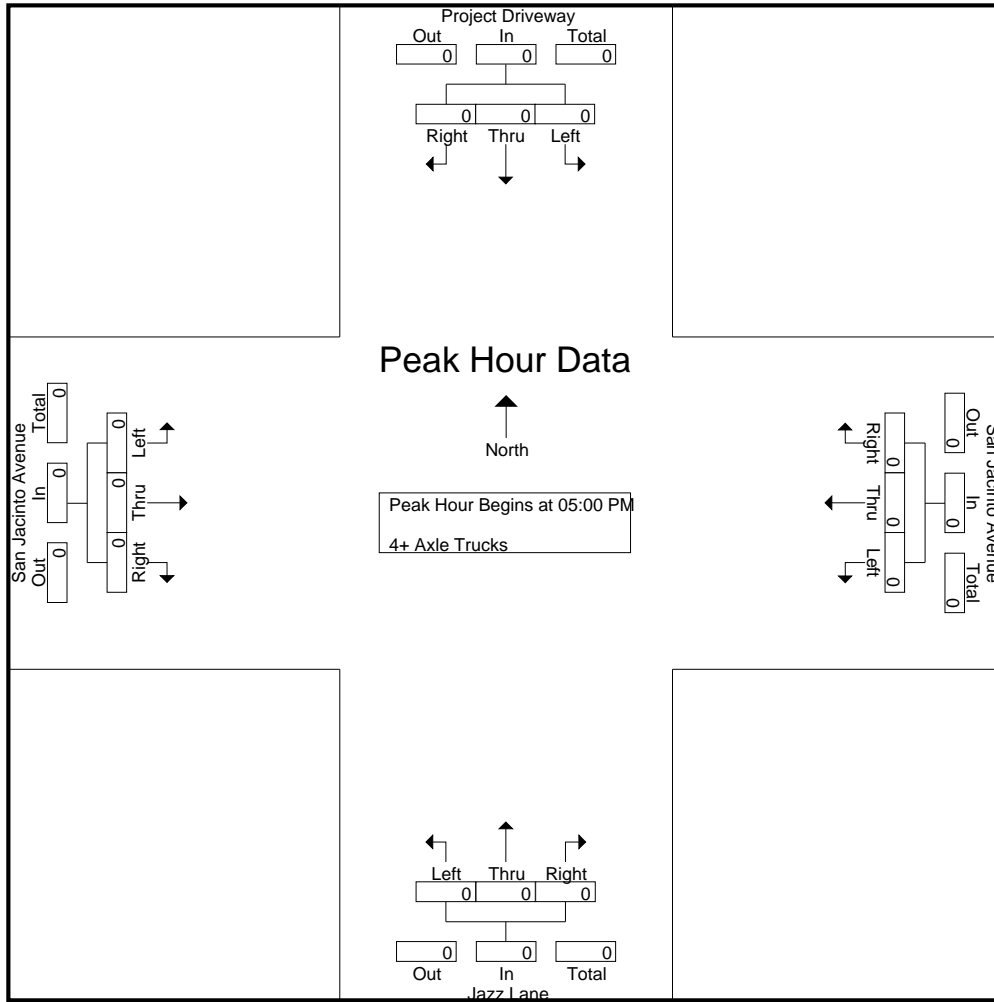
Groups Printed- 4+ Axle Trucks

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Project Driveway Southbound				San Jacinto Avenue Westbound				Jazz Lane Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 03_PER_Jazz_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

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

Location: Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue



Date: 9/10/2019
 Day: Tuesday

PEDESTRIANS

	North Leg Project Driveway	East Leg San Jacinto Avenue	South Leg Jazz Lane	West Leg San Jacinto Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Project Driveway	East Leg San Jacinto Avenue	South Leg Jazz Lane	West Leg San Jacinto Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	2	2
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	2	2

Location: Perris
 N/S: Project Driveway/Jazz Lane
 E/W: San Jacinto Avenue



Date: 9/10/2019
 Day: Tuesday

BICYCLES

	Southbound Project Driveway			Westbound San Jacinto Avenue			Northbound Jazz Lane			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Project Driveway			Westbound San Jacinto Avenue			Northbound Jazz Lane			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Perris
 N/S: A Street
 E/W: Nuevo Road
 Weather: Clear

File Name : 06_PER_A St_Nuevo AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

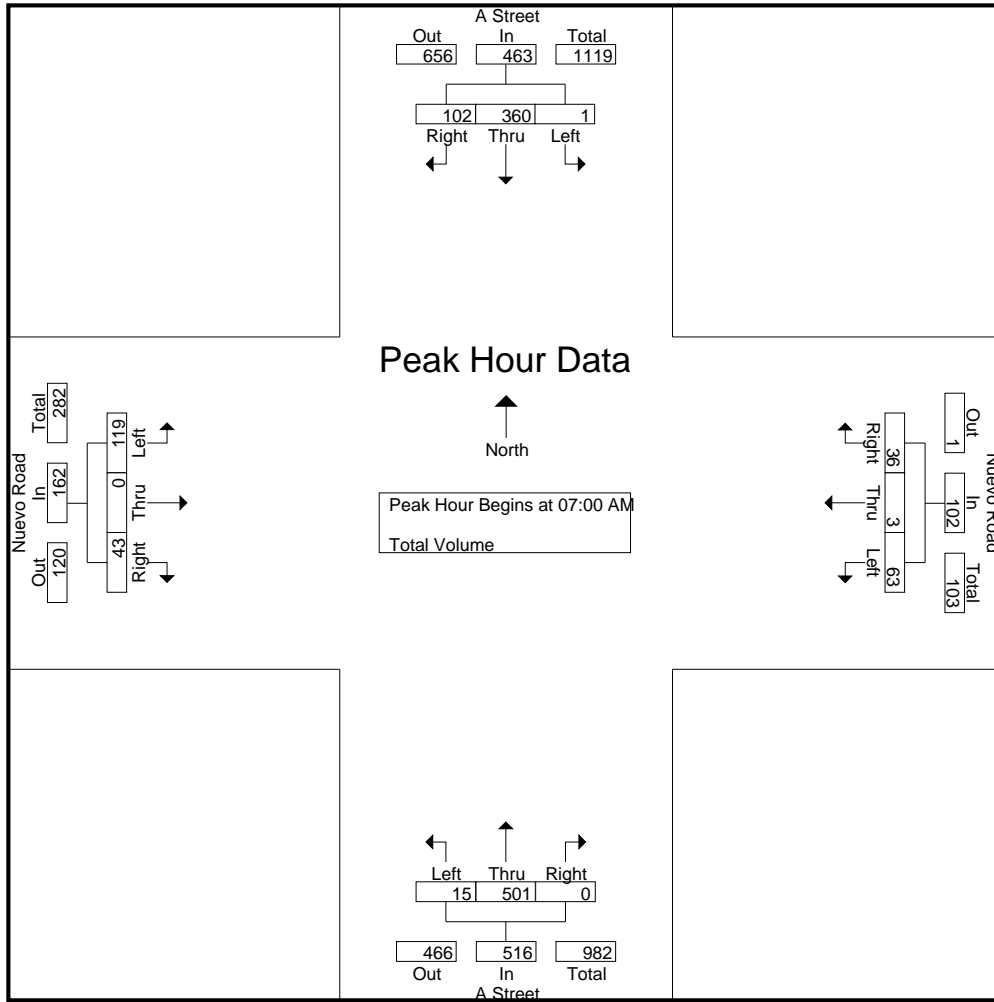
Groups Printed- Total Volume

Start Time	A Street Southbound				Nuevo Road Westbound				A Street Northbound				Nuevo Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	109	11	121	6	0	4	10	3	126	0	129	20	0	1	21	281
07:15 AM	0	141	14	155	6	0	7	13	4	180	0	184	26	0	11	37	389
07:30 AM	0	57	30	87	27	2	8	37	4	115	0	119	48	0	10	58	301
07:45 AM	0	53	47	100	24	1	17	42	4	80	0	84	25	0	21	46	272
Total	1	360	102	463	63	3	36	102	15	501	0	516	119	0	43	162	1243
08:00 AM	0	54	14	68	3	0	3	6	6	64	0	70	22	0	10	32	176
08:15 AM	0	41	3	44	2	0	0	2	1	46	0	47	14	0	4	18	111
08:30 AM	0	36	9	45	0	0	0	0	3	42	0	45	11	0	1	12	102
08:45 AM	0	44	5	49	2	0	0	2	0	40	0	40	8	0	1	9	100
Total	0	175	31	206	7	0	3	10	10	192	0	202	55	0	16	71	489
Grand Total	1	535	133	669	70	3	39	112	25	693	0	718	174	0	59	233	1732
Apprch %	0.1	80	19.9		62.5	2.7	34.8		3.5	96.5	0		74.7	0	25.3		
Total %	0.1	30.9	7.7	38.6	4	0.2	2.3	6.5	1.4	40	0	41.5	10	0	3.4	13.5	

Start Time	A Street Southbound				Nuevo Road Westbound				A Street Northbound				Nuevo Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	109	11	121	6	0	4	10	3	126	0	129	20	0	1	21	281
07:15 AM	0	141	14	155	6	0	7	13	4	180	0	184	26	0	11	37	389
07:30 AM	0	57	30	87	27	2	8	37	4	115	0	119	48	0	10	58	301
07:45 AM	0	53	47	100	24	1	17	42	4	80	0	84	25	0	21	46	272
Total Volume	1	360	102	463	63	3	36	102	15	501	0	516	119	0	43	162	1243
% App. Total	0.2	77.8	22		61.8	2.9	35.3		2.9	97.1	0		73.5	0	26.5		
PHF	.250	.638	.543	.747	.583	.375	.529	.607	.938	.696	.000	.701	.620	.000	.512	.698	.799

City of Perris
 N/S: A Street
 E/W: Nuevo Road
 Weather: Clear

File Name : 06_PER_A St_Nuevo AM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:15 AM			
+0 mins.	1	109	11	121	6	0	4	10	3	126	0	129	26	0	11	37
+15 mins.	0	141	14	155	6	0	7	13	4	180	0	184	48	0	10	58
+30 mins.	0	57	30	87	27	2	8	37	4	115	0	119	25	0	21	46
+45 mins.	0	53	47	100	24	1	17	42	4	80	0	84	22	0	10	32
Total Volume	1	360	102	463	63	3	36	102	15	501	0	516	121	0	52	173
% App. Total	0.2	77.8	22		61.8	2.9	35.3		2.9	97.1	0		69.9	0	30.1	
PHF	.250	.638	.543	.747	.583	.375	.529	.607	.938	.696	.000	.701	.630	.000	.619	.746

City of Perris
 N/S: A Street
 E/W: Nuevo Road
 Weather: Clear

File Name : 06_PER_A St_Nuevo PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 1

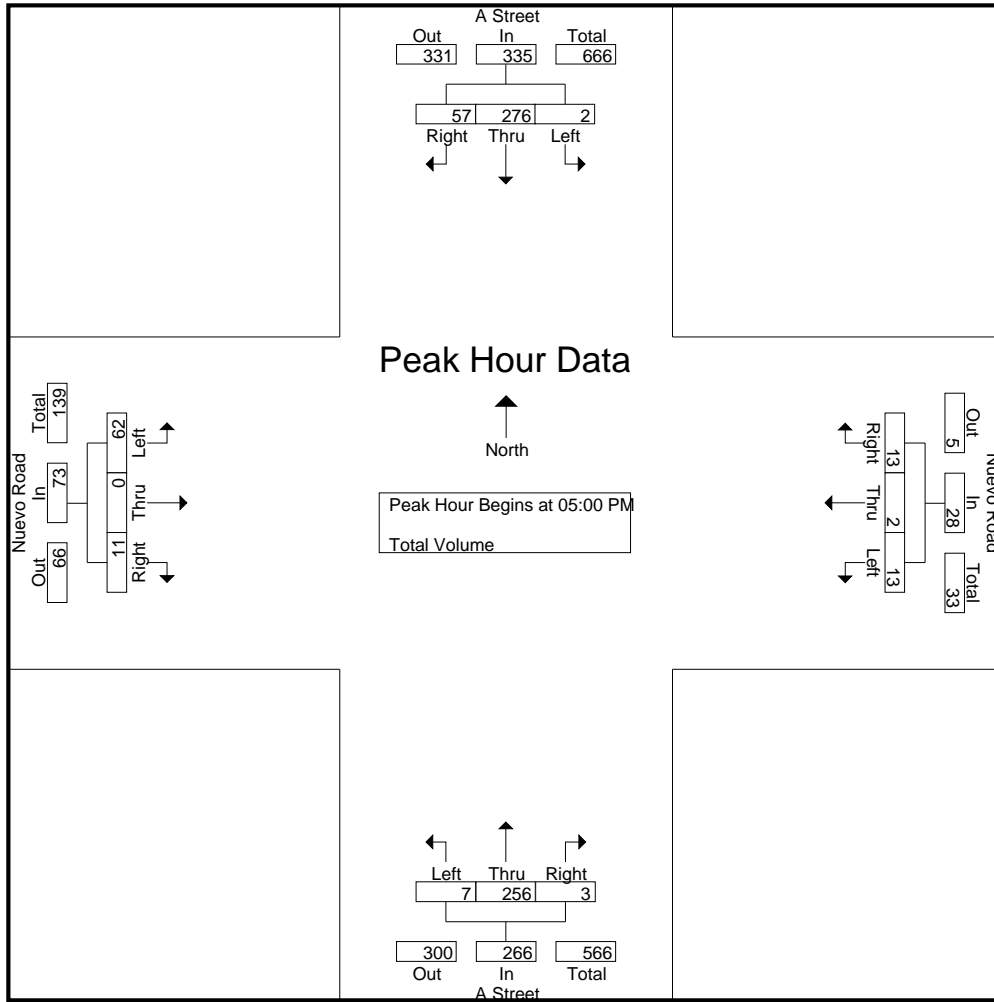
Groups Printed- Total Volume

Start Time	A Street Southbound				Nuevo Road Westbound				A Street Northbound				Nuevo Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	76	22	98	4	0	2	6	7	49	0	56	16	0	4	20	180
04:15 PM	0	69	14	83	0	1	2	3	8	67	0	75	12	0	2	14	175
04:30 PM	0	85	24	109	2	0	1	3	1	46	0	47	13	0	0	13	172
04:45 PM	0	66	18	84	1	1	1	3	2	50	2	54	18	0	3	21	162
Total	0	296	78	374	7	2	6	15	18	212	2	232	59	0	9	68	689
05:00 PM	1	70	8	79	5	2	3	10	0	67	1	68	14	0	1	15	172
05:15 PM	1	89	23	113	2	0	2	4	1	54	1	56	17	0	3	20	193
05:30 PM	0	63	14	77	2	0	1	3	4	71	0	75	18	0	1	19	174
05:45 PM	0	54	12	66	4	0	7	11	2	64	1	67	13	0	6	19	163
Total	2	276	57	335	13	2	13	28	7	256	3	266	62	0	11	73	702
Grand Total	2	572	135	709	20	4	19	43	25	468	5	498	121	0	20	141	1391
Apprch %	0.3	80.7	19		46.5	9.3	44.2		5	94	1		85.8	0	14.2		
Total %	0.1	41.1	9.7	51	1.4	0.3	1.4	3.1	1.8	33.6	0.4	35.8	8.7	0	1.4	10.1	

Start Time	A Street Southbound				Nuevo Road Westbound				A Street Northbound				Nuevo Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	70	8	79	5	2	3	10	0	67	1	68	14	0	1	15	172
05:15 PM	1	89	23	113	2	0	2	4	1	54	1	56	17	0	3	20	193
05:30 PM	0	63	14	77	2	0	1	3	4	71	0	75	18	0	1	19	174
05:45 PM	0	54	12	66	4	0	7	11	2	64	1	67	13	0	6	19	163
Total Volume	2	276	57	335	13	2	13	28	7	256	3	266	62	0	11	73	702
% App. Total	0.6	82.4	17		46.4	7.1	46.4		2.6	96.2	1.1		84.9	0	15.1		
PHF	.500	.775	.620	.741	.650	.250	.464	.636	.438	.901	.750	.887	.861	.000	.458	.913	.909

City of Perris
 N/S: A Street
 E/W: Nuevo Road
 Weather: Clear

File Name : 06_PER_A St_Nuevo PM
 Site Code : 00319604
 Start Date : 9/18/2019
 Page No : 2



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

	04:30 PM				05:00 PM				05:00 PM				04:45 PM			
+0 mins.	0	85	24	109	5	2	3	10	0	67	1	68	18	0	3	21
+15 mins.	0	66	18	84	2	0	2	4	1	54	1	56	14	0	1	15
+30 mins.	1	70	8	79	2	0	1	3	4	71	0	75	17	0	3	20
+45 mins.	1	89	23	113	4	0	7	11	2	64	1	67	18	0	1	19
Total Volume	2	310	73	385	13	2	13	28	7	256	3	266	67	0	8	75
% App. Total	0.5	80.5	19		46.4	7.1	46.4		2.6	96.2	1.1		89.3	0	10.7	
PHF	.500	.871	.760	.852	.650	.250	.464	.636	.438	.901	.750	.887	.931	.000	.667	.893

Location: Perris
 N/S: A Street
 E/W: Nuevo Road



Date: 9/18/2019
 Day: Wednesday

PEDESTRIANS

	North Leg A Street	East Leg Nuevo Road	South Leg A Street	West Leg Nuevo Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	2	1	3
7:15 AM	0	0	17	3	20
7:30 AM	0	0	76	0	76
7:45 AM	0	0	116	2	118
8:00 AM	0	0	11	0	11
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	222	7	229

	North Leg A Street	East Leg Nuevo Road	South Leg A Street	West Leg Nuevo Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	12	0	12
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	1	1
4:45 PM	0	0	15	2	17
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	2	0	2
TOTAL VOLUMES:	0	0	30	3	33

Location: Perris
 N/S: A Street
 E/W: Nuevo Road



Date: 9/18/2019
 Day: Wednesday

BICYCLES

	Southbound A Street			Westbound Nuevo Road			Northbound A Street			Eastbound Nuevo Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	1	1

	Southbound A Street			Westbound Nuevo Road			Northbound A Street			Eastbound Nuevo Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	0	0	0	1

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

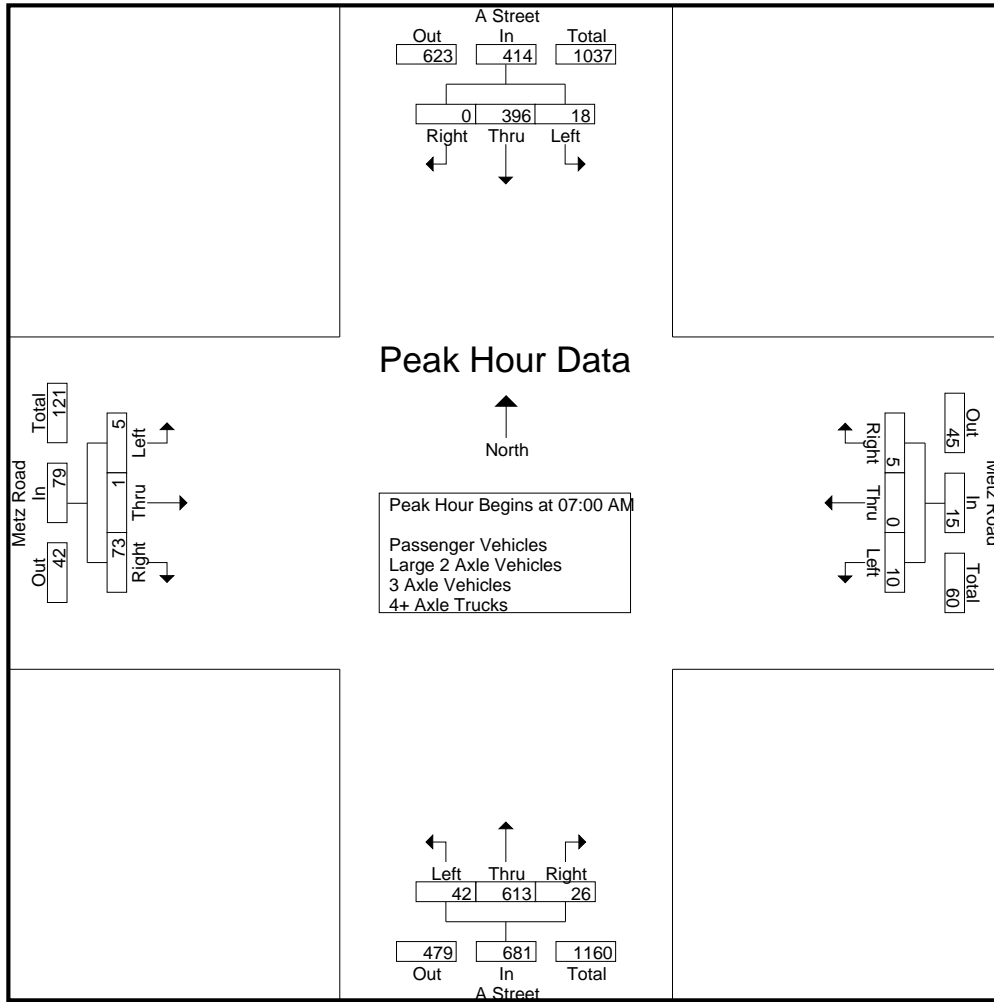
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	110	0	113	0	0	3	3	7	158	1	166	0	1	12	13	295
07:15 AM	8	120	0	128	1	0	2	3	14	187	9	210	1	0	22	23	364
07:30 AM	4	91	0	95	3	0	0	3	13	160	5	178	1	0	28	29	305
07:45 AM	3	75	0	78	6	0	0	6	8	108	11	127	3	0	11	14	225
Total	18	396	0	414	10	0	5	15	42	613	26	681	5	1	73	79	1189
08:00 AM	6	60	1	67	1	0	2	3	3	57	12	72	0	0	7	7	149
08:15 AM	8	29	1	38	4	0	3	7	4	35	14	53	0	0	3	3	101
08:30 AM	4	29	1	34	4	0	6	10	5	30	0	35	0	1	1	2	81
08:45 AM	3	26	1	30	6	0	11	17	4	31	7	42	0	0	2	2	91
Total	21	144	4	169	15	0	22	37	16	153	33	202	0	1	13	14	422
Grand Total	39	540	4	583	25	0	27	52	58	766	59	883	5	2	86	93	1611
Apprch %	6.7	92.6	0.7		48.1	0	51.9		6.6	86.7	6.7		5.4	2.2	92.5		
Total %	2.4	33.5	0.2	36.2	1.6	0	1.7	3.2	3.6	47.5	3.7	54.8	0.3	0.1	5.3	5.8	
Passenger Vehicles	20	527	4	551	22	0	24	46	55	762	35	852	5	2	84	91	1540
% Passenger Vehicles	51.3	97.6	100	94.5	88	0	88.9	88.5	94.8	99.5	59.3	96.5	100	100	97.7	97.8	95.6
Large 2 Axle Vehicles	19	11	0	30	3	0	3	6	3	3	24	30	0	0	2	2	68
% Large 2 Axle Vehicles	48.7	2	0	5.1	12	0	11.1	11.5	5.2	0.4	40.7	3.4	0	0	2.3	2.2	4.2
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% 3 Axle Vehicles	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% 4+ Axle Trucks	0	0.2	0	0.2	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0.1

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	110	0	113	0	0	3	3	7	158	1	166	0	1	12	13	295
07:15 AM	8	120	0	128	1	0	2	3	14	187	9	210	1	0	22	23	364
07:30 AM	4	91	0	95	3	0	0	3	13	160	5	178	1	0	28	29	305
07:45 AM	3	75	0	78	6	0	0	6	8	108	11	127	3	0	11	14	225
Total Volume	18	396	0	414	10	0	5	15	42	613	26	681	5	1	73	79	1189
% App. Total	4.3	95.7	0		66.7	0	33.3		6.2	90	3.8		6.3	1.3	92.4		
PHF	.563	.825	.000	.809	.417	.000	.417	.625	.750	.820	.591	.811	.417	.250	.652	.681	.817

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				08:00 AM				07:00 AM				07:00 AM			
+0 mins.	3	110	0	113	1	0	2	3	7	158	1	166	0	1	12	13
+15 mins.	8	120	0	128	4	0	3	7	14	187	9	210	1	0	22	23
+30 mins.	4	91	0	95	4	0	6	10	13	160	5	178	1	0	28	29
+45 mins.	3	75	0	78	6	0	11	17	8	108	11	127	3	0	11	14
Total Volume	18	396	0	414	15	0	22	37	42	613	26	681	5	1	73	79
% App. Total	4.3	95.7	0		40.5	0	59.5		6.2	90	3.8		6.3	1.3	92.4	
PHF	.563	.825	.000	.809	.625	.000	.500	.544	.750	.820	.591	.811	.417	.250	.652	.681

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

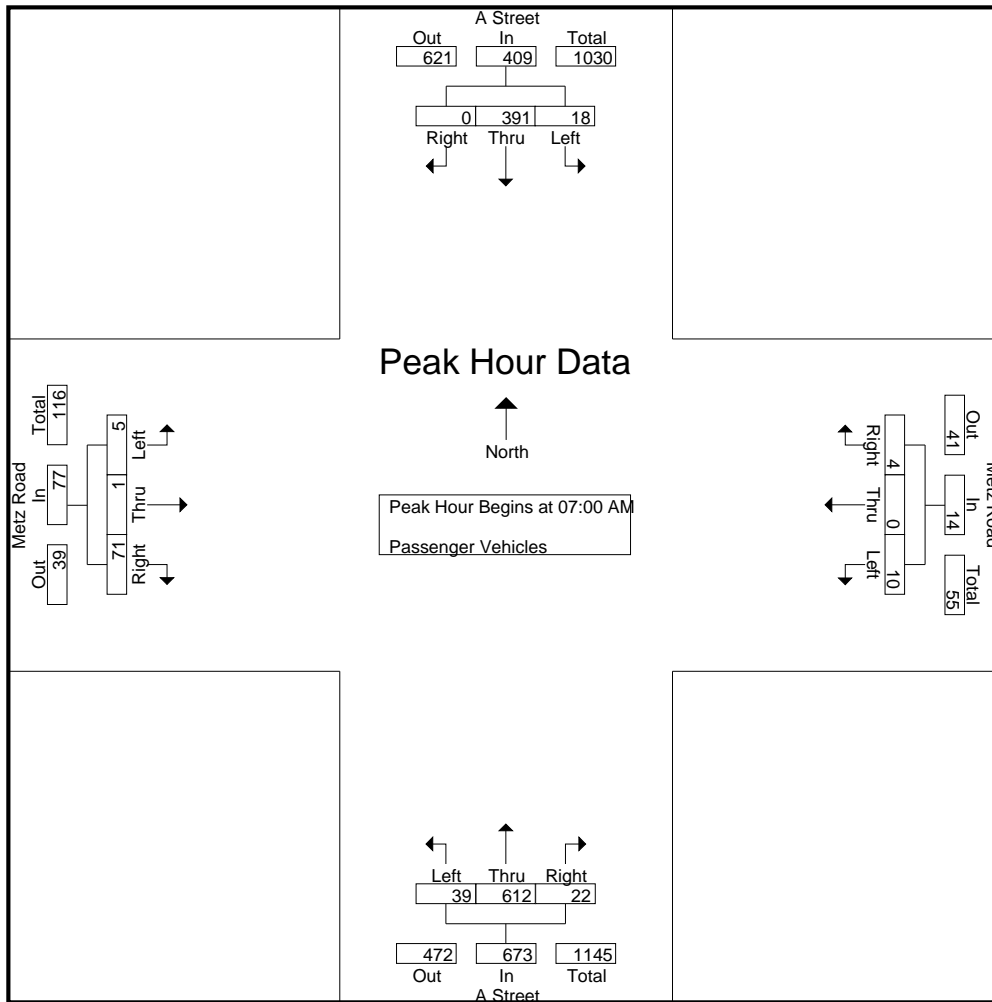
Groups Printed- Passenger Vehicles

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	108	0	111	0	0	2	2	6	158	1	165	0	1	11	12	290
07:15 AM	8	119	0	127	1	0	2	3	14	186	9	209	1	0	22	23	362
07:30 AM	4	89	0	93	3	0	0	3	13	160	5	178	1	0	28	29	303
07:45 AM	3	75	0	78	6	0	0	6	6	108	7	121	3	0	10	13	218
Total	18	391	0	409	10	0	4	14	39	612	22	673	5	1	71	77	1173
08:00 AM	1	54	1	56	0	0	2	2	3	54	6	63	0	0	7	7	128
08:15 AM	1	28	1	30	4	0	3	7	4	35	6	45	0	0	3	3	85
08:30 AM	0	28	1	29	2	0	5	7	5	30	0	35	0	1	1	2	73
08:45 AM	0	26	1	27	6	0	10	16	4	31	1	36	0	0	2	2	81
Total	2	136	4	142	12	0	20	32	16	150	13	179	0	1	13	14	367
Grand Total	20	527	4	551	22	0	24	46	55	762	35	852	5	2	84	91	1540
Apprch %	3.6	95.6	0.7		47.8	0	52.2		6.5	89.4	4.1		5.5	2.2	92.3		
Total %	1.3	34.2	0.3	35.8	1.4	0	1.6	3	3.6	49.5	2.3	55.3	0.3	0.1	5.5	5.9	

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	108	0	111	0	0	2	2	6	158	1	165	0	1	11	12	290
07:15 AM	8	119	0	127	1	0	2	3	14	186	9	209	1	0	22	23	362
07:30 AM	4	89	0	93	3	0	0	3	13	160	5	178	1	0	28	29	303
07:45 AM	3	75	0	78	6	0	0	6	6	108	7	121	3	0	10	13	218
Total Volume	18	391	0	409	10	0	4	14	39	612	22	673	5	1	71	77	1173
% App. Total	4.4	95.6	0		71.4	0	28.6		5.8	90.9	3.3		6.5	1.3	92.2		
PHF	.563	.821	.000	.805	.417	.000	.500	.583	.696	.823	.611	.805	.417	.250	.634	.664	.810

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	3	108	0	111	0	0	2	2	6	158	1	165	0	1	11	12
+15 mins.	8	119	0	127	1	0	2	3	14	186	9	209	1	0	22	23
+30 mins.	4	89	0	93	3	0	0	3	13	160	5	178	1	0	28	29
+45 mins.	3	75	0	78	6	0	0	6	6	108	7	121	3	0	10	13
Total Volume	18	391	0	409	10	0	4	14	39	612	22	673	5	1	71	77
% App. Total	4.4	95.6	0		71.4	0	28.6		5.8	90.9	3.3		6.5	1.3	92.2	
PHF	.563	.821	.000	.805	.417	.000	.500	.583	.696	.823	.611	.805	.417	.250	.634	.664

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
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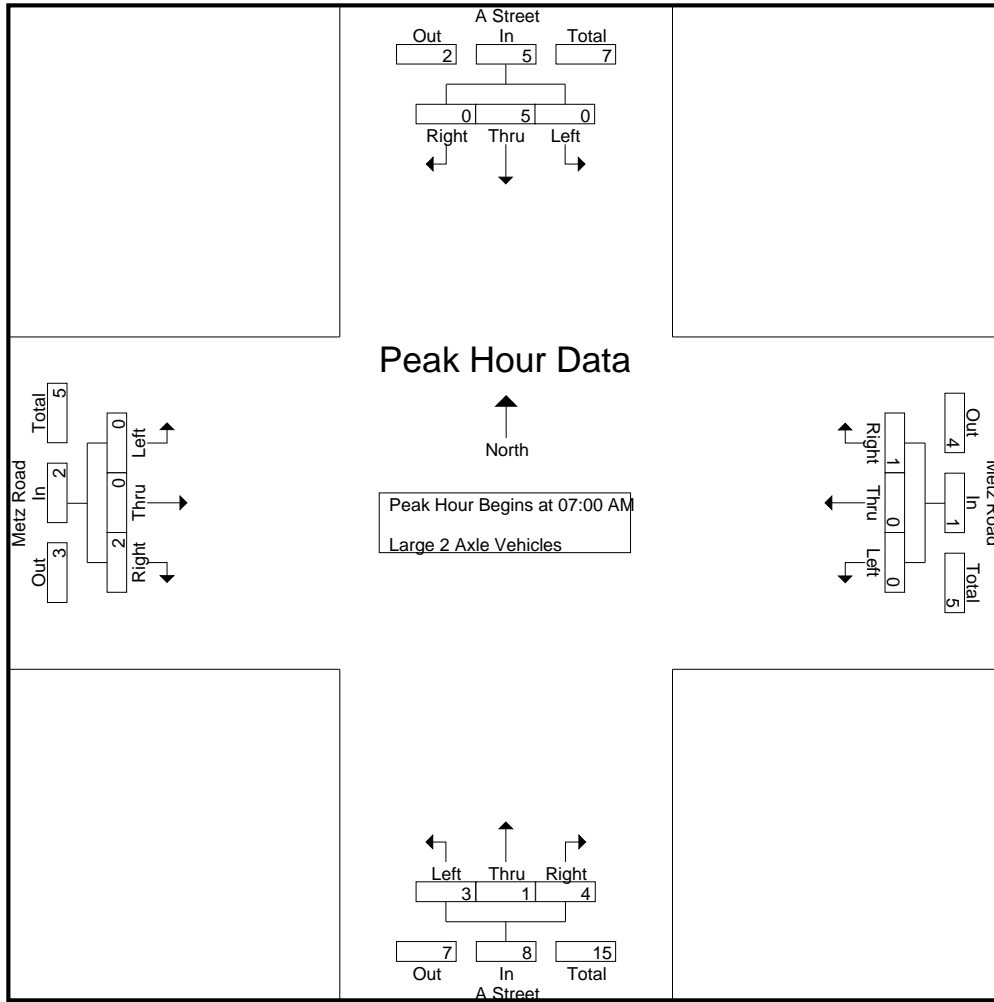
Groups Printed- Large 2 Axle Vehicles

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	2	0	2	0	0	1	1	1	0	0	1	1	0	0	1	1	5
07:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	2
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	4	6	0	0	1	1	7
Total	0	5	0	5	0	0	1	1	3	1	4	8	0	0	2	2	16	
08:00 AM	5	5	0	10	1	0	0	1	0	2	6	8	0	0	0	0	19	
08:15 AM	7	1	0	8	0	0	0	0	0	0	8	8	0	0	0	0	16	
08:30 AM	4	0	0	4	2	0	1	3	0	0	0	0	0	0	0	0	7	
08:45 AM	3	0	0	3	0	0	1	1	0	0	6	6	0	0	0	0	10	
Total	19	6	0	25	3	0	2	5	0	2	20	22	0	0	0	0	52	
Grand Total	19	11	0	30	3	0	3	6	3	3	24	30	0	0	2	2	68	
Apprch %	63.3	36.7	0		50	0	50		10	10	80		0	0	100			
Total %	27.9	16.2	0	44.1	4.4	0	4.4	8.8	4.4	4.4	35.3	44.1	0	0	2.9	2.9		

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:00 AM																		
07:00 AM	0	2	0	2	0	0	1	1	1	0	0	1	1	0	0	1	1	5
07:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	2
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	4	6	0	0	1	1	7
Total Volume	0	5	0	5	0	0	1	1	3	1	4	8	0	0	2	2	16	
% App. Total	0	100	0		0	0	100		37.5	12.5	50		0	0	100			
PHF	.000	.625	.000	.625	.000	.000	.250	.250	.375	.250	.250	.333	.000	.000	.500	.500	.571	

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	2	0	2	0	0	1	1	1	0	0	1	0	0	1	1
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	2	0	4	6	0	0	1	1
Total Volume	0	5	0	5	0	0	1	1	3	1	4	8	0	0	2	2
% App. Total	0	100	0		0	0	100		37.5	12.5	50		0	0	100	
PHF	.000	.625	.000	.625	.000	.000	.250	.250	.375	.250	.250	.333	.000	.000	.500	.500

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
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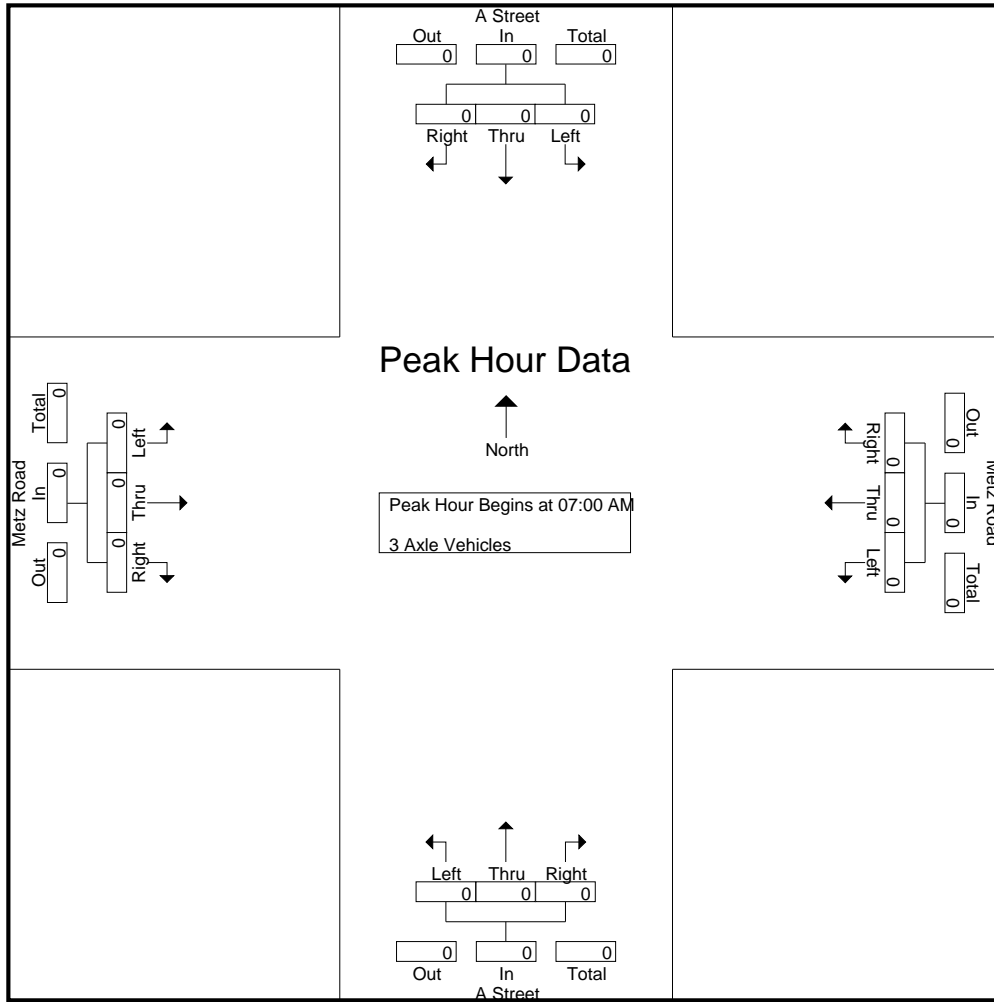
Groups Printed- 3 Axle Vehicles

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

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

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

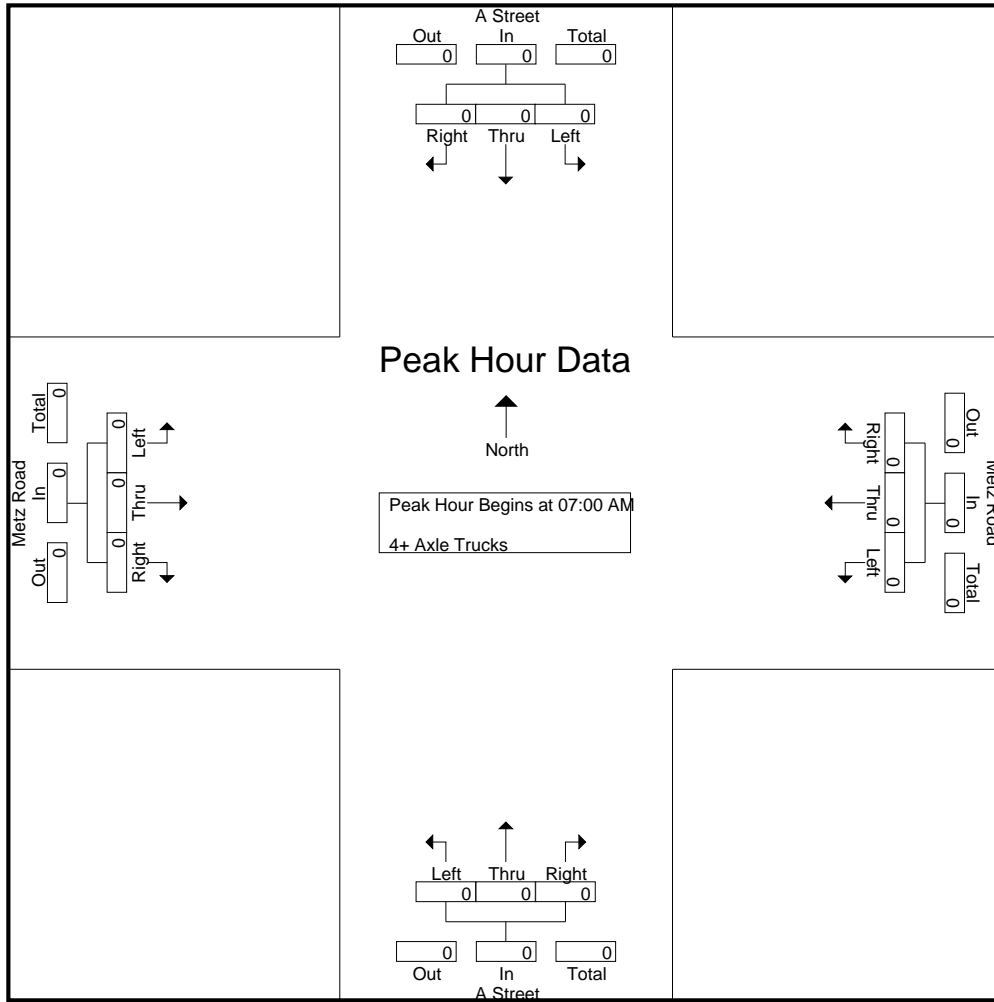
Groups Printed- 4+ Axle Trucks

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

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

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

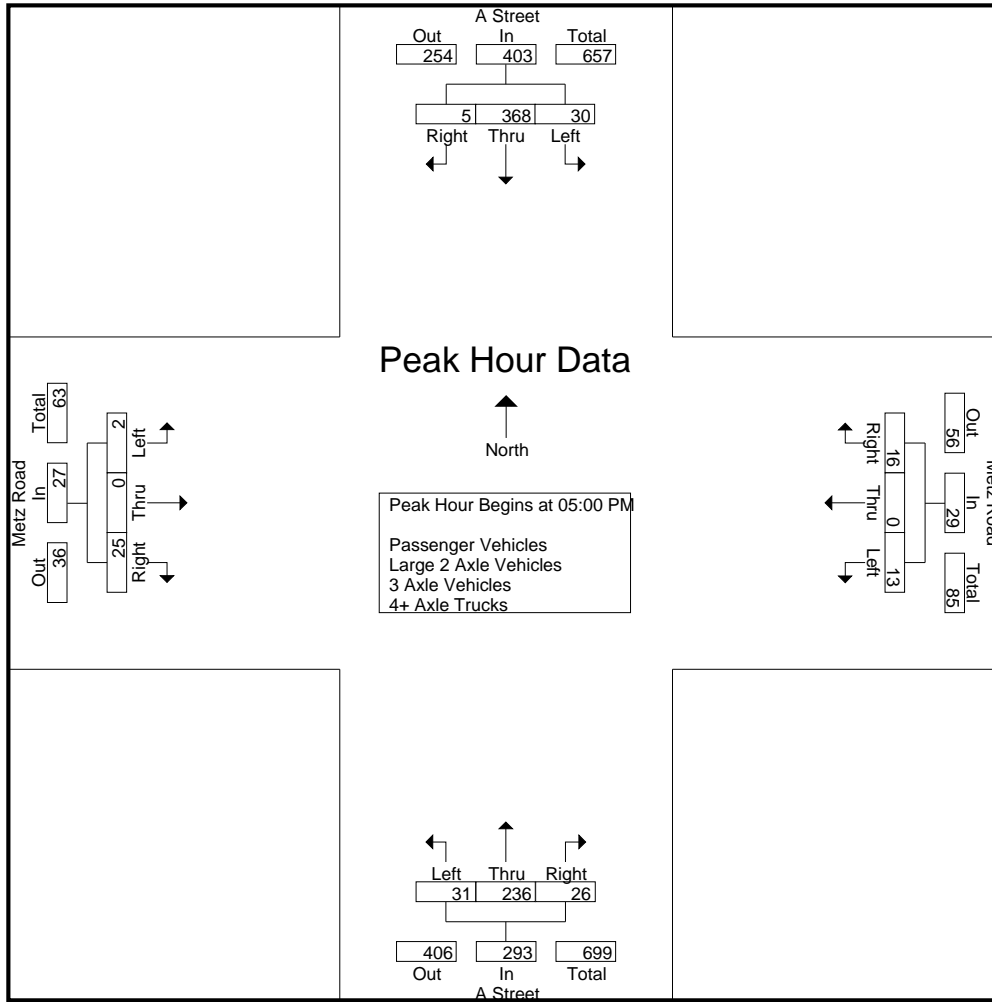
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	5	107	5	117	6	0	2	8	4	52	3	59	0	0	5	5	189
04:15 PM	8	84	2	94	4	0	6	10	11	56	4	71	1	0	5	6	181
04:30 PM	4	91	5	100	4	0	8	12	2	61	2	65	0	0	2	2	179
04:45 PM	2	85	1	88	5	0	3	8	2	60	0	62	2	0	6	8	166
Total	19	367	13	399	19	0	19	38	19	229	9	257	3	0	18	21	715
05:00 PM	2	106	2	110	3	0	5	8	10	70	2	82	1	0	4	5	205
05:15 PM	6	76	1	83	4	0	2	6	10	50	5	65	0	0	9	9	163
05:30 PM	9	100	1	110	5	0	7	12	3	63	4	70	1	0	6	7	199
05:45 PM	13	86	1	100	1	0	2	3	8	53	15	76	0	0	6	6	185
Total	30	368	5	403	13	0	16	29	31	236	26	293	2	0	25	27	752
Grand Total	49	735	18	802	32	0	35	67	50	465	35	550	5	0	43	48	1467
Apprch %	6.1	91.6	2.2		47.8	0	52.2		9.1	84.5	6.4		10.4	0	89.6		
Total %	3.3	50.1	1.2	54.7	2.2	0	2.4	4.6	3.4	31.7	2.4	37.5	0.3	0	2.9	3.3	
Passenger Vehicles	36	722	18	776	31	0	34	65	49	455	27	531	5	0	43	48	1420
% Passenger Vehicles	73.5	98.2	100	96.8	96.9	0	97.1	97	98	97.8	77.1	96.5	100	0	100	100	96.8
Large 2 Axle Vehicles	13	10	0	23	1	0	1	2	1	8	8	17	0	0	0	0	42
% Large 2 Axle Vehicles	26.5	1.4	0	2.9	3.1	0	2.9	3	2	1.7	22.9	3.1	0	0	0	0	2.9
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% 3 Axle Vehicles	0	0.1	0	0.1	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.1
4+ Axle Trucks	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% 4+ Axle Trucks	0	0.3	0	0.2	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.2

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	106	2	110	3	0	5	8	10	70	2	82	1	0	4	5	205
05:15 PM	6	76	1	83	4	0	2	6	10	50	5	65	0	0	9	9	163
05:30 PM	9	100	1	110	5	0	7	12	3	63	4	70	1	0	6	7	199
05:45 PM	13	86	1	100	1	0	2	3	8	53	15	76	0	0	6	6	185
Total Volume	30	368	5	403	13	0	16	29	31	236	26	293	2	0	25	27	752
% App. Total	7.4	91.3	1.2		44.8	0	55.2		10.6	80.5	8.9		7.4	0	92.6		
PHF	.577	.868	.625	.916	.650	.000	.571	.604	.775	.843	.433	.893	.500	.000	.694	.750	.917

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				05:00 PM				04:45 PM			
+0 mins.	2	106	2	110	6	0	2	8	10	70	2	82	2	0	6	8
+15 mins.	6	76	1	83	4	0	6	10	10	50	5	65	1	0	4	5
+30 mins.	9	100	1	110	4	0	8	12	3	63	4	70	0	0	9	9
+45 mins.	13	86	1	100	5	0	3	8	8	53	15	76	1	0	6	7
Total Volume	30	368	5	403	19	0	19	38	31	236	26	293	4	0	25	29
% App. Total	7.4	91.3	1.2		50	0	50		10.6	80.5	8.9		13.8	0	86.2	
PHF	.577	.868	.625	.916	.792	.000	.594	.792	.775	.843	.433	.893	.500	.000	.694	.806

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

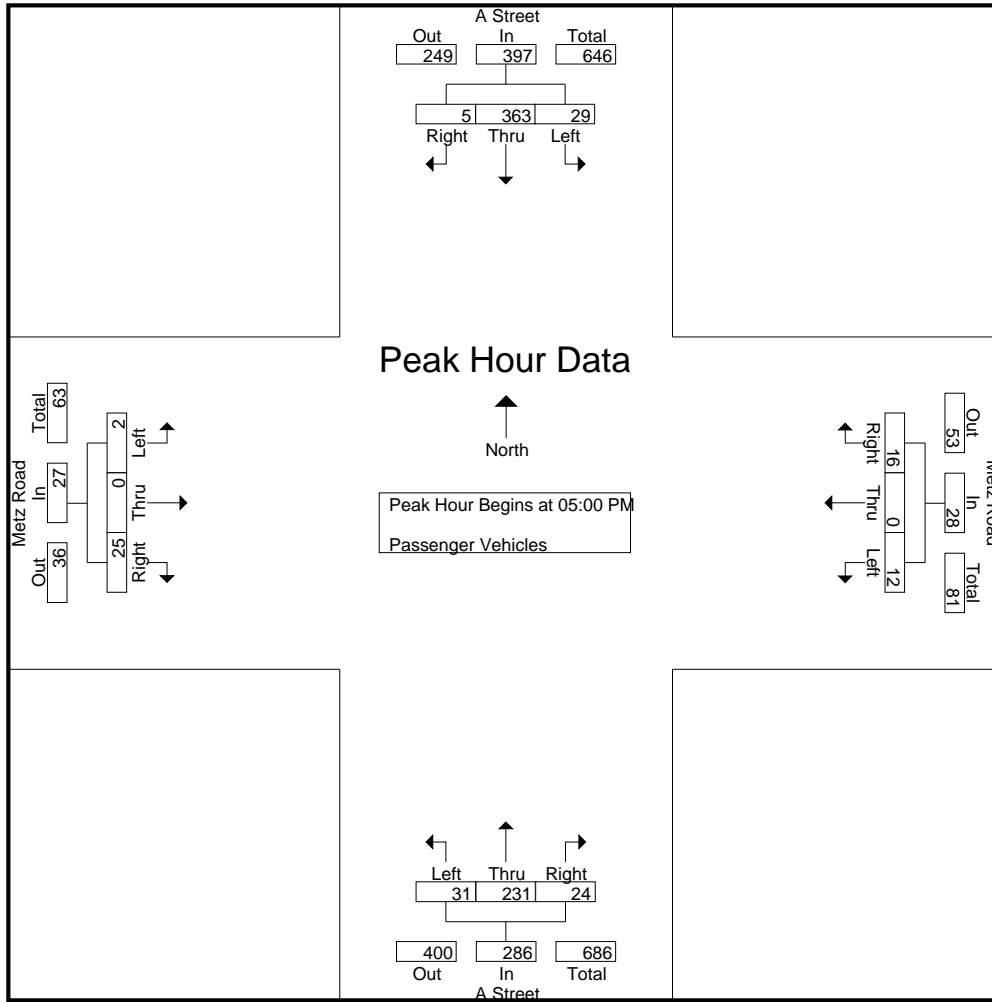
Groups Printed- Passenger Vehicles

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	105	5	113	6	0	2	8	4	52	1	57	0	0	5	5	183
04:15 PM	3	81	2	86	4	0	6	10	10	54	1	65	1	0	5	6	167
04:30 PM	0	91	5	96	4	0	7	11	2	60	1	63	0	0	2	2	172
04:45 PM	1	82	1	84	5	0	3	8	2	58	0	60	2	0	6	8	160
Total	7	359	13	379	19	0	18	37	18	224	3	245	3	0	18	21	682
05:00 PM	1	105	2	108	3	0	5	8	10	68	1	79	1	0	4	5	200
05:15 PM	6	75	1	82	3	0	2	5	10	49	4	63	0	0	9	9	159
05:30 PM	9	98	1	108	5	0	7	12	3	61	4	68	1	0	6	7	195
05:45 PM	13	85	1	99	1	0	2	3	8	53	15	76	0	0	6	6	184
Total	29	363	5	397	12	0	16	28	31	231	24	286	2	0	25	27	738
Grand Total	36	722	18	776	31	0	34	65	49	455	27	531	5	0	43	48	1420
Apprch %	4.6	93	2.3		47.7	0	52.3		9.2	85.7	5.1		10.4	0	89.6		
Total %	2.5	50.8	1.3	54.6	2.2	0	2.4	4.6	3.5	32	1.9	37.4	0.4	0	3	3.4	

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	105	2	108	3	0	5	8	10	68	1	79	1	0	4	5	200
05:15 PM	6	75	1	82	3	0	2	5	10	49	4	63	0	0	9	9	159
05:30 PM	9	98	1	108	5	0	7	12	3	61	4	68	1	0	6	7	195
05:45 PM	13	85	1	99	1	0	2	3	8	53	15	76	0	0	6	6	184
Total Volume	29	363	5	397	12	0	16	28	31	231	24	286	2	0	25	27	738
% App. Total	7.3	91.4	1.3		42.9	0	57.1		10.8	80.8	8.4		7.4	0	92.6		
PHF	.558	.864	.625	.919	.600	.000	.571	.583	.775	.849	.400	.905	.500	.000	.694	.750	.923

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	05:00 PM				05:00 PM				05:00 PM							
+0 mins.	1	105	2	108	3	0	5	8	10	68	1	79	1	0	4	5
+15 mins.	6	75	1	82	3	0	2	5	10	49	4	63	0	0	9	9
+30 mins.	9	98	1	108	5	0	7	12	3	61	4	68	1	0	6	7
+45 mins.	13	85	1	99	1	0	2	3	8	53	15	76	0	0	6	6
Total Volume	29	363	5	397	12	0	16	28	31	231	24	286	2	0	25	27
% App. Total	7.3	91.4	1.3		42.9	0	57.1		10.8	80.8	8.4		7.4	0	92.6	
PHF	.558	.864	.625	.919	.600	.000	.571	.583	.775	.849	.400	.905	.500	.000	.694	.750

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
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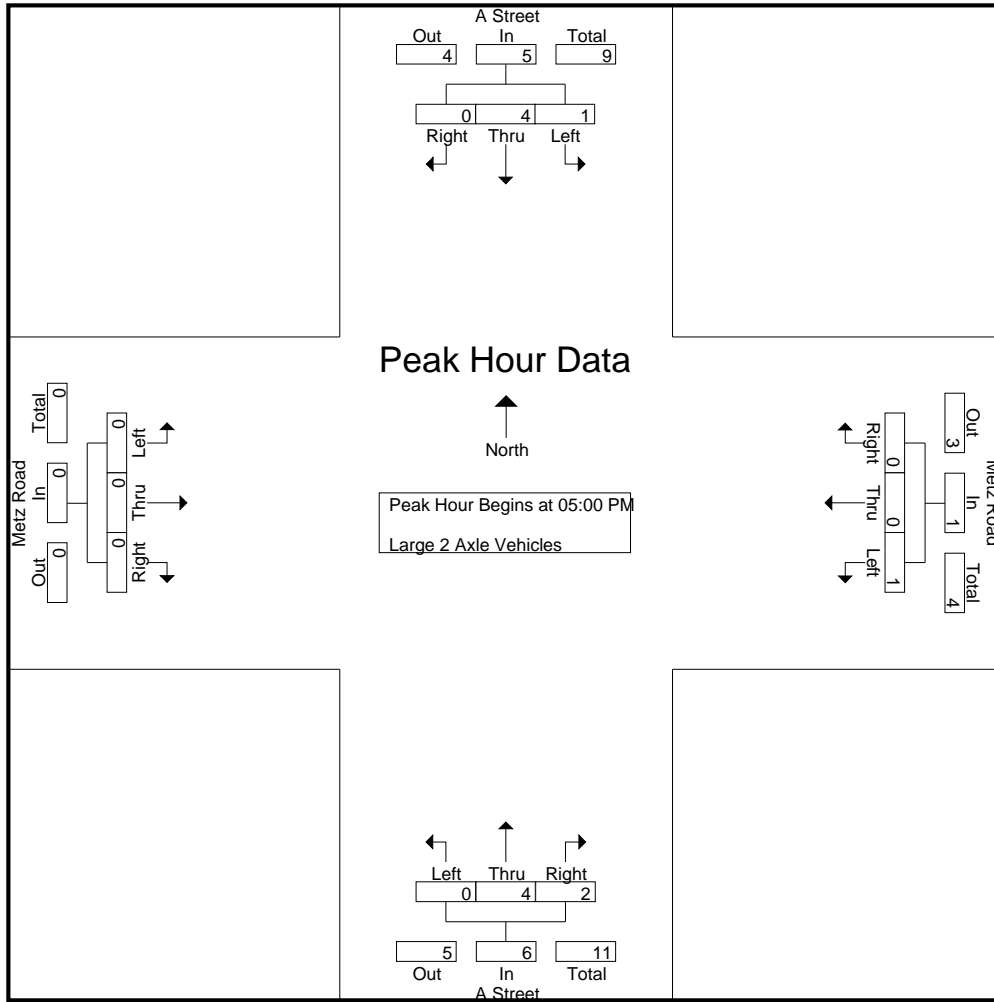
Groups Printed- Large 2 Axle Vehicles

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	1	0	3	0	0	0	0	0	0	2	2	0	0	0	0	5
04:15 PM	5	3	0	8	0	0	0	0	1	2	3	6	0	0	0	0	14
04:30 PM	4	0	0	4	0	0	1	1	0	1	1	2	0	0	0	0	7
04:45 PM	1	2	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total	12	6	0	18	0	0	1	1	1	4	6	11	0	0	0	0	30
05:00 PM	1	1	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
05:15 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	4	0	5	1	0	0	1	0	4	2	6	0	0	0	0	12
Grand Total	13	10	0	23	1	0	1	2	1	8	8	17	0	0	0	0	42
Apprch %	56.5	43.5	0		50	0	50		5.9	47.1	47.1		0	0	0		
Total %	31	23.8	0	54.8	2.4	0	2.4	4.8	2.4	19	19	40.5	0	0	0	0	

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	1	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
05:15 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	4	0	5	1	0	0	1	0	4	2	6	0	0	0	0	12
% App. Total	20	80	0		100	0	0		0	66.7	33.3		0	0	0		
PHF	.250	1.00	.000	.625	.250	.000	.000	.250	.000	.500	.500	.500	.000	.000	.000	.000	.600

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
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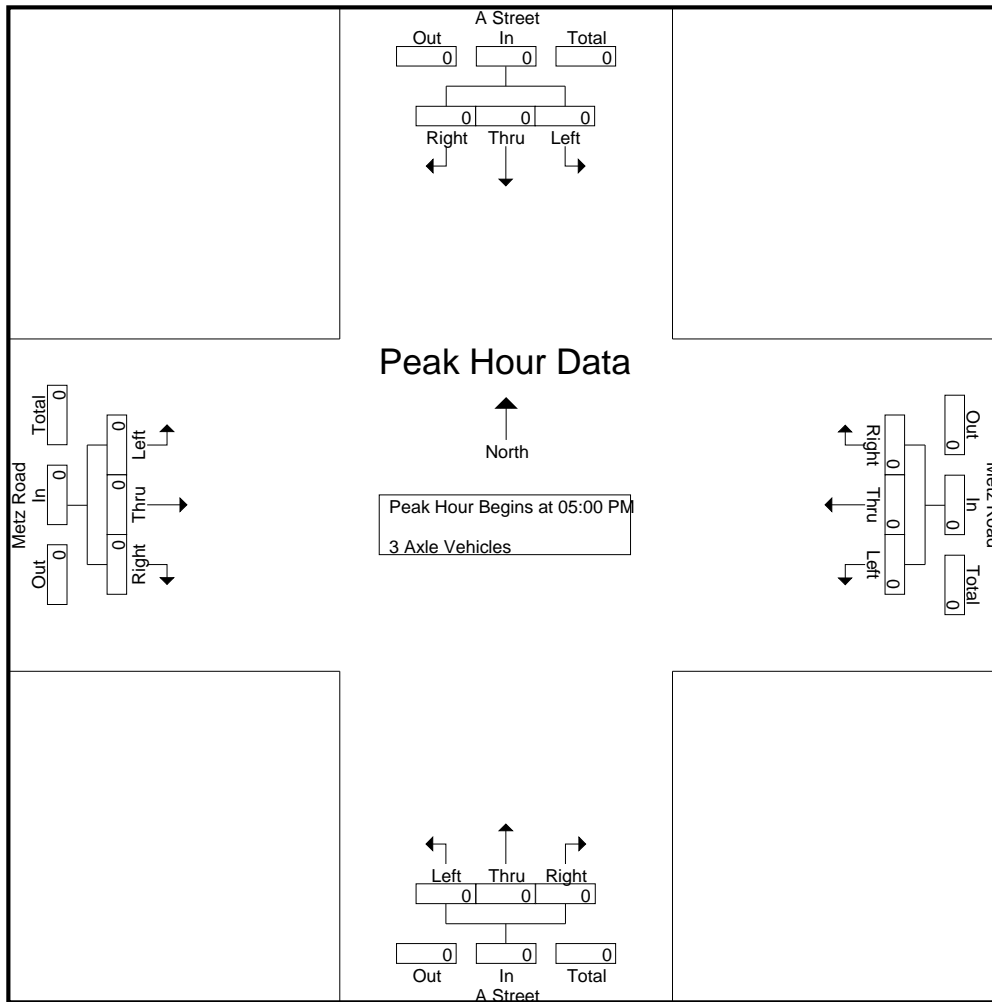


Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	1	0	2	0	0	0	0	0	2	1	3	0	0	0	0
+15 mins.	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	4	0	5	1	0	0	1	0	4	2	6	0	0	0	0
% App. Total	20	80	0		100	0	0		0	66.7	33.3		0	0	0	
PHF	.250	1.000	.000	.625	.250	.000	.000	.250	.000	.500	.500	.500	.000	.000	.000	.000

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

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

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
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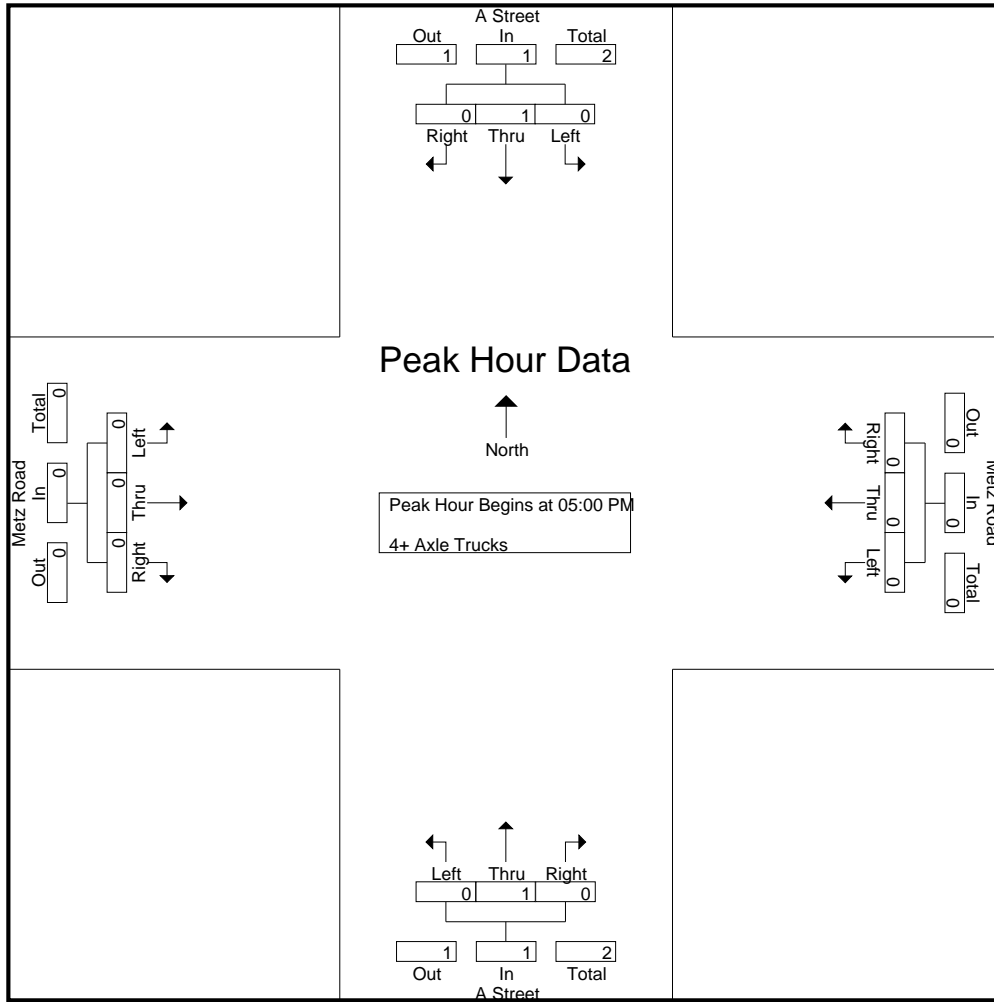
Groups Printed- 4+ Axle Trucks

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	66.7	0	66.7	0	0	0	0	0	33.3	0	33.3	0	0	0	0	

Start Time	A Street Southbound				Metz Road Westbound				A Street Northbound				Metz Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.500

City of Perris
 N/S: A Street
 E/W: Metz Road
 Weather: Clear

File Name : 02_PER_A St_Metz PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

Location: Perris
 N/S: A Street
 E/W: Metz Road



Date: 9/10/2019
 Day: Tuesday

PEDESTRIANS

	North Leg A Street	East Leg Metz Road	South Leg A Street	West Leg Metz Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	3	0	0	3
7:15 AM	0	0	1	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	1	0	0	1
8:00 AM	0	2	0	0	2
8:15 AM	0	0	0	3	3
8:30 AM	0	0	0	1	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	6	1	4	11

	North Leg A Street	East Leg Metz Road	South Leg A Street	West Leg Metz Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	13	0	13
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	2	0	0	2
TOTAL VOLUMES:	0	2	13	0	15

Location: Perris
 N/S: A Street
 E/W: Metz Road



Date: 9/10/2019
 Day: Tuesday

BICYCLES

	Southbound A Street			Westbound Metz Road			Northbound A Street			Eastbound Metz Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	0	0	0	2

	Southbound A Street			Westbound Metz Road			Northbound A Street			Eastbound Metz Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Perris
 N/S: A Street
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_A St_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

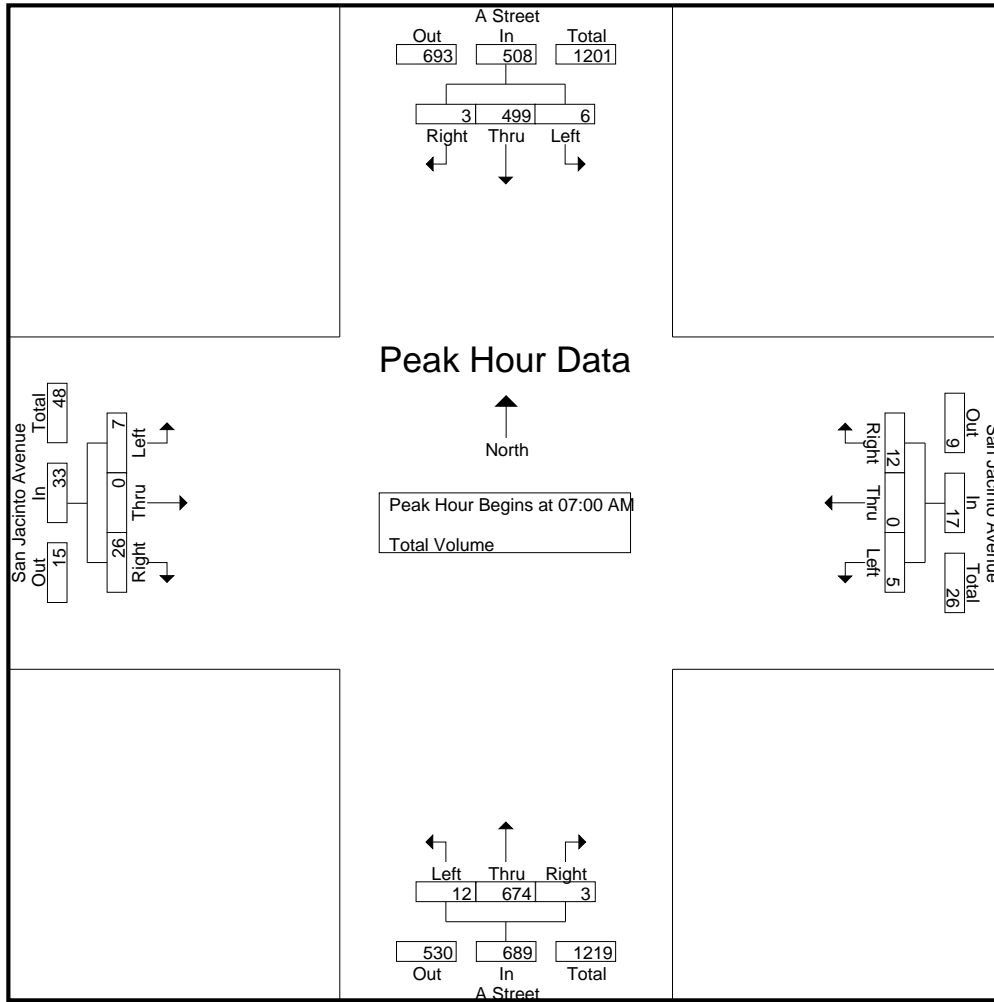
Groups Printed- Total Volume

Start Time	A Street Southbound				San Jacinto Avenue Westbound				A Street Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	92	2	95	1	0	4	5	1	199	0	200	1	0	5	6	306
07:15 AM	2	153	0	155	1	0	7	8	5	210	1	216	2	0	5	7	386
07:30 AM	2	155	0	157	3	0	1	4	3	137	1	141	3	0	12	15	317
07:45 AM	1	99	1	101	0	0	0	0	3	128	1	132	1	0	4	5	238
Total	6	499	3	508	5	0	12	17	12	674	3	689	7	0	26	33	1247
08:00 AM	1	77	2	80	0	0	0	0	2	76	3	81	0	0	5	5	166
08:15 AM	0	34	1	35	1	0	1	2	2	54	0	56	0	0	4	4	97
08:30 AM	1	35	0	36	0	0	0	0	1	34	1	36	0	0	2	2	74
08:45 AM	1	35	0	36	0	0	0	0	0	39	0	39	0	0	1	1	76
Total	3	181	3	187	1	0	1	2	5	203	4	212	0	0	12	12	413
Grand Total	9	680	6	695	6	0	13	19	17	877	7	901	7	0	38	45	1660
Apprch %	1.3	97.8	0.9		31.6	0	68.4		1.9	97.3	0.8		15.6	0	84.4		
Total %	0.5	41	0.4	41.9	0.4	0	0.8	1.1	1	52.8	0.4	54.3	0.4	0	2.3	2.7	

Start Time	A Street Southbound				San Jacinto Avenue Westbound				A Street Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	92	2	95	1	0	4	5	1	199	0	200	1	0	5	6	306
07:15 AM	2	153	0	155	1	0	7	8	5	210	1	216	2	0	5	7	386
07:30 AM	2	155	0	157	3	0	1	4	3	137	1	141	3	0	12	15	317
07:45 AM	1	99	1	101	0	0	0	0	3	128	1	132	1	0	4	5	238
Total Volume	6	499	3	508	5	0	12	17	12	674	3	689	7	0	26	33	1247
% App. Total	1.2	98.2	0.6		29.4	0	70.6		1.7	97.8	0.4		21.2	0	78.8		
PHF	.750	.805	.375	.809	.417	.000	.429	.531	.600	.802	.750	.797	.583	.000	.542	.550	.808

City of Perris
 N/S: A Street
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_A St_San Jacinto AM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	92	2	95	1	0	4	5	1	199	0	200	1	0	5	6
+15 mins.	2	153	0	155	1	0	7	8	5	210	1	216	2	0	5	7
+30 mins.	2	155	0	157	3	0	1	4	3	137	1	141	3	0	12	15
+45 mins.	1	99	1	101	0	0	0	0	3	128	1	132	1	0	4	5
Total Volume	6	499	3	508	5	0	12	17	12	674	3	689	7	0	26	33
% App. Total	1.2	98.2	0.6		29.4	0	70.6		1.7	97.8	0.4		21.2	0	78.8	
PHF	.750	.805	.375	.809	.417	.000	.429	.531	.600	.802	.750	.797	.583	.000	.542	.550

City of Perris
 N/S: A Street
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_A St_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 1

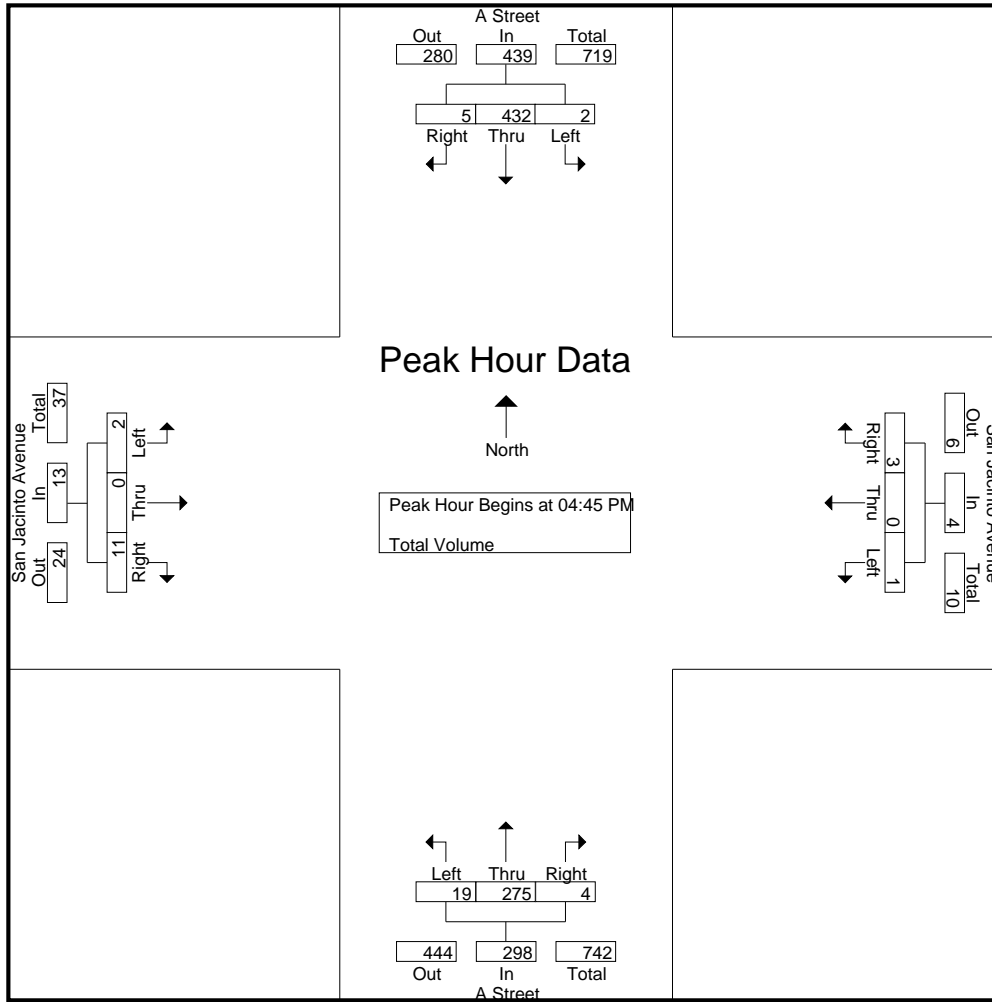
Groups Printed- Total Volume

Start Time	A Street Southbound				San Jacinto Avenue Westbound				A Street Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	117	3	122	0	1	1	2	3	52	1	56	0	0	3	3	183
04:15 PM	0	99	1	100	0	0	2	2	4	80	0	84	0	0	5	5	191
04:30 PM	1	93	1	95	0	0	0	0	3	64	0	67	0	0	1	1	163
04:45 PM	0	107	2	109	1	0	1	2	5	63	1	69	0	0	1	1	181
Total	3	416	7	426	1	1	4	6	15	259	2	276	0	0	10	10	718
05:00 PM	1	118	3	122	0	0	1	1	3	78	0	81	2	0	4	6	210
05:15 PM	0	99	0	99	0	0	0	0	4	71	1	76	0	0	4	4	179
05:30 PM	1	108	0	109	0	0	1	1	7	63	2	72	0	0	2	2	184
05:45 PM	0	89	0	89	1	0	1	2	5	75	0	80	1	0	7	8	179
Total	2	414	3	419	1	0	3	4	19	287	3	309	3	0	17	20	752
Grand Total	5	830	10	845	2	1	7	10	34	546	5	585	3	0	27	30	1470
Apprch %	0.6	98.2	1.2		20	10	70		5.8	93.3	0.9		10	0	90		
Total %	0.3	56.5	0.7	57.5	0.1	0.1	0.5	0.7	2.3	37.1	0.3	39.8	0.2	0	1.8	2	

Start Time	A Street Southbound				San Jacinto Avenue Westbound				A Street Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	107	2	109	1	0	1	2	5	63	1	69	0	0	1	1	181
05:00 PM	1	118	3	122	0	0	1	1	3	78	0	81	2	0	4	6	210
05:15 PM	0	99	0	99	0	0	0	0	4	71	1	76	0	0	4	4	179
05:30 PM	1	108	0	109	0	0	1	1	7	63	2	72	0	0	2	2	184
Total Volume	2	432	5	439	1	0	3	4	19	275	4	298	2	0	11	13	754
% App. Total	0.5	98.4	1.1		25	0	75		6.4	92.3	1.3		15.4	0	84.6		
PHF	.500	.915	.417	.900	.250	.000	.750	.500	.679	.881	.500	.920	.250	.000	.688	.542	.898

City of Perris
 N/S: A Street
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_A St_San Jacinto PM
 Site Code : 00319604
 Start Date : 9/10/2019
 Page No : 2



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

	04:45 PM				04:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	107	2	109	0	1	1	2	3	78	0	81	2	0	4	6
+15 mins.	1	118	3	122	0	0	2	2	4	71	1	76	0	0	4	4
+30 mins.	0	99	0	99	0	0	0	0	7	63	2	72	0	0	2	2
+45 mins.	1	108	0	109	1	0	1	2	5	75	0	80	1	0	7	8
Total Volume	2	432	5	439	1	1	4	6	19	287	3	309	3	0	17	20
% App. Total	0.5	98.4	1.1		16.7	16.7	66.7		6.1	92.9	1		15	0	85	
PHF	.500	.915	.417	.900	.250	.250	.500	.750	.679	.920	.375	.954	.375	.000	.607	.625

Location: Perris
 N/S: A Street
 E/W: San Jacinto Avenue



Date: 9/10/2019
 Day: Tuesday

PEDESTRIANS

	North Leg A Street	East Leg San Jacinto Avenue	South Leg A Street	West Leg San Jacinto Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	3	0	0	3
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	4	0	0	4

	North Leg A Street	East Leg San Jacinto Avenue	South Leg A Street	West Leg San Jacinto Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	2	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	2	0	0	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	2	4

Location: Perris
 N/S: A Street
 E/W: San Jacinto Avenue



Date: 9/10/2019
 Day: Tuesday

BICYCLES

	Southbound A Street			Westbound San Jacinto Avenue			Northbound A Street			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	0	0	0	2

	Southbound A Street			Westbound San Jacinto Avenue			Northbound A Street			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX C:

VOLUME DEVELOPMENT WORKSHEETS

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing Without Project	Project Trips	Existing With Project	Existing Without Project	Project Trips	Existing With Project
1 "A" Street / Harvill Avenue						
NBL	0	0	0	0	0	0
NBT	295	0	295	164	0	164
NBR	607	15	622	277	50	327
SBL	121	3	124	113	9	122
SBT	137	0	137	277	0	277
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	542	44	586	224	30	254
WBT	0	0	0	0	0	0
WBR	231	8	239	81	5	86
North Leg						
Approach	258	3	261	390	9	399
Departure	526	8	534	245	5	250
Total	784	11	795	635	14	649
South Leg						
Approach	902	15	917	441	50	491
Departure	679	44	723	501	30	531
Total	1,581	59	1,640	942	80	1,022
East Leg						
Approach	773	52	825	305	35	340
Departure	728	18	746	390	59	449
Total	1,501	70	1,571	695	94	789
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	1,933	70	2,003	1,136	94	1,230
Departure	1,933	70	2,003	1,136	94	1,230
Total	3,866	140	4,006	2,272	188	2,460

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing Without Project	Project Trips	Existing With Project	Existing Without Project	Project Trips	Existing With Project
2 Project Driveway / W Metz Road						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	48	48	0	32	32
SBL	16	0	16	5	0	5
SBT	0	0	0	0	0	0
SBR	0	0	0	1	0	1
EBL	0	0	0	0	0	0
EBT	55	0	55	23	0	23
EBR	0	0	0	0	0	0
WBL	0	17	17	0	54	54
WBT	33	0	33	34	0	34
WBR	6	0	6	4	0	4
North Leg						
Approach	16	0	16	6	0	6
Departure	6	0	6	4	0	4
Total	22	0	22	10	0	10
South Leg						
Approach	0	48	48	0	32	32
Departure	0	17	17	0	54	54
Total	0	65	65	0	86	86
East Leg						
Approach	39	17	56	38	54	92
Departure	71	48	119	28	32	60
Total	110	65	175	66	86	152
West Leg						
Approach	55	0	55	23	0	23
Departure	33	0	33	35	0	35
Total	88	0	88	58	0	58
Total Approaches						
Approach	110	65	175	67	86	153
Departure	110	65	175	67	86	153
Total	220	130	350	134	172	306

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing Without Project	Project Trips	Existing With Project	Existing Without Project	Project Trips	Existing With Project
3 Project Driveway / W San Jacinto Avenue						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	32	0	32	18	0	18
SBL	0	32	32	0	22	22
SBT	0	0	0	0	0	0
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	1	0	1	1	0	1
EBR	0	0	0	0	0	0
WBL	14	0	14	21	0	21
WBT	1	0	1	2	0	2
WBR	0	11	11	0	36	36
North Leg						
Approach	0	32	32	0	22	22
Departure	0	11	11	0	36	36
Total	0	43	43	0	58	58
South Leg						
Approach	32	0	32	18	0	18
Departure	14	0	14	21	0	21
Total	46	0	46	39	0	39
East Leg						
Approach	15	11	26	23	36	59
Departure	33	32	65	19	22	41
Total	48	43	91	42	58	100
West Leg						
Approach	1	0	1	1	0	1
Departure	1	0	1	2	0	2
Total	2	0	2	3	0	3
Total Approaches						
Approach	48	43	91	42	58	100
Departure	48	43	91	42	58	100
Total	96	86	182	84	116	200

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing Without Project	Project Trips	Existing With Project	Existing Without Project	Project Trips	Existing With Project
4 "A" Street / Nuevo Road						
NBL	15	0	15	7	0	7
NBT	512	52	564	263	35	298
NBR	0	0	0	3	0	3
SBL	1	0	1	2	0	2
SBT	368	18	386	283	59	342
SBR	102	0	102	57	0	57
EBL	119	0	119	62	0	62
EBT	0	0	0	0	0	0
EBR	43	0	43	11	0	11
WBL	63	0	63	13	0	13
WBT	3	0	3	2	0	2
WBR	36	0	36	13	0	13
North Leg						
Approach	471	18	489	342	59	401
Departure	667	52	719	338	35	373
Total	1,138	70	1,208	680	94	774
South Leg						
Approach	527	52	579	273	35	308
Departure	474	18	492	307	59	366
Total	1,001	70	1,071	580	94	674
East Leg						
Approach	102	0	102	28	0	28
Departure	1	0	1	5	0	5
Total	103	0	103	33	0	33
West Leg						
Approach	162	0	162	73	0	73
Departure	120	0	120	66	0	66
Total	282	0	282	139	0	139
Total Approaches						
Approach	1,262	70	1,332	716	94	810
Departure	1,262	70	1,332	716	94	810
Total	2,524	140	2,664	1,432	188	1,620

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing Without Project	Project Trips	Existing With Project	Existing Without Project	Project Trips	Existing With Project
5 "A" Street / W Metz Road						
NBL	44	3	47	31	9	40
NBT	614	12	626	240	8	248
NBR	28	0	28	27	0	27
SBL	18	0	18	31	0	31
SBT	399	4	403	372	14	386
SBR	0	14	14	5	45	50
EBL	5	40	45	2	27	29
EBT	1	0	1	0	0	0
EBR	71	8	79	25	5	30
WBL	10	0	10	14	0	14
WBT	0	0	0	0	0	0
WBR	6	0	6	16	0	16
North Leg						
Approach	417	18	435	408	59	467
Departure	625	52	677	258	35	293
Total	1,042	70	1,112	666	94	760
South Leg						
Approach	686	15	701	298	17	315
Departure	480	12	492	411	19	430
Total	1,166	27	1,193	709	36	745
East Leg						
Approach	16	0	16	30	0	30
Departure	47	0	47	58	0	58
Total	63	0	63	88	0	88
West Leg						
Approach	77	48	125	27	32	59
Departure	44	17	61	36	54	90
Total	121	65	186	63	86	149
Total Approaches						
Approach	1,196	81	1,277	763	108	871
Departure	1,196	81	1,277	763	108	871
Total	2,392	162	2,554	1,526	216	1,742

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing Without Project	Project Trips	Existing With Project	Existing Without Project	Project Trips	Existing With Project
6 "A" Street / W San Jacinto Avenue						
NBL	12	7	19	19	23	42
NBT	682	3	685	280	9	289
NBR	3	0	3	4	0	4
SBL	6	0	6	2	0	2
SBT	505	8	513	440	5	445
SBR	3	4	7	5	14	19
EBL	7	12	19	2	8	10
EBT	0	0	0	0	0	0
EBR	26	20	46	11	14	25
WBL	5	0	5	1	0	1
WBT	0	0	0	0	0	0
WBR	12	0	12	3	0	3
North Leg						
Approach	514	12	526	447	19	466
Departure	701	15	716	285	17	302
Total	1,215	27	1,242	732	36	768
South Leg						
Approach	697	10	707	303	32	335
Departure	536	28	564	452	19	471
Total	1,233	38	1,271	755	51	806
East Leg						
Approach	17	0	17	4	0	4
Departure	9	0	9	6	0	6
Total	26	0	26	10	0	10
West Leg						
Approach	33	32	65	13	22	35
Departure	15	11	26	24	37	61
Total	48	43	91	37	59	96
Total Approaches						
Approach	1,261	54	1,315	767	73	840
Departure	1,261	54	1,315	767	73	840
Total	2,522	108	2,630	1,534	146	1,680

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		AM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
1	"A" Street / Harvill Avenue					
	NBL	0	0	0	0	0
	NBT	295	18	313	0	313
	NBR	607	36	643	15	658
	SBL	121	7	128	3	131
	SBT	137	8	145	0	145
	SBR	0	0	0	0	0
	EBL	0	0	0	0	0
	EBT	0	0	0	0	0
	EBR	0	0	0	0	0
	WBL	542	33	575	44	619
	WBT	0	0	0	0	0
	WBR	231	14	245	8	253
	North Leg					
	Approach	258	15	273	3	276
	Departure	526	32	558	8	566
	Total	784	47	831	11	842
	South Leg					
	Approach	902	54	956	15	971
	Departure	679	41	720	44	764
	Total	1,581	95	1,676	59	1,735
	East Leg					
	Approach	773	47	820	52	872
	Departure	728	43	771	18	789
	Total	1,501	90	1,591	70	1,661
	West Leg					
	Approach	0	0	0	0	0
	Departure	0	0	0	0	0
	Total	0	0	0	0	0
	Total Approaches					
	Approach	1,933	116	2,049	70	2,119
	Departure	1,933	116	2,049	70	2,119
	Total	3,866	232	4,098	140	4,238

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		AM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
2	Project Driveway / W Metz Road					
	NBL	0	0	0	0	0
	NBT	0	0	0	0	0
	NBR	0	0	0	48	48
	SBL	16	1	17	0	17
	SBT	0	0	0	0	0
	SBR	0	0	0	0	0
	EBL	0	0	0	0	0
	EBT	55	3	58	0	58
	EBR	0	0	0	0	0
	WBL	0	0	0	17	17
	WBT	33	2	35	0	35
	WBR	6	0	6	0	6
	North Leg					
	Approach	16	1	17	0	17
	Departure	6	0	6	0	6
	Total	22	1	23	0	23
	South Leg					
	Approach	0	0	0	48	48
	Departure	0	0	0	17	17
	Total	0	0	0	65	65
	East Leg					
	Approach	39	2	41	17	58
	Departure	71	4	75	48	123
	Total	110	6	116	65	181
	West Leg					
	Approach	55	3	58	0	58
	Departure	33	2	35	0	35
	Total	88	5	93	0	93
	Total Approaches					
	Approach	110	6	116	65	181
	Departure	110	6	116	65	181
	Total	220	12	232	130	362

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		AM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
3	Project Driveway / W San Jacinto Avenue					
	NBL	0	0	0	0	0
	NBT	0	0	0	0	0
	NBR	32	2	34	0	34
	SBL	0	0	0	32	32
	SBT	0	0	0	0	0
	SBR	0	0	0	0	0
	EBL	0	0	0	0	0
	EBT	1	0	1	0	1
	EBR	0	0	0	0	0
	WBL	14	1	15	0	15
	WBT	1	0	1	0	1
	WBR	0	0	0	11	11
	North Leg					
	Approach	0	0	0	32	32
	Departure	0	0	0	11	11
	Total	0	0	0	43	43
	South Leg					
	Approach	32	2	34	0	34
	Departure	14	1	15	0	15
	Total	46	3	49	0	49
	East Leg					
	Approach	15	1	16	11	27
	Departure	33	2	35	32	67
	Total	48	3	51	43	94
	West Leg					
	Approach	1	0	1	0	1
	Departure	1	0	1	0	1
	Total	2	0	2	0	2
	Total Approaches					
	Approach	48	3	51	43	94
	Departure	48	3	51	43	94
	Total	96	6	102	86	188

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		AM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
4	"A" Street / Nuevo Road					
NBL		15	1	16	0	16
NBT		512	31	543	52	595
NBR		0	0	0	0	0
SBL		1	0	1	0	1
SBT		368	22	390	18	408
SBR		102	6	108	0	108
EBL		119	7	126	0	126
EBT		0	0	0	0	0
EBR		43	3	46	0	46
WBL		63	4	67	0	67
WBT		3	0	3	0	3
WBR		36	2	38	0	38
North Leg						
	Approach	471	28	499	18	517
	Departure	667	40	707	52	759
	Total	1,138	68	1,206	70	1,276
South Leg						
	Approach	527	32	559	52	611
	Departure	474	29	503	18	521
	Total	1,001	61	1,062	70	1,132
East Leg						
	Approach	102	6	108	0	108
	Departure	1	0	1	0	1
	Total	103	6	109	0	109
West Leg						
	Approach	162	10	172	0	172
	Departure	120	7	127	0	127
	Total	282	17	299	0	299
Total Approaches						
	Approach	1,262	76	1,338	70	1,408
	Departure	1,262	76	1,338	70	1,408
	Total	2,524	152	2,676	140	2,816

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		AM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
5	"A" Street / W Metz Road					
NBL		44	3	47	3	50
NBT		614	37	651	12	663
NBR		28	2	30	0	30
SBL		18	1	19	0	19
SBT		399	24	423	4	427
SBR		0	0	0	14	14
EBL		5	0	5	40	45
EBT		1	0	1	0	1
EBR		71	4	75	8	83
WBL		10	1	11	0	11
WBT		0	0	0	0	0
WBR		6	0	6	0	6
North Leg						
	Approach	417	25	442	18	460
	Departure	625	37	662	52	714
	Total	1,042	62	1,104	70	1,174
South Leg						
	Approach	686	42	728	15	743
	Departure	480	29	509	12	521
	Total	1,166	71	1,237	27	1,264
East Leg						
	Approach	16	1	17	0	17
	Departure	47	3	50	0	50
	Total	63	4	67	0	67
West Leg						
	Approach	77	4	81	48	129
	Departure	44	3	47	17	64
	Total	121	7	128	65	193
Total Approaches						
	Approach	1,196	72	1,268	81	1,349
	Departure	1,196	72	1,268	81	1,349
	Total	2,392	144	2,536	162	2,698

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		AM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
6	"A" Street / W San Jacinto Avenue					
NBL		12	1	13	7	20
NBT		682	41	723	3	726
NBR		3	0	3	0	3
SBL		6	0	6	0	6
SBT		505	30	535	8	543
SBR		3	0	3	4	7
EBL		7	0	7	12	19
EBT		0	0	0	0	0
EBR		26	2	28	20	48
WBL		5	0	5	0	5
WBT		0	0	0	0	0
WBR		12	1	13	0	13
North Leg						
	Approach	514	30	544	12	556
	Departure	701	42	743	15	758
	Total	1,215	72	1,287	27	1,314
South Leg						
	Approach	697	42	739	10	749
	Departure	536	32	568	28	596
	Total	1,233	74	1,307	38	1,345
East Leg						
	Approach	17	1	18	0	18
	Departure	9	0	9	0	9
	Total	26	1	27	0	27
West Leg						
	Approach	33	2	35	32	67
	Departure	15	1	16	11	27
	Total	48	3	51	43	94
Total Approaches						
	Approach	1,261	75	1,336	54	1,390
	Departure	1,261	75	1,336	54	1,390
	Total	2,522	150	2,672	108	2,780

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		PM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
1	"A" Street / Harvill Avenue					
	NBL	0	0	0	0	0
	NBT	164	10	174	0	174
	NBR	277	17	294	50	344
	SBL	113	7	120	9	129
	SBT	277	17	294	0	294
	SBR	0	0	0	0	0
	EBL	0	0	0	0	0
	EBT	0	0	0	0	0
	EBR	0	0	0	0	0
	WBL	224	13	237	30	267
	WBT	0	0	0	0	0
	WBR	81	5	86	5	91
	North Leg					
	Approach	390	24	414	9	423
	Departure	245	15	260	5	265
	Total	635	39	674	14	688
	South Leg					
	Approach	441	27	468	50	518
	Departure	501	30	531	30	561
	Total	942	57	999	80	1,079
	East Leg					
	Approach	305	18	323	35	358
	Departure	390	24	414	59	473
	Total	695	42	737	94	831
	West Leg					
	Approach	0	0	0	0	0
	Departure	0	0	0	0	0
	Total	0	0	0	0	0
	Total Approaches					
	Approach	1,136	69	1,205	94	1,299
	Departure	1,136	69	1,205	94	1,299
	Total	2,272	138	2,410	188	2,598

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		PM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
2	Project Driveway / W Metz Road					
	NBL	0	0	0	0	0
	NBT	0	0	0	0	0
	NBR	0	0	0	32	32
	SBL	5	0	5	0	5
	SBT	0	0	0	0	0
	SBR	1	0	1	0	1
	EBL	0	0	0	0	0
	EBT	23	1	24	0	24
	EBR	0	0	0	0	0
	WBL	0	0	0	54	54
	WBT	34	2	36	0	36
	WBR	4	0	4	0	4
	North Leg					
	Approach	6	0	6	0	6
	Departure	4	0	4	0	4
	Total	10	0	10	0	10
	South Leg					
	Approach	0	0	0	32	32
	Departure	0	0	0	54	54
	Total	0	0	0	86	86
	East Leg					
	Approach	38	2	40	54	94
	Departure	28	1	29	32	61
	Total	66	3	69	86	155
	West Leg					
	Approach	23	1	24	0	24
	Departure	35	2	37	0	37
	Total	58	3	61	0	61
	Total Approaches					
	Approach	67	3	70	86	156
	Departure	67	3	70	86	156
	Total	134	6	140	172	312

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		PM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
3	Project Driveway / W San Jacinto Avenue					
	NBL	0	0	0	0	0
	NBT	0	0	0	0	0
	NBR	18	1	19	0	19
	SBL	0	0	0	22	22
	SBT	0	0	0	0	0
	SBR	0	0	0	0	0
	EBL	0	0	0	0	0
	EBT	1	0	1	0	1
	EBR	0	0	0	0	0
	WBL	21	1	22	0	22
	WBT	2	0	2	0	2
	WBR	0	0	0	36	36
	North Leg					
	Approach	0	0	0	22	22
	Departure	0	0	0	36	36
	Total	0	0	0	58	58
	South Leg					
	Approach	18	1	19	0	19
	Departure	21	1	22	0	22
	Total	39	2	41	0	41
	East Leg					
	Approach	23	1	24	36	60
	Departure	19	1	20	22	42
	Total	42	2	44	58	102
	West Leg					
	Approach	1	0	1	0	1
	Departure	2	0	2	0	2
	Total	3	0	3	0	3
	Total Approaches					
	Approach	42	2	44	58	102
	Departure	42	2	44	58	102
	Total	84	4	88	116	204

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		PM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
4	"A" Street / Nuevo Road					
	NBL	7	0	7	0	7
	NBT	263	16	279	35	314
	NBR	3	0	3	0	3
	SBL	2	0	2	0	2
	SBT	283	17	300	59	359
	SBR	57	3	60	0	60
	EBL	62	4	66	0	66
	EBT	0	0	0	0	0
	EBR	11	1	12	0	12
	WBL	13	1	14	0	14
	WBT	2	0	2	0	2
	WBR	13	1	14	0	14
	North Leg					
	Approach	342	20	362	59	421
	Departure	338	21	359	35	394
	Total	680	41	721	94	815
	South Leg					
	Approach	273	16	289	35	324
	Departure	307	19	326	59	385
	Total	580	35	615	94	709
	East Leg					
	Approach	28	2	30	0	30
	Departure	5	0	5	0	5
	Total	33	2	35	0	35
	West Leg					
	Approach	73	5	78	0	78
	Departure	66	3	69	0	69
	Total	139	8	147	0	147
	Total Approaches					
	Approach	716	43	759	94	853
	Departure	716	43	759	94	853
	Total	1,432	86	1,518	188	1,706

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		PM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
5	"A" Street / W Metz Road					
NBL		31	2	33	9	42
NBT		240	14	254	8	262
NBR		27	2	29	0	29
SBL		31	2	33	0	33
SBT		372	22	394	14	408
SBR		5	0	5	45	50
EBL		2	0	2	27	29
EBT		0	0	0	0	0
EBR		25	2	27	5	32
WBL		14	1	15	0	15
WBT		0	0	0	0	0
WBR		16	1	17	0	17
North Leg						
	Approach	408	24	432	59	491
	Departure	258	15	273	35	308
	Total	666	39	705	94	799
South Leg						
	Approach	298	18	316	17	333
	Departure	411	25	436	19	455
	Total	709	43	752	36	788
East Leg						
	Approach	30	2	32	0	32
	Departure	58	4	62	0	62
	Total	88	6	94	0	94
West Leg						
	Approach	27	2	29	32	61
	Departure	36	2	38	54	92
	Total	63	4	67	86	153
Total Approaches						
	Approach	763	46	809	108	917
	Departure	763	46	809	108	917
	Total	1,526	92	1,618	216	1,834

Table C-2 - Proj Comp Year (2021) Peak Hour PCE Volume Summary

		PM Peak Hour				
		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	OY With Project
6	"A" Street / W San Jacinto Avenue					
NBL		19	1	20	23	43
NBT		280	17	297	9	306
NBR		4	0	4	0	4
SBL		2	0	2	0	2
SBT		440	26	466	5	471
SBR		5	0	5	14	19
EBL		2	0	2	8	10
EBT		0	0	0	0	0
EBR		11	1	12	14	26
WBL		1	0	1	0	1
WBT		0	0	0	0	0
WBR		3	0	3	0	3
North Leg						
	Approach	447	26	473	19	492
	Departure	285	17	302	17	319
	Total	732	43	775	36	811
South Leg						
	Approach	303	18	321	32	353
	Departure	452	27	479	19	498
	Total	755	45	800	51	851
East Leg						
	Approach	4	0	4	0	4
	Departure	6	0	6	0	6
	Total	10	0	10	0	10
West Leg						
	Approach	13	1	14	22	36
	Departure	24	1	25	37	62
	Total	37	2	39	59	98
Total Approaches						
	Approach	767	45	812	73	885
	Departure	767	45	812	73	885
	Total	1,534	90	1,624	146	1,770

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
1 "A" Street / Harvill Avenue					
NBL	0	0	0	0	0
NBT	313	47	360	0	360
NBR	643	112	755	15	770
SBL	128	4	132	3	135
SBT	145	28	173	0	173
SBR	0	0	0	0	0
EBL	0	0	0	0	0
EBT	0	0	0	0	0
EBR	0	0	0	0	0
WBL	575	194	769	44	813
WBT	0	0	0	0	0
WBR	245	14	259	8	267
North Leg					
Approach	273	32	305	3	308
Departure	558	61	619	8	627
Total	831	93	924	11	935
South Leg					
Approach	956	159	1,115	15	1,130
Departure	720	222	942	44	986
Total	1,676	381	2,057	59	2,116
East Leg					
Approach	820	208	1,028	52	1,080
Departure	771	116	887	18	905
Total	1,591	324	1,915	70	1,985
West Leg					
Approach	0	0	0	0	0
Departure	0	0	0	0	0
Total	0	0	0	0	0
Total Approaches					
Approach	2,049	399	2,448	70	2,518
Departure	2,049	399	2,448	70	2,518
Total	4,098	798	4,896	140	5,036

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
2 Project Driveway / W Metz Road					
NBL	0	0	0	0	0
NBT	0	0	0	0	0
NBR	0	0	0	48	48
SBL	17	5	22	0	22
SBT	0	0	0	0	0
SBR	0	0	0	0	0
EBL	0	0	0	0	0
EBT	58	16	74	0	74
EBR	0	0	0	0	0
WBL	0	0	0	17	17
WBT	35	5	40	0	40
WBR	6	2	8	0	8
North Leg					
Approach	17	5	22	0	22
Departure	6	2	8	0	8
Total	23	7	30	0	30
South Leg					
Approach	0	0	0	48	48
Departure	0	0	0	17	17
Total	0	0	0	65	65
East Leg					
Approach	41	7	48	17	65
Departure	75	21	96	48	144
Total	116	28	144	65	209
West Leg					
Approach	58	16	74	0	74
Departure	35	5	40	0	40
Total	93	21	114	0	114
Total Approaches					
Approach	116	28	144	65	209
Departure	116	28	144	65	209
Total	232	56	288	130	418

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
3 Project Driveway / W San Jacinto Avenue					
NBL	0	0	0	0	0
NBT	0	0	0	0	0
NBR	34	0	34	0	34
SBL	0	0	0	32	32
SBT	0	0	0	0	0
SBR	0	0	0	0	0
EBL	0	0	0	0	0
EBT	1	0	1	0	1
EBR	0	0	0	0	0
WBL	15	0	15	0	15
WBT	1	0	1	0	1
WBR	0	0	0	11	11
North Leg					
Approach	0	0	0	32	32
Departure	0	0	0	11	11
Total	0	0	0	43	43
South Leg					
Approach	34	0	34	0	34
Departure	15	0	15	0	15
Total	49	0	49	0	49
East Leg					
Approach	16	0	16	11	27
Departure	35	0	35	32	67
Total	51	0	51	43	94
West Leg					
Approach	1	0	1	0	1
Departure	1	0	1	0	1
Total	2	0	2	0	2
Total Approaches					
Approach	51	0	51	43	94
Departure	51	0	51	43	94
Total	102	0	102	86	188

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
4 "A" Street / Nuevo Road					
NBL	16	2	18	0	18
NBT	543	174	717	52	769
NBR	0	0	0	0	0
SBL	1	0	1	0	1
SBT	390	104	494	18	512
SBR	108	11	119	0	119
EBL	126	33	159	0	159
EBT	0	0	0	0	0
EBR	46	6	52	0	52
WBL	67	0	67	0	67
WBT	3	0	3	0	3
WBR	38	0	38	0	38
North Leg					
Approach	499	115	614	18	632
Departure	707	207	914	52	966
Total	1,206	322	1,528	70	1,598
South Leg					
Approach	559	176	735	52	787
Departure	503	110	613	18	631
Total	1,062	286	1,348	70	1,418
East Leg					
Approach	108	0	108	0	108
Departure	1	0	1	0	1
Total	109	0	109	0	109
West Leg					
Approach	172	39	211	0	211
Departure	127	13	140	0	140
Total	299	52	351	0	351
Total Approaches					
Approach	1,338	330	1,668	70	1,738
Departure	1,338	330	1,668	70	1,738
Total	2,676	660	3,336	140	3,476

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
5 "A" Street / W Metz Road					
NBL	47	7	54	3	57
NBT	651	94	745	12	757
NBR	30	0	30	0	30
SBL	19	0	19	0	19
SBT	423	166	589	4	593
SBR	0	0	0	14	14
EBL	5	0	5	40	45
EBT	1	0	1	0	1
EBR	75	21	96	8	104
WBL	11	0	11	0	11
WBT	0	0	0	0	0
WBR	6	0	6	0	6
North Leg					
Approach	442	166	608	18	626
Departure	662	94	756	52	808
Total	1,104	260	1,364	70	1,434
South Leg					
Approach	728	101	829	15	844
Departure	509	187	696	12	708
Total	1,237	288	1,525	27	1,552
East Leg					
Approach	17	0	17	0	17
Departure	50	0	50	0	50
Total	67	0	67	0	67
West Leg					
Approach	81	21	102	48	150
Departure	47	7	54	17	71
Total	128	28	156	65	221
Total Approaches					
Approach	1,268	288	1,556	81	1,637
Departure	1,268	288	1,556	81	1,637
Total	2,536	576	3,112	162	3,274

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
6 "A" Street / W San Jacinto Avenue					
NBL	13	0	13	7	20
NBT	723	101	824	3	827
NBR	3	0	3	0	3
SBL	6	0	6	0	6
SBT	535	187	722	8	730
SBR	3	0	3	4	7
EBL	7	0	7	12	19
EBT	0	0	0	0	0
EBR	28	0	28	20	48
WBL	5	0	5	0	5
WBT	0	0	0	0	0
WBR	13	0	13	0	13
North Leg					
Approach	544	187	731	12	743
Departure	743	101	844	15	859
Total	1,287	288	1,575	27	1,602
South Leg					
Approach	739	101	840	10	850
Departure	568	187	755	28	783
Total	1,307	288	1,595	38	1,633
East Leg					
Approach	18	0	18	0	18
Departure	9	0	9	0	9
Total	27	0	27	0	27
West Leg					
Approach	35	0	35	32	67
Departure	16	0	16	11	27
Total	51	0	51	43	94
Total Approaches					
Approach	1,336	288	1,624	54	1,678
Departure	1,336	288	1,624	54	1,678
Total	2,672	576	3,248	108	3,356

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	PM Peak Hour				
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Cumulative With Project
1 "A" Street / Harvill Avenue					
NBL	0	0	0	0	0
NBT	174	41	215	0	215
NBR	294	217	511	50	561
SBL	120	15	135	9	144
SBT	294	53	347	0	347
SBR	0	0	0	0	0
EBL	0	0	0	0	0
EBT	0	0	0	0	0
EBR	0	0	0	0	0
WBL	237	168	405	30	435
WBT	0	0	0	0	0
WBR	86	8	94	5	99
North Leg					
Approach	414	68	482	9	491
Departure	260	49	309	5	314
Total	674	117	791	14	805
South Leg					
Approach	468	258	726	50	776
Departure	531	221	752	30	782
Total	999	479	1,478	80	1,558
East Leg					
Approach	323	176	499	35	534
Departure	414	232	646	59	705
Total	737	408	1,145	94	1,239
West Leg					
Approach	0	0	0	0	0
Departure	0	0	0	0	0
Total	0	0	0	0	0
Total Approaches					
Approach	1,205	502	1,707	94	1,801
Departure	1,205	502	1,707	94	1,801
Total	2,410	1,004	3,414	188	3,602

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	PM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
2 Project Driveway / W Metz Road					
NBL	0	0	0	0	0
NBT	0	0	0	0	0
NBR	0	0	0	32	32
SBL	5	3	8	0	8
SBT	0	0	0	0	0
SBR	1	0	1	0	1
EBL	0	0	0	0	0
EBT	24	11	35	0	35
EBR	0	0	0	0	0
WBL	0	0	0	54	54
WBT	36	17	53	0	53
WBR	4	6	10	0	10
North Leg					
Approach	6	3	9	0	9
Departure	4	6	10	0	10
Total	10	9	19	0	19
South Leg					
Approach	0	0	0	32	32
Departure	0	0	0	54	54
Total	0	0	0	86	86
East Leg					
Approach	40	23	63	54	117
Departure	29	14	43	32	75
Total	69	37	106	86	192
West Leg					
Approach	24	11	35	0	35
Departure	37	17	54	0	54
Total	61	28	89	0	89
Total Approaches					
Approach	70	37	107	86	193
Departure	70	37	107	86	193
Total	140	74	214	172	386

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	PM Peak Hour				
	Opening	Cumulative	Cumulative	Project	Cumulative
	Year	Project	Without	Trips	With
	2021	Trips	Project		Project
3 Project Driveway / W San Jacinto Avenue					
NBL	0	0	0	0	0
NBT	0	0	0	0	0
NBR	19	0	19	0	19
SBL	0	0	0	22	22
SBT	0	0	0	0	0
SBR	0	0	0	0	0
EBL	0	0	0	0	0
EBT	1	0	1	0	1
EBR	0	0	0	0	0
WBL	22	0	22	0	22
WBT	2	0	2	0	2
WBR	0	0	0	36	36
North Leg					
Approach	0	0	0	22	22
Departure	0	0	0	36	36
Total	0	0	0	58	58
South Leg					
Approach	19	0	19	0	19
Departure	22	0	22	0	22
Total	41	0	41	0	41
East Leg					
Approach	24	0	24	36	60
Departure	20	0	20	22	42
Total	44	0	44	58	102
West Leg					
Approach	1	0	1	0	1
Departure	2	0	2	0	2
Total	3	0	3	0	3
Total Approaches					
Approach	44	0	44	58	102
Departure	44	0	44	58	102
Total	88	0	88	116	204

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	PM Peak Hour				
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Cumulative With Project
4 "A" Street / Nuevo Road					
NBL	7	7	14	0	14
NBT	279	154	433	35	468
NBR	3	0	3	0	3
SBL	2	0	2	0	2
SBT	300	194	494	59	553
SBR	60	37	97	0	97
EBL	66	21	87	0	87
EBT	0	0	0	0	0
EBR	12	4	16	0	16
WBL	14	0	14	0	14
WBT	2	0	2	0	2
WBR	14	0	14	0	14
North Leg					
Approach	362	231	593	59	652
Departure	359	175	534	35	569
Total	721	406	1,127	94	1,221
South Leg					
Approach	289	161	450	35	485
Departure	326	198	524	59	583
Total	615	359	974	94	1,068
East Leg					
Approach	30	0	30	0	30
Departure	5	0	5	0	5
Total	35	0	35	0	35
West Leg					
Approach	78	25	103	0	103
Departure	69	44	113	0	113
Total	147	69	216	0	216
Total Approaches					
Approach	759	417	1,176	94	1,270
Departure	759	417	1,176	94	1,270
Total	1,518	834	2,352	188	2,540

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	PM Peak Hour				
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Cumulative With Project
5 "A" Street / W Metz Road					
NBL	33	23	56	9	65
NBT	254	187	441	8	449
NBR	29	0	29	0	29
SBL	33	0	33	0	33
SBT	394	138	532	14	546
SBR	5	0	5	45	50
EBL	2	0	2	27	29
EBT	0	0	0	0	0
EBR	27	14	41	5	46
WBL	15	0	15	0	15
WBT	0	0	0	0	0
WBR	17	0	17	0	17
North Leg					
Approach	432	138	570	59	629
Departure	273	187	460	35	495
Total	705	325	1,030	94	1,124
South Leg					
Approach	316	210	526	17	543
Departure	436	152	588	19	607
Total	752	362	1,114	36	1,150
East Leg					
Approach	32	0	32	0	32
Departure	62	0	62	0	62
Total	94	0	94	0	94
West Leg					
Approach	29	14	43	32	75
Departure	38	23	61	54	115
Total	67	37	104	86	190
Total Approaches					
Approach	809	362	1,171	108	1,279
Departure	809	362	1,171	108	1,279
Total	1,618	724	2,342	216	2,558

Table C-3 - Cumulative (2021) Peak Hour PCE Volume Summary

	PM Peak Hour				
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Cumulative With Project
6 "A" Street / W San Jacinto Avenue					
NBL	20	0	20	23	43
NBT	297	210	507	9	516
NBR	4	0	4	0	4
SBL	2	0	2	0	2
SBT	466	152	618	5	623
SBR	5	0	5	14	19
EBL	2	0	2	8	10
EBT	0	0	0	0	0
EBR	12	0	12	14	26
WBL	1	0	1	0	1
WBT	0	0	0	0	0
WBR	3	0	3	0	3
North Leg					
Approach	473	152	625	19	644
Departure	302	210	512	17	529
Total	775	362	1,137	36	1,173
South Leg					
Approach	321	210	531	32	563
Departure	479	152	631	19	650
Total	800	362	1,162	51	1,213
East Leg					
Approach	4	0	4	0	4
Departure	6	0	6	0	6
Total	10	0	10	0	10
West Leg					
Approach	14	0	14	22	36
Departure	25	0	25	37	62
Total	39	0	39	59	98
Total Approaches					
Approach	812	362	1,174	73	1,247
Departure	812	362	1,174	73	1,247
Total	1,624	724	2,348	146	2,494

APPENDIX D:

LEVEL OF SERVICE WORKSHEETS

Intersection	
Intersection Delay, s/veh	137.6
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑↑		↑↑		↑	↑↑
Traffic Vol, veh/h	542	231	295	607	121	137
Future Vol, veh/h	542	231	295	607	121	137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	589	251	321	660	132	149
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	57.4	241.1	15.9
HCM LOS	F	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	44%	100%	0%	0%
Vol Thru, %	100%	14%	0%	0%	0%	100%	100%
Vol Right, %	0%	86%	0%	56%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	197	705	361	412	121	69	69
LT Vol	0	0	361	181	121	0	0
Through Vol	197	98	0	0	0	69	69
RT Vol	0	607	0	231	0	0	0
Lane Flow Rate	214	767	393	447	132	74	74
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.486	1.609	0.901	0.944	0.346	0.186	0.15
Departure Headway (Hd)	8.178	7.555	9.167	8.48	10.435	9.913	8.14
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	440	483	397	430	347	364	443
Service Time	5.95	5.327	6.867	6.18	8.135	7.613	5.84
HCM Lane V/C Ratio	0.486	1.588	0.99	1.04	0.38	0.203	0.167
HCM Control Delay	18.5	303.2	54.5	59.9	18.6	14.9	12.3
HCM Lane LOS	C	F	F	F	C	B	B
HCM 95th-tile Q	2.6	42.6	9.3	10.9	1.5	0.7	0.5

HCM 6th TWSC
2: W Metz Road & McKimball Road

TTM37803
Existing (2019) without Project - AM Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	0	55	33	6	16	0
Future Vol, veh/h	0	55	33	6	16	0
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	73	44	8	21	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	57	0	0	126	53
Stage 1	-	-	-	53	-
Stage 2	-	-	-	73	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	1560	-	-	874	1020
Stage 1	-	-	-	975	-
Stage 2	-	-	-	955	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1553	-	-	865	1015
Mov Cap-2 Maneuver	-	-	-	865	-
Stage 1	-	-	-	970	-
Stage 2	-	-	-	950	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1553	-	-	-	865
HCM Lane V/C Ratio	-	-	-	-	0.025
HCM Control Delay (s)	0	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 6th TWSC
3: Jazz Lane & W San Jacinto Avenue

TTM37803
Existing (2019) without Project - AM Peak Hour

Intersection						
Int Delay, s/veh	7.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	14	1	0	32
Future Vol, veh/h	1	0	14	1	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	18	1	0	40

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1	0	38
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	37
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1635	-	979
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	991
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1635	-	968
Mov Cap-2 Maneuver	-	-	-	-	968
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	980

Approach	EB	WB	NB
HCM Control Delay, s	0	6.7	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.037	-	-	0.011	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	36.4
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	119	0	43	63	3	36	15	512	0	1	368	102
Future Vol, veh/h	119	0	43	63	3	36	15	512	0	1	368	102
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	149	0	54	79	4	45	19	640	0	1	460	128
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	19	15.4	40.6	42.2
HCM LOS	C	C	E	E

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	8%	0%	73%	62%	100%	0%	0%
Vol Thru, %	92%	100%	0%	3%	0%	100%	0%
Vol Right, %	0%	0%	27%	35%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	186	341	162	102	1	368	102
LT Vol	15	0	119	63	1	0	0
Through Vol	171	341	0	3	0	368	0
RT Vol	0	0	43	36	0	0	102
Lane Flow Rate	232	427	202	128	1	460	128
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.504	0.922	0.48	0.31	0.003	0.925	0.231
Departure Headway (Hd)	7.82	7.778	8.541	8.741	7.755	7.242	6.523
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	460	465	421	409	460	501	548
Service Time	5.598	5.557	6.316	6.524	5.525	5.011	4.291
HCM Lane V/C Ratio	0.504	0.918	0.48	0.313	0.002	0.918	0.234
HCM Control Delay	18.4	52.7	19	15.4	10.5	50.8	11.3
HCM Lane LOS	C	F	C	C	B	F	B
HCM 95th-tile Q	2.8	10.5	2.5	1.3	0	11	0.9

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Existing (2019) without Project - AM Peak Hour

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	1	71	10	0	6	44	614	28	18	399	0
Future Vol, veh/h	5	1	71	10	0	6	44	614	28	18	399	0
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	1	87	12	0	7	54	749	34	22	487	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1409	1426	488	1454	1409	770	487	0	0	787	0	0
Stage 1	531	531	-	878	878	-	-	-	-	-	-	-
Stage 2	878	895	-	576	531	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	117	137	584	109	140	404	1086	-	-	841	-	-
Stage 1	536	529	-	345	368	-	-	-	-	-	-	-
Stage 2	345	362	-	506	529	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	104	120	583	83	123	402	1086	-	-	838	-	-
Mov Cap-2 Maneuver	104	120	-	83	123	-	-	-	-	-	-	-
Stage 1	488	510	-	313	334	-	-	-	-	-	-	-
Stage 2	309	328	-	414	510	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.6		41.5		0.5		0.4	
HCM LOS	C		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1086	-	-	432	118	838	-	-
HCM Lane V/C Ratio	0.049	-	-	0.217	0.165	0.026	-	-
HCM Control Delay (s)	8.5	0	-	15.6	41.5	9.4	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.6	0.1	-	-

HCM 6th TWSC
6: A Street & W San Jacinto Avenue

TTM37803
Existing (2019) without Project - AM Peak Hour





Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	7	0	26	5	0	12	12	682	3	6	505	3
Future Vol, veh/h	7	0	26	5	0	12	12	682	3	6	505	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	0	32	6	0	15	15	842	4	7	623	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1519	1516	623	1532	1518	847	627	0	0	849	0	0
Stage 1	637	637	-	877	877	-	-	-	-	-	-	-
Stage 2	882	879	-	655	641	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	98	121	490	96	120	365	965	-	-	798	-	-
Stage 1	469	475	-	346	369	-	-	-	-	-	-	-
Stage 2	344	368	-	458	473	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	91	116	490	87	115	364	965	-	-	796	-	-
Mov Cap-2 Maneuver	91	116	-	87	115	-	-	-	-	-	-	-
Stage 1	455	468	-	335	357	-	-	-	-	-	-	-
Stage 2	320	356	-	422	466	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	21.9		26.5		0.2		0.1	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	965	-	-	254	188	796	-	-
HCM Lane V/C Ratio	0.015	-	-	0.16	0.112	0.009	-	-
HCM Control Delay (s)	8.8	0	-	21.9	26.5	9.6	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	13.4
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	224	81	164	277	113	277
Future Vol, veh/h	224	81	164	277	113	277
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	233	84	171	289	118	289
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	13.2	15.5	11.1
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	48%	100%	0%	0%
Vol Thru, %	100%	16%	0%	0%	0%	100%	100%
Vol Right, %	0%	84%	0%	52%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	109	332	149	156	113	139	139
LT Vol	0	0	149	75	113	0	0
Through Vol	109	55	0	0	0	139	139
RT Vol	0	277	0	81	0	0	0
Lane Flow Rate	114	345	156	162	118	144	144
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.21	0.579	0.323	0.308	0.238	0.271	0.202
Departure Headway (Hd)	6.631	6.036	7.467	6.837	7.273	6.764	5.034
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	539	594	479	522	491	528	705
Service Time	4.411	3.816	5.25	4.619	5.057	4.548	2.817
HCM Lane V/C Ratio	0.212	0.581	0.326	0.31	0.24	0.273	0.204
HCM Control Delay	11.2	16.9	13.8	12.7	12.3	12.1	9.1
HCM Lane LOS	B	C	B	B	B	B	A
HCM 95th-tile Q	0.8	3.7	1.4	1.3	0.9	1.1	0.8

HCM 6th TWSC
2: W Metz Road & McKimball Road

TTM37803
Existing (2019) without Project - PM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	0	23	34	4	5	1
Future Vol, veh/h	0	23	34	4	5	1
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	32	47	5	7	1

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	53	0	0	83	51
Stage 1	-	-	-	51	-
Stage 2	-	-	-	32	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	1566	-	-	924	1023
Stage 1	-	-	-	977	-
Stage 2	-	-	-	996	-
Platoon blocked, %		-	-		
Mov Cap-1 Maneuver	1565	-	-	922	1022
Mov Cap-2 Maneuver	-	-	-	922	-
Stage 1	-	-	-	976	-
Stage 2	-	-	-	995	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1565	-	-	-	937
HCM Lane V/C Ratio	-	-	-	-	0.009
HCM Control Delay (s)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC
3: Jazz Lane & W San Jacinto Avenue

TTM37803
Existing (2019) without Project - PM Peak Hour

Intersection						
Int Delay, s/veh	7.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	21	2	0	18
Future Vol, veh/h	1	0	21	2	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	24	2	0	20

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1	0	51
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	50
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1635	-	963
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	978
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1635	-	949
Mov Cap-2 Maneuver	-	-	-	-	949
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	963

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.019	-	-	0.015	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	62	0	11	13	2	13	7	263	3	2	283	57
Future Vol, veh/h	62	0	11	13	2	13	7	263	3	2	283	57
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	68	0	12	14	2	14	8	289	3	2	311	63
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	10.3	9.3	10.2	11.2
HCM LOS	B	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	5%	0%	85%	46%	100%	0%	0%
Vol Thru, %	95%	98%	0%	7%	0%	100%	0%
Vol Right, %	0%	2%	15%	46%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	139	135	73	28	2	283	57
LT Vol	7	0	62	13	2	0	0
Through Vol	132	132	0	2	0	283	0
RT Vol	0	3	11	13	0	0	57
Lane Flow Rate	152	148	80	31	2	311	63
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.238	0.23	0.145	0.053	0.003	0.445	0.077
Departure Headway (Hd)	5.638	5.597	6.506	6.203	5.655	5.152	4.448
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	632	636	554	581	629	694	798
Service Time	3.425	3.384	4.206	3.905	3.425	2.921	2.216
HCM Lane V/C Ratio	0.241	0.233	0.144	0.053	0.003	0.448	0.079
HCM Control Delay	10.2	10.1	10.3	9.3	8.4	12	7.6
HCM Lane LOS	B	B	B	A	A	B	A
HCM 95th-tile Q	0.9	0.9	0.5	0.2	0	2.3	0.2

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Existing (2019) without Project - PM Peak Hour

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	25	14	0	16	31	240	27	31	372	5
Future Vol, veh/h	2	0	25	14	0	16	31	240	27	31	372	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	27	15	0	17	34	261	29	34	404	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	827	835	407	834	823	278	409	0	0	292	0	0
Stage 1	475	475	-	346	346	-	-	-	-	-	-	-
Stage 2	352	360	-	488	477	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	293	306	648	290	311	766	1161	-	-	1281	-	-
Stage 1	574	561	-	674	639	-	-	-	-	-	-	-
Stage 2	669	630	-	565	559	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	272	285	648	263	289	765	1161	-	-	1279	-	-
Mov Cap-2 Maneuver	272	285	-	263	289	-	-	-	-	-	-	-
Stage 1	554	542	-	649	615	-	-	-	-	-	-	-
Stage 2	631	607	-	523	540	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.4		14.7		0.9		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1161	-	-	588	405	1279	-	-
HCM Lane V/C Ratio	0.029	-	-	0.05	0.081	0.026	-	-
HCM Control Delay (s)	8.2	0	-	11.4	14.7	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	0.1	-	-

HCM 6th AWSC
6: A Street & W San Jacinto Avenue

TTM37803
Existing (2019) without Project - PM Peak Hour

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	2	0	11	1	0	3	19	280	4	2	440	5
Future Vol, veh/h	2	0	11	1	0	3	19	280	4	2	440	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	12	1	0	3	21	311	4	2	489	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8.4	8.5	11	15.6
HCM LOS	A	A	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	6%	15%	25%	0%	0%
Vol Thru, %	92%	0%	0%	100%	0%
Vol Right, %	1%	85%	75%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	303	13	4	442	5
LT Vol	19	2	1	2	0
Through Vol	280	0	0	440	0
RT Vol	4	11	3	0	5
Lane Flow Rate	337	14	4	491	6
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.429	0.021	0.007	0.641	0.006
Departure Headway (Hd)	4.588	5.296	5.395	4.7	3.996
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	788	676	664	756	880
Service Time	2.595	3.324	3.424	2.497	1.792
HCM Lane V/C Ratio	0.428	0.021	0.006	0.649	0.007
HCM Control Delay	11	8.4	8.5	15.7	6.8
HCM Lane LOS	B	A	A	C	A
HCM 95th-tile Q	2.2	0.1	0	4.7	0

HCM 6th AWSC
1: Harvill Avenue & A Street

TTM37803
Existing (2019) with Project - AM Peak Hour

Intersection	
Intersection Delay, s/veh	148.9
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	586	239	295	622	124	137
Future Vol, veh/h	586	239	295	622	124	137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	637	260	321	676	135	149
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	72.3	255.5	16.3
HCM LOS	F	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	45%	100%	0%	0%
Vol Thru, %	100%	14%	0%	0%	0%	100%	100%
Vol Right, %	0%	86%	0%	55%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	197	720	391	434	124	69	69
LT Vol	0	0	391	195	124	0	0
Through Vol	197	98	0	0	0	69	69
RT Vol	0	622	0	239	0	0	0
Lane Flow Rate	214	783	425	472	135	74	74
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.485	1.647	0.978	1.001	0.359	0.188	0.153
Departure Headway (Hd)	8.377	7.751	9.239	8.565	10.595	10.074	8.3
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	434	478	395	430	342	358	435
Service Time	6.077	5.451	6.939	6.265	8.295	7.774	6
HCM Lane V/C Ratio	0.493	1.638	1.076	1.098	0.395	0.207	0.17
HCM Control Delay	18.7	320.2	70.9	73.6	19.1	15.1	12.5
HCM Lane LOS	C	F	F	F	C	C	B
HCM 95th-tile Q	2.6	44.1	11.4	12.6	1.6	0.7	0.5

HCM 6th TWSC
 2: Project Driveway 1/McKimball Road & W Metz Road

TTM37803
 Existing (2019) with Project - AM Peak Hour

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	55	0	17	33	6	0	0	48	16	0	0
Future Vol, veh/h	0	55	0	17	33	6	0	0	48	16	0	0
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	55	0	17	33	6	0	0	48	16	0	0

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	44	0	0	55	0	0	125	133	55	154	130	41
Stage 1	-	-	-	-	-	-	55	55	-	75	75	-
Stage 2	-	-	-	-	-	-	70	78	-	79	55	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1577	-	-	1563	-	-	854	761	1018	817	764	1036
Stage 1	-	-	-	-	-	-	962	853	-	939	836	-
Stage 2	-	-	-	-	-	-	945	834	-	935	853	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1569	-	-	1563	-	-	847	749	1018	768	752	1031
Mov Cap-2 Maneuver	-	-	-	-	-	-	847	749	-	768	752	-
Stage 1	-	-	-	-	-	-	962	853	-	934	823	-
Stage 2	-	-	-	-	-	-	935	821	-	891	853	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		2.2		8.7		9.8	
HCM LOS					A		A	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1018	1569	-	-	1563	-	-	768
HCM Lane V/C Ratio	0.047	-	-	-	0.011	-	-	0.021
HCM Control Delay (s)	8.7	0	-	-	7.3	0	-	9.8
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection

Int Delay, s/veh 7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	14	1	11	0	0	32	32	0	0
Future Vol, veh/h	0	1	0	14	1	11	0	0	32	32	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	0	14	1	11	0	0	32	32	0	0

Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	12	0	0	1	0	0	36	41	1	52	36	7
Stage 1	-	-	-	-	-	-	1	1	-	35	35	-
Stage 2	-	-	-	-	-	-	35	40	-	17	1	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1620	-	-	1635	-	-	975	855	1090	952	860	1081
Stage 1	-	-	-	-	-	-	1027	899	-	986	870	-
Stage 2	-	-	-	-	-	-	986	866	-	1008	899	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1620	-	-	1635	-	-	968	847	1090	918	852	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	968	847	-	918	852	-
Stage 1	-	-	-	-	-	-	1027	899	-	986	862	-
Stage 2	-	-	-	-	-	-	977	858	-	978	899	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	0		3.9			8.4			9.1		
HCM LOS						A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1620	-	-	1635	-	-	918
HCM Lane V/C Ratio	0.029	-	-	-	0.009	-	-	0.035
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	47.4
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	119	0	43	63	3	36	15	564	0	1	386	102
Future Vol, veh/h	119	0	43	63	3	36	15	564	0	1	386	102
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	149	0	54	79	4	45	19	705	0	1	483	128
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	19.4	15.7	58.7	49.8
HCM LOS	C	C	F	E

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	7%	0%	73%	62%	100%	0%	0%
Vol Thru, %	93%	100%	0%	3%	0%	100%	0%
Vol Right, %	0%	0%	27%	35%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	203	376	162	102	1	386	102
LT Vol	15	0	119	63	1	0	0
Through Vol	188	376	0	3	0	386	0
RT Vol	0	0	43	36	0	0	102
Lane Flow Rate	254	470	202	128	1	482	128
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.561	1.034	0.481	0.31	0.003	0.967	0.23
Departure Headway (Hd)	7.956	7.918	8.787	9.004	7.95	7.436	6.716
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	457	461	413	402	453	492	538
Service Time	5.656	5.618	6.487	6.704	5.65	5.136	4.416
HCM Lane V/C Ratio	0.556	1.02	0.489	0.318	0.002	0.98	0.238
HCM Control Delay	20.3	79.4	19.4	15.7	10.7	60.1	11.4
HCM Lane LOS	C	F	C	C	B	F	B
HCM 95th-tile Q	3.4	14.3	2.5	1.3	0	12.3	0.9

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Existing (2019) with Project - AM Peak Hour

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	1	79	10	0	6	47	626	28	18	403	14
Future Vol, veh/h	45	1	79	10	0	6	47	626	28	18	403	14
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	1	96	12	0	7	57	763	34	22	491	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1442	1459	501	1491	1450	784	508	0	0	801	0	0
Stage 1	544	544	-	898	898	-	-	-	-	-	-	-
Stage 2	898	915	-	593	552	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	111	131	574	103	132	396	1067	-	-	831	-	-
Stage 1	527	522	-	337	361	-	-	-	-	-	-	-
Stage 2	337	354	-	496	518	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	98	113	573	76	114	394	1067	-	-	828	-	-
Mov Cap-2 Maneuver	98	113	-	76	114	-	-	-	-	-	-	-
Stage 1	476	503	-	303	325	-	-	-	-	-	-	-
Stage 2	299	318	-	396	499	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	60.1		45.1		0.6		0.4	
HCM LOS	F		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1067	-	-	206	109	828	-	-
HCM Lane V/C Ratio	0.054	-	-	0.74	0.179	0.027	-	-
HCM Control Delay (s)	8.6	0	-	60.1	45.1	9.5	0	-
HCM Lane LOS	A	A	-	F	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	4.9	0.6	0.1	-	-

HCM 6th TWSC
6: A Street & W San Jacinto Avenue

TTM37803
Existing (2019) with Project - AM Peak Hour

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	19	0	46	5	0	12	19	685	3	6	513	7
Future Vol, veh/h	19	0	46	5	0	12	19	685	3	6	513	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	0	57	6	0	15	23	846	4	7	633	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1549	1546	633	1577	1553	851	642	0	0	853	0	0
Stage 1	647	647	-	897	897	-	-	-	-	-	-	-
Stage 2	902	899	-	680	656	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	94	116	483	90	114	363	952	-	-	795	-	-
Stage 1	463	470	-	337	361	-	-	-	-	-	-	-
Stage 2	335	360	-	444	465	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	86	109	483	76	107	362	952	-	-	793	-	-
Mov Cap-2 Maneuver	86	109	-	76	107	-	-	-	-	-	-	-
Stage 1	442	463	-	320	343	-	-	-	-	-	-	-
Stage 2	307	342	-	386	458	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	33.2		28.8		0.2		0.1	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	952	-	-	206	172	793	-	-
HCM Lane V/C Ratio	0.025	-	-	0.39	0.122	0.009	-	-
HCM Control Delay (s)	8.9	0	-	33.2	28.8	9.6	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.7	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↕↔		↕	↕↕
Traffic Vol, veh/h	254	86	164	327	122	277
Future Vol, veh/h	254	86	164	327	122	277
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	265	90	171	341	127	289
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	14.6	20.2	11.9
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	50%	100%	0%	0%
Vol Thru, %	100%	14%	0%	0%	0%	100%	100%
Vol Right, %	0%	86%	0%	50%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	109	382	169	171	122	139	139
LT Vol	0	0	169	85	122	0	0
Through Vol	109	55	0	0	0	139	139
RT Vol	0	327	0	86	0	0	0
Lane Flow Rate	114	398	176	178	127	144	144
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.221	0.702	0.382	0.355	0.271	0.287	0.218
Departure Headway (Hd)	6.972	6.359	7.8	7.188	7.676	7.166	5.43
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	518	573	462	501	469	502	661
Service Time	4.672	4.059	5.543	4.931	5.417	4.906	3.17
HCM Lane V/C Ratio	0.22	0.695	0.381	0.355	0.271	0.287	0.218
HCM Control Delay	11.6	22.7	15.3	13.9	13.3	12.8	9.7
HCM Lane LOS	B	C	C	B	B	B	A
HCM 95th-tile Q	0.8	5.6	1.8	1.6	1.1	1.2	0.8

HCM 6th TWSC
 2: Project Driveway 1/McKimball Road & W Metz Road

TTM37803
 Existing (2019) with Project - PM Peak Hour

Intersection												
Int Delay, s/veh	4.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	23	0	54	34	4	0	0	32	5	0	1
Future Vol, veh/h	0	23	0	54	34	4	0	0	32	5	0	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	23	0	54	34	4	0	0	32	5	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	23	0	0	168	170	23	184	168	37
Stage 1	-	-	-	-	-	-	23	23	-	145	145	-
Stage 2	-	-	-	-	-	-	145	147	-	39	23	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1584	-	-	1605	-	-	800	727	1060	781	728	1041
Stage 1	-	-	-	-	-	-	1000	880	-	863	781	-
Stage 2	-	-	-	-	-	-	863	779	-	981	880	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1582	-	-	1605	-	-	778	702	1060	737	703	1040
Mov Cap-2 Maneuver	-	-	-	-	-	-	778	702	-	737	703	-
Stage 1	-	-	-	-	-	-	1000	880	-	862	754	-
Stage 2	-	-	-	-	-	-	833	752	-	951	880	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			4.3			8.5			9.7		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1060	1582	-	-	1605	-	-	775
HCM Lane V/C Ratio	0.03	-	-	-	0.034	-	-	0.008
HCM Control Delay (s)	8.5	0	-	-	7.3	0	-	9.7
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

HCM 6th TWSC
 3: Jazz Lane/Project Driveway 2 & W San Jacinto Avenue

TTM37803
 Existing (2019) with Project - PM Peak Hour

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	21	2	36	0	0	18	22	0	0
Future Vol, veh/h	0	1	0	21	2	36	0	0	18	22	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	0	21	2	36	0	0	18	22	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	38	0	0	1	0	0	63	81	1	72	63	20
Stage 1	-	-	-	-	-	-	1	1	-	62	62	-
Stage 2	-	-	-	-	-	-	62	80	-	10	1	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1585	-	-	1635	-	-	936	813	1090	924	832	1064
Stage 1	-	-	-	-	-	-	1027	899	-	954	847	-
Stage 2	-	-	-	-	-	-	954	832	-	1016	899	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1585	-	-	1635	-	-	927	802	1090	900	821	1064
Mov Cap-2 Maneuver	-	-	-	-	-	-	927	802	-	900	821	-
Stage 1	-	-	-	-	-	-	1027	899	-	954	836	-
Stage 2	-	-	-	-	-	-	942	821	-	999	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.6	8.4	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1585	-	-	1635	-	-	900
HCM Lane V/C Ratio	0.017	-	-	-	0.013	-	-	0.024
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	62	0	11	13	2	13	7	298	3	2	342	57
Future Vol, veh/h	62	0	11	13	2	13	7	298	3	2	342	57
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	68	0	12	14	2	14	8	327	3	2	376	63
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	10.7	9.6	10.8	13.2
HCM LOS	B	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	4%	0%	85%	46%	100%	0%	0%
Vol Thru, %	96%	98%	0%	7%	0%	100%	0%
Vol Right, %	0%	2%	15%	46%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	156	152	73	28	2	342	57
LT Vol	7	0	62	13	2	0	0
Through Vol	149	149	0	2	0	342	0
RT Vol	0	3	11	13	0	0	57
Lane Flow Rate	171	167	80	31	2	376	63
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.28	0.271	0.151	0.055	0.003	0.544	0.078
Departure Headway (Hd)	5.876	5.848	6.759	6.471	5.712	5.209	4.504
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	614	618	533	555	620	684	784
Service Time	3.585	3.548	4.473	4.189	3.506	3.002	2.297
HCM Lane V/C Ratio	0.279	0.27	0.15	0.056	0.003	0.55	0.08
HCM Control Delay	10.9	10.7	10.7	9.6	8.5	14.1	7.7
HCM Lane LOS	B	B	B	A	A	B	A
HCM 95th-tile Q	1.1	1.1	0.5	0.2	0	3.3	0.3

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Existing (2019) with Project - PM Peak Hour

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	0	30	14	0	16	40	248	27	31	386	50
Future Vol, veh/h	29	0	30	14	0	16	40	248	27	31	386	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	32	0	33	15	0	17	43	270	29	34	420	54

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	894	902	447	905	915	287	474	0	0	301	0	0
Stage 1	515	515	-	373	373	-	-	-	-	-	-	-
Stage 2	379	387	-	532	542	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	264	280	616	260	275	757	1099	-	-	1272	-	-
Stage 1	546	538	-	652	622	-	-	-	-	-	-	-
Stage 2	647	613	-	535	523	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	242	256	616	230	252	756	1099	-	-	1270	-	-
Mov Cap-2 Maneuver	242	256	-	230	252	-	-	-	-	-	-	-
Stage 1	520	518	-	620	592	-	-	-	-	-	-	-
Stage 2	602	583	-	488	504	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	17.6		15.8		1.1		0.5	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1099	-	-	350	366	1270	-	-
HCM Lane V/C Ratio	0.04	-	-	0.183	0.089	0.027	-	-
HCM Control Delay (s)	8.4	0	-	17.6	15.8	7.9	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.3	0.1	-	-

HCM 6th AWSC
6: A Street & W San Jacinto Avenue

TTM37803
Existing (2019) with Project - PM Peak Hour





Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	↔
Traffic Vol, veh/h	10	0	25	1	0	3	42	289	4	2	445	19
Future Vol, veh/h	10	0	25	1	0	3	42	289	4	2	445	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	0	28	1	0	3	47	321	4	2	494	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8.9	8.7	12.1	16.8
HCM LOS	A	A	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	13%	29%	25%	0%	0%
Vol Thru, %	86%	0%	0%	100%	0%
Vol Right, %	1%	71%	75%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	335	35	4	447	19
LT Vol	42	10	1	2	0
Through Vol	289	0	0	445	0
RT Vol	4	25	3	0	19
Lane Flow Rate	372	39	4	497	21
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.486	0.06	0.007	0.674	0.025
Departure Headway (Hd)	4.698	5.517	5.565	4.887	4.181
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	767	646	638	740	855
Service Time	2.73	3.581	3.64	2.62	1.913
HCM Lane V/C Ratio	0.485	0.06	0.006	0.672	0.025
HCM Control Delay	12.1	8.9	8.7	17.2	7
HCM Lane LOS	B	A	A	C	A
HCM 95th-tile Q	2.7	0.2	0	5.3	0.1

Intersection	
Intersection Delay, s/veh	161.6
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	575	245	313	643	128	145
Future Vol, veh/h	575	245	313	643	128	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	625	266	340	699	139	158
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	73.4	278.6	16.7
HCM LOS	F	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	44%	100%	0%	0%
Vol Thru, %	100%	14%	0%	0%	0%	100%	100%
Vol Right, %	0%	86%	0%	56%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	209	747	383	437	128	73	73
LT Vol	0	0	383	192	128	0	0
Through Vol	209	104	0	0	0	73	73
RT Vol	0	643	0	245	0	0	0
Lane Flow Rate	227	812	417	475	139	79	79
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.517	1.717	0.967	1.013	0.371	0.199	0.162
Departure Headway (Hd)	8.421	7.797	9.367	8.679	10.696	10.174	8.4
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	431	471	392	422	338	355	429
Service Time	6.121	5.497	7.067	6.379	8.396	7.874	6.1
HCM Lane V/C Ratio	0.527	1.724	1.064	1.126	0.411	0.223	0.184
HCM Control Delay	19.8	350.8	68.9	77.3	19.6	15.4	12.7
HCM Lane LOS	C	F	F	F	C	C	B
HCM 95th-tile Q	2.9	47.6	11	12.9	1.7	0.7	0.6

HCM 6th TWSC
2: W Metz Road & McKimball Road

TTM37803
Opening Year (2021) without Project - AM Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	0	58	35	6	17	0
Future Vol, veh/h	0	58	35	6	17	0
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	77	47	8	23	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	60	0	-	0	133
Stage 1	-	-	-	-	56
Stage 2	-	-	-	-	77
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1556	-	-	-	866
Stage 1	-	-	-	-	972
Stage 2	-	-	-	-	951
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1549	-	-	-	857
Mov Cap-2 Maneuver	-	-	-	-	857
Stage 1	-	-	-	-	967
Stage 2	-	-	-	-	946

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1549	-	-	-	857
HCM Lane V/C Ratio	-	-	-	-	0.026
HCM Control Delay (s)	0	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 6th TWSC
3: Jazz Lane & W San Jacinto Avenue

TTM37803
Opening Year (2021) without Project - AM Peak Hour

Intersection						
Int Delay, s/veh	7.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	15	1	0	34
Future Vol, veh/h	1	0	15	1	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	19	1	0	43

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1	0	40
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	39
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1635	-	977
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	989
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1635	-	965
Mov Cap-2 Maneuver	-	-	-	-	965
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	977

Approach	EB	WB	NB
HCM Control Delay, s	0	6.8	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.039	-	-	0.011	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	49.5
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	126	0	46	67	3	38	16	543	0	1	390	108
Future Vol, veh/h	126	0	46	67	3	38	16	543	0	1	390	108
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	158	0	58	84	4	48	20	679	0	1	488	135
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	20.8	16.4	56	59.2
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	8%	0%	73%	62%	100%	0%	0%
Vol Thru, %	92%	100%	0%	3%	0%	100%	0%
Vol Right, %	0%	0%	27%	35%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	197	362	172	108	1	390	108
LT Vol	16	0	126	67	1	0	0
Through Vol	181	362	0	3	0	390	0
RT Vol	0	0	46	38	0	0	108
Lane Flow Rate	246	452	215	135	1	488	135
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.555	1.015	0.519	0.334	0.003	1.015	0.254
Departure Headway (Hd)	8.119	8.077	8.885	9.138	8.013	7.498	6.777
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	443	448	408	396	446	483	529
Service Time	5.885	5.843	6.585	6.838	5.766	5.251	4.529
HCM Lane V/C Ratio	0.555	1.009	0.527	0.341	0.002	1.01	0.255
HCM Control Delay	20.6	75.3	20.8	16.4	10.8	72.5	11.8
HCM Lane LOS	C	F	C	C	B	F	B
HCM 95th-tile Q	3.3	13.4	2.9	1.4	0	13.9	1

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	1	75	11	0	6	47	651	30	19	423	0
Future Vol, veh/h	5	1	75	11	0	6	47	651	30	19	423	0
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	1	91	13	0	7	57	794	37	23	516	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1492	1511	517	1540	1493	817	516	0	0	835	0	0
Stage 1	562	562	-	931	931	-	-	-	-	-	-	-
Stage 2	930	949	-	609	562	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	103	121	562	95	124	380	1060	-	-	807	-	-
Stage 1	515	513	-	323	348	-	-	-	-	-	-	-
Stage 2	323	342	-	486	513	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	90	104	561	70	107	379	1060	-	-	804	-	-
Mov Cap-2 Maneuver	90	104	-	70	107	-	-	-	-	-	-	-
Stage 1	463	492	-	289	311	-	-	-	-	-	-	-
Stage 2	285	306	-	389	492	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.7		51.3		0.6		0.4	
HCM LOS	C		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1060	-	-	407	98	804	-	-
HCM Lane V/C Ratio	0.054	-	-	0.243	0.212	0.029	-	-
HCM Control Delay (s)	8.6	0	-	16.7	51.3	9.6	0	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.9	0.7	0.1	-	-

HCM 6th TWSC
6: A Street & W San Jacinto Avenue

TTM37803
Opening Year (2021) without Project - AM Peak Hour

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	7	0	28	5	0	13	13	723	3	6	535	3
Future Vol, veh/h	7	0	28	5	0	13	13	723	3	6	535	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	0	35	6	0	16	16	893	4	7	660	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1609	1606	660	1624	1608	898	664	0	0	900	0	0
Stage 1	674	674	-	930	930	-	-	-	-	-	-	-
Stage 2	935	932	-	694	678	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	85	106	467	83	106	341	935	-	-	763	-	-
Stage 1	448	457	-	323	349	-	-	-	-	-	-	-
Stage 2	321	348	-	436	455	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	78	101	467	74	101	340	935	-	-	761	-	-
Mov Cap-2 Maneuver	78	101	-	74	101	-	-	-	-	-	-	-
Stage 1	433	450	-	311	336	-	-	-	-	-	-	-
Stage 2	295	335	-	398	448	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	23.8		29.3		0.2		0.1	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	935	-	-	234	170	761	-	-
HCM Lane V/C Ratio	0.017	-	-	0.185	0.131	0.01	-	-
HCM Control Delay (s)	8.9	0	-	23.8	29.3	9.8	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.4	0	-	-

Intersection	
Intersection Delay, s/veh	14.4
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔↔		↑↑		↔	↑↑
Traffic Vol, veh/h	237	86	174	294	120	294
Future Vol, veh/h	237	86	174	294	120	294
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	247	90	181	306	125	306
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	13.9	17.2	11.6
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	48%	100%	0%	0%
Vol Thru, %	100%	16%	0%	0%	0%	100%	100%
Vol Right, %	0%	84%	0%	52%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	116	352	158	165	120	147	147
LT Vol	0	0	158	79	120	0	0
Through Vol	116	58	0	0	0	147	147
RT Vol	0	294	0	86	0	0	0
Lane Flow Rate	121	367	165	172	125	153	153
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.228	0.631	0.349	0.335	0.258	0.295	0.221
Departure Headway (Hd)	6.786	6.191	7.639	7.007	7.441	6.931	5.199
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	526	579	467	509	480	515	683
Service Time	4.579	3.983	5.436	4.804	5.238	4.728	2.995
HCM Lane V/C Ratio	0.23	0.634	0.353	0.338	0.26	0.297	0.224
HCM Control Delay	11.6	19.1	14.5	13.3	12.8	12.6	9.5
HCM Lane LOS	B	C	B	B	B	B	A
HCM 95th-tile Q	0.9	4.4	1.5	1.5	1	1.2	0.8

HCM 6th TWSC
2: W Metz Road & McKimball Road

TTM37803
Opening Year (2021) without Project - PM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	0	24	36	4	5	1
Future Vol, veh/h	0	24	36	4	5	1
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	33	49	5	7	1

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	55	0	-	0	86 53
Stage 1	-	-	-	-	53 -
Stage 2	-	-	-	-	33 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1563	-	-	-	920 1020
Stage 1	-	-	-	-	975 -
Stage 2	-	-	-	-	995 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1562	-	-	-	918 1019
Mov Cap-2 Maneuver	-	-	-	-	918 -
Stage 1	-	-	-	-	974 -
Stage 2	-	-	-	-	994 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	933
HCM Lane V/C Ratio	-	-	-	-	0.009
HCM Control Delay (s)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC
3: Jazz Lane & W San Jacinto Avenue

TTM37803
Opening Year (2021) without Project - PM Peak Hour

Intersection						
Int Delay, s/veh	7.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	22	2	0	19
Future Vol, veh/h	1	0	22	2	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	25	2	0	22

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1	0	53
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	52
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1635	-	960
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	976
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1635	-	946
Mov Cap-2 Maneuver	-	-	-	-	946
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	961

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.02	-	-	0.015	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	66	0	12	14	2	14	7	279	3	2	300	60
Future Vol, veh/h	66	0	12	14	2	14	7	279	3	2	300	60
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	73	0	13	15	2	15	8	307	3	2	330	66
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	10.5	9.4	10.5	11.8
HCM LOS	B	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	5%	0%	85%	47%	100%	0%	0%
Vol Thru, %	95%	98%	0%	7%	0%	100%	0%
Vol Right, %	0%	2%	15%	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	147	143	78	30	2	300	60
LT Vol	7	0	66	14	2	0	0
Through Vol	140	140	0	2	0	300	0
RT Vol	0	3	12	14	0	0	60
Lane Flow Rate	161	157	86	33	2	330	66
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.256	0.247	0.157	0.058	0.003	0.477	0.082
Departure Headway (Hd)	5.715	5.676	6.61	6.325	5.709	5.205	4.5
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	621	626	546	569	622	686	787
Service Time	3.514	3.475	4.311	4.027	3.489	2.985	2.28
HCM Lane V/C Ratio	0.259	0.251	0.158	0.058	0.003	0.481	0.084
HCM Control Delay	10.5	10.4	10.5	9.4	8.5	12.7	7.7
HCM Lane LOS	B	B	B	A	A	B	A
HCM 95th-tile Q	1	1	0.6	0.2	0	2.6	0.3

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	27	15	0	17	33	254	29	33	394	5
Future Vol, veh/h	2	0	27	15	0	17	33	254	29	33	394	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	29	16	0	18	36	276	32	36	428	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	876	885	431	883	871	294	433	0	0	310	0	0
Stage 1	503	503	-	366	366	-	-	-	-	-	-	-
Stage 2	373	382	-	517	505	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	272	286	629	269	291	750	1137	-	-	1262	-	-
Stage 1	555	545	-	657	626	-	-	-	-	-	-	-
Stage 2	652	616	-	545	544	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	250	264	629	241	269	749	1137	-	-	1260	-	-
Mov Cap-2 Maneuver	250	264	-	241	269	-	-	-	-	-	-	-
Stage 1	534	524	-	631	601	-	-	-	-	-	-	-
Stage 2	612	591	-	500	523	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.7		15.5		0.9		0.6	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1137	-	-	569	377	1260	-	-
HCM Lane V/C Ratio	0.032	-	-	0.055	0.092	0.028	-	-
HCM Control Delay (s)	8.3	0	-	11.7	15.5	7.9	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	0.1	-	-





Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	2	0	12	1	0	3	20	297	4	2	466	5
Future Vol, veh/h	2	0	12	1	0	3	20	297	4	2	466	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	13	1	0	3	22	330	4	2	518	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8.6	8.6	11.5	17.7
HCM LOS	A	A	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	6%	14%	25%	0%	0%
Vol Thru, %	93%	0%	0%	100%	0%
Vol Right, %	1%	86%	75%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	321	14	4	468	5
LT Vol	20	2	1	2	0
Through Vol	297	0	0	466	0
RT Vol	4	12	3	0	5
Lane Flow Rate	357	16	4	520	6
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.458	0.023	0.007	0.696	0.006
Departure Headway (Hd)	4.626	5.393	5.504	4.818	4.112
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	781	661	647	754	876
Service Time	2.646	3.449	3.562	2.518	1.812
HCM Lane V/C Ratio	0.457	0.024	0.006	0.69	0.007
HCM Control Delay	11.5	8.6	8.6	17.8	6.8
HCM Lane LOS	B	A	A	C	A
HCM 95th-tile Q	2.4	0.1	0	5.7	0

Intersection	
Intersection Delay, s/veh	174.8
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	619	253	313	658	131	145
Future Vol, veh/h	619	253	313	658	131	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	673	275	340	715	142	158
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	91.9	294.1	17
HCM LOS	F	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	45%	100%	0%	0%
Vol Thru, %	100%	14%	0%	0%	0%	100%	100%
Vol Right, %	0%	86%	0%	55%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	209	762	413	459	131	73	73
LT Vol	0	0	413	206	131	0	0
Through Vol	209	104	0	0	0	73	73
RT Vol	0	658	0	253	0	0	0
Lane Flow Rate	227	829	449	499	142	79	79
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.519	1.758	1.044	1.071	0.382	0.2	0.163
Departure Headway (Hd)	8.528	7.903	9.435	8.759	10.854	10.332	8.557
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	426	464	390	419	333	350	422
Service Time	6.228	5.603	7.135	6.459	8.554	8.032	6.257
HCM Lane V/C Ratio	0.533	1.787	1.151	1.191	0.426	0.226	0.187
HCM Control Delay	20.1	369.1	89.3	94.3	20.1	15.6	12.9
HCM Lane LOS	C	F	F	F	C	C	B
HCM 95th-tile Q	2.9	49.3	13.3	14.8	1.7	0.7	0.6

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	58	0	17	35	6	0	0	48	17	0	0
Future Vol, veh/h	0	58	0	17	35	6	0	0	48	17	0	0
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	58	0	17	35	6	0	0	48	17	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	46	0	0	58	0	0	130	138	58	159	135	43
Stage 1	-	-	-	-	-	-	58	58	-	77	77	-
Stage 2	-	-	-	-	-	-	72	80	-	82	58	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1575	-	-	1559	-	-	847	757	1014	811	760	1033
Stage 1	-	-	-	-	-	-	959	851	-	937	835	-
Stage 2	-	-	-	-	-	-	943	832	-	931	851	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1568	-	-	1559	-	-	840	745	1014	762	748	1028
Mov Cap-2 Maneuver	-	-	-	-	-	-	840	745	-	762	748	-
Stage 1	-	-	-	-	-	-	959	851	-	932	822	-
Stage 2	-	-	-	-	-	-	933	819	-	887	851	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			2.1			8.7			9.8		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1014	1568	-	-	1559	-	-	762
HCM Lane V/C Ratio	0.047	-	-	-	0.011	-	-	0.022
HCM Control Delay (s)	8.7	0	-	-	7.3	0	-	9.8
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection

Int Delay, s/veh 7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	15	1	11	0	0	34	32	0	0
Future Vol, veh/h	0	1	0	15	1	11	0	0	34	32	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	0	15	1	11	0	0	34	32	0	0

Major/Minor	Major1		Major2			Minor1		Minor2				
Conflicting Flow All	12	0	0	1	0	0	38	43	1	55	38	7
Stage 1	-	-	-	-	-	-	1	1	-	37	37	-
Stage 2	-	-	-	-	-	-	37	42	-	18	1	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1620	-	-	1635	-	-	972	853	1090	948	858	1081
Stage 1	-	-	-	-	-	-	1027	899	-	984	868	-
Stage 2	-	-	-	-	-	-	984	864	-	1006	899	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1620	-	-	1635	-	-	965	845	1090	912	850	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	965	845	-	912	850	-
Stage 1	-	-	-	-	-	-	1027	899	-	984	860	-
Stage 2	-	-	-	-	-	-	975	856	-	975	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4	8.4	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1620	-	-	1635	-	-	912
HCM Lane V/C Ratio	0.031	-	-	-	0.009	-	-	0.035
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	60.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	126	0	46	67	3	38	16	595	0	1	408	108
Future Vol, veh/h	126	0	46	67	3	38	16	595	0	1	408	108
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	158	0	58	84	4	48	20	744	0	1	510	135
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	20.8	16.4	72.6	67.7
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	7%	0%	73%	62%	100%	0%	0%
Vol Thru, %	93%	100%	0%	3%	0%	100%	0%
Vol Right, %	0%	0%	27%	35%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	214	397	172	108	1	408	108
LT Vol	16	0	126	67	1	0	0
Through Vol	198	397	0	3	0	408	0
RT Vol	0	0	46	38	0	0	108
Lane Flow Rate	268	496	215	135	1	510	135
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.596	1.097	0.513	0.33	0.003	1.05	0.252
Departure Headway (Hd)	8.207	8.169	8.995	9.248	8.128	7.612	6.891
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	442	446	404	392	443	479	524
Service Time	5.907	5.869	6.695	6.948	5.828	5.312	4.591
HCM Lane V/C Ratio	0.606	1.112	0.532	0.344	0.002	1.065	0.258
HCM Control Delay	22.3	99.8	20.8	16.4	10.9	82.6	11.9
HCM Lane LOS	C	F	C	C	B	F	B
HCM 95th-tile Q	3.8	16.4	2.8	1.4	0	15.2	1

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Opening Year (2021) with Project - AM Peak Hour

Intersection												
Int Delay, s/veh	9.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	1	83	11	0	6	50	663	30	19	427	14
Future Vol, veh/h	45	1	83	11	0	6	50	663	30	19	427	14
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	1	101	13	0	7	61	809	37	23	521	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1529	1548	531	1582	1538	832	538	0	0	850	0	0
Stage 1	576	576	-	954	954	-	-	-	-	-	-	-
Stage 2	953	972	-	628	584	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	97	115	552	89	117	372	1040	-	-	797	-	-
Stage 1	506	505	-	313	340	-	-	-	-	-	-	-
Stage 2	314	333	-	474	501	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	84	98	551	64	99	371	1040	-	-	794	-	-
Mov Cap-2 Maneuver	84	98	-	64	99	-	-	-	-	-	-	-
Stage 1	450	484	-	277	301	-	-	-	-	-	-	-
Stage 2	274	295	-	370	480	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	83.4		56.6		0.6		0.4	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1040	-	-	185	90	794	-	-
HCM Lane V/C Ratio	0.059	-	-	0.85	0.23	0.029	-	-
HCM Control Delay (s)	8.7	0	-	83.4	56.6	9.7	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	6.1	0.8	0.1	-	-

HCM 6th TWSC
6: A Street & W San Jacinto Avenue

TTM37803
Opening Year (2021) with Project - AM Peak Hour





Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	19	0	48	5	0	13	20	726	3	6	543	7
Future Vol, veh/h	19	0	48	5	0	13	20	726	3	6	543	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	0	59	6	0	16	25	896	4	7	670	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1640	1637	670	1669	1644	901	679	0	0	903	0	0
Stage 1	684	684	-	951	951	-	-	-	-	-	-	-
Stage 2	956	953	-	718	693	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	81	102	460	77	101	340	923	-	-	761	-	-
Stage 1	442	452	-	315	341	-	-	-	-	-	-	-
Stage 2	313	340	-	423	448	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	73	95	460	63	94	339	923	-	-	759	-	-
Mov Cap-2 Maneuver	73	95	-	63	94	-	-	-	-	-	-	-
Stage 1	418	445	-	297	322	-	-	-	-	-	-	-
Stage 2	282	321	-	363	441	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	39.6		32.5		0.2		0.1	
HCM LOS	E		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	923	-	-	184	153	759	-
HCM Lane V/C Ratio	0.027	-	-	0.45	0.145	0.01	-
HCM Control Delay (s)	9	0	-	39.6	32.5	9.8	0
HCM Lane LOS	A	A	-	E	D	A	A
HCM 95th %tile Q(veh)	0.1	-	-	2.1	0.5	0	-

Intersection	
Intersection Delay, s/veh	17.6
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	267	91	174	344	129	294
Future Vol, veh/h	267	91	174	344	129	294
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	278	95	181	358	134	306
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	15.4	23.4	12.4
HCM LOS	C	C	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	49%	100%	0%	0%
Vol Thru, %	100%	14%	0%	0%	0%	100%	100%
Vol Right, %	0%	86%	0%	51%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	116	402	178	180	129	147	147
LT Vol	0	0	178	89	129	0	0
Through Vol	116	58	0	0	0	147	147
RT Vol	0	344	0	91	0	0	0
Lane Flow Rate	121	419	185	188	134	153	153
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.239	0.756	0.412	0.384	0.293	0.313	0.239
Departure Headway (Hd)	7.114	6.501	7.992	7.377	7.861	7.35	5.611
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	505	557	451	488	457	490	639
Service Time	4.852	4.239	5.734	5.118	5.604	5.092	3.353
HCM Lane V/C Ratio	0.24	0.752	0.41	0.385	0.293	0.312	0.239
HCM Control Delay	12.1	26.7	16.2	14.7	13.8	13.4	10.1
HCM Lane LOS	B	D	C	B	B	B	B
HCM 95th-tile Q	0.9	6.7	2	1.8	1.2	1.3	0.9

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	24	0	54	36	4	0	0	32	5	0	1
Future Vol, veh/h	0	24	0	54	36	4	0	0	32	5	0	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	24	0	54	36	4	0	0	32	5	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	41	0	0	24	0	0	171	173	24	187	171	39
Stage 1	-	-	-	-	-	-	24	24	-	147	147	-
Stage 2	-	-	-	-	-	-	147	149	-	40	24	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1581	-	-	1604	-	-	797	724	1058	778	726	1038
Stage 1	-	-	-	-	-	-	999	879	-	860	779	-
Stage 2	-	-	-	-	-	-	860	778	-	980	879	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1579	-	-	1604	-	-	775	699	1058	734	701	1037
Mov Cap-2 Maneuver	-	-	-	-	-	-	775	699	-	734	701	-
Stage 1	-	-	-	-	-	-	999	879	-	859	752	-
Stage 2	-	-	-	-	-	-	830	751	-	950	879	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			4.2			8.5			9.7		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1058	1579	-	-	1604	-	-	772
HCM Lane V/C Ratio	0.03	-	-	-	0.034	-	-	0.008
HCM Control Delay (s)	8.5	0	-	-	7.3	0	-	9.7
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection

Int Delay, s/veh 5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	22	2	36	0	0	19	22	0	0
Future Vol, veh/h	0	1	0	22	2	36	0	0	19	22	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	0	22	2	36	0	0	19	22	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	38	0	0	1	0	0	65	83	1	75	65	20
Stage 1	-	-	-	-	-	-	1	1	-	64	64	-
Stage 2	-	-	-	-	-	-	64	82	-	11	1	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1585	-	-	1635	-	-	934	811	1090	920	830	1064
Stage 1	-	-	-	-	-	-	1027	899	-	952	846	-
Stage 2	-	-	-	-	-	-	952	831	-	1015	899	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1585	-	-	1635	-	-	924	800	1090	894	818	1064
Mov Cap-2 Maneuver	-	-	-	-	-	-	924	800	-	894	818	-
Stage 1	-	-	-	-	-	-	1027	899	-	952	834	-
Stage 2	-	-	-	-	-	-	939	819	-	997	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.7	8.4	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1585	-	-	1635	-	-	894
HCM Lane V/C Ratio	0.017	-	-	-	0.013	-	-	0.025
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	66	0	12	14	2	14	7	314	3	2	359	60
Future Vol, veh/h	66	0	12	14	2	14	7	314	3	2	359	60
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	73	0	13	15	2	15	8	345	3	2	395	66
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	10.9	9.8	11.2	14.3
HCM LOS	B	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	4%	0%	85%	47%	100%	0%	0%
Vol Thru, %	96%	98%	0%	7%	0%	100%	0%
Vol Right, %	0%	2%	15%	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	164	160	78	30	2	359	60
LT Vol	7	0	66	14	2	0	0
Through Vol	157	157	0	2	0	359	0
RT Vol	0	3	12	14	0	0	60
Lane Flow Rate	180	176	86	33	2	395	66
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.299	0.29	0.163	0.06	0.004	0.588	0.085
Departure Headway (Hd)	5.967	5.933	6.864	6.594	5.874	5.369	4.663
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	604	607	523	543	613	675	773
Service Time	3.694	3.66	4.599	4.333	3.574	3.069	2.363
HCM Lane V/C Ratio	0.298	0.29	0.164	0.061	0.003	0.585	0.085
HCM Control Delay	11.2	11.1	10.9	9.8	8.6	15.4	7.8
HCM Lane LOS	B	B	B	A	A	C	A
HCM 95th-tile Q	1.2	1.2	0.6	0.2	0	3.9	0.3

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Opening Year (2021) with Project - PM Peak Hour

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	0	32	15	0	17	42	262	29	33	408	50
Future Vol, veh/h	29	0	32	15	0	17	42	262	29	33	408	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	32	0	35	16	0	18	46	285	32	36	443	54

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	944	953	470	955	964	303	497	0	0	319	0	0
Stage 1	542	542	-	395	395	-	-	-	-	-	-	-
Stage 2	402	411	-	560	569	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	244	261	598	240	257	741	1077	-	-	1252	-	-
Stage 1	528	523	-	634	608	-	-	-	-	-	-	-
Stage 2	629	598	-	516	509	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	222	237	598	210	233	740	1077	-	-	1250	-	-
Mov Cap-2 Maneuver	222	237	-	210	233	-	-	-	-	-	-	-
Stage 1	501	502	-	600	575	-	-	-	-	-	-	-
Stage 2	581	566	-	467	489	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.6		16.8		1.1		0.5	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1077	-	-	331	339	1250	-	-
HCM Lane V/C Ratio	0.042	-	-	0.2	0.103	0.029	-	-
HCM Control Delay (s)	8.5	0	-	18.6	16.8	8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	15.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	10	0	26	1	0	3	43	306	4	2	471	19
Future Vol, veh/h	10	0	26	1	0	3	43	306	4	2	471	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	0	29	1	0	3	48	340	4	2	523	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	9.1	8.8	12.7	18.6
HCM LOS	A	A	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	12%	28%	25%	0%	0%
Vol Thru, %	87%	0%	0%	100%	0%
Vol Right, %	1%	72%	75%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	353	36	4	473	19
LT Vol	43	10	1	2	0
Through Vol	306	0	0	471	0
RT Vol	4	26	3	0	19
Lane Flow Rate	392	40	4	526	21
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.516	0.062	0.007	0.717	0.025
Departure Headway (Hd)	4.738	5.616	5.678	4.91	4.204
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	761	634	625	736	850
Service Time	2.77	3.687	3.76	2.642	1.935
HCM Lane V/C Ratio	0.515	0.063	0.006	0.715	0.025
HCM Control Delay	12.7	9.1	8.8	19.1	7
HCM Lane LOS	B	A	A	C	A
HCM 95th-tile Q	3	0.2	0	6.1	0.1

HCM 6th AWSC
1: Harvill Avenue & A Street

TTM37803
Cumulative (2021) without Project - AM Peak Hour

Intersection	
Intersection Delay, s/veh	255.3
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	769	259	360	755	132	173
Future Vol, veh/h	769	259	360	755	132	173
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	836	282	391	821	143	188
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	172.6	396.4	18.2
HCM LOS	F	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	50%	100%	0%	0%
Vol Thru, %	100%	14%	0%	0%	0%	100%	100%
Vol Right, %	0%	86%	0%	50%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	875	513	515	132	87	87
LT Vol	0	0	513	256	132	0	0
Through Vol	240	120	0	0	0	87	87
RT Vol	0	755	0	259	0	0	0
Lane Flow Rate	261	951	557	560	143	94	94
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.606	2.049	1.323	1.236	0.388	0.241	0.197
Departure Headway (Hd)	8.848	8.224	9.866	9.248	11.566	11.045	9.274
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	410	457	373	398	313	327	389
Service Time	6.548	5.924	7.566	6.948	9.266	8.745	6.974
HCM Lane V/C Ratio	0.637	2.081	1.493	1.407	0.457	0.287	0.242
HCM Control Delay	24.2	498.5	190.9	154.3	21.4	17.2	14.2
HCM Lane LOS	C	F	F	F	C	C	B
HCM 95th-tile Q	3.9	62.8	22.7	20.3	1.8	0.9	0.7

HCM 6th TWSC
2: W Metz Road & McKimball Road

TTM37803
Cumulative (2021) without Project - AM Peak Hour

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	0	74	40	8	22	0
Future Vol, veh/h	0	74	40	8	22	0
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	99	53	11	29	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	69	0	0	163	64
Stage 1	-	-	-	64	-
Stage 2	-	-	-	99	-
Critical Hdwy	4.1	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	3.5	3.3
Pot Cap-1 Maneuver	1545	-	-	832	1006
Stage 1	-	-	-	964	-
Stage 2	-	-	-	930	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1538	-	-	824	1001
Mov Cap-2 Maneuver	-	-	-	824	-
Stage 1	-	-	-	959	-
Stage 2	-	-	-	925	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1538	-	-	-	824
HCM Lane V/C Ratio	-	-	-	-	0.036
HCM Control Delay (s)	0	-	-	-	9.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 6th TWSC
 3: Jazz Lane & W San Jacinto Avenue

TTM37803
 Cumulative (2021) without Project - AM Peak Hour

Intersection						
Int Delay, s/veh	7.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	15	1	0	34
Future Vol, veh/h	1	0	15	1	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	19	1	0	43

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	1	40
Stage 1	-	-	-	1
Stage 2	-	-	-	39
Critical Hdwy	-	-	4.1	6.4
Critical Hdwy Stg 1	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	3.5
Pot Cap-1 Maneuver	-	-	1635	977
Stage 1	-	-	-	1028
Stage 2	-	-	-	989
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1635	965
Mov Cap-2 Maneuver	-	-	-	965
Stage 1	-	-	-	1028
Stage 2	-	-	-	977

Approach	EB	WB	NB
HCM Control Delay, s	0	6.8	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.039	-	-	0.011	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th AWSC
4: A Street & Nuevo Road

TTM37803
Cumulative (2021) without Project - AM Peak Hour

Intersection	
Intersection Delay, s/veh	123.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	159	0	52	67	3	38	18	717	0	1	494	119
Future Vol, veh/h	159	0	52	67	3	38	18	717	0	1	494	119
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	199	0	65	84	4	48	23	896	0	1	618	149
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	27.8	17.9	144	149.7
HCM LOS	D	C	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	7%	0%	75%	62%	100%	0%	0%
Vol Thru, %	93%	100%	0%	3%	0%	100%	0%
Vol Right, %	0%	0%	25%	35%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	257	478	211	108	1	494	119
LT Vol	18	0	159	67	1	0	0
Through Vol	239	478	0	3	0	494	0
RT Vol	0	0	52	38	0	0	119
Lane Flow Rate	321	598	264	135	1	618	149
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.737	1.364	0.641	0.343	0.003	1.32	0.289
Departure Headway (Hd)	8.93	8.893	9.564	10.048	8.639	8.122	7.397
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	408	412	380	360	417	451	489
Service Time	6.63	6.593	7.264	7.748	6.339	5.822	5.097
HCM Lane V/C Ratio	0.787	1.451	0.695	0.375	0.002	1.37	0.305
HCM Control Delay	32.8	203.8	27.8	17.9	11.4	182.9	13.1
HCM Lane LOS	D	F	D	C	B	F	B
HCM 95th-tile Q	5.8	26.3	4.3	1.5	0	26.1	1.2

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Cumulative (2021) without Project - AM Peak Hour

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	1	96	11	0	6	54	745	30	19	589	0
Future Vol, veh/h	5	1	96	11	0	6	54	745	30	19	589	0
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	1	117	13	0	7	66	909	37	23	718	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1827	1846	719	1888	1828	932	718	0	0	950	0	0
Stage 1	764	764	-	1064	1064	-	-	-	-	-	-	-
Stage 2	1063	1082	-	824	764	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	60	76	432	54	78	326	892	-	-	731	-	-
Stage 1	399	416	-	272	302	-	-	-	-	-	-	-
Stage 2	272	296	-	370	416	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	50	60	432	33	62	325	892	-	-	728	-	-
Mov Cap-2 Maneuver	50	60	-	33	62	-	-	-	-	-	-	-
Stage 1	336	394	-	228	254	-	-	-	-	-	-	-
Stage 2	224	249	-	254	394	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	25.1		128		0.6		0.3	
HCM LOS	D		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	892	-	-	301	48	728	-
HCM Lane V/C Ratio	0.074	-	-	0.413	0.432	0.032	-
HCM Control Delay (s)	9.4	0	-	25.1	128	10.1	0
HCM Lane LOS	A	A	-	D	F	B	A
HCM 95th %tile Q(veh)	0.2	-	-	1.9	1.6	0.1	-

HCM 6th TWSC
6: A Street & W San Jacinto Avenue

TTM37803
Cumulative (2021) without Project - AM Peak Hour

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↕	↗
Traffic Vol, veh/h	7	0	28	5	0	13	13	824	3	6	722	3
Future Vol, veh/h	7	0	28	5	0	13	13	824	3	6	722	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	0	35	6	0	16	16	1017	4	7	891	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1964	1961	891	1979	1963	1022	895	0	0	1024	0	0
Stage 1	905	905	-	1054	1054	-	-	-	-	-	-	-
Stage 2	1059	1056	-	925	909	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	48	64	344	47	64	289	767	-	-	686	-	-
Stage 1	334	358	-	276	305	-	-	-	-	-	-	-
Stage 2	274	305	-	325	357	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	43	60	344	40	60	288	767	-	-	684	-	-
Mov Cap-2 Maneuver	43	60	-	40	60	-	-	-	-	-	-	-
Stage 1	318	351	-	262	289	-	-	-	-	-	-	-
Stage 2	246	289	-	286	350	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	40.7		47.8		0.2		0.1	
HCM LOS	E		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	767	-	-	143	106	684	-	-
HCM Lane V/C Ratio	0.021	-	-	0.302	0.21	0.011	-	-
HCM Control Delay (s)	9.8	0	-	40.7	47.8	10.3	0	-
HCM Lane LOS	A	A	-	E	E	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.7	0	-	-

Intersection	
Intersection Delay, s/veh	64.7
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	405	94	215	511	135	347
Future Vol, veh/h	405	94	215	511	135	347
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	422	98	224	532	141	361
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	25	124.6	15.6
HCM LOS	C	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	59%	100%	0%	0%
Vol Thru, %	100%	12%	0%	0%	0%	100%	100%
Vol Right, %	0%	88%	0%	41%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	143	583	270	229	135	174	174
LT Vol	0	0	270	135	135	0	0
Through Vol	143	72	0	0	0	174	174
RT Vol	0	511	0	94	0	0	0
Lane Flow Rate	149	607	281	239	141	181	181
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.334	1.249	0.67	0.536	0.339	0.41	0.325
Departure Headway (Hd)	8.042	7.408	9.12	8.616	9.225	8.708	6.948
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	449	498	399	422	392	416	521
Service Time	5.742	5.108	6.82	6.316	6.925	6.408	4.648
HCM Lane V/C Ratio	0.332	1.219	0.704	0.566	0.36	0.435	0.347
HCM Control Delay	14.7	151.6	28.5	20.8	16.6	17.3	13
HCM Lane LOS	B	F	D	C	C	C	B
HCM 95th-tile Q	1.4	24.4	4.7	3.1	1.5	2	1.4

HCM 6th TWSC
2: W Metz Road & McKimball Road

TTM37803
Cumulative (2021) without Project - PM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	0	35	53	10	8	1
Future Vol, veh/h	0	35	53	10	8	1
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	48	73	14	11	1

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	88	0	-	0	129
Stage 1	-	-	-	-	81
Stage 2	-	-	-	-	48
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1520	-	-	-	870
Stage 1	-	-	-	-	947
Stage 2	-	-	-	-	980
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1519	-	-	-	868
Mov Cap-2 Maneuver	-	-	-	-	868
Stage 1	-	-	-	-	946
Stage 2	-	-	-	-	979

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1519	-	-	-	880
HCM Lane V/C Ratio	-	-	-	-	0.014
HCM Control Delay (s)	0	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC
3: Jazz Lane & W San Jacinto Avenue

TTM37803
Cumulative (2021) without Project - PM Peak Hour

Intersection						
Int Delay, s/veh	7.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	22	2	0	19
Future Vol, veh/h	1	0	22	2	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	25	2	0	22

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1	0	53
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	52
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1635	-	960
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	976
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1635	-	946
Mov Cap-2 Maneuver	-	-	-	-	946
Stage 1	-	-	-	-	1028
Stage 2	-	-	-	-	961

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1090	-	-	1635	-
HCM Lane V/C Ratio	0.02	-	-	0.015	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	22.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	87	0	16	14	2	14	14	433	3	2	494	97
Future Vol, veh/h	87	0	16	14	2	14	14	433	3	2	494	97
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	96	0	18	15	2	15	15	476	3	2	543	107
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	12.8	10.9	14.7	30.8
HCM LOS	B	B	B	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	6%	0%	84%	47%	100%	0%	0%
Vol Thru, %	94%	99%	0%	7%	0%	100%	0%
Vol Right, %	0%	1%	16%	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	231	220	103	30	2	494	97
LT Vol	14	0	87	14	2	0	0
Through Vol	217	217	0	2	0	494	0
RT Vol	0	3	16	14	0	0	97
Lane Flow Rate	253	241	113	33	2	543	107
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.464	0.439	0.24	0.069	0.004	0.87	0.15
Departure Headway (Hd)	6.598	6.558	7.633	7.508	6.274	5.768	5.06
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	545	548	469	475	569	630	707
Service Time	4.363	4.322	5.402	5.29	4.023	3.517	2.809
HCM Lane V/C Ratio	0.464	0.44	0.241	0.069	0.004	0.862	0.151
HCM Control Delay	15	14.4	12.8	10.9	9	35.2	8.7
HCM Lane LOS	B	B	B	B	A	E	A
HCM 95th-tile Q	2.4	2.2	0.9	0.2	0	10	0.5

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Cumulative (2021) without Project - PM Peak Hour

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	2	0	41	15	0	17	56	441	29	33	532	5
Future Vol, veh/h	2	0	41	15	0	17	56	441	29	33	532	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	45	16	0	18	61	479	32	36	578	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1279	1288	581	1294	1274	497	583	0	0	513	0	0
Stage 1	653	653	-	619	619	-	-	-	-	-	-	-
Stage 2	626	635	-	675	655	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	144	165	517	141	169	577	1001	-	-	1063	-	-
Stage 1	460	467	-	480	483	-	-	-	-	-	-	-
Stage 2	475	476	-	447	466	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	125	143	517	116	147	576	1001	-	-	1061	-	-
Mov Cap-2 Maneuver	125	143	-	116	147	-	-	-	-	-	-	-
Stage 1	420	444	-	438	440	-	-	-	-	-	-	-
Stage 2	420	434	-	388	443	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.9		26.6		0.9		0.5	
HCM LOS	B		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1001	-	-	451	201	1061	-	-
HCM Lane V/C Ratio	0.061	-	-	0.104	0.173	0.034	-	-
HCM Control Delay (s)	8.8	0	-	13.9	26.6	8.5	0	-
HCM Lane LOS	A	A	-	B	D	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.6	0.1	-	-

HCM 6th AWSC
6: A Street & W San Jacinto Avenue

TTM37803
Cumulative (2021) without Project - PM Peak Hour

Intersection	
Intersection Delay, s/veh	34.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	2	0	12	1	0	3	20	507	4	2	618	5
Future Vol, veh/h	2	0	12	1	0	3	20	507	4	2	618	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	13	1	0	3	22	563	4	2	687	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	9.5	9.5	23.7	44.4
HCM LOS	A	A	C	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	4%	14%	25%	0%	0%
Vol Thru, %	95%	0%	0%	100%	0%
Vol Right, %	1%	86%	75%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	531	14	4	620	5
LT Vol	20	2	1	2	0
Through Vol	507	0	0	618	0
RT Vol	4	12	3	0	5
Lane Flow Rate	590	16	4	689	6
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.792	0.027	0.008	0.953	0.007
Departure Headway (Hd)	4.832	6.311	6.443	4.978	4.271
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	749	571	559	730	835
Service Time	2.869	4.311	4.443	2.717	2.01
HCM Lane V/C Ratio	0.788	0.028	0.007	0.944	0.007
HCM Control Delay	23.7	9.5	9.5	44.7	7
HCM Lane LOS	C	A	A	E	A
HCM 95th-tile Q	8.1	0.1	0	14	0

Intersection	
Intersection Delay, s/veh	272.5
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	813	267	360	770	135	173
Future Vol, veh/h	813	267	360	770	135	173
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	884	290	391	837	147	188
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	199.8	411.2	18.5
HCM LOS	F	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	50%	100%	0%	0%
Vol Thru, %	100%	13%	0%	0%	0%	100%	100%
Vol Right, %	0%	87%	0%	50%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	890	542	538	135	87	87
LT Vol	0	0	542	271	135	0	0
Through Vol	240	120	0	0	0	87	87
RT Vol	0	770	0	267	0	0	0
Lane Flow Rate	261	967	589	585	147	94	94
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.607	2.087	1.4	1.294	0.393	0.241	0.197
Departure Headway (Hd)	8.89	8.265	9.916	9.305	11.694	11.174	9.404
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	410	455	371	398	310	323	385
Service Time	6.59	5.965	7.616	7.005	9.394	8.874	7.104
HCM Lane V/C Ratio	0.637	2.125	1.588	1.47	0.474	0.291	0.244
HCM Control Delay	24.4	515.5	222.4	177.1	21.8	17.4	14.4
HCM Lane LOS	C	F	F	F	C	C	B
HCM 95th-tile Q	3.9	64.5	25.6	22.5	1.8	0.9	0.7

HCM 6th TWSC
 2: Project Driveway 1/McKimball Road & W Metz Road

TTM37803
 Cumulative (2021) with Project - AM Peak Hour

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	74	0	17	40	8	0	0	48	22	0	0
Future Vol, veh/h	0	74	0	17	40	8	0	0	48	22	0	0
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	74	0	17	40	8	0	0	48	22	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	53	0	0	74	0	0	152	161	74	181	157	49
Stage 1	-	-	-	-	-	-	74	74	-	83	83	-
Stage 2	-	-	-	-	-	-	78	87	-	98	74	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1566	-	-	1538	-	-	820	735	993	785	739	1025
Stage 1	-	-	-	-	-	-	940	837	-	930	830	-
Stage 2	-	-	-	-	-	-	936	827	-	913	837	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1559	-	-	1538	-	-	813	723	993	737	727	1020
Mov Cap-2 Maneuver	-	-	-	-	-	-	813	723	-	737	727	-
Stage 1	-	-	-	-	-	-	940	837	-	925	817	-
Stage 2	-	-	-	-	-	-	926	814	-	869	837	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.9	8.8	10
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	993	1559	-	-	1538	-	-	737
HCM Lane V/C Ratio	0.048	-	-	-	0.011	-	-	0.03
HCM Control Delay (s)	8.8	0	-	-	7.4	0	-	10
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection

Int Delay, s/veh 7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	15	1	11	0	0	34	32	0	0
Future Vol, veh/h	0	1	0	15	1	11	0	0	34	32	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	0	15	1	11	0	0	34	32	0	0

Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	12	0	0	1	0	0	38	43	1	55	38	7
Stage 1	-	-	-	-	-	-	1	1	-	37	37	-
Stage 2	-	-	-	-	-	-	37	42	-	18	1	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1620	-	-	1635	-	-	972	853	1090	948	858	1081
Stage 1	-	-	-	-	-	-	1027	899	-	984	868	-
Stage 2	-	-	-	-	-	-	984	864	-	1006	899	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1620	-	-	1635	-	-	965	845	1090	912	850	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	965	845	-	912	850	-
Stage 1	-	-	-	-	-	-	1027	899	-	984	860	-
Stage 2	-	-	-	-	-	-	975	856	-	975	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4	8.4	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1620	-	-	1635	-	-	912
HCM Lane V/C Ratio	0.031	-	-	-	0.009	-	-	0.035
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	144.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	159	0	52	67	3	38	18	769	0	1	512	119
Future Vol, veh/h	159	0	52	67	3	38	18	769	0	1	512	119
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	199	0	65	84	4	48	23	961	0	1	640	149
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	28.2	18.1	173.3	168.1
HCM LOS	D	C	F	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	7%	0%	75%	62%	100%	0%	0%
Vol Thru, %	93%	100%	0%	3%	0%	100%	0%
Vol Right, %	0%	0%	25%	35%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	274	513	211	108	1	512	119
LT Vol	18	0	159	67	1	0	0
Through Vol	256	513	0	3	0	512	0
RT Vol	0	0	52	38	0	0	119
Lane Flow Rate	343	641	264	135	1	640	149
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.787	1.464	0.643	0.343	0.003	1.372	0.29
Departure Headway (Hd)	9.006	8.972	9.67	10.153	8.705	8.187	7.462
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	405	410	377	356	414	448	485
Service Time	6.706	6.672	7.37	7.853	6.405	5.887	5.162
HCM Lane V/C Ratio	0.847	1.563	0.7	0.379	0.002	1.429	0.307
HCM Control Delay	37.9	245.7	28.2	18.1	11.4	204.4	13.2
HCM Lane LOS	E	F	D	C	B	F	B
HCM 95th-tile Q	6.8	30.5	4.3	1.5	0	28.4	1.2

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Cumulative (2021) with Project - AM Peak Hour

Intersection												
Int Delay, s/veh	32.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	1	104	11	0	6	57	757	30	19	593	14
Future Vol, veh/h	45	1	104	11	0	6	57	757	30	19	593	14
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	1	127	13	0	7	70	923	37	23	723	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1863	1882	733	1929	1872	946	740	0	0	964	0	0
Stage 1	778	778	-	1086	1086	-	-	-	-	-	-	-
Stage 2	1085	1104	-	843	786	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	56	72	424	51	73	320	876	-	-	722	-	-
Stage 1	392	410	-	264	295	-	-	-	-	-	-	-
Stage 2	265	289	-	361	406	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 46	56	424	29	57	319	876	-	-	719	-	-
Mov Cap-2 Maneuver	~ 46	56	-	29	57	-	-	-	-	-	-	-
Stage 1	324	387	-	218	243	-	-	-	-	-	-	-
Stage 2	214	238	-	238	384	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s\$	332.9	150.4	0.6	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	876	-	-	121	43	719	-	-
HCM Lane V/C Ratio	0.079	-	-	1.512	0.482	0.032	-	-
HCM Control Delay (s)	9.5	0	-	\$ 332.9	150.4	10.2	0	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.3	-	-	13	1.7	0.1	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
6: A Street & W San Jacinto Avenue

TTM37803
Cumulative (2021) with Project - AM Peak Hour





Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	19	0	48	5	0	13	20	827	3	6	730	7
Future Vol, veh/h	19	0	48	5	0	13	20	827	3	6	730	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	0	59	6	0	16	25	1021	4	7	901	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1996	1993	901	2025	2000	1026	910	0	0	1028	0	0
Stage 1	915	915	-	1076	1076	-	-	-	-	-	-	-
Stage 2	1081	1078	-	949	924	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	45	61	340	43	61	288	757	-	-	683	-	-
Stage 1	329	354	-	268	298	-	-	-	-	-	-	-
Stage 2	266	297	-	315	351	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	39	55	340	33	55	287	757	-	-	681	-	-
Mov Cap-2 Maneuver	39	55	-	33	55	-	-	-	-	-	-	-
Stage 1	304	347	-	247	274	-	-	-	-	-	-	-
Stage 2	232	273	-	255	344	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	107.2	56.9	0.2	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	757	-	-	107	91	681	-	-
HCM Lane V/C Ratio	0.033	-	-	0.773	0.244	0.011	-	-
HCM Control Delay (s)	9.9	0	-	107.2	56.9	10.3	0	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	4.3	0.9	0	-	-

Intersection	
Intersection Delay, s/veh	87.2
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	435	99	215	561	144	347
Future Vol, veh/h	435	99	215	561	144	347
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	453	103	224	584	150	361
Number of Lanes	2	0	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	2	0
HCM Control Delay	28.4	172.6	16.3
HCM LOS	D	F	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	59%	100%	0%	0%
Vol Thru, %	100%	11%	0%	0%	0%	100%	100%
Vol Right, %	0%	89%	0%	41%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	143	633	290	244	144	174	174
LT Vol	0	0	290	145	144	0	0
Through Vol	143	72	0	0	0	174	174
RT Vol	0	561	0	99	0	0	0
Lane Flow Rate	149	659	302	254	150	181	181
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.341	1.387	0.724	0.575	0.367	0.417	0.331
Departure Headway (Hd)	8.216	7.574	9.371	8.871	9.525	9.006	7.242
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	440	488	390	409	380	403	501
Service Time	5.916	5.274	7.071	6.571	7.225	6.706	4.942
HCM Lane V/C Ratio	0.339	1.35	0.774	0.621	0.395	0.449	0.361
HCM Control Delay	15.1	208.3	33.1	22.9	17.6	18	13.5
HCM Lane LOS	C	F	D	C	C	C	B
HCM 95th-tile Q	1.5	31	5.5	3.5	1.6	2	1.4

HCM 6th TWSC
 2: Project Driveway 1/McKimball Road & W Metz Road

TTM37803
 Cumulative (2021) with Project - PM Peak Hour

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	35	0	54	53	10	0	0	32	8	0	1
Future Vol, veh/h	0	35	0	54	53	10	0	0	32	8	0	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	35	0	54	53	10	0	0	32	8	0	1

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	64	0	0	35	0	0	202	207	35	218	202	59
Stage 1	-	-	-	-	-	-	35	35	-	167	167	-
Stage 2	-	-	-	-	-	-	167	172	-	51	35	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1551	-	-	1589	-	-	761	693	1044	743	698	1012
Stage 1	-	-	-	-	-	-	986	870	-	840	764	-
Stage 2	-	-	-	-	-	-	840	760	-	967	870	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1550	-	-	1589	-	-	740	668	1044	701	673	1011
Mov Cap-2 Maneuver	-	-	-	-	-	-	740	668	-	701	673	-
Stage 1	-	-	-	-	-	-	986	870	-	839	736	-
Stage 2	-	-	-	-	-	-	810	733	-	937	870	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	8.6	10
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1044	1550	-	-	1589	-	-	726
HCM Lane V/C Ratio	0.031	-	-	-	0.034	-	-	0.012
HCM Control Delay (s)	8.6	0	-	-	7.3	0	-	10
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	22	2	36	0	0	19	22	0	0
Future Vol, veh/h	0	1	0	22	2	36	0	0	19	22	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	0	22	2	36	0	0	19	22	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	38	0	0	1	0	0	65	83	1	75	65	20
Stage 1	-	-	-	-	-	-	1	1	-	64	64	-
Stage 2	-	-	-	-	-	-	64	82	-	11	1	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1585	-	-	1635	-	-	934	811	1090	920	830	1064
Stage 1	-	-	-	-	-	-	1027	899	-	952	846	-
Stage 2	-	-	-	-	-	-	952	831	-	1015	899	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1585	-	-	1635	-	-	924	800	1090	894	818	1064
Mov Cap-2 Maneuver	-	-	-	-	-	-	924	800	-	894	818	-
Stage 1	-	-	-	-	-	-	1027	899	-	952	834	-
Stage 2	-	-	-	-	-	-	939	819	-	997	899	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.7	8.4	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1090	1585	-	-	1635	-	-	894
HCM Lane V/C Ratio	0.017	-	-	-	0.013	-	-	0.025
HCM Control Delay (s)	8.4	0	-	-	7.2	0	-	9.1
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	33.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	87	0	16	14	2	14	14	468	3	2	553	97
Future Vol, veh/h	87	0	16	14	2	14	14	468	3	2	553	97
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	96	0	18	15	2	15	15	514	3	2	608	107
Number of Lanes	0	1	0	0	1	0	0	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	1
HCM Control Delay	13.2	11.2	16.2	50.4
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	6%	0%	84%	47%	100%	0%	0%
Vol Thru, %	94%	99%	0%	7%	0%	100%	0%
Vol Right, %	0%	1%	16%	47%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	248	237	103	30	2	553	97
LT Vol	14	0	87	14	2	0	0
Through Vol	234	234	0	2	0	553	0
RT Vol	0	3	16	14	0	0	97
Lane Flow Rate	273	260	113	33	2	608	107
Geometry Grp	8	8	7	7	7	7	7
Degree of Util (X)	0.513	0.488	0.247	0.071	0.004	0.99	0.153
Departure Headway (Hd)	6.777	6.74	7.867	7.77	6.37	5.863	5.154
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	529	531	455	458	560	620	693
Service Time	4.552	4.514	5.649	5.567	4.125	3.619	2.91
HCM Lane V/C Ratio	0.516	0.49	0.248	0.072	0.004	0.981	0.154
HCM Control Delay	16.5	15.8	13.2	11.2	9.2	57.8	8.8
HCM Lane LOS	C	C	B	B	A	F	A
HCM 95th-tile Q	2.9	2.7	1	0.2	0	14.7	0.5

HCM 6th TWSC
5: A Street & W Metz Road

TTM37803
Cumulative (2021) with Project - PM Peak Hour

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	0	46	15	0	17	65	449	29	33	546	50
Future Vol, veh/h	29	0	46	15	0	17	65	449	29	33	546	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	32	0	50	16	0	18	71	488	32	36	593	54

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1347	1356	620	1365	1367	506	647	0	0	522	0	0
Stage 1	692	692	-	648	648	-	-	-	-	-	-	-
Stage 2	655	664	-	717	719	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	129	151	492	126	148	570	948	-	-	1055	-	-
Stage 1	437	448	-	462	469	-	-	-	-	-	-	-
Stage 2	458	461	-	424	436	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	110	127	492	100	125	569	948	-	-	1053	-	-
Mov Cap-2 Maneuver	110	127	-	100	125	-	-	-	-	-	-	-
Stage 1	391	424	-	412	418	-	-	-	-	-	-	-
Stage 2	396	411	-	360	412	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	32.6		30.1		1.1		0.4	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	948	-	-	210	178	1053	-	-
HCM Lane V/C Ratio	0.075	-	-	0.388	0.195	0.034	-	-
HCM Control Delay (s)	9.1	0	-	32.6	30.1	8.5	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.7	0.7	0.1	-	-

HCM 6th AWSC
6: A Street & W San Jacinto Avenue

TTM37803
Cumulative (2021) with Project - PM Peak Hour

Intersection	
Intersection Delay, s/veh	40.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	10	0	26	1	0	3	43	516	4	2	623	19
Future Vol, veh/h	10	0	26	1	0	3	43	516	4	2	623	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	0	29	1	0	3	48	573	4	2	692	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	10.1	9.7	30.7	51.4
HCM LOS	B	A	D	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	8%	28%	25%	0%	0%
Vol Thru, %	92%	0%	0%	100%	0%
Vol Right, %	1%	72%	75%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	563	36	4	625	19
LT Vol	43	10	1	2	0
Through Vol	516	0	0	623	0
RT Vol	4	26	3	0	19
Lane Flow Rate	626	40	4	694	21
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.86	0.073	0.008	0.986	0.026
Departure Headway (Hd)	4.952	6.558	6.69	5.11	4.402
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	726	550	538	708	806
Service Time	3.016	4.558	4.695	2.875	2.167
HCM Lane V/C Ratio	0.862	0.073	0.007	0.98	0.026
HCM Control Delay	30.7	10.1	9.7	52.7	7.3
HCM Lane LOS	D	B	A	F	A
HCM 95th-tile Q	10.2	0.2	0	15.4	0.1

HCM 6th Signalized Intersection Summary

1: Harvill Avenue & A Street

TTM37803

Existing (2019) with Project - AM Peak Hour Mitigation



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	586	239	295	622	124	137
Future Volume (veh/h)	586	239	295	622	124	137
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	448	462	321	676	135	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	573	509	824	735	169	2147
Arrive On Green	0.32	0.32	0.46	0.46	0.09	0.59
Sat Flow, veh/h	1810	1610	1900	1610	1810	3705
Grp Volume(v), veh/h	448	462	321	676	135	149
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	20.2	24.8	10.6	35.4	6.6	1.6
Cycle Q Clear(g_c), s	20.2	24.8	10.6	35.4	6.6	1.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	573	509	824	735	169	2147
V/C Ratio(X)	0.78	0.91	0.39	0.92	0.80	0.07
Avail Cap(c_a), veh/h	643	573	824	735	281	2147
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	29.5	16.2	22.9	40.0	7.7
Incr Delay (d2), s/veh	5.6	17.1	1.4	18.5	8.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	11.6	4.5	16.2	3.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.6	46.5	17.5	41.4	48.2	7.8
LnGrp LOS	C	D	B	D	D	A
Approach Vol, veh/h	910		997			284
Approach Delay, s/veh	40.2		33.7			27.0
Approach LOS	D		C			C
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.4	45.1			57.5	32.5
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	14.0	32.0			50.0	32.0
Max Q Clear Time (g_c+I1), s	8.6	37.4			3.6	26.8
Green Ext Time (p_c), s	0.1	0.0			1.0	1.7

Intersection Summary

HCM 6th Ctrl Delay			35.5			
HCM 6th LOS			D			

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	28.2
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	119	0	43	63	3	36	15	564	0	1	386	102
Future Vol, veh/h	119	0	43	63	3	36	15	564	0	1	386	102
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	149	0	54	79	4	45	19	705	0	1	483	128
Number of Lanes	0	1	0	0	1	0	1	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	1
HCM Control Delay	18.2	14.9	18.9	45.2
HCM LOS	C	B	C	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	73%	62%	100%	0%	0%
Vol Thru, %	0%	100%	100%	0%	3%	0%	100%	0%
Vol Right, %	0%	0%	0%	27%	35%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	282	282	162	102	1	386	102
LT Vol	15	0	0	119	63	1	0	0
Through Vol	0	282	282	0	3	0	386	0
RT Vol	0	0	0	43	36	0	0	102
Lane Flow Rate	19	352	352	202	128	1	482	128
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.04	0.693	0.522	0.467	0.301	0.003	0.947	0.225
Departure Headway (Hd)	7.596	7.08	5.328	8.307	8.498	7.584	7.069	6.349
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	470	508	673	433	422	471	511	564
Service Time	5.362	4.846	3.092	6.077	6.278	5.348	4.832	4.111
HCM Lane V/C Ratio	0.04	0.693	0.523	0.467	0.303	0.002	0.943	0.227
HCM Control Delay	10.7	24.4	13.8	18.2	14.9	10.4	54.3	11
HCM Lane LOS	B	C	B	C	B	B	F	B
HCM 95th-tile Q	0.1	5.3	3	2.4	1.2	0	11.8	0.9

HCM 6th Signalized Intersection Summary

5: A Street & W Metz Road

TTM37803

Existing (2019) with Project - AM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	45	1	79	10	0	6	47	626	28	18	403	14
Future Volume (veh/h)	45	1	79	10	0	6	47	626	28	18	403	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	1	96	12	0	7	57	763	34	22	491	17
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	111	14	120	158	15	63	105	1282	56	70	1349	46
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	463	113	988	768	120	518	81	1646	72	36	1732	59
Grp Volume(v), veh/h	152	0	0	19	0	0	854	0	0	530	0	0
Grp Sat Flow(s),veh/h/ln	1564	0	0	1405	0	0	1798	0	0	1827	0	0
Q Serve(g_s), s	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.5	0.0	0.0	0.9	0.0	0.0	16.5	0.0	0.0	7.8	0.0	0.0
Prop In Lane	0.36		0.63	0.63		0.37	0.07		0.04	0.04		0.03
Lane Grp Cap(c), veh/h	244	0	0	236	0	0	1443	0	0	1464	0	0
V/C Ratio(X)	0.62	0.00	0.00	0.08	0.00	0.00	0.59	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	365	0	0	347	0	0	1443	0	0	1464	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.4	0.0	0.0	35.1	0.0	0.0	4.0	0.0	0.0	3.1	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.0	0.0	0.1	0.0	0.0	1.8	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	0.4	0.0	0.0	4.9	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.0	0.0	0.0	35.3	0.0	0.0	5.8	0.0	0.0	3.8	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		152			19			854			530	
Approach Delay, s/veh		41.0			35.3			5.8			3.8	
Approach LOS		D			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		74.6		15.4		74.6		15.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		63.0		18.0		63.0		18.0				
Max Q Clear Time (g_c+1), s		18.5		10.5		9.8		2.9				
Green Ext Time (p_c), s		8.6		0.4		4.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				8.9								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

1: Harvill Avenue & A Street

TTM37803

Existing (2019) with Project - PM Peak Hour Mitigation



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WT		WT		WT	WT
Traffic Volume (veh/h)	254	86	164	327	122	277
Future Volume (veh/h)	254	86	164	327	122	277
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	184	191	178	355	133	301
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	268	238	1128	1007	169	2755
Arrive On Green	0.15	0.15	0.63	0.63	0.09	0.76
Sat Flow, veh/h	1810	1610	1900	1610	1810	3705
Grp Volume(v), veh/h	184	191	178	355	133	301
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	8.7	10.3	3.7	9.5	6.5	1.9
Cycle Q Clear(g_c), s	8.7	10.3	3.7	9.5	6.5	1.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	268	238	1128	1007	169	2755
V/C Ratio(X)	0.69	0.80	0.16	0.35	0.79	0.11
Avail Cap(c_a), veh/h	523	465	1128	1007	422	2755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	37.1	7.0	8.1	39.9	2.8
Incr Delay (d2), s/veh	3.1	6.2	0.3	1.0	7.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.4	1.4	3.2	3.2	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.5	43.2	7.3	9.1	47.8	2.8
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	375		533			434
Approach Delay, s/veh	41.4		8.5			16.6
Approach LOS	D		A			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.4	60.3			72.7	17.3
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	21.0	31.0			56.0	26.0
Max Q Clear Time (g_c+I1), s	8.5	11.5			3.9	12.3
Green Ext Time (p_c), s	0.2	3.4			2.2	1.0

Intersection Summary

HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	62	0	11	13	2	13	7	298	3	2	342	57
Future Vol, veh/h	62	0	11	13	2	13	7	298	3	2	342	57
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	78	0	14	16	3	16	9	373	4	3	428	71
Number of Lanes	0	1	0	0	1	0	1	2	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	1
HCM Control Delay	11.1	9.8	10.8	15.5
HCM LOS	B	A	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	85%	46%	100%	0%	0%
Vol Thru, %	0%	100%	97%	0%	7%	0%	100%	0%
Vol Right, %	0%	0%	3%	15%	46%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	7	199	102	73	28	2	342	57
LT Vol	7	0	0	62	13	2	0	0
Through Vol	0	199	99	0	2	0	342	0
RT Vol	0	0	3	11	13	0	0	57
Lane Flow Rate	9	248	128	91	35	2	428	71
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.015	0.379	0.194	0.175	0.065	0.004	0.629	0.091
Departure Headway (Hd)	5.992	5.487	5.467	6.903	6.649	5.904	5.4	4.694
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	601	661	660	522	540	610	671	768
Service Time	3.692	3.187	3.167	4.621	4.369	3.604	3.1	2.394
HCM Lane V/C Ratio	0.015	0.375	0.194	0.174	0.065	0.003	0.638	0.092
HCM Control Delay	8.8	11.5	9.5	11.1	9.8	8.6	16.8	7.9
HCM Lane LOS	A	B	A	B	A	A	C	A
HCM 95th-tile Q	0	1.8	0.7	0.6	0.2	0	4.4	0.3

HCM 6th Signalized Intersection Summary

5: A Street & W Metz Road

TTM37803

Existing (2019) with Project - PM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	29	0	30	14	0	16	40	248	27	31	386	50
Future Volume (veh/h)	29	0	30	14	0	16	40	248	27	31	386	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	35	0	37	17	0	20	49	302	33	38	471	61
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	140	6	60	131	13	67	184	1091	114	112	1211	151
Arrive On Green	0.07	0.00	0.07	0.07	0.00	0.07	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	696	75	815	590	179	904	150	1405	146	61	1560	194
Grp Volume(v), veh/h	72	0	0	37	0	0	384	0	0	570	0	0
Grp Sat Flow(s),veh/h/ln	1586	0	0	1673	0	0	1701	0	0	1816	0	0
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	0.0	0.0	1.2	0.0	0.0	3.5	0.0	0.0	5.9	0.0	0.0
Prop In Lane	0.49		0.51	0.46		0.54	0.13		0.09	0.07		0.11
Lane Grp Cap(c), veh/h	206	0	0	211	0	0	1388	0	0	1474	0	0
V/C Ratio(X)	0.35	0.00	0.00	0.18	0.00	0.00	0.28	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	546	0	0	549	0	0	1388	0	0	1474	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.9	0.0	0.0	26.3	0.0	0.0	1.9	0.0	0.0	2.2	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0	0.0	0.0	0.5	0.0	0.0	0.6	0.0	0.0	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	0.0	26.7	0.0	0.0	2.4	0.0	0.0	2.9	0.0	0.0
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		72			37			384			570	
Approach Delay, s/veh		27.9			26.7			2.4			2.9	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		51.1		8.9		51.1		8.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		33.0		18.0		33.0		18.0				
Max Q Clear Time (g_c+1), s		5.5		4.5		7.9		3.2				
Green Ext Time (p_c), s		2.7		0.2		4.2		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				5.2								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

1: Harvill Avenue & A Street

TTM37803

Opening Year (2021) with Project - AM Peak Hour Mitigation



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	619	253	313	658	131	145
Future Volume (veh/h)	619	253	313	658	131	145
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	474	488	340	715	142	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	594	529	765	683	177	2064
Arrive On Green	0.33	0.33	0.42	0.42	0.10	0.57
Sat Flow, veh/h	1810	1610	1900	1610	1810	3705
Grp Volume(v), veh/h	474	488	340	715	142	158
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	21.5	26.3	12.0	38.2	6.9	1.8
Cycle Q Clear(g_c), s	21.5	26.3	12.0	38.2	6.9	1.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	594	529	765	683	177	2064
V/C Ratio(X)	0.80	0.92	0.44	1.05	0.80	0.08
Avail Cap(c_a), veh/h	633	564	765	683	271	2064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	29.1	18.4	25.9	39.8	8.6
Incr Delay (d2), s/veh	6.7	20.3	1.9	47.5	9.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	12.7	5.2	22.7	3.5	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.2	49.5	20.3	73.4	49.3	8.7
LnGrp LOS	C	D	C	F	D	A
Approach Vol, veh/h	962		1055			300
Approach Delay, s/veh	42.0		56.3			27.9
Approach LOS	D		E			C
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.3	42.7			56.0	34.0
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	13.5	31.5			49.5	31.5
Max Q Clear Time (g_c+I1), s	8.9	40.2			3.8	28.3
Green Ext Time (p_c), s	0.1	0.0			1.1	1.3

Intersection Summary

HCM 6th Ctrl Delay	46.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

4: A Street & Nuevo Road

TTM37803

Opening Year (2021) with Project - AM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	↗
Traffic Volume (veh/h)	126	0	46	67	3	38	16	595	0	1	408	108
Future Volume (veh/h)	126	0	46	67	3	38	16	595	0	1	408	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.80		0.54	0.88		0.72	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	158	0	58	84	4	48	20	744	0	1	510	135
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	241	6	66	238	22	107	40	2278	0	2	1160	958
Arrive On Green	0.22	0.00	0.22	0.22	0.22	0.22	0.02	0.63	0.00	0.00	0.61	0.61
Sat Flow, veh/h	791	29	301	797	101	490	1810	3705	0	1810	1900	1569
Grp Volume(v), veh/h	216	0	0	136	0	0	20	744	0	1	510	135
Grp Sat Flow(s),veh/h/ln	1122	0	0	1389	0	0	1810	1805	0	1810	1900	1569
Q Serve(g_s), s	9.1	0.0	0.0	0.0	0.0	0.0	1.0	8.6	0.0	0.0	12.9	3.3
Cycle Q Clear(g_c), s	16.5	0.0	0.0	7.4	0.0	0.0	1.0	8.6	0.0	0.0	12.9	3.3
Prop In Lane	0.73		0.27	0.62		0.35	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	0	0	367	0	0	40	2278	0	2	1160	958
V/C Ratio(X)	0.69	0.00	0.00	0.37	0.00	0.00	0.51	0.33	0.00	0.40	0.44	0.14
Avail Cap(c_a), veh/h	415	0	0	486	0	0	111	2278	0	111	1160	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	0.0	30.4	0.0	0.0	43.5	7.7	0.0	44.9	9.3	7.5
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.6	0.0	0.0	9.6	0.4	0.0	81.2	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	0.0	2.6	0.0	0.0	0.5	3.1	0.0	0.1	5.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	0.0	0.0	31.0	0.0	0.0	53.2	8.1	0.0	126.1	10.5	7.8
LnGrp LOS	D	A	A	C	A	A	D	A	A	F	B	A
Approach Vol, veh/h		216			136			764				646
Approach Delay, s/veh		36.6			31.0			9.3				10.1
Approach LOS		D			C			A				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	61.3		24.1	6.5	59.4		24.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	42.5		28.5	5.5	42.5		28.5				
Max Q Clear Time (g_c+I1), s	2.0	10.6		18.5	3.0	14.9		9.4				
Green Ext Time (p_c), s	0.0	5.9		1.1	0.0	4.0		0.8				

Intersection Summary

HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

5: A Street & W Metz Road

TTM37803

Opening Year (2021) with Project - AM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	45	1	83	11	0	6	50	663	30	19	427	14
Future Volume (veh/h)	45	1	83	11	0	6	50	663	30	19	427	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	1	101	13	0	7	61	809	37	23	521	17
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	110	14	125	163	14	60	107	1268	57	69	1345	43
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	447	112	1007	777	111	478	83	1635	73	35	1734	55
Grp Volume(v), veh/h	157	0	0	20	0	0	907	0	0	561	0	0
Grp Sat Flow(s),veh/h/ln	1566	0	0	1366	0	0	1791	0	0	1824	0	0
Q Serve(g_s), s	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.7	0.0	0.0	0.9	0.0	0.0	18.7	0.0	0.0	8.5	0.0	0.0
Prop In Lane	0.35		0.64	0.65		0.35	0.07		0.04	0.04		0.03
Lane Grp Cap(c), veh/h	249	0	0	236	0	0	1431	0	0	1456	0	0
V/C Ratio(X)	0.63	0.00	0.00	0.08	0.00	0.00	0.63	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	365	0	0	342	0	0	1431	0	0	1456	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.2	0.0	0.0	34.9	0.0	0.0	4.4	0.0	0.0	3.2	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.0	0.0	0.2	0.0	0.0	2.1	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	0.4	0.0	0.0	5.6	0.0	0.0	2.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.9	0.0	0.0	35.0	0.0	0.0	6.5	0.0	0.0	4.0	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		157			20			907			561	
Approach Delay, s/veh		40.9			35.0			6.5			4.0	
Approach LOS		D			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		74.3		15.7		74.3		15.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		63.0		18.0		63.0		18.0				
Max Q Clear Time (g_c+1), s		20.7		10.7		10.5		2.9				
Green Ext Time (p_c), s		9.6		0.4		4.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				9.3								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

6: A Street & W San Jacinto Avenue

TTM37803

Opening Year (2021) with Project - AM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↗
Traffic Volume (veh/h)	19	0	48	5	0	13	20	726	3	6	543	7
Future Volume (veh/h)	19	0	48	5	0	13	20	726	3	6	543	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	0	59	6	0	16	25	896	4	7	670	9
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	30	0	77	10	0	28	60	1395	6	44	1437	1225
Arrive On Green	0.06	0.00	0.06	0.02	0.00	0.02	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	466	0	1195	441	0	1177	25	1830	8	5	1885	1607
Grp Volume(v), veh/h	82	0	0	22	0	0	925	0	0	677	0	9
Grp Sat Flow(s),veh/h/ln	1662	0	0	1618	0	0	1862	0	0	1890	0	1607
Q Serve(g_s), s	4.4	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	4.4	0.0	0.0	1.2	0.0	0.0	20.3	0.0	0.0	11.8	0.0	0.1
Prop In Lane	0.28		0.72	0.27		0.73	0.03		0.00	0.01		1.00
Lane Grp Cap(c), veh/h	107	0	0	38	0	0	1461	0	0	1481	0	1225
V/C Ratio(X)	0.77	0.00	0.00	0.58	0.00	0.00	0.63	0.00	0.00	0.46	0.00	0.01
Avail Cap(c_a), veh/h	332	0	0	324	0	0	1461	0	0	1481	0	1225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	0.0	43.5	0.0	0.0	5.0	0.0	0.0	3.9	0.0	2.6
Incr Delay (d2), s/veh	11.0	0.0	0.0	13.1	0.0	0.0	2.1	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.6	0.0	0.0	6.4	0.0	0.0	3.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	0.0	0.0	56.6	0.0	0.0	7.1	0.0	0.0	5.0	0.0	2.6
LnGrp LOS	D	A	A	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		82			22			925			686	
Approach Delay, s/veh		52.5			56.6			7.1			4.9	
Approach LOS		D			E			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		73.1		10.3		73.1		6.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		40.5		18.0		40.5		18.0				
Max Q Clear Time (g_c+1), s		22.3		6.4		13.8		3.2				
Green Ext Time (p_c), s		7.2		0.3		5.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				9.0								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

TTM37803

1: Harvill Avenue & A Street

Opening Year (2021) with Project - PM Peak Hour Mitigation



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	YY		↑↓		Y	↑↑
Traffic Volume (veh/h)	267	91	174	344	129	294
Future Volume (veh/h)	267	91	174	344	129	294
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	194	201	189	374	140	320
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	279	248	1110	990	177	2732
Arrive On Green	0.15	0.15	0.61	0.61	0.10	0.76
Sat Flow, veh/h	1810	1610	1900	1610	1810	3705
Grp Volume(v), veh/h	194	201	189	374	140	320
Grp Sat Flow(s),veh/h/ln	1810	1610	1805	1610	1810	1805
Q Serve(g_s), s	9.1	10.9	4.1	10.5	6.8	2.1
Cycle Q Clear(g_c), s	9.1	10.9	4.1	10.5	6.8	2.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	279	248	1110	990	177	2732
V/C Ratio(X)	0.70	0.81	0.17	0.38	0.79	0.12
Avail Cap(c_a), veh/h	503	447	1110	990	422	2732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	36.8	7.5	8.7	39.7	2.9
Incr Delay (d2), s/veh	3.1	6.2	0.3	1.1	7.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.6	1.5	3.6	3.4	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.2	43.0	7.8	9.8	47.4	3.0
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	395		563			460
Approach Delay, s/veh	41.1		9.1			16.5
Approach LOS	D		A			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.8	59.3			72.1	17.9
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	21.0	32.0			57.0	25.0
Max Q Clear Time (g_c+I1), s	8.8	12.5			4.1	12.9
Green Ext Time (p_c), s	0.3	3.6			2.3	1.0

Intersection Summary

HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

4: A Street & Nuevo Road

TTM37803

Opening Year (2021) with Project - PM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕	↕
Traffic Volume (veh/h)	66	0	12	14	2	14	7	314	3	2	359	60
Future Volume (veh/h)	66	0	12	14	2	14	7	314	3	2	359	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.72		0.49	0.60		0.70	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	82	0	15	18	2	18	9	392	4	2	449	75
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	241	5	32	151	29	109	20	2371	24	5	1215	1003
Arrive On Green	0.20	0.00	0.20	0.20	0.20	0.20	0.01	0.65	0.65	0.00	0.64	0.64
Sat Flow, veh/h	839	27	158	461	144	545	1810	3661	37	1810	1900	1570
Grp Volume(v), veh/h	97	0	0	38	0	0	9	193	203	2	449	75
Grp Sat Flow(s),veh/h/ln	1024	0	0	1150	0	0	1810	1805	1893	1810	1900	1570
Q Serve(g_s), s	5.0	0.0	0.0	0.0	0.0	0.0	0.4	3.8	3.8	0.1	10.0	1.6
Cycle Q Clear(g_c), s	7.0	0.0	0.0	2.0	0.0	0.0	0.4	3.8	3.8	0.1	10.0	1.6
Prop In Lane	0.85		0.15	0.47		0.47	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	278	0	0	288	0	0	20	1169	1226	5	1215	1003
V/C Ratio(X)	0.35	0.00	0.00	0.13	0.00	0.00	0.44	0.17	0.17	0.41	0.37	0.07
Avail Cap(c_a), veh/h	328	0	0	339	0	0	131	1169	1226	131	1215	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	0.0	0.0	29.6	0.0	0.0	44.2	6.3	6.3	44.8	7.7	6.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.2	0.0	0.0	14.5	0.3	0.3	46.5	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.7	0.0	0.0	0.3	1.4	1.4	0.1	3.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	0.0	0.0	29.8	0.0	0.0	58.7	6.6	6.5	91.3	8.5	6.3
LnGrp LOS	C	A	A	C	A	A	E	A	A	F	A	A
Approach Vol, veh/h		97			38			405			526	
Approach Delay, s/veh		32.1			29.8			7.7			8.5	
Approach LOS		C			C			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	62.8		22.5	5.5	62.0		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	47.5		22.5	6.5	47.5		22.5				
Max Q Clear Time (g_c+I1), s	2.1	5.8		9.0	2.4	12.0		4.0				
Green Ext Time (p_c), s	0.0	2.5		0.5	0.0	3.4		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			11.1									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary

5: A Street & W Metz Road

TTM37803

Opening Year (2021) with Project - PM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	29	0	32	15	0	17	42	262	29	33	408	50
Future Volume (veh/h)	29	0	32	15	0	17	42	262	29	33	408	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	35	0	39	18	0	21	51	320	35	40	498	61
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	103	7	57	97	15	62	184	1133	120	107	1282	153
Arrive On Green	0.07	0.00	0.07	0.07	0.00	0.07	0.83	0.83	0.83	0.83	0.83	0.83
Sat Flow, veh/h	651	104	841	567	214	911	167	1362	144	77	1542	184
Grp Volume(v), veh/h	74	0	0	39	0	0	406	0	0	599	0	0
Grp Sat Flow(s),veh/h/ln	1596	0	0	1691	0	0	1673	0	0	1803	0	0
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	0.0	1.9	0.0	0.0	4.2	0.0	0.0	7.2	0.0	0.0
Prop In Lane	0.47		0.53	0.46		0.54	0.13		0.09	0.07		0.10
Lane Grp Cap(c), veh/h	168	0	0	174	0	0	1437	0	0	1542	0	0
V/C Ratio(X)	0.44	0.00	0.00	0.22	0.00	0.00	0.28	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	407	0	0	412	0	0	1437	0	0	1542	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	40.8	0.0	0.0	40.0	0.0	0.0	1.6	0.0	0.0	1.9	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.6	0.0	0.0	0.5	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7	0.0	0.0	0.8	0.0	0.0	0.9	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	0.0	40.6	0.0	0.0	2.1	0.0	0.0	2.6	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		74			39			406			599	
Approach Delay, s/veh		42.7			40.6			2.1			2.6	
Approach LOS		D			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		79.4		10.6		79.4		10.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		60.5		20.5		60.5		20.5				
Max Q Clear Time (g_c+1), s		6.2		5.9		9.2		3.9				
Green Ext Time (p_c), s		3.1		0.2		4.9		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				6.4								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

6: A Street & W San Jacinto Avenue

TTM37803

Opening Year (2021) with Project - PM Peak Hour Mitigation














Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↗
Traffic Volume (veh/h)	10	0	26	1	0	3	43	306	4	2	471	19
Future Volume (veh/h)	10	0	26	1	0	3	43	306	4	2	471	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	12	0	32	1	0	4	53	378	5	2	581	23
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	0	45	2	0	8	174	1218	16	41	1531	1296
Arrive On Green	0.04	0.00	0.04	0.01	0.00	0.01	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	453	0	1207	320	0	1281	160	1510	19	1	1898	1607
Grp Volume(v), veh/h	44	0	0	5	0	0	436	0	0	583	0	23
Grp Sat Flow(s),veh/h/ln	1660	0	0	1601	0	0	1690	0	0	1899	0	1607
Q Serve(g_s), s	2.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.3	0.0	0.0	5.2	0.0	0.0	7.7	0.0	0.3
Prop In Lane	0.27		0.73	0.20		0.80	0.12		0.01	0.00		1.00
Lane Grp Cap(c), veh/h	62	0	0	10	0	0	1407	0	0	1572	0	1296
V/C Ratio(X)	0.72	0.00	0.00	0.48	0.00	0.00	0.31	0.00	0.00	0.37	0.00	0.02
Avail Cap(c_a), veh/h	332	0	0	320	0	0	1407	0	0	1572	0	1296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	0.0	44.6	0.0	0.0	2.2	0.0	0.0	2.4	0.0	1.7
Incr Delay (d2), s/veh	14.3	0.0	0.0	30.2	0.0	0.0	0.6	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2	0.0	0.0	0.2	0.0	0.0	1.3	0.0	0.0	1.9	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.1	0.0	0.0	74.8	0.0	0.0	2.8	0.0	0.0	3.1	0.0	1.7
LnGrp LOS	E	A	A	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		44			5			436			606	
Approach Delay, s/veh		57.1			74.8			2.8			3.1	
Approach LOS		E			E			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		77.1		7.8		77.1		5.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		40.5		18.0		40.5		18.0				
Max Q Clear Time (g_c+1), s		7.2		4.4		9.7		2.3				
Green Ext Time (p_c), s		3.3		0.1		4.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				5.4								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

1: Harvill Avenue & A Street

TTM37803

Cumulative (2021) with Project - AM Peak Hour Mitigation

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	813	267	360	770	135	173
Future Volume (veh/h)	813	267	360	770	135	173
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	884	290	391	837	147	188
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1006	461	865	772	183	2255
Arrive On Green	0.29	0.29	0.48	0.48	0.10	0.62
Sat Flow, veh/h	3510	1610	1900	1610	1810	3705
Grp Volume(v), veh/h	884	290	391	837	147	188
Grp Sat Flow(s),veh/h/ln	1755	1610	1805	1610	1810	1805
Q Serve(g_s), s	21.6	14.1	13.0	43.1	7.2	1.9
Cycle Q Clear(g_c), s	21.6	14.1	13.0	43.1	7.2	1.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1006	461	865	772	183	2255
V/C Ratio(X)	0.88	0.63	0.45	1.08	0.81	0.08
Avail Cap(c_a), veh/h	1108	508	865	772	294	2255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	27.9	15.6	23.4	39.6	6.7
Incr Delay (d2), s/veh	7.8	2.1	1.7	57.8	8.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	5.6	5.5	27.4	3.5	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.4	30.1	17.3	81.2	47.7	6.8
LnGrp LOS	D	C	B	F	D	A
Approach Vol, veh/h	1174		1228			335
Approach Delay, s/veh	36.3		60.8			24.7
Approach LOS	D		E			C
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.1	47.1			60.2	29.8
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	14.6	35.0			53.6	28.4
Max Q Clear Time (g_c+I1), s	9.2	45.1			3.9	23.6
Green Ext Time (p_c), s	0.2	0.0			1.3	2.2
Intersection Summary						
HCM 6th Ctrl Delay			45.9			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary

4: A Street & Nuevo Road

TTM37803

Cumulative (2021) with Project - AM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕	↕
Traffic Volume (veh/h)	159	0	52	67	3	38	18	769	0	1	512	119
Future Volume (veh/h)	159	0	52	67	3	38	18	769	0	1	512	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.84		0.60	1.00		0.76	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	199	0	65	84	4	48	22	961	0	1	640	149
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	293	2	73	294	25	139	404	2327	0	386	1225	1012
Arrive On Green	0.26	0.00	0.26	0.26	0.26	0.26	0.64	0.64	0.00	0.64	0.64	0.64
Sat Flow, veh/h	871	9	287	899	98	544	698	3705	0	593	1900	1570
Grp Volume(v), veh/h	264	0	0	136	0	0	22	961	0	1	640	149
Grp Sat Flow(s),veh/h/ln	1167	0	0	1541	0	0	698	1805	0	593	1900	1570
Q Serve(g_s), s	13.0	0.0	0.0	0.0	0.0	0.0	1.6	11.6	0.0	0.1	16.2	3.4
Cycle Q Clear(g_c), s	19.3	0.0	0.0	6.3	0.0	0.0	17.8	11.6	0.0	11.7	16.2	3.4
Prop In Lane	0.75		0.25	0.62		0.35	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	368	0	0	458	0	0	404	2327	0	386	1225	1012
V/C Ratio(X)	0.72	0.00	0.00	0.30	0.00	0.00	0.05	0.41	0.00	0.00	0.52	0.15
Avail Cap(c_a), veh/h	521	0	0	642	0	0	404	2327	0	386	1225	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	0.0	27.3	0.0	0.0	13.4	7.7	0.0	10.6	8.6	6.3
Incr Delay (d2), s/veh	2.7	0.0	0.0	0.4	0.0	0.0	0.3	0.5	0.0	0.0	1.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	0.0	2.4	0.0	0.0	0.3	4.1	0.0	0.0	6.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	0.0	0.0	27.6	0.0	0.0	13.6	8.3	0.0	10.6	10.2	6.6
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	B	A
Approach Vol, veh/h		264			136			983				790
Approach Delay, s/veh		34.5			27.6			8.4				9.5
Approach LOS		C			C			A				A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		62.5		27.5		62.5		27.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		35.5		45.5		35.5				
Max Q Clear Time (g_c+I1), s		19.8		21.3		18.2		8.3				
Green Ext Time (p_c), s		7.9		1.7		5.4		0.8				

Intersection Summary

HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

5: A Street & W Metz Road

TTM37803

Cumulative (2021) with Project - AM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	45	1	104	11	0	6	57	757	30	19	593	14
Future Volume (veh/h)	45	1	104	11	0	6	57	757	30	19	593	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	1	127	13	0	7	70	923	37	23	723	17
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	133	18	166	226	21	80	117	1135	44	78	1242	29
Arrive On Green	0.15	0.15	0.15	0.15	0.00	0.15	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	361	122	1096	839	136	525	76	1626	63	23	1779	41
Grp Volume(v), veh/h	183	0	0	20	0	0	1030	0	0	763	0	0
Grp Sat Flow(s),veh/h/ln	1579	0	0	1499	0	0	1766	0	0	1843	0	0
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	0.0	0.6	0.0	0.0	23.8	0.0	0.0	12.2	0.0	0.0
Prop In Lane	0.30		0.69	0.65		0.35	0.07		0.04	0.03		0.02
Lane Grp Cap(c), veh/h	318	0	0	327	0	0	1297	0	0	1348	0	0
V/C Ratio(X)	0.58	0.00	0.00	0.06	0.00	0.00	0.79	0.00	0.00	0.57	0.00	0.00
Avail Cap(c_a), veh/h	547	0	0	531	0	0	1297	0	0	1348	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.3	0.0	0.0	21.8	0.0	0.0	6.1	0.0	0.0	4.6	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.1	0.0	0.0	5.1	0.0	0.0	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.2	0.0	0.0	6.7	0.0	0.0	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	0.0	0.0	21.9	0.0	0.0	11.2	0.0	0.0	6.3	0.0	0.0
LnGrp LOS	C	A	A	C	A	A	B	A	A	A	A	A
Approach Vol, veh/h		183			20			1030			763	
Approach Delay, s/veh		26.0			21.9			11.2			6.3	
Approach LOS		C			C			B			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.4		13.6		46.4		13.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		33.0		18.0		33.0		18.0				
Max Q Clear Time (g_c+1), s		25.8		8.6		14.2		2.6				
Green Ext Time (p_c), s		4.5		0.7		5.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				10.8								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

6: A Street & W San Jacinto Avenue

TTM37803

Cumulative (2021) with Project - AM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↗
Traffic Volume (veh/h)	19	0	48	5	0	13	20	827	3	6	730	7
Future Volume (veh/h)	19	0	48	5	0	13	20	827	3	6	730	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	0	59	6	0	16	25	1021	4	7	901	9
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	30	0	77	10	0	28	57	1392	5	43	1439	1225
Arrive On Green	0.06	0.00	0.06	0.02	0.00	0.02	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	466	0	1195	441	0	1177	22	1826	7	4	1888	1607
Grp Volume(v), veh/h	82	0	0	22	0	0	1050	0	0	908	0	9
Grp Sat Flow(s),veh/h/ln	1662	0	0	1618	0	0	1854	0	0	1891	0	1607
Q Serve(g_s), s	4.4	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	4.4	0.0	0.0	1.2	0.0	0.0	26.5	0.0	0.0	19.6	0.0	0.1
Prop In Lane	0.28		0.72	0.27		0.73	0.02		0.00	0.01		1.00
Lane Grp Cap(c), veh/h	107	0	0	38	0	0	1455	0	0	1482	0	1225
V/C Ratio(X)	0.77	0.00	0.00	0.58	0.00	0.00	0.72	0.00	0.00	0.61	0.00	0.01
Avail Cap(c_a), veh/h	332	0	0	324	0	0	1455	0	0	1482	0	1225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	0.0	43.5	0.0	0.0	5.7	0.0	0.0	4.9	0.0	2.6
Incr Delay (d2), s/veh	11.0	0.0	0.0	13.1	0.0	0.0	3.1	0.0	0.0	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.6	0.0	0.0	8.4	0.0	0.0	6.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	0.0	0.0	56.6	0.0	0.0	8.8	0.0	0.0	6.8	0.0	2.6
LnGrp LOS	D	A	A	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		82			22			1050			917	
Approach Delay, s/veh		52.5			56.6			8.8			6.7	
Approach LOS		D			E			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		73.1		10.3		73.1		6.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		40.5		18.0		40.5		18.0				
Max Q Clear Time (g_c+1), s		28.5		6.4		21.6		3.2				
Green Ext Time (p_c), s		6.7		0.3		7.1		0.0				

Intersection Summary












HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

TTM37803

1: Harvill Avenue & A Street

Cumulative (2021) with Project - PM Peak Hour Mitigation

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	435	99	215	561	144	347
Future Volume (veh/h)	435	99	215	561	144	347
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	473	108	234	610	157	377
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	596	273	1063	949	195	2677
Arrive On Green	0.17	0.17	0.59	0.59	0.11	0.74
Sat Flow, veh/h	3510	1610	1900	1610	1810	3705
Grp Volume(v), veh/h	473	108	234	610	157	377
Grp Sat Flow(s),veh/h/ln	1755	1610	1805	1610	1810	1805
Q Serve(g_s), s	11.6	5.4	5.5	22.6	7.6	2.7
Cycle Q Clear(g_c), s	11.6	5.4	5.5	22.6	7.6	2.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	596	273	1063	949	195	2677
V/C Ratio(X)	0.79	0.40	0.22	0.64	0.80	0.14
Avail Cap(c_a), veh/h	936	429	1063	949	402	2677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	33.3	8.7	12.2	39.2	3.4
Incr Delay (d2), s/veh	2.5	0.9	0.5	3.3	7.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	2.1	2.1	8.1	3.7	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.4	34.2	9.2	15.6	46.7	3.5
LnGrp LOS	D	C	A	B	D	A
Approach Vol, veh/h	581		844			534
Approach Delay, s/veh	37.6		13.8			16.2
Approach LOS	D		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.7	57.0			70.7	19.3
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	20.0	34.0			58.0	24.0
Max Q Clear Time (g_c+I1), s	9.6	24.6			4.7	13.6
Green Ext Time (p_c), s	0.3	4.0			2.8	1.6
Intersection Summary						
HCM 6th Ctrl Delay			21.5			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary

4: A Street & Nuevo Road

TTM37803

Cumulative (2021) with Project - PM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↕	↕	↔	↕	↕
Traffic Volume (veh/h)	87	0	16	14	2	14	14	468	3	2	553	97
Future Volume (veh/h)	87	0	16	14	2	14	14	468	3	2	553	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.72		0.49	0.64		0.70	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	109	0	20	18	2	18	18	585	4	2	691	121
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	241	5	32	159	30	116	36	2380	16	5	1197	989
Arrive On Green	0.20	0.00	0.20	0.20	0.20	0.20	0.02	0.65	0.65	0.00	0.63	0.63
Sat Flow, veh/h	838	27	159	499	148	582	1810	3675	25	1810	1900	1570
Grp Volume(v), veh/h	129	0	0	38	0	0	18	287	302	2	691	121
Grp Sat Flow(s),veh/h/ln	1024	0	0	1229	0	0	1810	1805	1895	1810	1900	1570
Q Serve(g_s), s	8.0	0.0	0.0	0.0	0.0	0.0	0.9	6.0	6.0	0.1	19.0	2.8
Cycle Q Clear(g_c), s	10.0	0.0	0.0	2.0	0.0	0.0	0.9	6.0	6.0	0.1	19.0	2.8
Prop In Lane	0.84		0.16	0.47		0.47	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	278	0	0	304	0	0	36	1169	1227	5	1197	989
V/C Ratio(X)	0.46	0.00	0.00	0.12	0.00	0.00	0.49	0.25	0.25	0.41	0.58	0.12
Avail Cap(c_a), veh/h	317	0	0	345	0	0	111	1169	1227	111	1197	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	0.0	29.6	0.0	0.0	43.6	6.6	6.6	44.8	9.7	6.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.2	0.0	0.0	10.0	0.5	0.5	46.5	2.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	0.7	0.0	0.0	0.5	2.2	2.3	0.1	7.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	0.0	0.0	29.8	0.0	0.0	53.6	7.1	7.1	91.3	11.7	6.9
LnGrp LOS	C	A	A	C	A	A	D	A	A	F	B	A
Approach Vol, veh/h		129			38			607				814
Approach Delay, s/veh		33.7			29.8			8.5				11.2
Approach LOS		C			C			A				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	62.8		22.5	6.3	61.2		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	49.5		21.5	5.5	49.5		21.5				
Max Q Clear Time (g_c+I1), s	2.1	8.0		12.0	2.9	21.0		4.0				
Green Ext Time (p_c), s	0.0	4.0		0.6	0.0	5.9		0.2				

Intersection Summary

HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

5: A Street & W Metz Road

TTM37803

Cumulative (2021) with Project - PM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	29	0	46	15	0	17	65	449	29	33	546	50
Future Volume (veh/h)	29	0	46	15	0	17	65	449	29	33	546	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	35	0	56	18	0	21	79	548	35	40	666	61
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	127	9	84	135	19	78	168	1113	68	100	1238	110
Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.09	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	506	101	972	553	224	906	132	1456	89	49	1620	144
Grp Volume(v), veh/h	91	0	0	39	0	0	662	0	0	767	0	0
Grp Sat Flow(s),veh/h/ln1580	0	0	1683	0	0	1677	0	0	1813	0	0	0
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.3	0.0	0.0	1.3	0.0	0.0	7.7	0.0	0.0	9.8	0.0	0.0
Prop In Lane	0.38		0.62	0.46		0.54	0.12		0.05	0.05		0.08
Lane Grp Cap(c), veh/h	219	0	0	233	0	0	1348	0	0	1448	0	0
V/C Ratio(X)	0.42	0.00	0.00	0.17	0.00	0.00	0.49	0.00	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	544	0	0	550	0	0	1348	0	0	1448	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.5	0.0	0.0	25.6	0.0	0.0	2.6	0.0	0.0	2.8	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.3	0.0	0.0	1.3	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln1.3	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	0.0	0.0	26.0	0.0	0.0	3.9	0.0	0.0	4.2	0.0	0.0
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		91			39			662			767	
Approach Delay, s/veh		27.8			26.0			3.9			4.2	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.3		9.7		50.3		9.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		33.0		18.0		33.0		18.0				
Max Q Clear Time (g_c+1), s		9.7		5.3		11.8		3.3				
Green Ext Time (p_c), s		5.4		0.3		6.0		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				6.0								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

6: A Street & W San Jacinto Avenue

TTM37803

Cumulative (2021) with Project - PM Peak Hour Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↗
Traffic Volume (veh/h)	10	0	26	1	0	3	43	516	4	2	623	19
Future Volume (veh/h)	10	0	26	1	0	3	43	516	4	2	623	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	12	0	32	1	0	4	53	637	5	2	769	23
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	0	45	2	0	8	114	1327	10	41	1531	1296
Arrive On Green	0.04	0.00	0.04	0.01	0.00	0.01	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	453	0	1207	320	0	1281	88	1646	13	1	1899	1607
Grp Volume(v), veh/h	44	0	0	5	0	0	695	0	0	771	0	23
Grp Sat Flow(s),veh/h/ln1660	0	0	1601	0	0	1746	0	0	1899	0	1607	
Q Serve(g_s), s	2.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.3	0.0	0.0	10.1	0.0	0.0	11.9	0.0	0.3
Prop In Lane	0.27		0.73	0.20		0.80	0.08		0.01	0.00		1.00
Lane Grp Cap(c), veh/h	62	0	0	10	0	0	1451	0	0	1572	0	1296
V/C Ratio(X)	0.72	0.00	0.00	0.48	0.00	0.00	0.48	0.00	0.00	0.49	0.00	0.02
Avail Cap(c_a), veh/h	332	0	0	320	0	0	1451	0	0	1572	0	1296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	0.0	44.6	0.0	0.0	2.7	0.0	0.0	2.8	0.0	1.7
Incr Delay (d2), s/veh	14.3	0.0	0.0	30.2	0.0	0.0	1.1	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln1.2	0.0	0.0	0.0	0.2	0.0	0.0	2.6	0.0	0.0	3.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.1	0.0	0.0	74.8	0.0	0.0	3.8	0.0	0.0	3.9	0.0	1.7
LnGrp LOS	E	A	A	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		44			5			695			794	
Approach Delay, s/veh		57.1			74.8			3.8			3.9	
Approach LOS		E			E			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		77.1		7.8		77.1		5.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		40.5		18.0		40.5		18.0				
Max Q Clear Time (g_c+11), s		12.1		4.4		13.9		2.3				
Green Ext Time (p_c), s		5.9		0.1		6.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				5.6								
HCM 6th LOS				A								