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REPORT

**Willow Rock Energy Storage Center
Supplemental Application for Certification
Traffic Study Report**

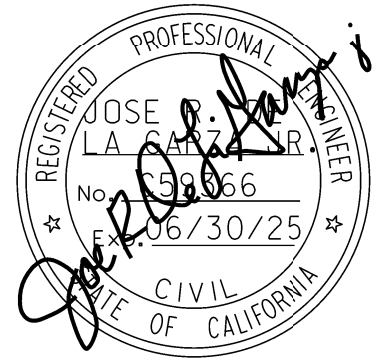
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Table of Contents

1.0 INTRODUCTION	1
2.0 STUDY AREA	3
3.0 ANALYSIS SCENARIOS	4
4.0 TRAFFIC ANALYSIS METHODOLOGY	4
5.0 TRIP GENERATION	5
5.1 Construction Phase	5
5.2 Operations Phase	6
6.0 TRIP DISTRIBUTION	7
6.1 Construction Trip Distribution – Non-Specialized Workers	7
6.2 Construction Trip Distribution – Specialized Workers	8
6.3 Construction Trip Distribution – Water Trucks	10
6.4 Construction Trip Distribution – Haul Trucks	11
7.0 EXISTING TRAFFIC VOLUMES	13
8.0 FORECAST VOLUMES	15
8.1 Year 2028 Before Construction Volumes	15
8.2 Year 2028 During Construction Volumes	15
9.0 EXISTING CONDITIONS	18
9.1 Intersection Operations Analysis	18
9.2 Queuing Analysis	18
10.0 YEAR 2028 BEFORE CONSTRUCTION CONDITIONS	20
10.1 Intersection Operations Analysis	20
10.2 Queuing Analysis	20
11.0 YEAR 2028 DURING CONSTRUCTION CONDITIONS	21
11.1 Intersection Operations Analysis	21
11.2 Queuing Analysis	22
12.0 TEMPORARY IMPROVEMENTS DURING CONSTRUCTION	22

13.0 CONCLUSIONS.....23

TABLES

Table 1: Study Intersections	3
Table 2: Level of Service Threshold	5
Table 3: Project Trip Generation During Construction	6
Table 4: Project Trip Generation During Operation	7
Table 5: Residential Locations of Non-Specialized Workers.....	7
Table 6: Residential Distribution of Specialized Workers.....	9
Table 7: Existing (2024) Roadway Segment Daily Traffic Volume.....	13
Table 8: Existing (2024) Intersection Levels of Service	18
Table 9: Existing (2024) Ramp Intersection Queuing Summary	18
Table 10: Year 2028 Before Construction Intersection Levels of Service.....	20
Table 11: Year 2028 Before Construction Ramp Intersection Queuing Summary.....	21
Table 12: Year 2028 During Construction Intersection Levels of Service.....	22
Table 13: Year 2028 During Construction Ramp Intersection Queuing Summary.....	22
Table 14: Intersection Levels of Service Comparison	24

FIGURES

Figure 1: Project Location.....	2
Figure 2: Study Intersections	4
Figure 3: Project Construction Trip Distribution – Non-Specialized Workers.....	8
Figure 4: Project Construction Trip Distribution – Specialized Workers.....	9
Figure 5: Project Construction Trip Distribution – Water Trucks	10
Figure 6: Project Construction Trip Distribution – Haul Trucks	11
Figure 7: Project Trips During Construction	12
Figure 8: Existing (2024) Peak Hour Intersection Traffic Volumes	14
Figure 9: Year 2028 Before Construction Peak Hour Intersection Volumes.....	16
Figure 10: Year 2028 During Construction Peak Hour Intersection Volumes.....	17
Figure 11: Intersection Lane Configuration	19

APPENDICES

APPENDIX A

Existing Traffic Count Data

APPENDIX B

Volume Development Worksheets

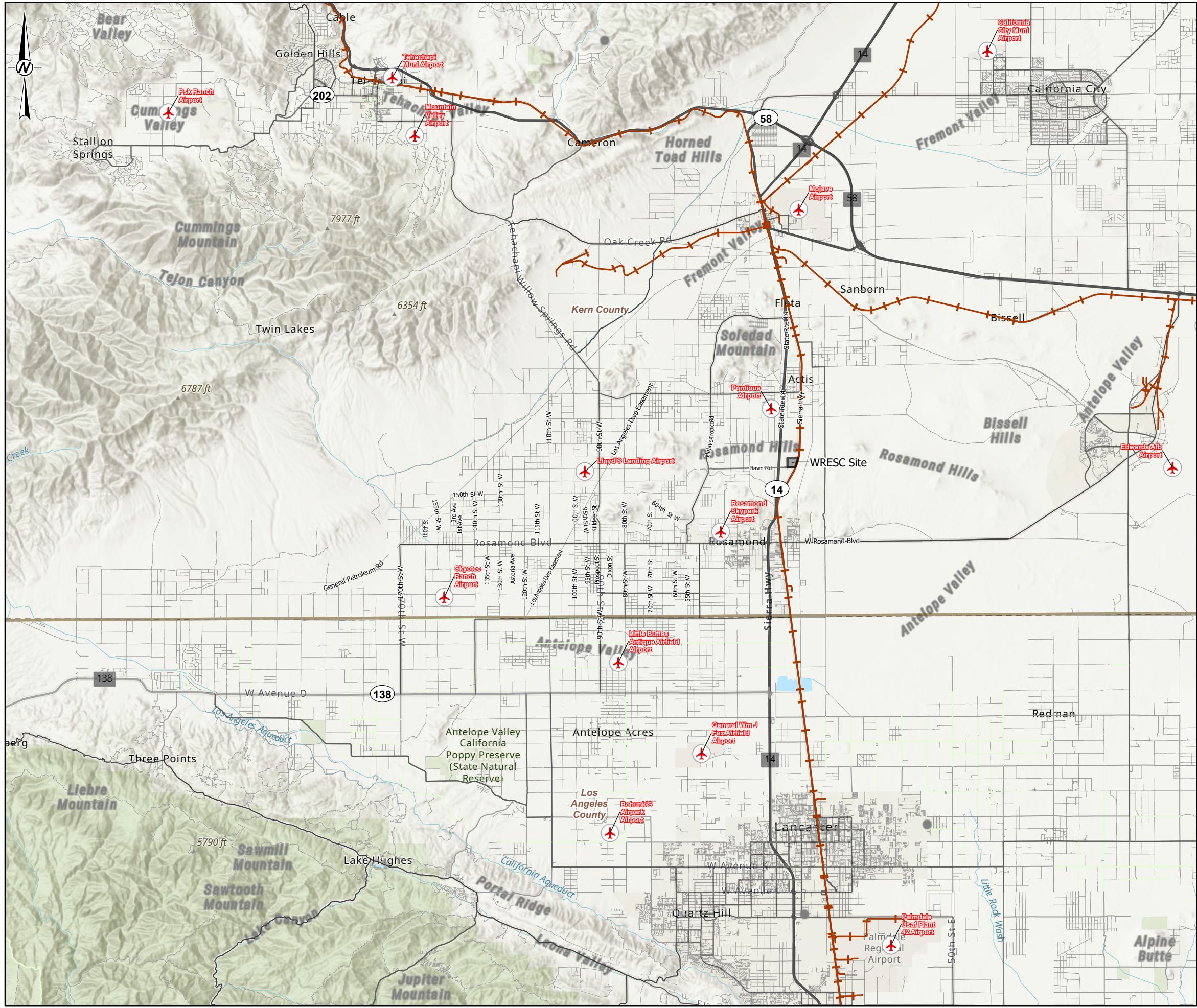
APPENDIX C

HCM 6th Analysis Worksheets

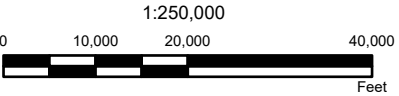
1.0 INTRODUCTION

GEM A-CAES LLC's (GEM, the Applicant) Willow Rock Energy Storage Center (WRESC, or Willow Rock) will be located on approximately 88.6 acres of private land immediately north of Dawn Road and between State Route (SR) 14 and Sierra Highway within unincorporated, southeastern Kern County, California. The WRESC will be a nominal 520-megawatt (MW) gross (500 MW net) and 4,160 megawatt-hour (MWh) gross (4,000 MWh net) facility using Hydrostor, Inc.'s (Hydrostor's) proprietary, advanced compressed air energy storage (A-CAES) technology. Energy stored at the WRESC will be delivered to Southern California Edison's (SCE's) Whirlwind Substation located southwest of the WRESC at the intersection of 170th Street W and Rosamond Boulevard, via a new approximately 19-mile 230-kilovolt (kV) generation-tie (gen-tie) line. The WRESC will be capable of operating on a 24-hour basis, 365 days a year with an approximately 50-year lifespan. The Project or Project Area encompasses the WRESC Site, the parcels within the Project Boundary, and the right-of-way (ROW) associated with the WRESC's gen-tie line. **Figure 1** illustrates the project location.

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- LEGEND**
- WRES SITE
 - RAILS
 - AIRPORTS
- ROAD CLASSIFICATION**
- FREEWAY
 - MAJOR ROAD
 - SECONDARY ROAD
 - LOCAL CONNECTING ROAD
 - IMPORTANT LOCAL ROAD
 - COUNTY BOUNDARIES



REFERENCE(S)
MAP SERVICE LAYER CREDITS: ESRI, NASA, NGA, USGS, ESRI, HERE, GARMIN, FAO, USGS, EPA, NPS, CALIFORNIA STATE PARKS, ESRI, TOMTOM, GARMIN, SAFEGRAPH, METI/NASA, USGS, BUREAU OF LAND MANAGEMENT, EPA, NPS, USDA, USFWS, CALTRANS

CLIENT
GEM A-CAES LLC

PROJECT
WILLOW ROCK ENERGY STORAGE CENTER
KERN COUNTY TRAFFIC STUDY

TITLE
REGIONAL TRANSPORTATION SETTING

CONSULTANT	YYYY-MM-DD	2024-07-26
	DESIGNED	KO
	PREPARED	KO
	REVIEWED	VA
	APPROVED	VA



PROJECT NO.
29687.4225

FIGURE
5.12-1

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The construction of the proposed Willow Rock Energy Storage facility will result in added traffic due to workers and construction equipment accessing the site. Division Nine of Kern County's Standards for Traffic Engineering states that a traffic study is required for any project where the increase in project trip generation is expected to exceed 50 vehicle trips in any peak hour. The operations and maintenance of the proposed WRESC facility would generate less than 50 trips in any peak hour and less than 100 trips per day and therefore, the effects of project operations on surrounding roadway network would be minimal. A focused traffic study was conducted to evaluate the effects of the project construction-related additional traffic on the surrounding roadway network. The purpose of this report is to document the methodology, assumptions, and results of the data collection, traffic forecasting, and analysis conducted for the project.

2.0 STUDY AREA

The study area for the traffic analysis includes the intersections that are expected to be used by the project related vehicles. **Table 1** lists the study intersections. **Figure 2** illustrates the location of the study intersections.

Table 1: Study Intersections

ID	Intersection	Control Type
1	Mojave Tropico Rd & Backus Rd	SSSC
2	SR 14 SB Ramps & Backus Rd	SSSC
3	SR 14 NB Ramps & Backus Rd	SSSC
4	SR 14 SB Ramps & Dawn Rd	SSSC
5	SR 14 NB Ramps & Dawn Rd	SSSC
6	Project Driveway & Dawn Rd (future intersection)	SSSC
7	Sierra Highway & Backus Rd	SSSC
8	Sierra Highway & Dawn Rd	SSSC

SSSC=Side Street Stop Control

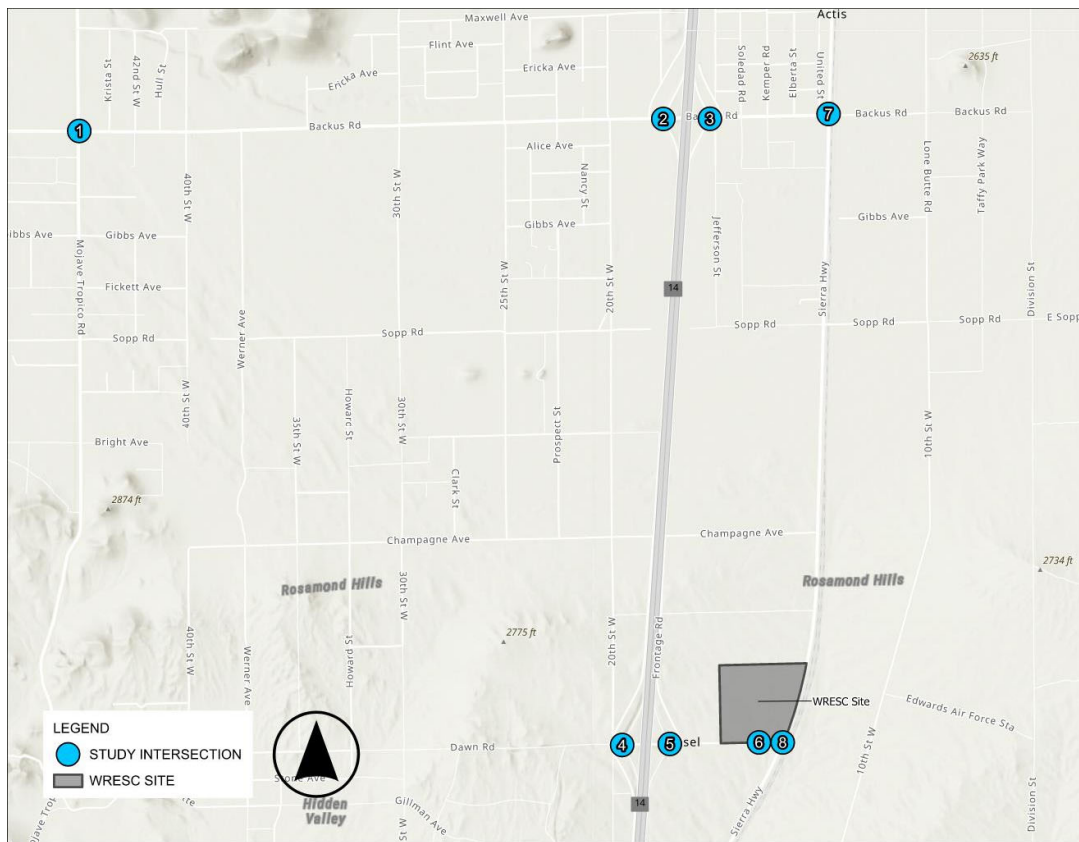


Figure 2: Study Intersections

3.0 ANALYSIS SCENARIOS

The construction of the facility from site preparation and grading to full-scale operation is expected to take approximately 60 months. The construction is anticipated to start in March 2025 and the peak construction activity is estimated to occur in year 2028. Therefore, traffic forecasts were developed, and traffic operations were evaluated at the study intersections for 2028 conditions for the typical mid-weekday AM and PM peak hours. The following scenarios were evaluated for this project:

- Existing (2024) Conditions
- Year 2028 Before Construction Conditions
- Year 2028 During Construction Conditions

4.0 TRAFFIC ANALYSIS METHODOLOGY

Peak hour intersection traffic operations were analyzed using the Highway Capacity Manual (HCM) 6th Edition operations methodology utilizing Synchro (v11) software.

According to the HCM methodology, intersection Level of Service (LOS) thresholds are based on the average delay incurred by vehicles traveling through the intersection. This methodology determines the capacity of each lane group approaching the intersection. The LOS criteria for intersections controlled by traffic signals are stated in terms of the average control delay per vehicle (expressed in seconds). For unsignalized (two-way stop

controlled) intersections, LOS is based on the worst approach delay at the intersection. LOS ranges from LOS A, which indicates free flow or excellent conditions with short delays, to LOS F, which indicates congested or overloaded conditions with prolonged delays. **Table 2** shows the LOS ranges for signalized and unsignalized intersections.

Table 2: Level of Service Threshold

Level of Service	Signalized Intersection Control Delay (seconds)	Unsignalized Intersection Control Delay (seconds)
A	0-10	0-10
B	>10-20	>10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50

Source: *Highway Capacity Manual*, 6th Edition

In addition, 95th percentile queue lengths were extracted for the study area off-ramps using the results of the intersection LOS analysis. The 95th percentile queue lengths were then compared to the available storage on the off-ramps to determine if there is sufficient queuing space.

Kern County aims to maintain a minimum level of service of LOS D for all roads throughout the County, unless the roads are part of an adopted Community Plan or Specific Plan. Caltrans level of service standard is LOS C-D for state highways. Therefore, intersection operations are assumed to be generally unacceptable if:

- Peak hour level of service changes from LOS D to LOS E or worse with construction conditions.
- Any delay is added with construction conditions if the projected peak hour LOS is E or F in the before construction conditions.
- 95th percentile queues spill over from turn pockets into through lanes.

5.0 TRIP GENERATION

5.1 Construction Phase

As mentioned previously, the construction of the facility is expected to take approximately 60 months. Construction traffic to the WRESC Site has been estimated based on the schedule of construction activities, the number of workers, and the type and number of construction-related trucks that will be required at each stage of construction. Truck volumes have been converted to passenger car equivalents (PCE) using a factor of 2.0, which is appropriate for heavy trucks on surface streets according to the Highway Capacity Manual. **Table 3** summarizes the construction-related trip generation during the peak of construction. The following assumptions were made in calculating the peak hour trips during construction¹:

¹ Trip generation and trip distribution assumptions were documented and approved in the Supplemental Application for Certification (AFC), Section 5.12 Traffic and Transportation

- 15% of workers will be recruited locally and drive alone to the site.
- 85% of the workers, particularly those with special skills, will be recruited from areas outside of the county and will reside in hotels during the period when they work on the WRESC. They will drive alone to work in personal vehicles.
- All workers arrive during the AM peak hour and depart during the PM peak hour.
- 10% of the truck trips entering or leaving the site in a day will travel during the AM peak hour and another 10% will travel during the PM peak hour. Half of the peak hour trips will be entering the site, and the other half will be leaving the site.

These are considered conservative assumptions, given that locally recruited construction workers may carpool, and truck drivers prefer to avoid periods of heavy traffic when possible.

Table 3: Project Trip Generation During Construction

Vehicle Type	AM Peak Hour			PM Peak Hour			Daily		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
Workers (cars)	749	0	749	0	749	749	749	749	1,498
Water Trucks (in vehicles)	1	1	2	1	1	2	2	2	4
Water Trucks (in PCE)	2	2	4	2	2	4	4	4	8
Haul Trucks (in vehicles)	18	18	36	18	18	36	180	180	360
Haul Trucks (in PCE)	36	36	72	36	36	72	360	360	720
Total Trucks in PCE	38	38	76	38	38	76	364	364	728
Total Construction Traffic (in PCE)	787	38	825	38	787	825	1,113	1,113	2,226

PCE = passenger car equivalent

5.2 Operations Phase

During operation, the WRESC will be staffed with a team of full-time employees that includes the following:

- 30 operators, working on different shifts to cover operations 24 hours per day, 7 days per week
 - 10 operators per shift, assuming three shifts per day
- 5 maintenance staff working 5 days per week and 8 hours per day
- 3 supervisors working 5 days per week and 8 hours per day
- 1 administrative professional working 5 days per week and 8 hours per day
- 1 plant manager working 5 days per week and 8 hours per day Shift changes will likely occur during peak hours and all WRESC workers will likely drive alone to the facility.

Table 4 summarizes the trip generation during operation of the proposed Project.

Table 4: Project Trip Generation During Operation

Vehicle Type	AM Peak Hour			PM Peak Hour			Daily		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
Workers (cars)	20	10	30	10	20	30	40	40	80

PCE = passenger car equivalent

As shown in the table, the proposed project would generate 80 trips per day and 30 trips in the peak hours during the operations and maintenance phase. Since the peak hour trip generation does not exceed 50 trips in any peak hour, the operation of the proposed project is expected to have minimal effect on the surrounding roadway network.

6.0 TRIP DISTRIBUTION

It is anticipated that 15% of the workers (total 113 out of 749) in the construction phase would be considered non-specialized workers and would be recruited locally. The remaining 85% (total 637 out of 749), considered specialized workers, would be recruited from outside the area and would stay in hotels in nearby cities.

6.1 Construction Trip Distribution – Non-Specialized Workers

The residences of the non-specialized workers are assumed to follow the residential distribution of persons currently employed in the Rosamond Census Designated Place (CDP). U.S. census data was used to determine the residential locations of workers in the Rosamond area and are summarized in **Table 5**.

Table 5: Residential Locations of Non-Specialized Workers

Residential Location	Percentage of Workers	Relative Direction to WRESC Site
Rosamond CDP, CA	36%	South
Lancaster, CA	17%	South
Palmdale, CA	8%	South
Los Angeles, CA	3%	South
Mojave CDP, CA	2%	North
Santa Clarita, CA	2%	South
California City, CA	2%	North
Golden Hills CDP, CA	1%	North
Quartz Hill CDP, CA	1%	South
Tehachapi, CA	1%	North
Other Locations	27%	South
Total	100%	-

Source: U.S. Census Bureau, OnTheMap Application

<https://onthemap.ces.census.gov/> (as accessed on 07/17/24)

CA = California; CDP = census-designated place

Based on the residential locations of the non-specialized workers relative to the location of the proposed WRESC site, it is assumed that 94% of the non-specialized workers would enter the site from the south and 6% would enter the site from the north. Out of the 94% non-specialized workers from the south, 89% of them are estimated to access the site using SR 14 and the remaining 5% are expected to use Sierra Highway to access the site (89% + 5% = 94% non-specialized workers total). The 6% of the non-specialized workers from the north are expected to use SR 14 to access the site. **Figure 3** illustrates the trip distribution percentages for the non-specialized workers.

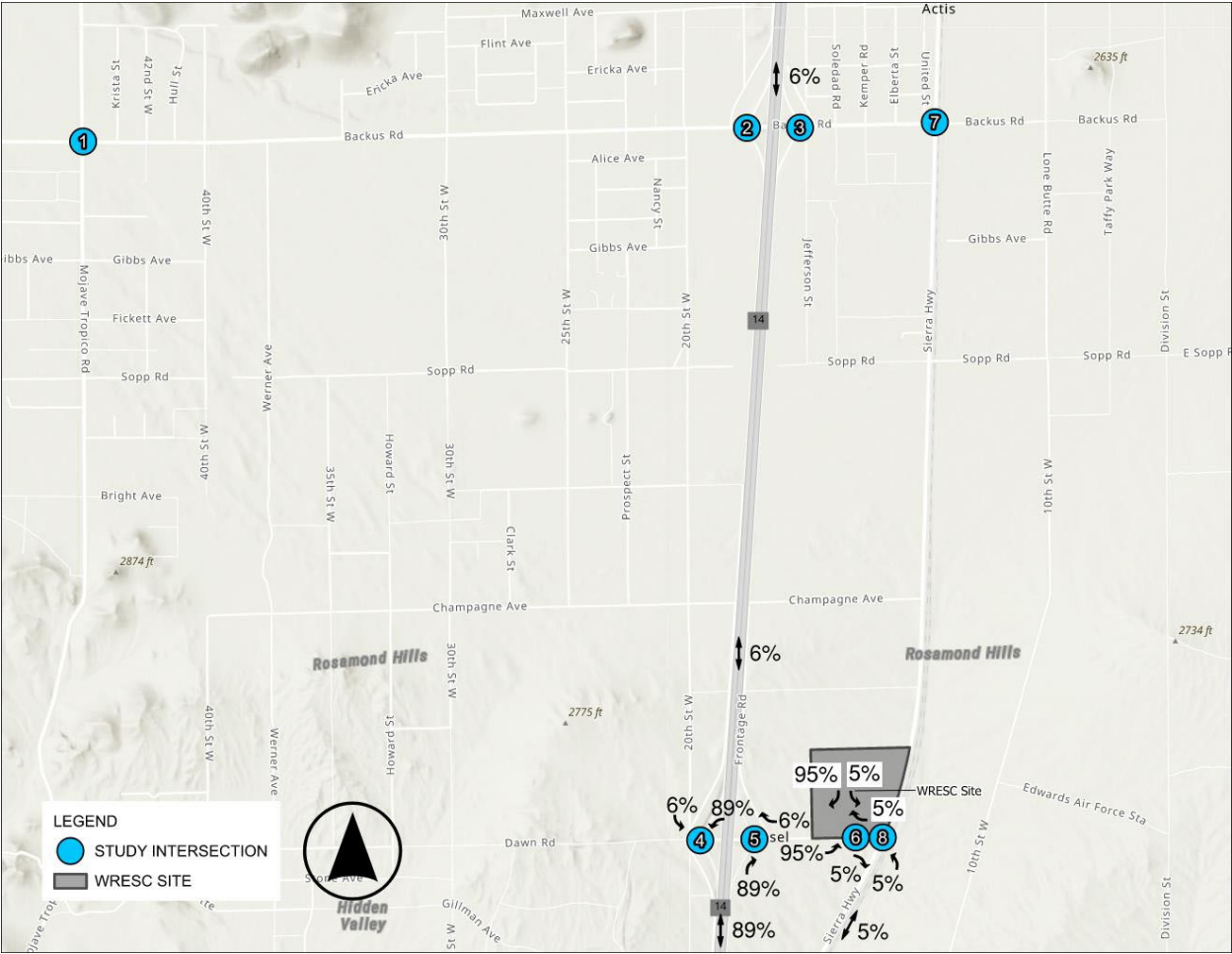


Figure 3: Project Construction Trip Distribution – Non-Specialized Workers

6.2 Construction Trip Distribution – Specialized Workers

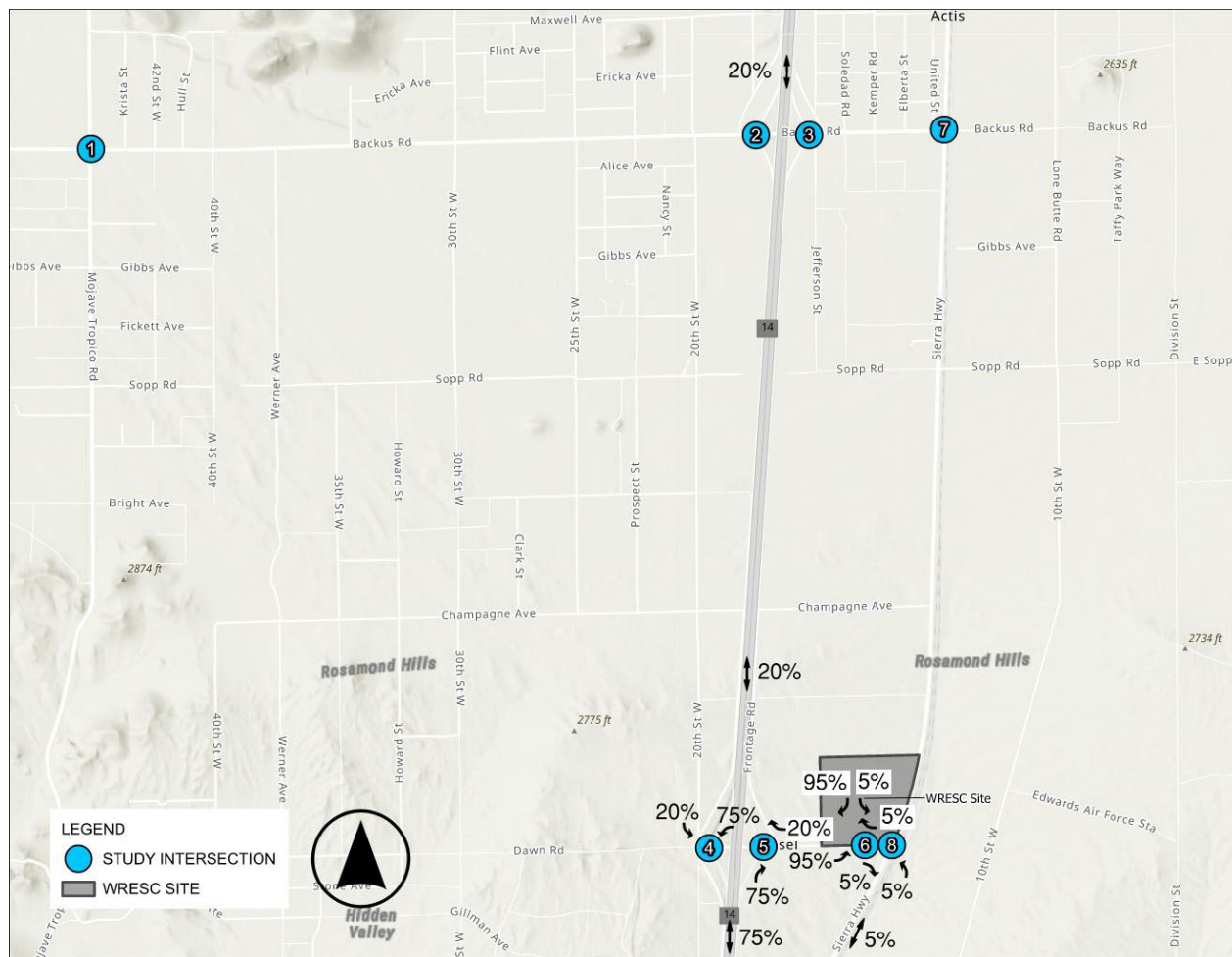
The specialized workforce would presumably stay in hotels in nearby Rosamond, Mojave, Lancaster, and Palmdale. Since it is unknown in which hotels the specialized workers would be lodged, an assumption of their spatial distribution was made based on the spatial distribution of hotels in the area. **Table 6** summarizes the distribution of specialized workers based on the information obtained from Google Maps.

Table 6: Residential Distribution of Specialized Workers

Hotel Location	Number of Hotels (approximate)	Distribution of Workers	Relative Direction to WRESC Site
Rosamond CDP, CA	4	8%	South
Lancaster, CA	21	41%	South
Palmdale, CA	16	31%	South
Mojave CDP, CA	10	20%	North

CA = California; CDP = census-designated place

Based on the distribution of the specialized workers relative to the location of the proposed WRESC site, it is assumed that 80% of the specialized workers would enter the site from the south and 20% would enter the site from the north. Out of the 80% specialized workers from the south, 75% of them are estimated to access the site using SR 14 and the remaining 5% are expected to use Sierra Highway to access the site. The 20% of the specialized workers from the north are expected to use SR 14 to access the site. **Figure 4** illustrates the trip distribution percentages for the specialized workers.

**Figure 4: Project Construction Trip Distribution – Specialized Workers**

6.3 Construction Trip Distribution – Water Trucks

50% of the trucks delivering water to the site during construction are assumed to enter the site from the north and the remaining 50% from the south using SR 14. **Figure 5** illustrates the trip distribution percentages for the water trucks.

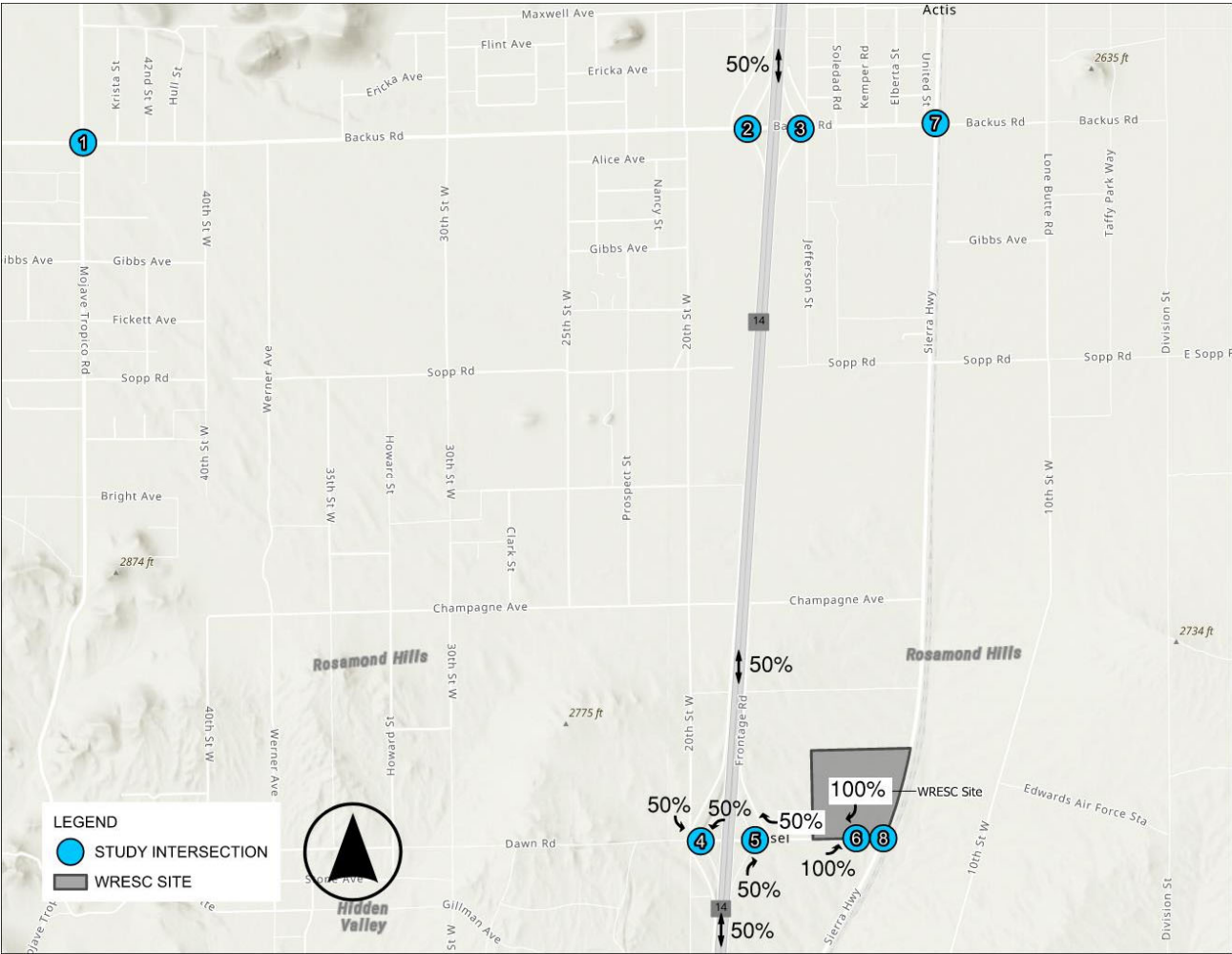


Figure 5: Project Construction Trip Distribution – Water Trucks

6.4 Construction Trip Distribution – Haul Trucks

Approximately 1.3 million cubic yards of rock will be excavated to construct the compressed air caverns.² It is assumed that all of the rock will be transported to the Holliday Rock facility in Mojave, CA, which is located to the north-west of the WRESC site. 95% of the haul trucks are expected to use SR 14 to access the site and the remaining 5% are expected to use Sierra Highway.³ **Figure 6** illustrates the trip distribution percentages for the haul trucks.

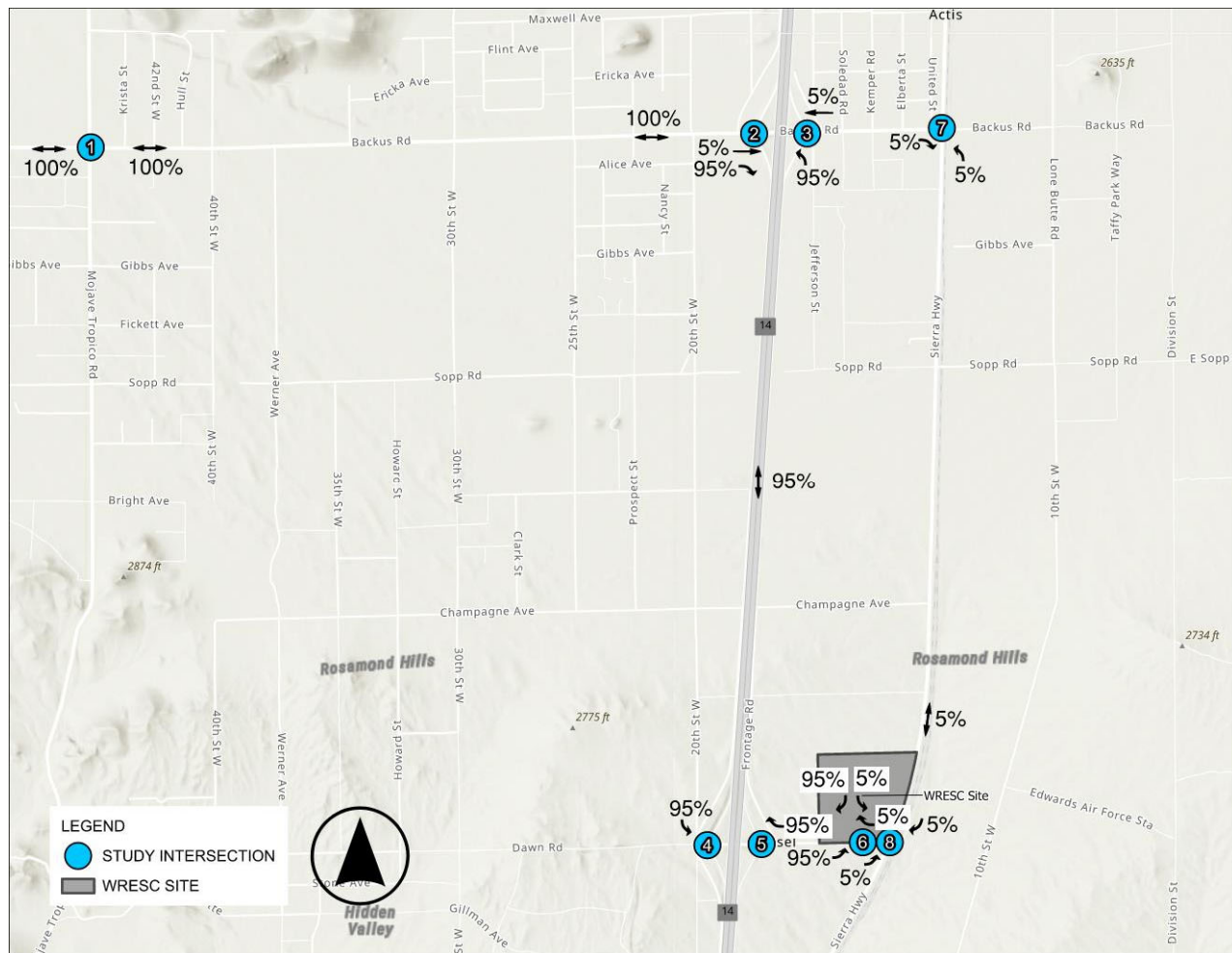


Figure 6: Project Construction Trip Distribution – Haul Trucks

Figure 7 illustrates the project traffic volumes at the study intersections for AM and PM peak hours during construction.

² SAFC Section 2.0 Project Description describes the quantity of rock excavated from the cavern and the size of cavern.

³ On June 26, 2024, the Applicant conducted an information exchange with CEC traffic specialists who directed the scope of study to be focused on Kern County only, and it was not necessary to include cavern rock haul route. However, the Applicant went above and beyond by including the Kern County-based offtake location and haul route for context, and assumed all rock would go there for the purposes of the analysis.

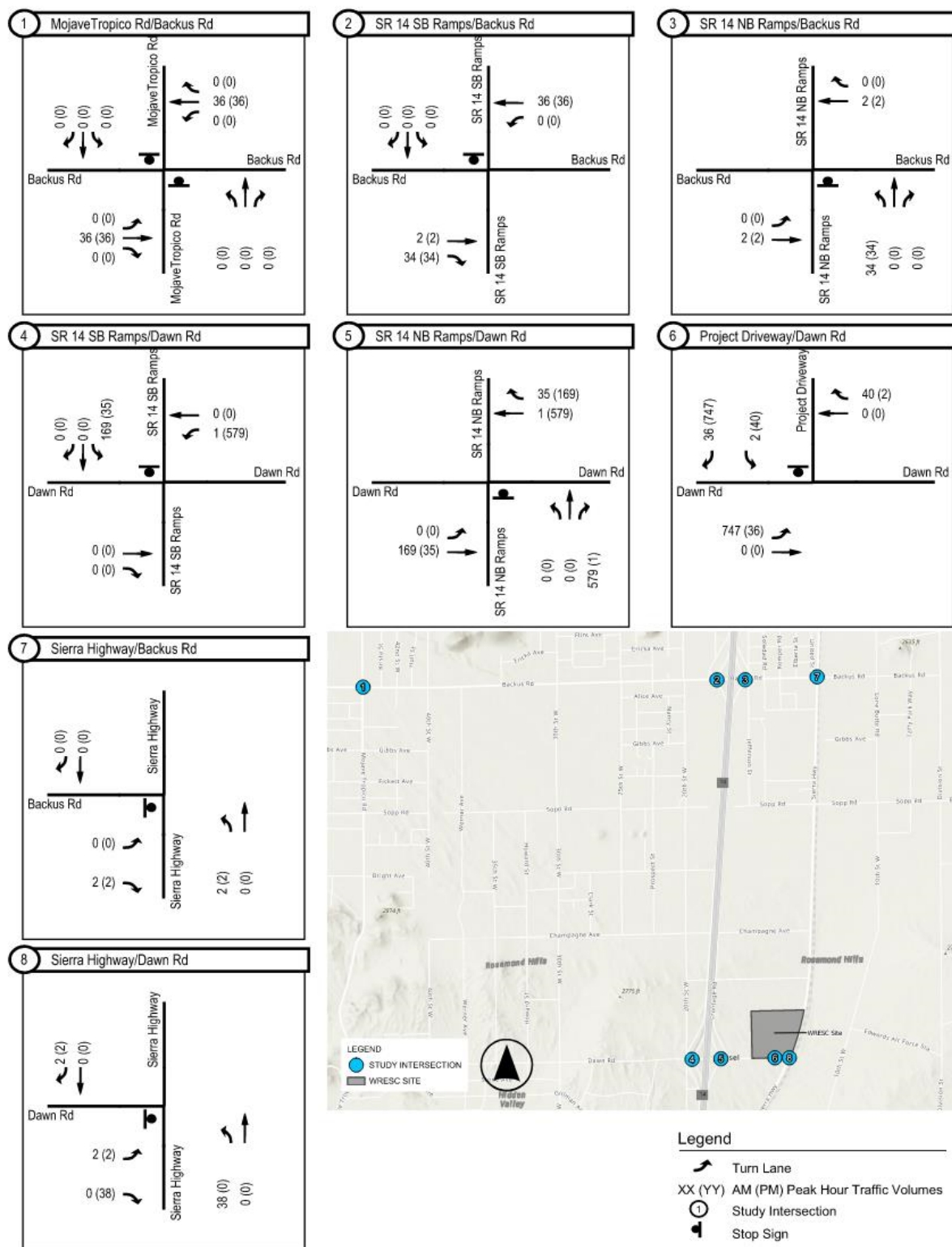


Figure 7: Project Trips During Construction

7.0 EXISTING TRAFFIC VOLUMES

New weekday AM (7:00-9:00 AM) and PM (4:00-6:00 PM) peak period turning movement counts, including vehicle classification, and pedestrian and bicycle counts were collected at the seven existing study intersections on June 25, 2024. The peak hour volume used in the analysis is the highest single hour of traffic during each of the peak periods. Truck volumes were converted to passenger car equivalents (PCE) by applying a factor of 2.0 to account for these slower and less maneuverable vehicles, which is appropriate for heavy trucks on surface streets according to the Highway Capacity Manual. Existing peak hour turning movement PCE volumes at the study intersections are illustrated in **Figure 8**.

In addition, daily (24-hour) traffic volumes including vehicle classification counts were also collected on the same day as the turning movement counts at the following locations:

- Dawn Road between SR 14 Ramps
- Dawn Road between SR 14 and Sierra Highway
- Sierra Highway south of Dawn Road
- Sierra Highway north of Dawn Road
- Backus Road between SR 14 and Mojave Tropic Road

The existing daily roadway segment volumes and truck percentages at the study segments are summarized in **Table 7** below. The raw intersection turning movement counts, pedestrian and bicycle counts, and roadway segment traffic counts are included in **Appendix A**.

Table 7: Existing (2024) Roadway Segment Daily Traffic Volume

Roadway	Segment	All Vehicles			Truck %
		NB/EB	SB/WB	TOTAL	
Dawn Rd	Between SR 14 Ramps	132	85	217	15%
Dawn Rd	Between SR 14 and Sierra Highway	30	19	49	18%
Sierra Hwy	South of Dawn Rd	1,221	1,083	2,304	23%
Sierra Hwy	North of Dawn Rd	1,209	1,082	2,291	26%
Backus Rd	Between SR 14 and Mojave Tropic Rd	1,261	1,086	2,347	20%

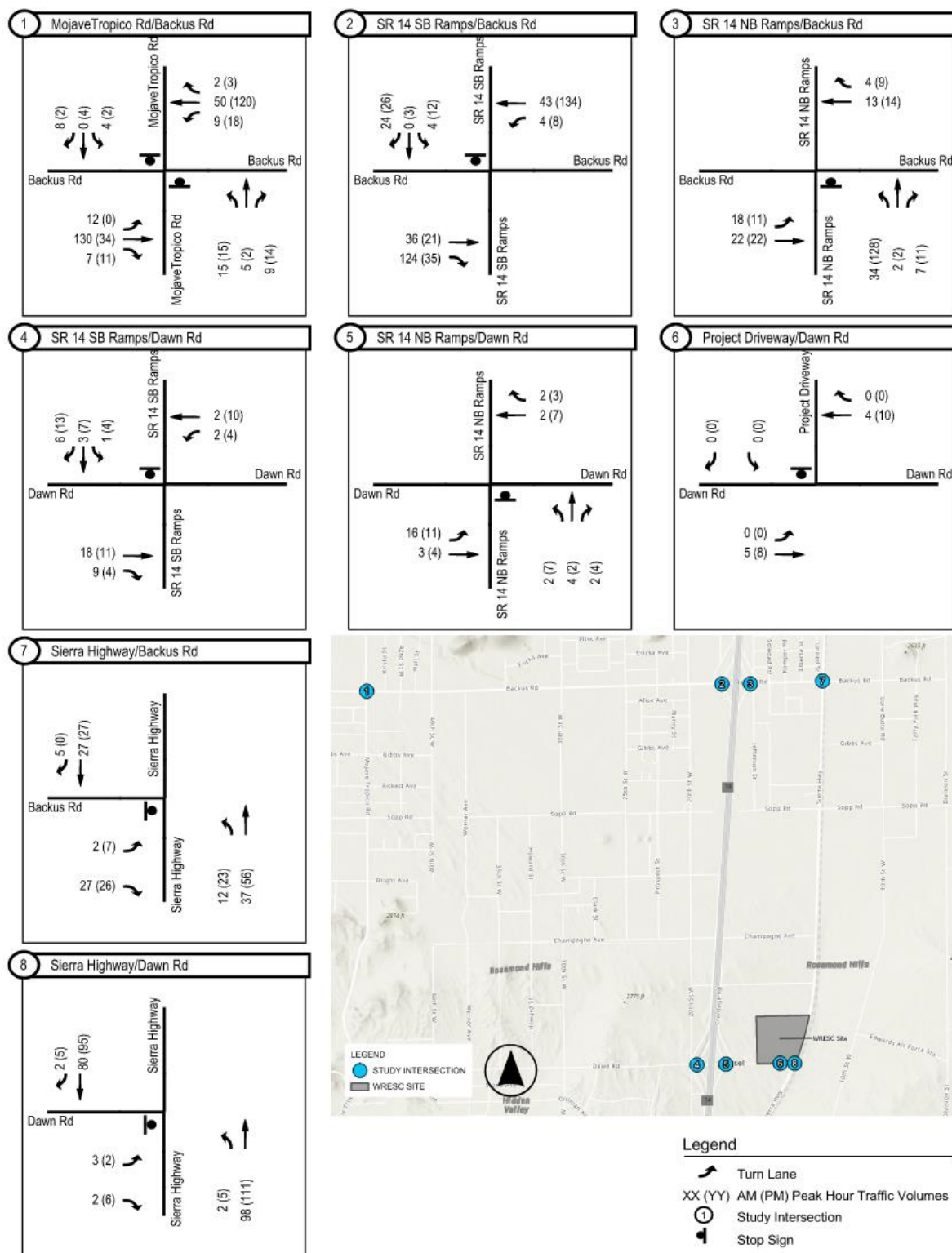


Figure 8: Existing (2024) Peak Hour Intersection Traffic Volumes

8.0 FORECAST VOLUMES

This section describes the traffic forecasting methodology applied to develop the construction year (2028) traffic volumes at the study intersections.

8.1 Year 2028 Before Construction Volumes

Traffic volume projections for the Year 2028 Before Construction conditions were developed using an ambient growth factor. The growth factor (2% per year) was obtained from the Kern County Public Works Department to be used for this project. The growth factor was applied to the existing intersection turning movement volumes to calculate the forecast traffic volume for the Year 2028 Before Construction conditions. The Year 2028 Before Construction peak hour intersection PCE volumes are illustrated in **Figure 9**.

8.2 Year 2028 During Construction Volumes

The traffic volumes for the Year 2028 During Construction conditions were calculated by adding the project construction trips to the “Before Construction” traffic volumes. The estimation of project trips during construction was described in the previous section of this report. The Year 2028 During Construction peak hour intersection volumes are illustrated in **Figure 10**. The volume development worksheets for the Year 2028 Conditions are included in **Appendix B**.

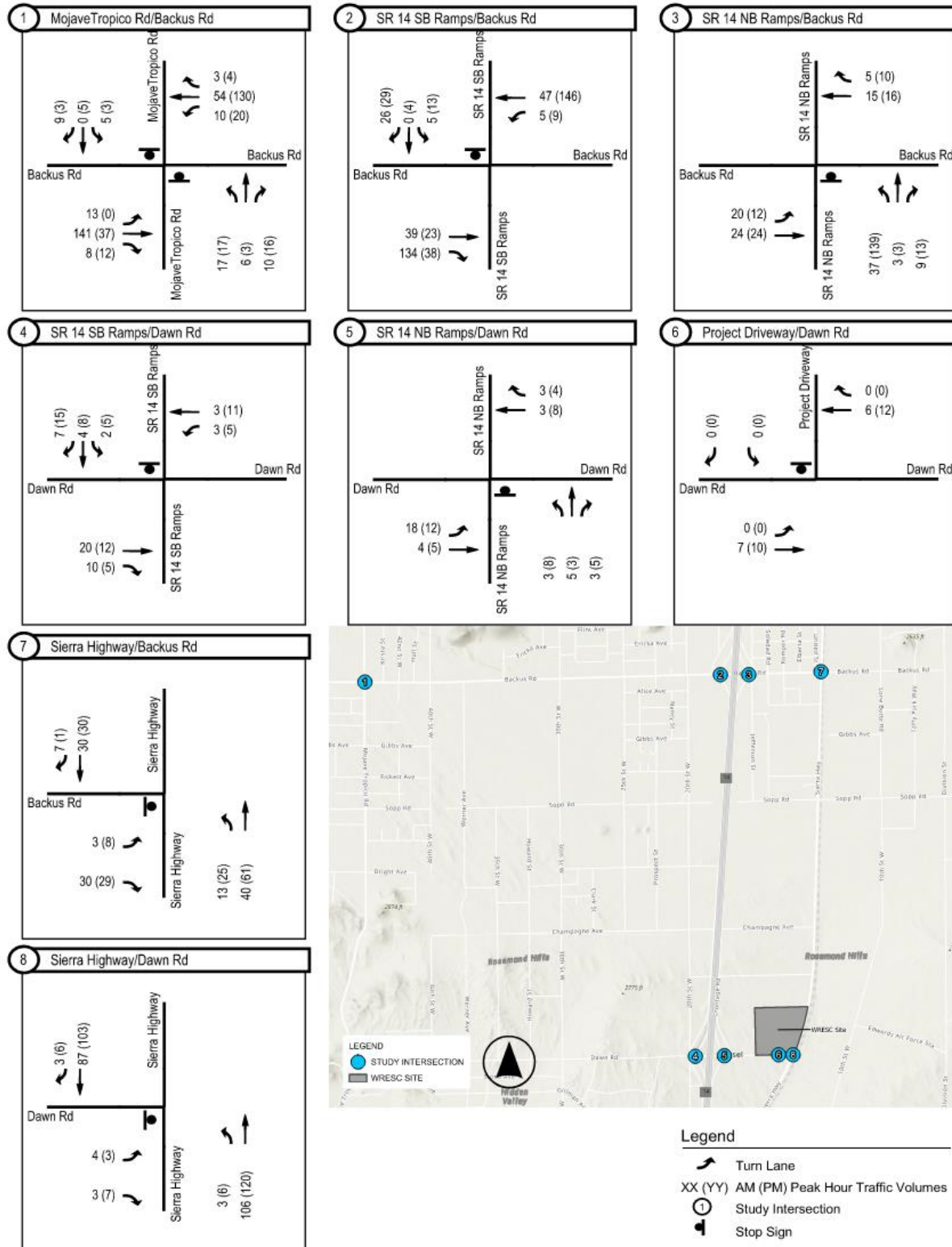


Figure 9: Year 2028 Before Construction Peak Hour Intersection Volumes

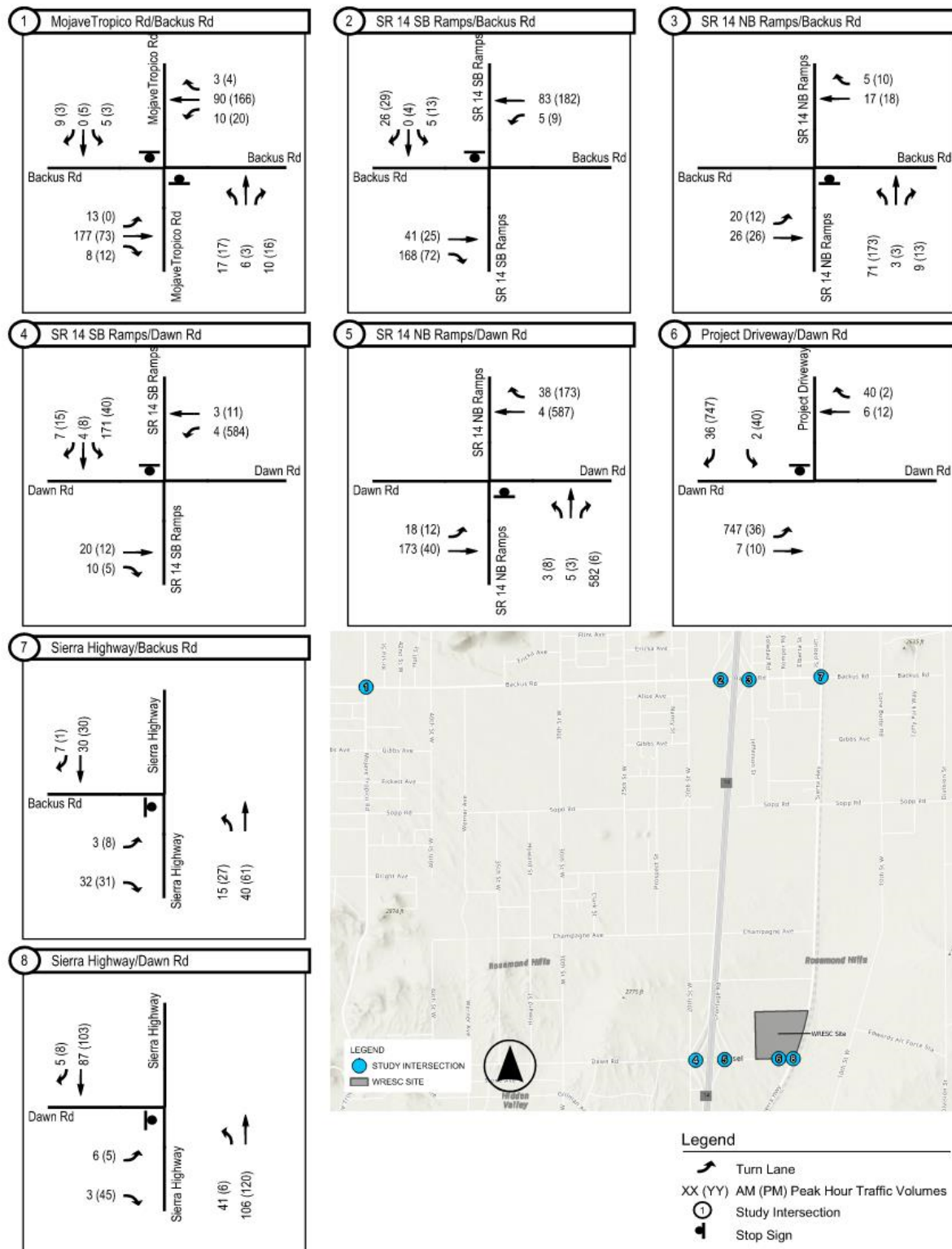


Figure 10: Year 2028 During Construction Peak Hour Intersection Volumes

9.0 EXISTING CONDITIONS

9.1 Intersection Operations Analysis

Traffic volumes at the study intersections for the Existing (2024) conditions were developed using the methodology described in detail under the Existing Traffic Volume section. AM and PM peak hour intersection turning movement volumes for Existing (2024) conditions are illustrated in **Figure 8**.

Existing lane configurations at the study intersections are illustrated in **Figure 11**. A level of service analysis was conducted to evaluate Existing (2024) intersection operations in the study area during AM and PM peak hours and the results are summarized in **Table 8**. As shown in the table, all intersections are currently operating at LOS B or better during both AM and PM peak hours. Detailed LOS calculation worksheets are included in **Appendix C**.

Table 8: Existing (2024) Intersection Levels of Service

ID	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Mojave Tropico Rd & Backus Rd	SSSC	10.1	B	10.1	B
2	SR 14 SB Ramps & Backus Rd	SSSC	8.7	A	9.5	A
3	SR 14 NB Ramps & Backus Rd	SSSC	9.0	A	9.8	A
4	SR 14 SB Ramps & Dawn Rd	SSSC	8.4	A	8.5	A
5	SR 14 NB Ramps & Dawn Rd	SSSC	8.5	A	8.6	A
6	Project Driveway & Dawn Rd (future intersection)	SSSC	Intersection Doesn't Exist			
7	Sierra Highway & Backus Rd	SSSC	8.6	A	8.8	A
8	Sierra Highway & Dawn Rd	SSSC	9.3	A	9.2	A

Notes:

SSSC = Side Street Stop Control

Delay - Average delay (seconds per vehicle)

9.2 Queuing Analysis

A queuing analysis was conducted to evaluate the 95th percentile queues at the freeway off-ramp intersections during both the AM and PM peak hours. **Table 9** summarizes the queuing analysis results for the existing conditions. As shown in the table, the available storage is sufficient to accommodate the existing 95th percentile queues at the off-ramp intersections. Queuing analysis worksheets are included in **Appendix C**.

Table 9: Existing (2024) Ramp Intersection Queuing Summary

ID	Intersection	Approach	Storage (ft)	Queue Length (ft)	
				AM Peak	PM Peak
2	SR 14 SB Ramps & Backus Rd	Southbound	1,770	3	6
3	SR 14 NB Ramps & Backus Rd	Northbound	1,760	3	21
4	SR 14 SB Ramps & Dawn Rd	Southbound	1,740	0	3
5	SR 14 NB Ramps & Dawn Rd	Northbound	1,750	0	0

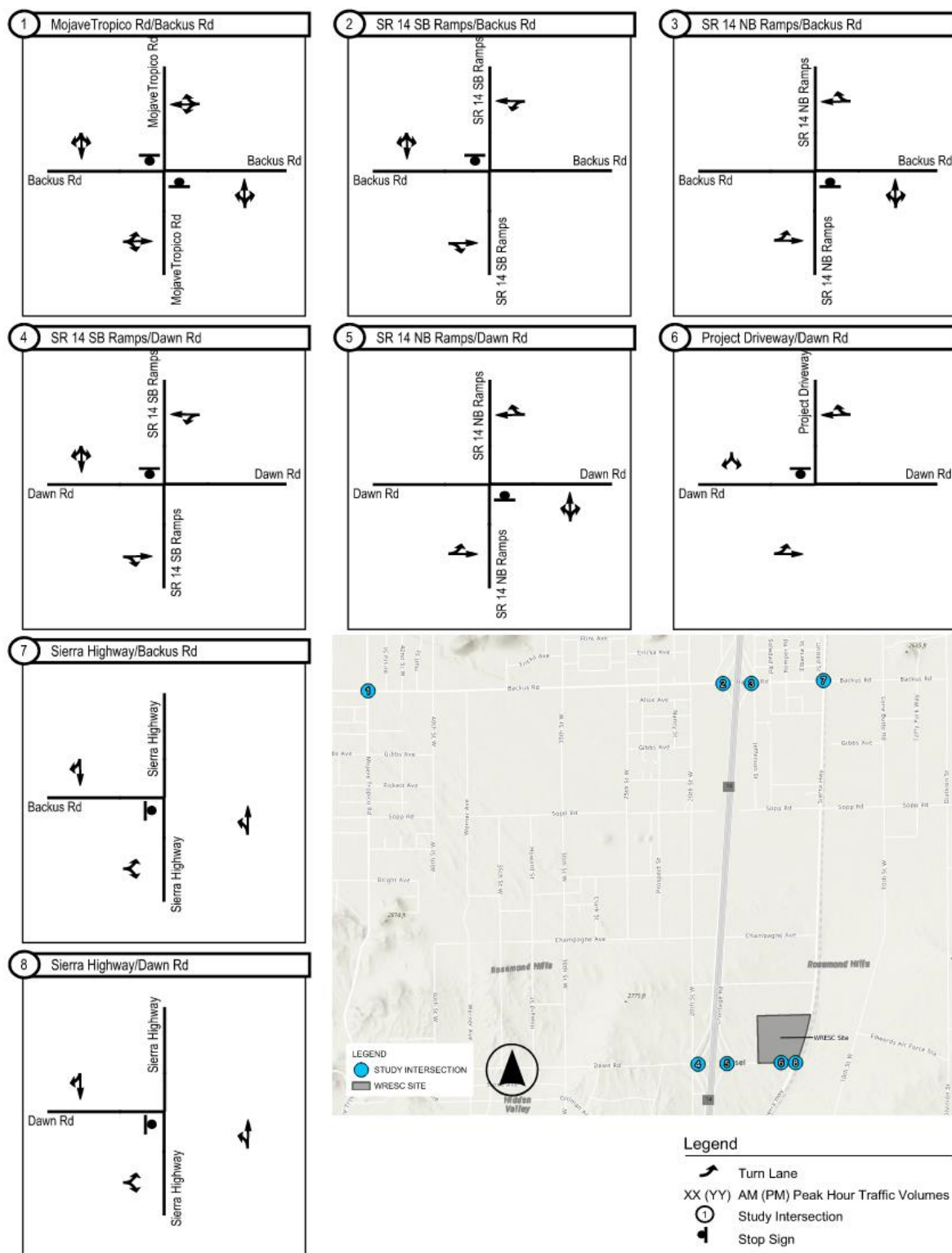


Figure 11: Intersection Lane Configuration

10.0 YEAR 2028 BEFORE CONSTRUCTION CONDITIONS

Traffic volumes at the study intersections for the Year 2028 Before Construction scenario were developed using the methodology described in detail under Section 8 Forecast Volumes of this report.

10.1 Intersection Operations Analysis

The traffic analysis assumes that the intersection lane configurations in the year 2028 would be the same as the existing conditions, as previously illustrated in **Figure 11**. The AM and PM peak hour intersection volumes for the Year 2028 Before Construction conditions are illustrated in **Figure 9**. A level of service analysis was conducted using the methodology described previously to evaluate intersection traffic operations. The results of the analysis are summarized in **Table 10**. The results show that no changes to the existing LOS are expected at any of the intersections and that all intersections would continue to operate at LOS B or better in the Year 2028 Before Construction conditions. Detailed LOS calculation worksheets are included in **Appendix C**.

Table 10: Year 2028 Before Construction Intersection Levels of Service

ID	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Mojave Tropico Rd & Backus Rd	SSSC	10.3	B	10.1	B
2	SR 14 SB Ramps & Backus Rd	SSSC	8.8	A	9.5	A
3	SR 14 NB Ramps & Backus Rd	SSSC	9.1	A	9.7	A
4	SR 14 SB Ramps & Dawn Rd	SSSC	8.4	A	8.5	A
5	SR 14 NB Ramps & Dawn Rd	SSSC	8.6	A	8.6	A
6	Project Driveway & Dawn Rd	SSSC	Intersection Doesn't Exist			
7	Sierra Highway & Backus Rd	SSSC	8.6	A	8.8	A
8	Sierra Highway & Dawn Rd	SSSC	9.3	A	9.2	A

Notes:

SSSC = Side Street Stop Control

Delay - Average delay (seconds per vehicle)

10.2 Queuing Analysis

A queuing analysis was conducted to evaluate the 95th percentile queues at the freeway off-ramp intersections during both the AM and PM peak hours. **Table 11** summarizes the queuing analysis results for the existing conditions. As shown in the table, the available storage is sufficient to accommodate the anticipated 95th percentile queues at the off-ramp intersections. Queuing analysis worksheets are included in **Appendix C**.

Table 11: Year 2028 Before Construction Ramp Intersection Queuing Summary

ID	Intersection	Approach	Storage (ft)	Queue Length (ft)	
				AM Peak	PM Peak
2	SR 14 SB Ramps & Backus Rd	Southbound	1,770	3	6
3	SR 14 NB Ramps & Backus Rd	Northbound	1,760	6	21
4	SR 14 SB Ramps & Dawn Rd	Southbound	1,740	0	3
5	SR 14 NB Ramps & Dawn Rd	Northbound	1,750	0	3

11.0 YEAR 2028 DURING CONSTRUCTION CONDITIONS

Traffic volumes at the study intersections for the Year 2028 During Construction scenario were developed using the methodology described in detail under Section 8 Forecast Volumes of this report.

11.1 Intersection Operations Analysis

The traffic analysis assumes that the intersection lane configurations in the year 2028 would be the same as the existing conditions, as previously illustrated in **Figure 11**. The AM and PM peak hour intersection volumes for the Year 2028 During Construction conditions are illustrated in **Figure 10**. A level of service analysis was conducted using the methodology described previously to evaluate intersection traffic operations. The results of the analysis are summarized in **Table 12**. The results show that all intersections would continue to operate at LOS C or better in the Year 2028 During Construction conditions, except for the SR 14 SB Ramps & Dawn Road intersection. The intersection is projected to operate at LOS F during the PM peak hour under the Year 2028 During Construction scenario. The vehicles making the southbound left-turn from the SR 14 Off-Ramp on to Dawn Road would experience delays due to the additional construction related vehicles on Dawn Road. Detailed LOS calculation worksheets are included in **Appendix C**.

Table 12: Year 2028 During Construction Intersection Levels of Service

ID	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Mojave Tropico Rd & Backus Rd	SSSC	10.9	B	10.6	B
2	SR 14 SB Ramps & Backus Rd	SSSC	9.0	A	9.8	A
3	SR 14 NB Ramps & Backus Rd	SSSC	9.4	A	10.0	B
4	SR 14 SB Ramps & Dawn Rd	SSSC	9.6	A	50.8	F
5	SR 14 NB Ramps & Dawn Rd	SSSC	20.5	C	12.7	B
6	Project Driveway & Dawn Rd	SSSC	12.5	B	20.8	C
7	Sierra Highway & Backus Rd	SSSC	8.6	A	8.8	A
8	Sierra Highway & Dawn Rd	SSSC	9.9	A	9.2	A

Notes:

SSSC = Side Street Stop Control

Delay - Average delay (seconds per vehicle)

BOLD font indicates LOS E/LOS F

11.2 Queuing Analysis

A queuing analysis was conducted to evaluate the 95th percentile queues at the freeway off-ramp intersections during both the AM and PM peak hours. **Table 13** summarizes the queuing analysis results for the existing conditions. As shown in the table, the available storage is sufficient to accommodate the projected 95th percentile queues at the off-ramp intersections. Queuing analysis worksheets are included in **Appendix C**.

Table 13: Year 2028 During Construction Ramp Intersection Queuing Summary

ID	Intersection	Approach	Storage (ft)	Queue Length (ft)	
				AM Peak	PM Peak
2	SR 14 SB Ramps & Backus Rd	Southbound	1,770	3	6
3	SR 14 NB Ramps & Backus Rd	Northbound	1,760	9	24
4	SR 14 SB Ramps & Dawn Rd	Southbound	1,740	24	66
5	SR 14 NB Ramps & Dawn Rd	Northbound	1,750	210	3

12.0 TEMPORARY IMPROVEMENTS DURING CONSTRUCTION

The level of service analysis conducted for the “During Construction” conditions showed that the delay at the SR 14 SB Ramps & Dawn Road intersection is anticipated to worsen when compared to “Before Construction” conditions. The southbound traffic on the off-ramp would not find sufficient gaps in traffic on Dawn Road and would experience long delays during the PM peak hour. The predicted delays at the intersection would be improved by providing a flag person during both the AM and PM peak hours to direct traffic. With a flagger, the intersection would operate almost like an all-way stop controlled (AWSC) intersection, where traffic from all approaches would have to stop at the intersection. A level of service and queuing analysis were conducted to

evaluate the option of a flagger at that intersection by converting the intersection to an all-way stop control. The results show that the intersection would operate at LOS C or better during both peak hours and the 95th percentile queue would also reduce significantly at that intersection.

13.0 CONCLUSIONS

The project, WRESC, will be located on approximately 88.6 acres of private land immediately north of Dawn Road and between State Route (SR) 14 and Sierra Highway within unincorporated, southeastern Kern County, California. The WRESC will be a nominal 520-megawatt (MW) gross (500 MW net) and 4,160 megawatt-hour (MWh) gross (4,000 MWh net) facility using GEM's proprietary, advanced compressed air energy storage (A-CAES) technology.

A level of service analysis was conducted to evaluate the effect of the construction-related traffic at study intersections. The following discussion provides a summary of the traffic analysis conducted for Existing (2024), Year 2028 Before Construction, and Year 2028 During Construction.

Under the Existing (2024) conditions, the level of service analysis showed that all intersections are currently operating at LOS B or better during both the AM and PM peak hours. The queuing analysis showed that the available storage at the SR 14/Backus Road and SR 14/Dawn Road intersections would be currently sufficient to accommodate the 95th percentile queues.

Under the Year 2028 Before Construction conditions, all study intersections are projected to continue to operate at LOS B or better during both AM and PM peak hours. The available storage at the study ramp intersections would also be sufficient to accommodate the projected 95th percentile queues.

Under the Year 2028 During Construction conditions, all study intersections are projected to continue to operate at LOS D or better during both AM and PM peak hours, except for one intersection. The SR 14 SB Ramps & Dawn Road intersection is projected to operate at LOS F during the PM peak hour. As a temporary improvement during construction, a flag person could direct traffic during the peak hours to help the southbound SR 14 ramp traffic find gaps in traffic on Dawn Road and thereby reduce long delays at the intersection. The intersection, with the proposed temporary measure would operate like an all-way stop controlled intersection, and the LOS would improve to LOS C during the PM peak hour. The queuing analysis showed that the available storage would be sufficient to accommodate the projected queues during the peak construction activity.

Table 14 provides a summary comparison of intersection operations across all study scenarios.

Table 14: Intersection Levels of Service Comparison

ID	Intersection	Peak	2024 Existing		2028 Before Construction		2028 During Construction	
			Delay	LOS	Delay	LOS	Delay	LOS
1	Mojave Tropico Rd & Backus Rd	AM	10.1	B	10.3	B	10.9	B
		PM	10.1	B	10.1	B	10.6	B
2	SR 14 SB Ramps & Backus Rd	AM	8.7	A	8.8	A	9	A
		PM	9.5	A	9.5	A	9.8	A
3	SR 14 NB Ramps & Backus Rd	AM	9.0	A	9.1	A	9.4	A
		PM	9.8	A	9.7	A	10	B
4	SR 14 SB Ramps & Dawn Rd	AM	8.4	A	8.4	A	9.6	A
		PM	8.5	A	8.5	A	50.8	F
5	SR 14 NB Ramps & Dawn Rd	AM	8.5	A	8.6	A	20.5	C
		PM	8.6	A	8.6	A	12.7	B
6	Dawn Rd & Project Driveway	AM	Doesn't Exist		Doesn't Exist		12.5	B
		PM					20.8	C
7	Sierra Highway & Backus Rd	AM	8.6	A	8.6	A	8.6	A
		PM	8.8	A	8.8	A	8.8	A
8	Sierra Highway & Dawn Rd	AM	9.3	A	9.3	A	9.9	A
		PM	9.2	A	9.2	A	9.2	A

APPENDIX A

Existing Traffic Count Data

County of Kern
N/S: Mojave-Tropico Road
E/W: Backus Road
Weather: Clear

File Name : 01_KCO_MoTr_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

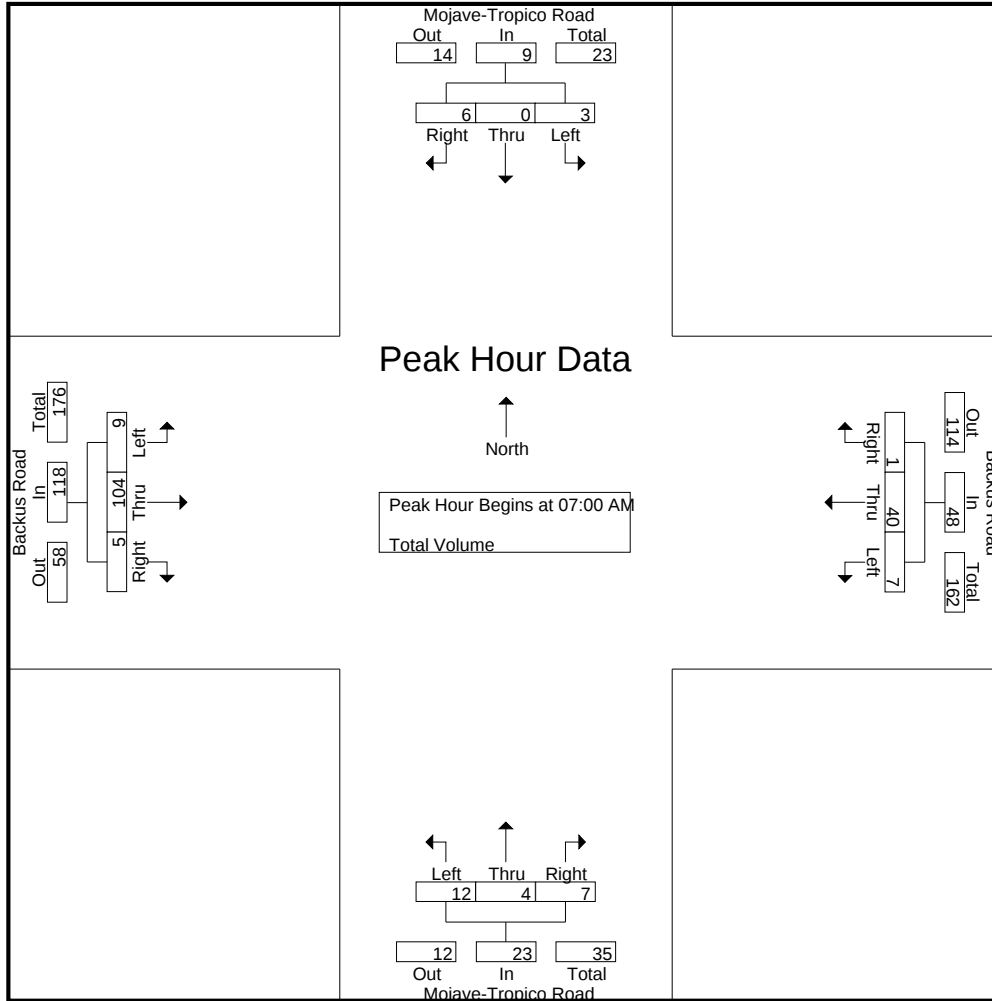
Groups Printed- Total Volume

	Mojave-Tropico Road Southbound				Backus Road Westbound				Mojave-Tropico Road Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	4	14	1	19	1	2	3	6	2	24	2	28	54
07:15 AM	0	0	3	3	1	8	0	9	5	0	3	8	0	23	1	24	44
07:30 AM	1	0	0	1	1	10	0	11	5	1	0	6	3	29	0	32	50
07:45 AM	1	0	3	4	1	8	0	9	1	1	1	3	4	28	2	34	50
Total	3	0	6	9	7	40	1	48	12	4	7	23	9	104	5	118	198
08:00 AM	1	0	4	5	0	5	0	5	0	0	2	2	1	18	5	24	36
08:15 AM	1	1	2	4	2	4	0	6	1	0	1	2	3	24	2	29	41
08:30 AM	0	0	2	2	0	2	0	2	5	1	1	7	0	13	4	17	28
08:45 AM	0	1	1	2	1	11	0	12	2	1	2	5	0	24	2	26	45
Total	2	2	9	13	3	22	0	25	8	2	6	16	4	79	13	96	150
Grand Total	5	2	15	22	10	62	1	73	20	6	13	39	13	183	18	214	348
Apprch %	22.7	9.1	68.2		13.7	84.9	1.4		51.3	15.4	33.3		6.1	85.5	8.4		
Total %	1.4	0.6	4.3	6.3	2.9	17.8	0.3	21	5.7	1.7	3.7	11.2	3.7	52.6	5.2	61.5	

	Mojave-Tropico Road Southbound				Backus Road Westbound				Mojave-Tropico Road Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. 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	0	0	1	4	14	1	19	1	2	3	6	2	24	2	28	54
07:15 AM	0	0	3	3	1	8	0	9	5	0	3	8	0	23	1	24	44
07:30 AM	1	0	0	1	1	10	0	11	5	1	0	6	3	29	0	32	50
07:45 AM	1	0	3	4	1	8	0	9	1	1	1	3	4	28	2	34	50
Total Volume	3	0	6	9	7	40	1	48	12	4	7	23	9	104	5	118	198
% App. Total	33.3	0	66.7		14.6	83.3	2.1		52.2	17.4	30.4		7.6	88.1	4.2		
PHF	.750	.000	.500	.563	.438	.714	.250	.632	.600	.500	.583	.719	.563	.897	.625	.868	.917

County of Kern
N/S: Mojave-Tropico Road
E/W: Backus Road
Weather: Clear

File Name : 01_KCO_MoTr_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 2



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

	07:45 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	1	0	3	4	4	14	1	19	1	2	3	6	3	29	0	32
+15 mins.	1	0	4	5	1	8	0	9	5	0	3	8	4	28	2	34
+30 mins.	1	1	2	4	1	10	0	11	5	1	0	6	1	18	5	24
+45 mins.	0	0	2	2	1	8	0	9	1	1	1	3	3	24	2	29
Total Volume	3	1	11	15	7	40	1	48	12	4	7	23	11	99	9	119
% App. Total	20	6.7	73.3		14.6	83.3	2.1		52.2	17.4	30.4		9.2	83.2	7.6	
PHF	.750	.250	.688	.750	.438	.714	.250	.632	.600	.500	.583	.719	.688	.853	.450	.875

County of Kern
N/S: Mojave-Tropico Road
E/W: Backus Road
Weather: Clear

File Name : 01_KCO_MoTr_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

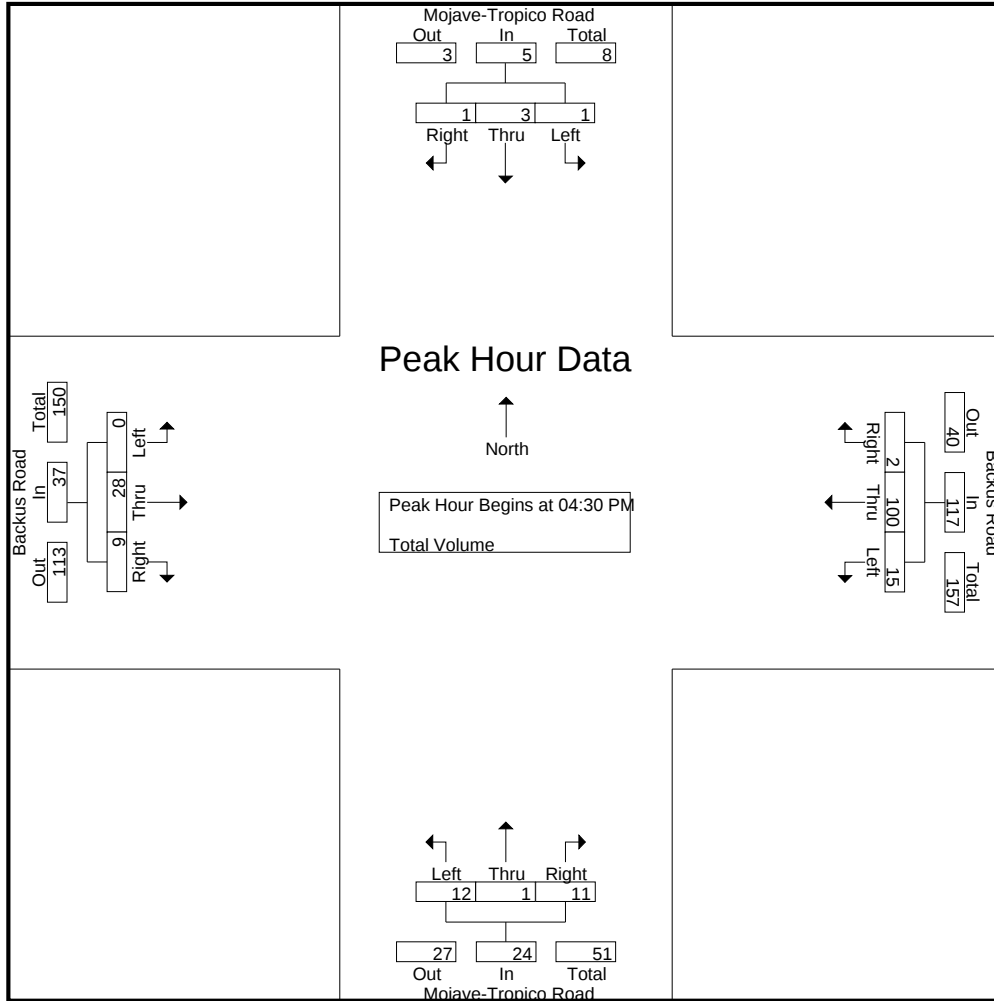
Groups Printed- Total Volume

	Mojave-Tropico Road Southbound				Backus Road Westbound				Mojave-Tropico Road Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	1	2	5	2	12	0	14	1	1	0	2	1	15	5	21	42
04:15 PM	0	1	2	3	3	22	0	25	6	0	1	7	0	12	7	19	54
04:30 PM	1	0	0	1	3	22	0	25	6	0	2	8	0	6	2	8	42
04:45 PM	0	1	1	2	5	21	1	27	0	0	2	2	0	5	2	7	38
Total	3	3	5	11	13	77	1	91	13	1	5	19	1	38	16	55	176
05:00 PM	0	0	0	0	5	29	0	34	3	1	2	6	0	6	2	8	48
05:15 PM	0	2	0	2	2	28	1	31	3	0	5	8	0	11	3	14	55
05:30 PM	1	1	2	4	5	16	0	21	1	0	2	3	0	10	0	10	38
05:45 PM	0	0	0	0	1	22	1	24	1	1	1	3	0	8	1	9	36
Total	1	3	2	6	13	95	2	110	8	2	10	20	0	35	6	41	177
Grand Total	4	6	7	17	26	172	3	201	21	3	15	39	1	73	22	96	353
Apprch %	23.5	35.3	41.2		12.9	85.6	1.5		53.8	7.7	38.5		1	76	22.9		
Total %	1.1	1.7	2	4.8	7.4	48.7	0.8	56.9	5.9	0.8	4.2	11	0.3	20.7	6.2	27.2	

	Mojave-Tropico Road Southbound				Backus Road Westbound				Mojave-Tropico Road Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	0	0	1	3	22	0	25	6	0	2	8	0	6	2	8	42
04:45 PM	0	1	1	2	5	21	1	27	0	0	2	2	0	5	2	7	38
05:00 PM	0	0	0	0	5	29	0	34	3	1	2	6	0	6	2	8	48
05:15 PM	0	2	0	2	2	28	1	31	3	0	5	8	0	11	3	14	55
Total Volume	1	3	1	5	15	100	2	117	12	1	11	24	0	28	9	37	183
% App. Total	20	60	20		12.8	85.5	1.7		50	4.2	45.8		0	75.7	24.3		
PHF	.250	.375	.250	.625	.750	.862	.500	.860	.500	.250	.550	.750	.000	.636	.750	.661	.832

County of Kern
N/S: Mojave-Tropico Road
E/W: Backus Road
Weather: Clear

File Name : 01_KCO_MoTr_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
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				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	2	1	2	5	3	22	0	25	6	0	2	8	1	15	5	21
+15 mins.	0	1	2	3	5	21	1	27	0	0	2	2	0	12	7	19
+30 mins.	1	0	0	1	5	29	0	34	3	1	2	6	0	6	2	8
+45 mins.	0	1	1	2	2	28	1	31	3	0	5	8	0	5	2	7
Total Volume	3	3	5	11	15	100	2	117	12	1	11	24	1	38	16	55
% App. Total	27.3	27.3	45.5		12.8	85.5	1.7		50	4.2	45.8		1.8	69.1	29.1	
PHF	.375	.750	.625	.550	.750	.862	.500	.860	.500	.250	.550	.750	.250	.633	.571	.655

Location: County of Kern
 N/S: Mojave-Tropico Road
 E/W: Backus Road



Date: 6/25/2024
 Day: Tuesday

PEDESTRIANS

		North Leg Mojave-Tropico Road	East Leg Backus Road	South Leg Mojave-Tropico Road	West Leg Backus Road		
		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 Mojave-Tropico Road	East Leg Backus Road	South Leg Mojave-Tropico Road	West Leg Backus 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	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: County of Kern
 N/S: Mojave-Tropico Road
 E/W: Backus Road



Date: 6/25/2024
 Day: Tuesday

BICYCLES

		Southbound Mojave-Tropico Road			Westbound Backus Road			Northbound Mojave-Tropico Road			Eastbound Backus 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 Mojave-Tropico Road			Westbound Backus Road			Northbound Mojave-Tropico Road			Eastbound Backus 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

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Kern
N/S: SR-14 Southbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 02_KCO_14S_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

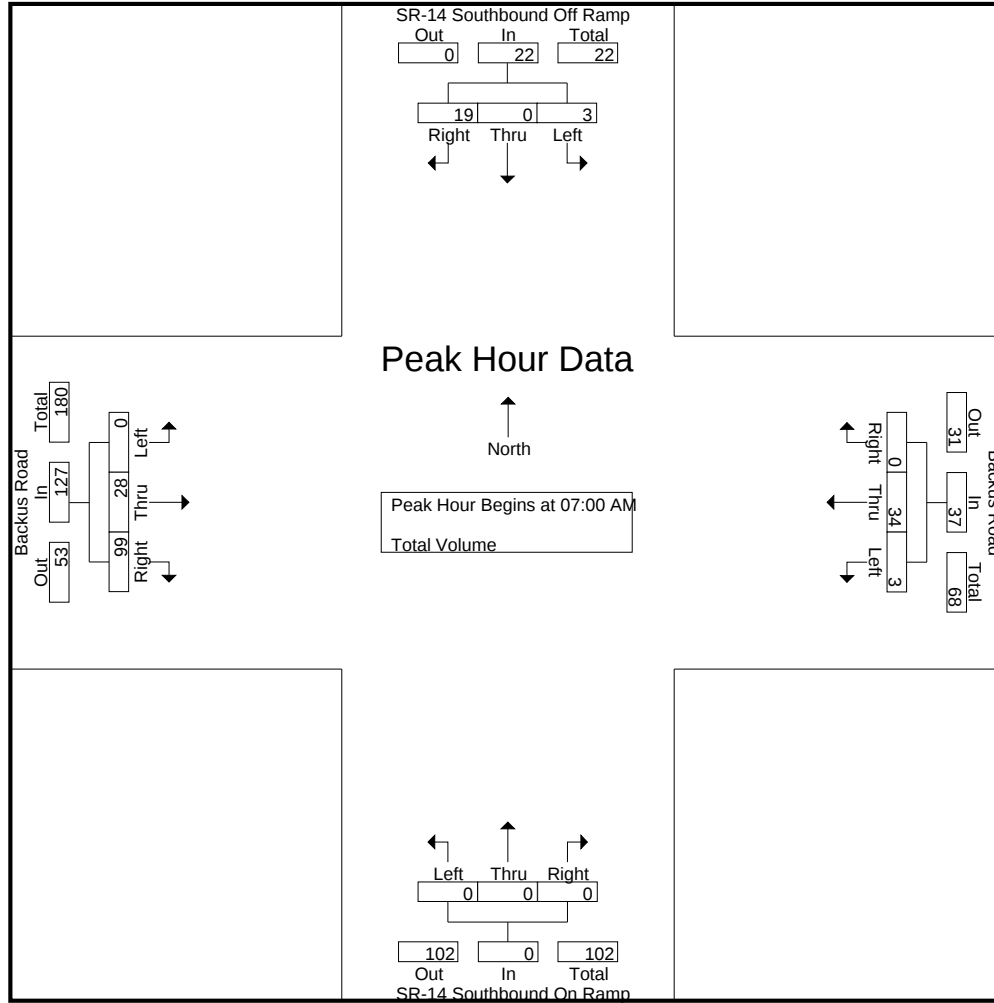
Groups Printed- Total Volume

	SR-14 Southbound Off Ramp Southbound				Backus Road Westbound				SR-14 Southbound On Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	9	9	0	12	0	12	0	0	0	0	0	4	24	28	49
07:15 AM	2	0	5	7	2	6	0	8	0	0	0	0	0	8	22	30	45
07:30 AM	0	0	2	2	0	10	0	10	0	0	0	0	0	10	28	38	50
07:45 AM	1	0	3	4	1	6	0	7	0	0	0	0	0	6	25	31	42
Total	3	0	19	22	3	34	0	37	0	0	0	0	0	28	99	127	186
08:00 AM	2	0	0	2	1	4	0	5	0	0	0	0	0	4	17	21	28
08:15 AM	2	0	2	4	1	4	0	5	0	0	0	0	0	4	19	23	32
08:30 AM	0	0	1	1	0	5	0	5	0	0	0	0	0	0	19	19	25
08:45 AM	0	0	3	3	1	4	0	5	0	0	0	0	0	5	19	24	32
Total	4	0	6	10	3	17	0	20	0	0	0	0	0	13	74	87	117
Grand Total	7	0	25	32	6	51	0	57	0	0	0	0	0	41	173	214	303
Apprch %	21.9	0	78.1		10.5	89.5	0		0	0	0		0	19.2	80.8		
Total %	2.3	0	8.3	10.6	2	16.8	0	18.8	0	0	0	0	0	13.5	57.1	70.6	

	SR-14 Southbound Off Ramp Southbound				Backus Road Westbound				SR-14 Southbound On Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. 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	9	9	0	12	0	12	0	0	0	0	0	4	24	28	49
07:15 AM	2	0	5	7	2	6	0	8	0	0	0	0	0	8	22	30	45
07:30 AM	0	0	2	2	0	10	0	10	0	0	0	0	0	10	28	38	50
07:45 AM	1	0	3	4	1	6	0	7	0	0	0	0	0	6	25	31	42
Total Volume	3	0	19	22	3	34	0	37	0	0	0	0	0	28	99	127	186
% App. Total	13.6	0	86.4		8.1	91.9	0		0	0	0		0	22	78		
PHF	.375	.000	.528	.611	.375	.708	.000	.771	.000	.000	.000	.000	.000	.700	.884	.836	.930

County of Kern
N/S: SR-14 Southbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 02_KCO_14S_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	9	9	0	12	0	12	0	0	0	0	0	4	24	28
+15 mins.	2	0	5	7	2	6	0	8	0	0	0	0	0	8	22	30
+30 mins.	0	0	2	2	0	10	0	10	0	0	0	0	0	10	28	38
+45 mins.	1	0	3	4	1	6	0	7	0	0	0	0	0	6	25	31
Total Volume	3	0	19	22	3	34	0	37	0	0	0	0	0	28	99	127
% App. Total	13.6	0	86.4		8.1	91.9	0		0	0	0	0	0	22	78	
PHF	.375	.000	.528	.611	.375	.708	.000	.771	.000	.000	.000	.000	.000	.700	.884	.836

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Kern
N/S: SR-14 Southbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 02_KCO_14S_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

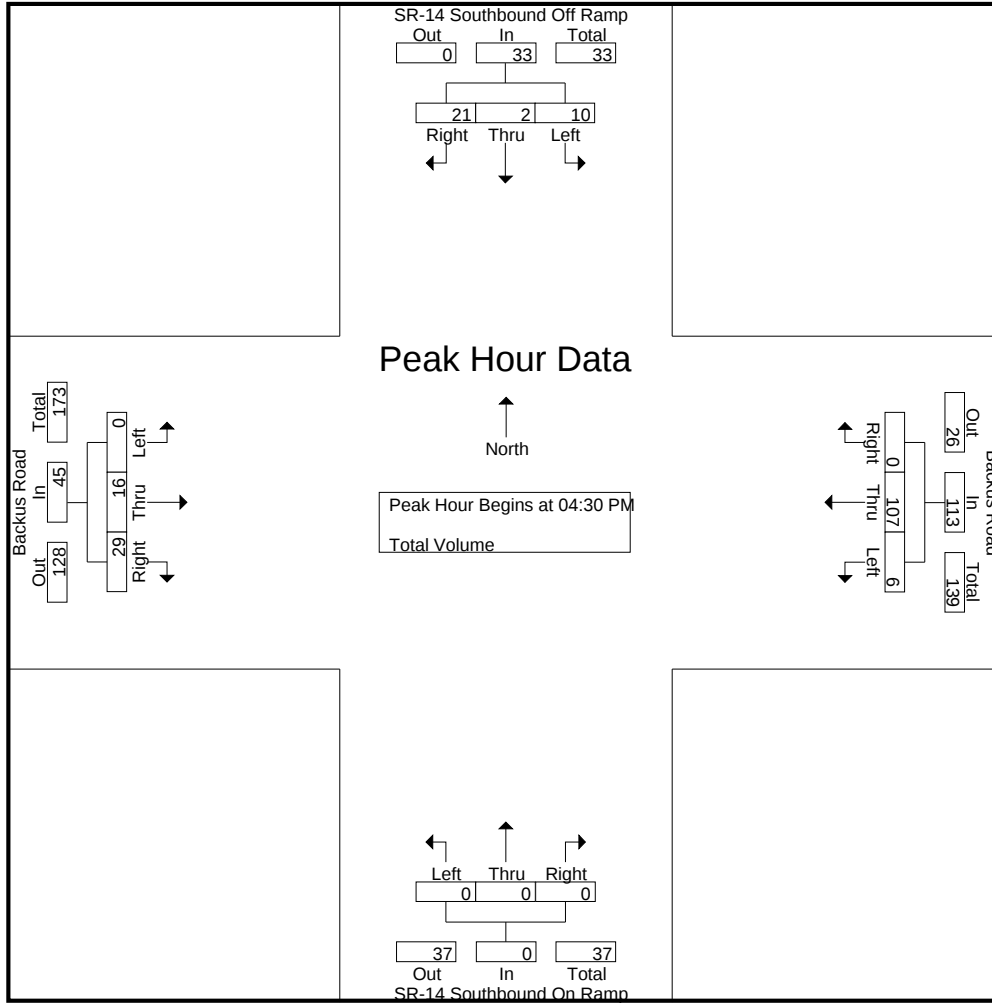
Groups Printed- Total Volume

	SR-14 Southbound Off Ramp Southbound				Backus Road Westbound				SR-14 Southbound On Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	1	0	6	1	15	0	16	0	0	0	0	0	5	8	13	35
04:15 PM	2	0	3	5	4	22	0	26	0	0	0	0	0	5	11	16	47
04:30 PM	2	0	5	7	2	27	0	29	0	0	0	0	0	4	7	11	47
04:45 PM	5	1	6	12	1	22	0	23	0	0	0	0	0	4	5	9	44
Total	14	2	14	30	8	86	0	94	0	0	0	0	0	18	31	49	173
05:00 PM	1	0	7	8	2	25	0	27	0	0	0	0	0	2	8	10	45
05:15 PM	2	1	3	6	1	33	0	34	0	0	0	0	0	6	9	15	55
05:30 PM	4	0	2	6	1	24	0	25	0	0	0	0	0	7	7	14	45
05:45 PM	0	0	2	2	4	25	0	29	0	0	0	0	0	3	11	14	45
Total	7	1	14	22	8	107	0	115	0	0	0	0	0	18	35	53	190
Grand Total	21	3	28	52	16	193	0	209	0	0	0	0	0	36	66	102	363
Apprch %	40.4	5.8	53.8		7.7	92.3	0		0	0	0		0	35.3	64.7		
Total %	5.8	0.8	7.7	14.3	4.4	53.2	0	57.6	0	0	0	0	0	9.9	18.2	28.1	

	SR-14 Southbound Off Ramp Southbound				Backus Road Westbound				SR-14 Southbound On Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	0	5	7	2	27	0	29	0	0	0	0	0	4	7	11	47
04:45 PM	5	1	6	12	1	22	0	23	0	0	0	0	0	4	5	9	44
05:00 PM	1	0	7	8	2	25	0	27	0	0	0	0	0	2	8	10	45
05:15 PM	2	1	3	6	1	33	0	34	0	0	0	0	0	6	9	15	55
Total Volume	10	2	21	33	6	107	0	113	0	0	0	0	0	16	29	45	191
% App. Total	30.3	6.1	63.6		5.3	94.7	0		0	0	0		0	35.6	64.4		
PHF	.500	.500	.750	.688	.750	.811	.000	.831	.000	.000	.000	.000	.000	.667	.806	.750	.868

County of Kern
N/S: SR-14 Southbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 02_KCO_14S_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 2



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

	04:30 PM				05:00 PM				04:00 PM				05:00 PM			
+0 mins.	2	0	5	7	2	25	0	27	0	0	0	0	0	2	8	10
+15 mins.	5	1	6	12	1	33	0	34	0	0	0	0	0	6	9	15
+30 mins.	1	0	7	8	1	24	0	25	0	0	0	0	0	7	7	14
+45 mins.	2	1	3	6	4	25	0	29	0	0	0	0	0	3	11	14
Total Volume	10	2	21	33	8	107	0	115	0	0	0	0	0	18	35	53
% App. Total	30.3	6.1	63.6		7	93	0		0	0	0	0	0	34	66	
PHF	.500	.500	.750	.688	.500	.811	.000	.846	.000	.000	.000	.000	.000	.643	.795	.883

Location: County of Kern
 N/S: SR-14 SB Ramps
 E/W: Backus Road



Date: 6/25/2024
 Day: Tuesday

PEDESTRIANS

		North Leg SR-14 SB Ramps	East Leg Backus Road	South Leg SR-14 SB Ramps	West Leg Backus Road	
		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 SR-14 SB Ramps	East Leg Backus Road	South Leg SR-14 SB Ramps	West Leg Backus 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	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: County of Kern
N/S: SR-14 SB Ramps
E/W: Backus Road



Date: 6/25/2024
Day: Tuesday

BICYCLES

		Southbound SR-14 SB Ramps			Westbound Backus Road			Northbound SR-14 SB Ramps			Eastbound Backus 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 SR-14 SB Ramps			Westbound Backus Road			Northbound SR-14 SB Ramps			Eastbound Backus 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

County of Kern
N/S: SR-14 Northbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 03_KCO_14N_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

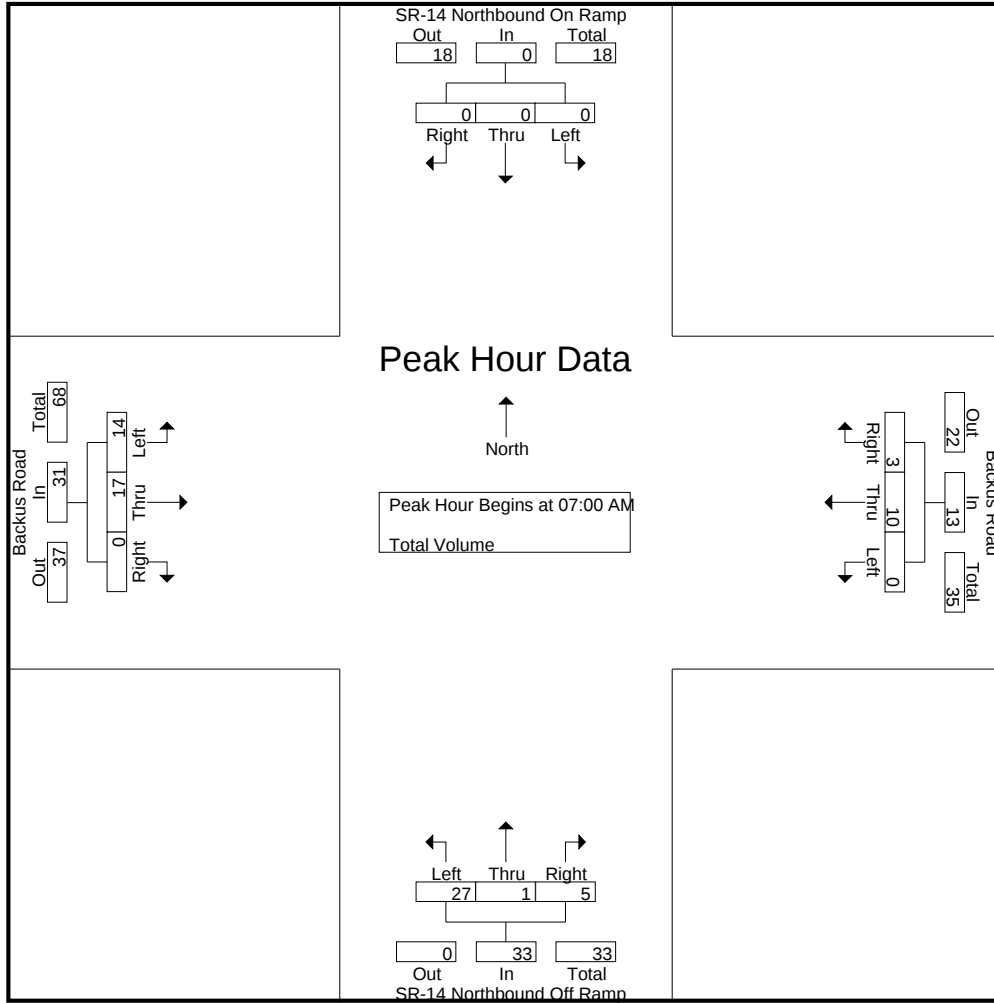
Groups Printed- Total Volume

	SR-14 Northbound On Ramp Southbound				Backus Road Westbound				SR-14 Northbound Off Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	9	1	2	12	3	1	0	4	19
07:15 AM	0	0	0	0	0	2	1	3	6	0	1	7	5	5	0	10	20
07:30 AM	0	0	0	0	0	4	0	4	6	0	0	6	3	7	0	10	20
07:45 AM	0	0	0	0	0	1	2	3	6	0	2	8	3	4	0	7	18
Total	0	0	0	0	0	10	3	13	27	1	5	33	14	17	0	31	77
08:00 AM	0	0	0	0	0	1	1	2	4	1	0	5	3	3	0	6	13
08:15 AM	0	0	0	0	0	3	1	4	4	0	1	5	2	4	0	6	15
08:30 AM	0	0	0	0	0	1	1	2	2	2	1	5	0	0	0	0	7
08:45 AM	0	0	0	0	0	3	2	5	2	0	0	2	1	3	0	4	11
Total	0	0	0	0	0	8	5	13	12	3	2	17	6	10	0	16	46
Grand Total	0	0	0	0	0	18	8	26	39	4	7	50	20	27	0	47	123
Apprch %	0	0	0		0	69.2	30.8		78	8	14		42.6	57.4	0		
Total %	0	0	0		0	14.6	6.5	21.1	31.7	3.3	5.7	40.7	16.3	22	0	38.2	

	SR-14 Northbound On Ramp Southbound				Backus Road Westbound				SR-14 Northbound Off Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. 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	0	3	0	3	9	1	2	12	3	1	0	4	19
07:15 AM	0	0	0	0	0	2	1	3	6	0	1	7	5	5	0	10	20
07:30 AM	0	0	0	0	0	4	0	4	6	0	0	6	3	7	0	10	20
07:45 AM	0	0	0	0	0	1	2	3	6	0	2	8	3	4	0	7	18
Total Volume	0	0	0	0	0	10	3	13	27	1	5	33	14	17	0	31	77
% App. Total	0	0	0		0	76.9	23.1		81.8	3	15.2		45.2	54.8	0		
PHF	.000	.000	.000	.000	.000	.625	.375	.813	.750	.250	.625	.688	.700	.607	.000	.775	.963

County of Kern
N/S: SR-14 Northbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 03_KCO_14N_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
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.	0	0	0	0	0	3	0	3	9	1	2	12	5	5	0	10
+15 mins.	0	0	0	0	0	2	1	3	6	0	1	7	3	7	0	10
+30 mins.	0	0	0	0	0	4	0	4	6	0	0	6	3	4	0	7
+45 mins.	0	0	0	0	0	1	2	3	6	0	2	8	3	3	0	6
Total Volume	0	0	0	0	0	10	3	13	27	1	5	33	14	19	0	33
% App. Total	0	0	0	0	0	76.9	23.1		81.8	3	15.2		42.4	57.6	0	
PHF	.000	.000	.000	.000	.000	.625	.375	.813	.750	.250	.625	.688	.700	.679	.000	.825

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County of Kern
N/S: SR-14 Northbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 03_KCO_14N_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

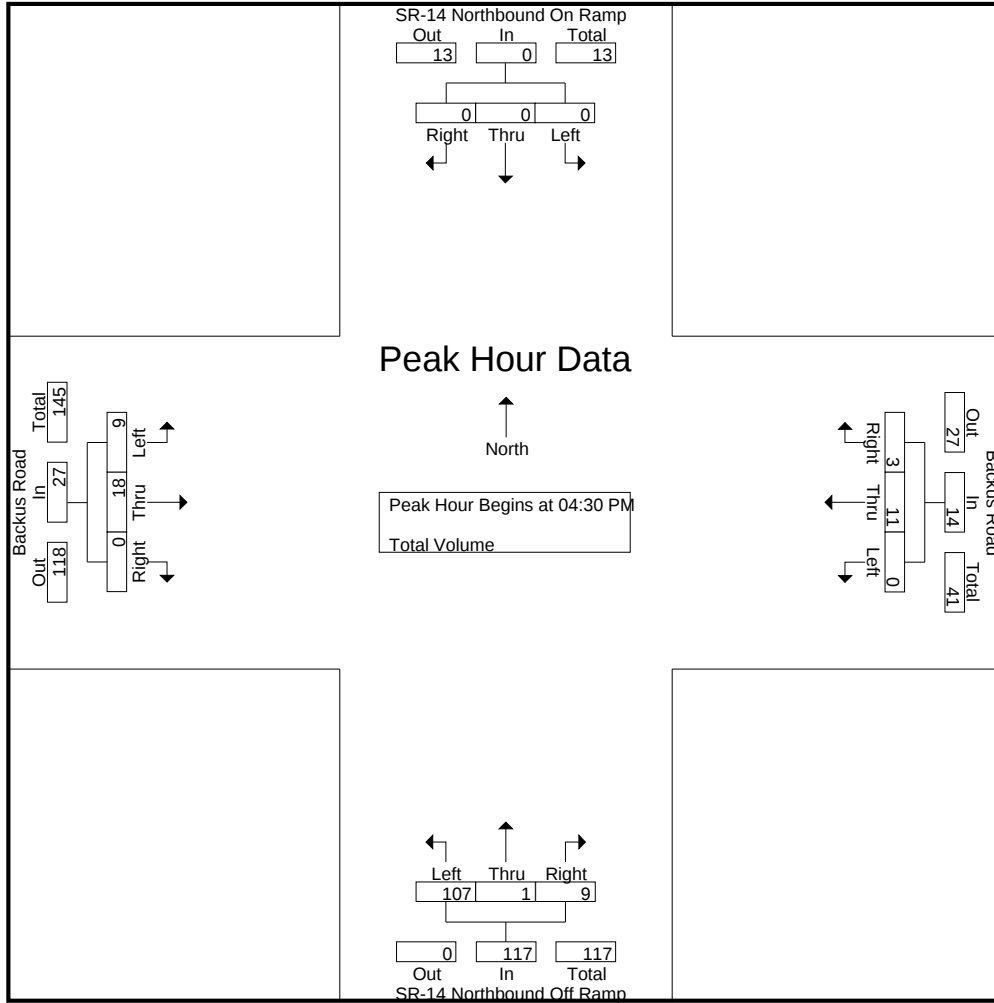
Groups Printed- Total Volume

	SR-14 Northbound On Ramp Southbound				Backus Road Westbound				SR-14 Northbound Off Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	3	0	3	14	0	0	14	5	6	0	11	28
04:15 PM	0	0	0	0	0	6	1	7	19	0	2	21	4	3	0	7	35
04:30 PM	0	0	0	0	0	3	0	3	28	0	1	29	2	4	0	6	38
04:45 PM	0	0	0	0	0	3	2	5	20	0	3	23	3	8	0	11	39
Total	0	0	0	0	0	15	3	18	81	0	6	87	14	21	0	35	140
05:00 PM	0	0	0	0	0	4	0	4	23	0	1	24	1	1	0	2	30
05:15 PM	0	0	0	0	0	1	1	2	36	1	4	41	3	5	0	8	51
05:30 PM	0	0	0	0	0	4	0	4	18	0	1	19	4	6	0	10	33
05:45 PM	0	0	0	0	0	8	0	8	21	0	0	21	1	2	0	3	32
Total	0	0	0	0	0	17	1	18	98	1	6	105	9	14	0	23	146
Grand Total	0	0	0	0	0	32	4	36	179	1	12	192	23	35	0	58	286
Apprch %	0	0	0		0	88.9	11.1		93.2	0.5	6.2		39.7	60.3	0		
Total %	0	0	0		0	11.2	1.4	12.6	62.6	0.3	4.2	67.1	8	12.2	0	20.3	

	SR-14 Northbound On Ramp Southbound				Backus Road Westbound				SR-14 Northbound Off Ramp Northbound				Backus Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	3	0	3	28	0	1	29	2	4	0	6	38
04:45 PM	0	0	0	0	0	3	2	5	20	0	3	23	3	8	0	11	39
05:00 PM	0	0	0	0	0	4	0	4	23	0	1	24	1	1	0	2	30
05:15 PM	0	0	0	0	0	1	1	2	36	1	4	41	3	5	0	8	51
Total Volume	0	0	0	0	0	11	3	14	107	1	9	117	9	18	0	27	158
% App. Total	0	0	0		0	78.6	21.4		91.5	0.9	7.7		33.3	66.7	0		
PHF	.000	.000	.000	.000	.000	.688	.375	.700	.743	.250	.563	.713	.750	.563	.000	.614	.775

County of Kern
N/S: SR-14 Northbound Ramps
E/W: Backus Road
Weather: Clear

File Name : 03_KCO_14N_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
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				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	0	0	0	0	0	6	1	7	28	0	1	29	5	6	0	11
+15 mins.	0	0	0	0	0	3	0	3	20	0	3	23	4	3	0	7
+30 mins.	0	0	0	0	0	3	2	5	23	0	1	24	2	4	0	6
+45 mins.	0	0	0	0	0	4	0	4	36	1	4	41	3	8	0	11
Total Volume	0	0	0	0	0	16	3	19	107	1	9	117	14	21	0	35
% App. Total	0	0	0	0	0	84.2	15.8		91.5	0.9	7.7		40	60	0	
PHF	.000	.000	.000	.000	.000	.667	.375	.679	.743	.250	.563	.713	.700	.656	.000	.795

Location: County of Kern
 N/S: SR-14 NB Ramps
 E/W: Backus Road



Date: 6/25/2024
 Day: Tuesday

PEDESTRIANS

		North Leg SR-14 NB Ramps	East Leg Backus Road	South Leg SR-14 NB Ramps	West Leg Backus Road	
		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 SR-14 NB Ramps	East Leg Backus Road	South Leg SR-14 NB Ramps	West Leg Backus 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	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: County of Kern
 N/S: SR-14 NB Ramps
 E/W: Backus Road



Date: 6/25/2024
 Day: Tuesday

BICYCLES

		Southbound SR-14 NB Ramps			Westbound Backus Road			Northbound SR-14 NB Ramps			Eastbound Backus 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 SR-14 NB Ramps			Westbound Backus Road			Northbound SR-14 NB Ramps			Eastbound Backus 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

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County of Kern
N/S: I-14 Southbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 04_KCO_15S_Dawn AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

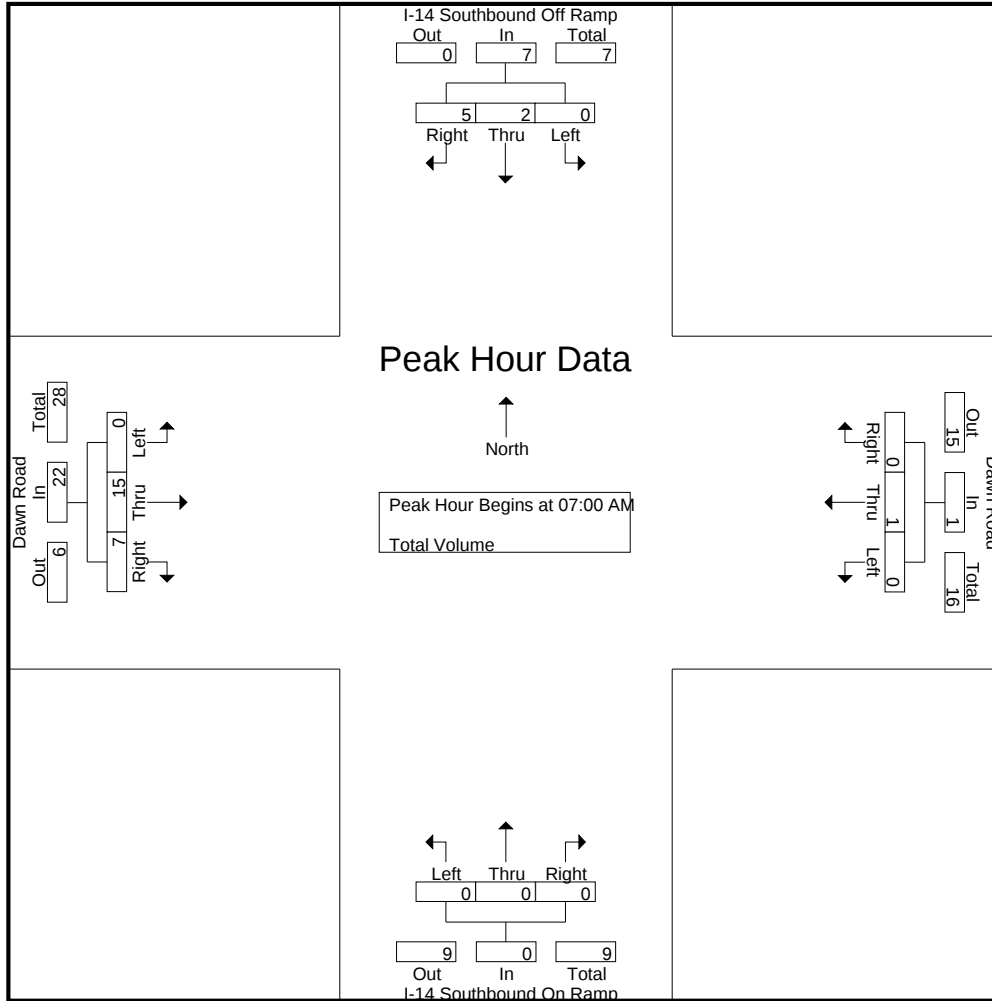
Groups Printed- Total Volume

	I-14 Southbound Off Ramp Southbound				Dawn Road Westbound				I-14 Southbound On Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	6	3	9	11
07:15 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	3	0	3	5
07:30 AM	0	0	3	3	0	1	0	1	0	0	0	0	0	4	2	6	10
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	4
Total	0	2	5	7	0	1	0	1	0	0	0	0	0	15	7	22	30
08:00 AM	0	0	3	3	0	1	0	1	0	0	0	0	0	3	1	4	8
08:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
08:30 AM	1	1	0	2	2	1	0	3	0	0	0	0	0	1	0	1	6
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
Total	1	1	3	5	3	3	0	6	0	0	0	0	0	5	2	7	18
Grand Total	1	3	8	12	3	4	0	7	0	0	0	0	0	20	9	29	48
Apprch %	8.3	25	66.7		42.9	57.1	0		0	0	0		0	69	31		
Total %	2.1	6.2	16.7	25	6.2	8.3	0	14.6	0	0	0	0	0	41.7	18.8	60.4	

	I-14 Southbound Off Ramp Southbound				Dawn Road Westbound				I-14 Southbound On Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. 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	1	1	2	0	0	0	0	0	0	0	0	0	6	3	9	11
07:15 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	3	0	3	5
07:30 AM	0	0	3	3	0	1	0	1	0	0	0	0	0	4	2	6	10
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	4
Total Volume	0	2	5	7	0	1	0	1	0	0	0	0	0	15	7	22	30
% App. Total	0	28.6	71.4		0	100	0		0	0	0		0	68.2	31.8		
PHF	.000	.500	.417	.583	.000	.250	.000	.250	.000	.000	.000	.000	.000	.625	.583	.611	.682

County of Kern
N/S: I-14 Southbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 04_KCO_15S_Dawn AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 2



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

	07:15 AM				08:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	1	1	2	0	1	0	1	0	0	0	0	0	6	3	9
+15 mins.	0	0	3	3	1	0	0	1	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	2	1	0	3	0	0	0	0	0	4	2	6
+45 mins.	0	0	3	3	0	1	0	1	0	0	0	0	0	2	2	4
Total Volume	0	1	7	8	3	3	0	6	0	0	0	0	0	15	7	22
% App. Total	0	12.5	87.5		50	50	0		0	0	0		0	68.2	31.8	
PHF	.000	.250	.583	.667	.375	.750	.000	.500	.000	.000	.000	.000	.000	.625	.583	.611

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County of Kern
N/S: I-14 Southbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 04_KCO_15S_Dawn PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

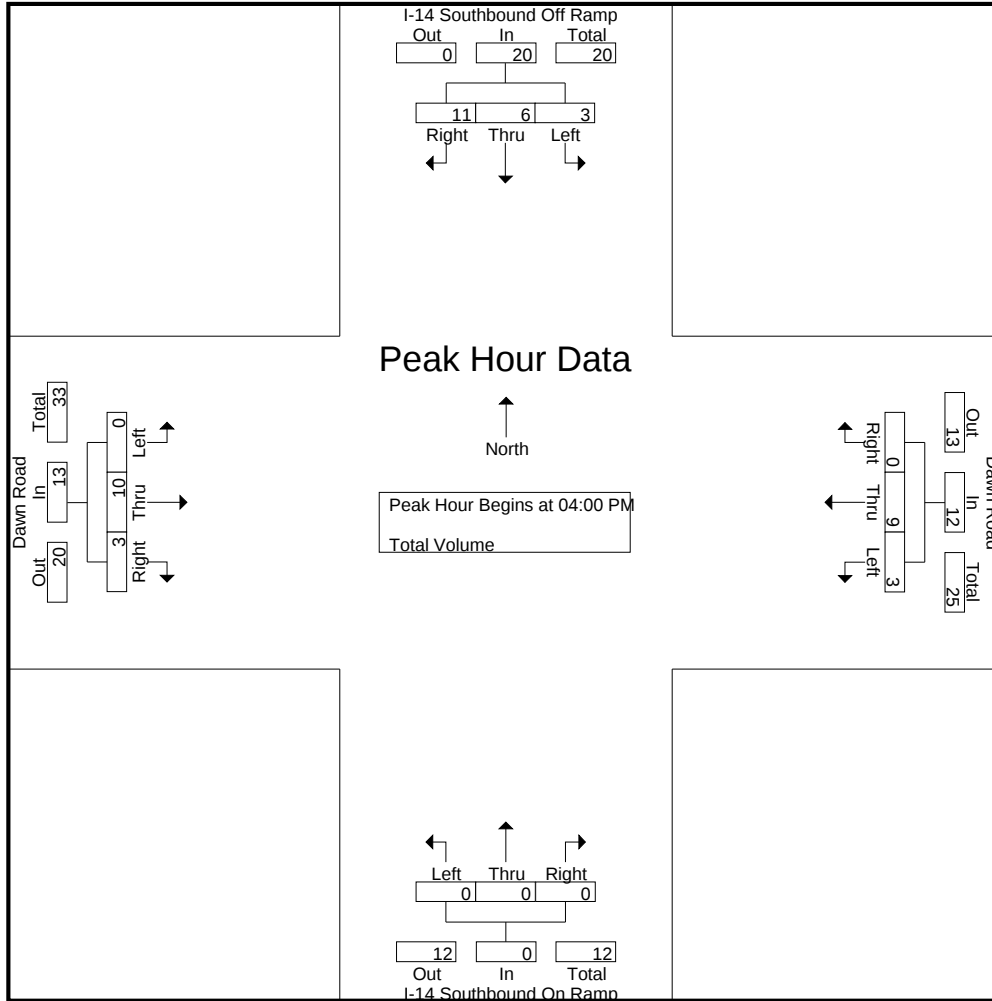
Groups Printed- Total Volume

	I-14 Southbound Off Ramp Southbound				Dawn Road Westbound				I-14 Southbound On Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	2	4	1	2	0	3	0	0	0	0	0	5	1	6	13
04:15 PM	2	1	3	6	1	2	0	3	0	0	0	0	0	0	2	2	11
04:30 PM	0	1	2	3	1	2	0	3	0	0	0	0	0	1	0	1	7
04:45 PM	1	2	4	7	0	3	0	3	0	0	0	0	0	4	0	4	14
Total	3	6	11	20	3	9	0	12	0	0	0	0	0	10	3	13	45
05:00 PM	0	0	4	4	1	2	0	3	0	0	0	0	0	1	0	1	8
05:15 PM	0	0	2	2	0	2	0	2	0	0	0	0	0	1	0	1	5
05:30 PM	0	0	6	6	0	1	0	1	0	0	0	0	0	3	0	3	10
05:45 PM	0	0	4	4	0	2	0	2	0	0	0	0	0	2	0	2	8
Total	0	0	16	16	1	7	0	8	0	0	0	0	0	7	0	7	31
Grand Total	3	6	27	36	4	16	0	20	0	0	0	0	0	17	3	20	76
Apprch %	8.3	16.7	75		20	80	0		0	0	0		0	85	15		
Total %	3.9	7.9	35.5	47.4	5.3	21.1	0	26.3	0	0	0	0	0	22.4	3.9	26.3	

	I-14 Southbound Off Ramp Southbound				Dawn Road Westbound				I-14 Southbound On Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	2	2	4	1	2	0	3	0	0	0	0	0	5	1	6	13
04:15 PM	2	1	3	6	1	2	0	3	0	0	0	0	0	0	2	2	11
04:30 PM	0	1	2	3	1	2	0	3	0	0	0	0	0	1	0	1	7
04:45 PM	1	2	4	7	0	3	0	3	0	0	0	0	0	4	0	4	14
Total Volume	3	6	11	20	3	9	0	12	0	0	0	0	0	10	3	13	45
% App. Total	15	30	55		25	75	0		0	0	0		0	76.9	23.1		
PHF	.375	.750	.688	.714	.750	.750	.000	1.00	.000	.000	.000	.000	.000	.500	.375	.542	.804

County of Kern
N/S: I-14 Southbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 04_KCO_15S_Dawn PM
Site Code : 99924607
Start Date : 6/25/2024
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				04:00 PM				04:00 PM			
+0 mins.	0	2	2	4	1	2	0	3	0	0	0	0	0	5	1	6
+15 mins.	2	1	3	6	1	2	0	3	0	0	0	0	0	0	2	2
+30 mins.	0	1	2	3	1	2	0	3	0	0	0	0	0	1	0	1
+45 mins.	1	2	4	7	0	3	0	3	0	0	0	0	0	4	0	4
Total Volume	3	6	11	20	3	9	0	12	0	0	0	0	0	10	3	13
% App. Total	15	30	55		25	75	0		0	0	0		0	76.9	23.1	
PHF	.375	.750	.688	.714	.750	.750	.000	1.000	.000	.000	.000	.000	.000	.500	.375	.542

Location: County of Kern
 N/S: I-14 SB Ramps
 E/W: Dawn Road



Date: 6/25/2024
 Day: Tuesday

PEDESTRIANS

		North Leg I-14 SB Ramps	East Leg Dawn Road	South Leg I-14 SB Ramps	West Leg Dawn Road	
		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 I-14 SB Ramps	East Leg Dawn Road	South Leg I-14 SB Ramps	West Leg Dawn 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	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: County of Kern
N/S: I-14 SB Ramps
E/W: Dawn Road



Date: 6/25/2024
Day: Tuesday

BICYCLES

		Southbound I-14 SB Ramps			Westbound Dawn Road			Northbound I-14 SB Ramps			Eastbound Dawn 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	1	0	0	0	0	0	1	0	2
	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	1	0	0	0	0	0	1	0	2

		Southbound I-14 SB Ramps			Westbound Dawn Road			Northbound I-14 SB Ramps			Eastbound Dawn 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

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County of Kern
N/S: I-14 Northbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 05_KCO_15N_Dawn AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

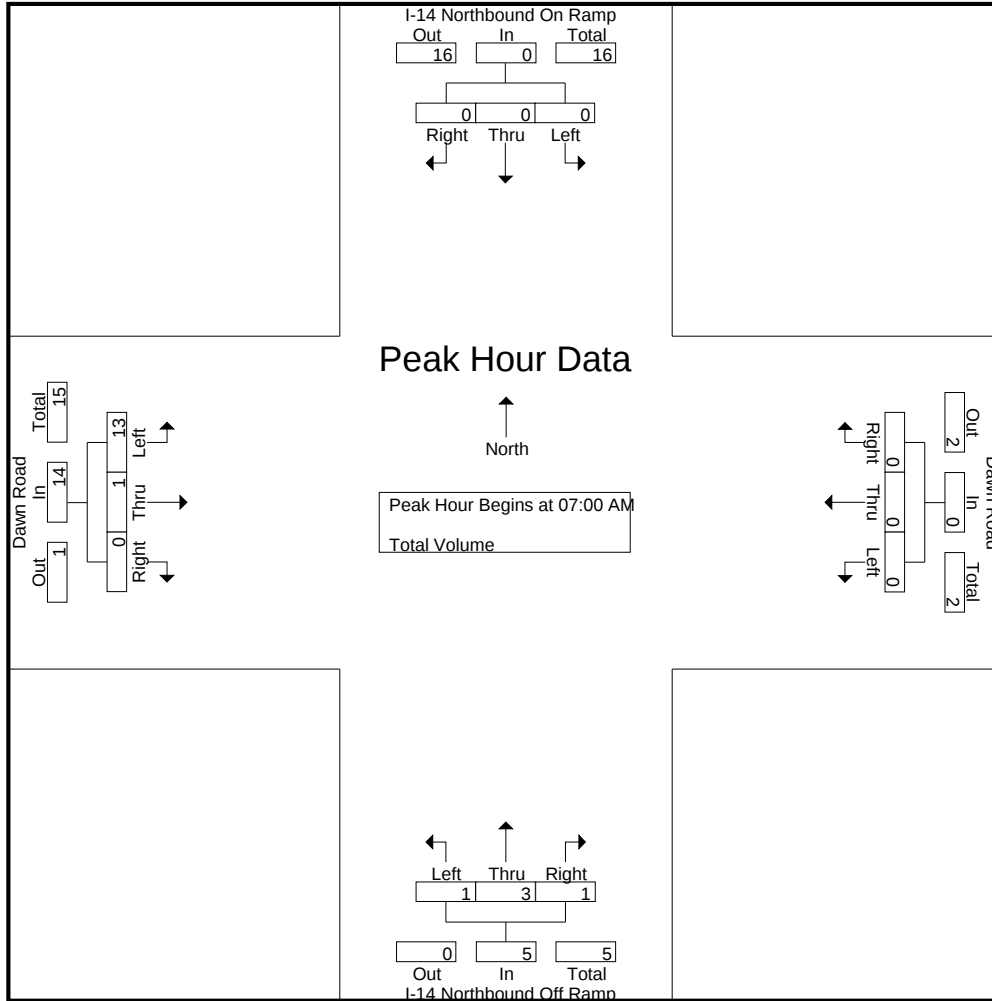
Groups Printed- Total Volume

	I-14 Northbound On Ramp Southbound				Dawn Road Westbound				I-14 Northbound Off Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	3	4
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	4	5
07:45 AM	0	0	0	0	0	0	0	0	0	2	1	3	1	1	0	2	5
Total	0	0	0	0	0	0	0	0	1	3	1	5	13	1	0	14	19
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	2
08:15 AM	0	0	0	0	0	0	0	0	1	0	1	2	1	0	0	1	3
08:30 AM	0	0	0	0	0	1	1	2	2	0	0	2	1	1	0	2	6
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	1	1	2	4	0	1	5	3	1	0	4	11
Grand Total	0	0	0	0	0	1	1	2	5	3	2	10	16	2	0	18	30
Apprch %	0	0	0		0	50	50		50	30	20		88.9	11.1	0		
Total %	0	0	0		0	3.3	3.3	6.7	16.7	10	6.7	33.3	53.3	6.7	0	60	

	I-14 Northbound On Ramp Southbound				Dawn Road Westbound				I-14 Northbound Off Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. 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	0	0	0	0	0	0	0	0	5	0	0	5	5
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	3	4
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	4	5
07:45 AM	0	0	0	0	0	0	0	0	0	2	1	3	1	1	0	2	5
Total Volume	0	0	0	0	0	0	0	0	1	3	1	5	13	1	0	14	19
% App. Total	0	0	0		0	0	0		20	60	20		92.9	7.1	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.375	.250	.417	.650	.250	.000	.700	.950

County of Kern
N/S: I-14 Northbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 05_KCO_15N_Dawn AM
Site Code : 99924607
Start Date : 6/25/2024
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				07:45 AM				07:45 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	2	1	3	5	0	0	5
+15 mins.	0	0	0	0	0	0	0	0	1	0	0	1	3	0	0	3
+30 mins.	0	0	0	0	0	0	0	0	1	0	1	2	4	0	0	4
+45 mins.	0	0	0	0	0	1	1	2	2	0	0	2	1	1	0	2
Total Volume	0	0	0	0	0	1	1	2	4	2	2	8	13	1	0	14
% App. Total	0	0	0	0	0	50	50		50	25	25		92.9	7.1	0	
PHF	.000	.000	.000	.000	.000	.250	.250	.250	.500	.250	.500	.667	.650	.250	.000	.700

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County of Kern
N/S: I-14 Northbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 05_KCO_15N_Dawn PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

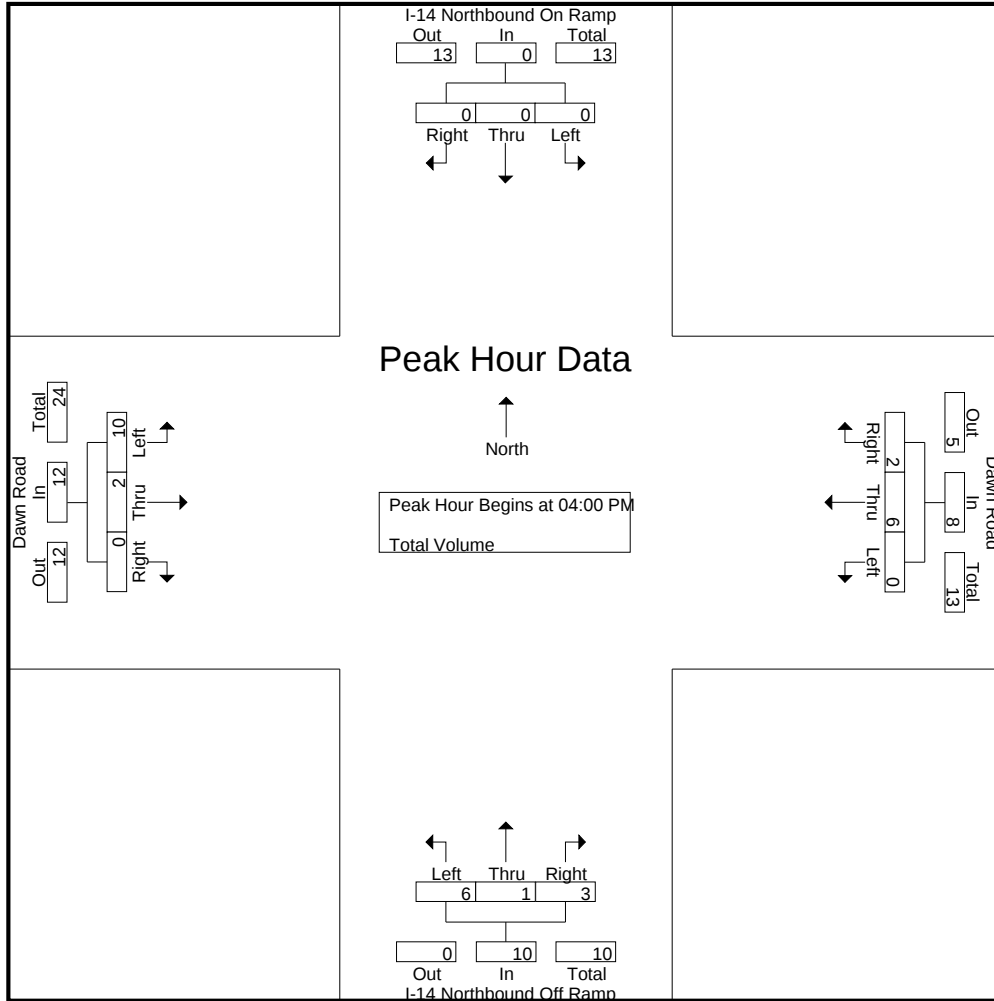
Groups Printed- Total Volume

	I-14 Northbound On Ramp Southbound				Dawn Road Westbound				I-14 Northbound Off Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	0	2	1	1	0	2	5	0	0	5	9
04:15 PM	0	0	0	0	0	1	0	1	2	0	0	2	1	1	0	2	5
04:30 PM	0	0	0	0	0	2	1	3	1	0	3	4	0	1	0	1	8
04:45 PM	0	0	0	0	0	1	1	2	2	0	0	2	4	0	0	4	8
Total	0	0	0	0	0	6	2	8	6	1	3	10	10	2	0	12	30
05:00 PM	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	1	3
05:15 PM	0	0	0	0	0	0	0	0	1	0	1	2	1	0	0	1	3
05:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	3	0	0	3	5
05:45 PM	0	0	0	0	0	0	0	0	2	0	1	3	1	1	0	2	5
Total	0	0	0	0	0	0	0	0	6	1	2	9	6	1	0	7	16
Grand Total	0	0	0	0	0	6	2	8	12	2	5	19	16	3	0	19	46
Apprch %	0	0	0		0	75	25		63.2	10.5	26.3		84.2	15.8	0		
Total %	0	0	0	0	0	13	4.3	17.4	26.1	4.3	10.9	41.3	34.8	6.5	0	41.3	

	I-14 Northbound On Ramp Southbound				Dawn Road Westbound				I-14 Northbound Off Ramp Northbound				Dawn Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	2	0	2	1	1	0	2	5	0	0	5	9
04:15 PM	0	0	0	0	0	1	0	1	2	0	0	2	1	1	0	2	5
04:30 PM	0	0	0	0	0	2	1	3	1	0	3	4	0	1	0	1	8
04:45 PM	0	0	0	0	0	1	1	2	2	0	0	2	4	0	0	4	8
Total Volume	0	0	0	0	0	6	2	8	6	1	3	10	10	2	0	12	30
% App. Total	0	0	0		0	75	25		60	10	30		83.3	16.7	0		
PHF	.000	.000	.000	.000	.000	.750	.500	.667	.750	.250	.250	.625	.500	.500	.000	.600	.833

County of Kern
N/S: I-14 Northbound Ramps
E/W: Dawn Road
Weather: Clear

File Name : 05_KCO_15N_Dawn PM
Site Code : 99924607
Start Date : 6/25/2024
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				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	2	0	2	1	1	0	2	5	0	0	5
+15 mins.	0	0	0	0	0	1	0	1	2	0	0	2	1	1	0	2
+30 mins.	0	0	0	0	0	2	1	3	1	0	3	4	0	1	0	1
+45 mins.	0	0	0	0	0	1	1	2	2	0	0	2	4	0	0	4
Total Volume	0	0	0	0	0	6	2	8	6	1	3	10	10	2	0	12
% App. Total	0	0	0	0	0	75	25		60	10	30		83.3	16.7	0	
PHF	.000	.000	.000	.000	.000	.750	.500	.667	.750	.250	.250	.625	.500	.500	.000	.600

Location: County of Kern
 N/S: I-14 NB Ramps
 E/W: Dawn Road



Date: 6/25/2024
 Day: Tuesday

PEDESTRIANS

		North Leg I-14 NB Ramps	East Leg Dawn Road	South Leg I-14 NB Ramps	West Leg Dawn Road	
		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 I-14 NB Ramps	East Leg Dawn Road	South Leg I-14 NB Ramps	West Leg Dawn 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	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: County of Kern
N/S: I-14 NB Ramps
E/W: Dawn Road



Date: 6/25/2024
Day: Tuesday

BICYCLES

		Southbound I-14 NB Ramps			Westbound Dawn Road			Northbound I-14 NB Ramps			Eastbound Dawn 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 I-14 NB Ramps			Westbound Dawn Road			Northbound I-14 NB Ramps			Eastbound Dawn 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

County of Kern
N/S: Sierra Highway
E/W: Backus Road
Weather: Clear

File Name : 06_KCO_Sierra_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

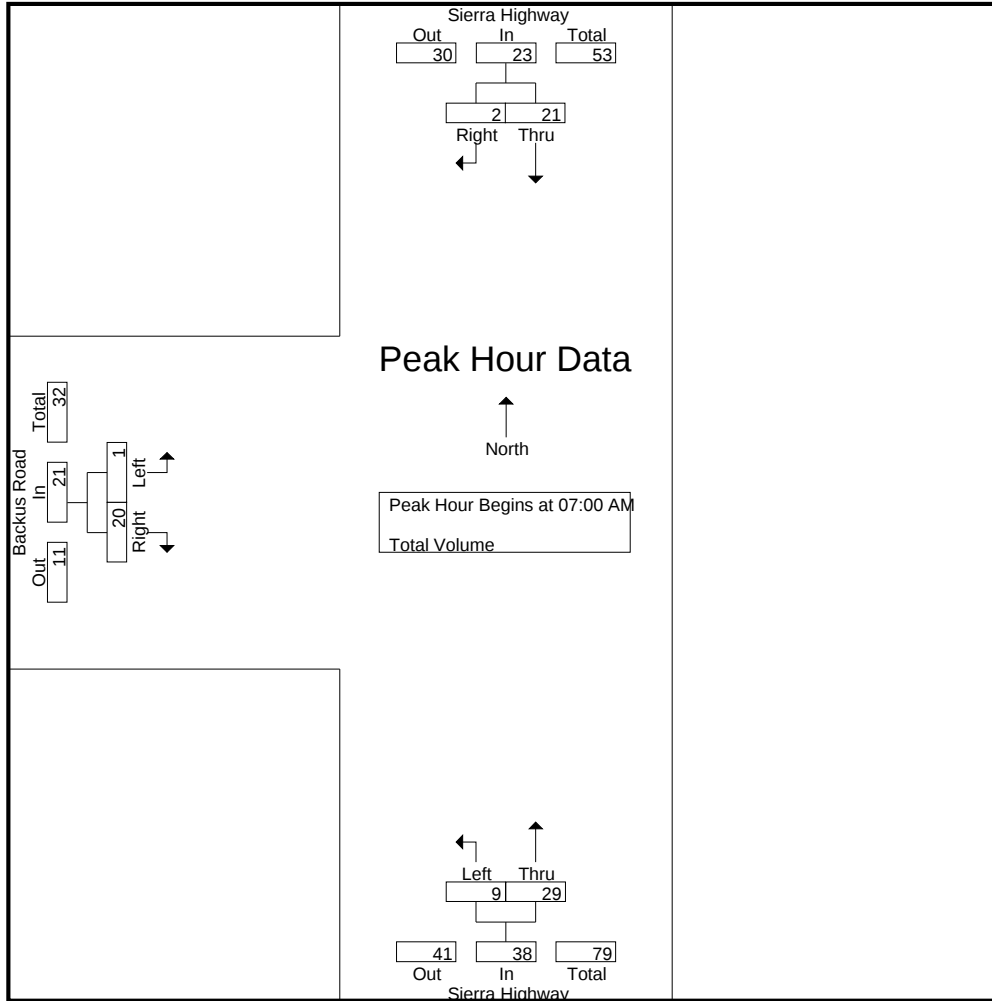
Groups Printed- Total Volume

	Sierra Highway Southbound			Sierra Highway Northbound			Backus Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	5	0	5	2	12	14	0	3	3	22
07:15 AM	2	1	3	2	3	5	0	4	4	12
07:30 AM	7	0	7	2	9	11	1	6	7	25
07:45 AM	7	1	8	3	5	8	0	7	7	23
Total	21	2	23	9	29	38	1	20	21	82
08:00 AM	1	0	1	0	6	6	0	3	3	10
08:15 AM	3	0	3	3	2	5	0	4	4	12
08:30 AM	2	0	2	3	3	6	0	1	1	9
08:45 AM	6	1	7	1	8	9	1	2	3	19
Total	12	1	13	7	19	26	1	10	11	50
Grand Total	33	3	36	16	48	64	2	30	32	132
Apprch %	91.7	8.3		25	75		6.2	93.8		
Total %	25	2.3	27.3	12.1	36.4	48.5	1.5	22.7	24.2	

	Sierra Highway Southbound			Sierra Highway Northbound			Backus Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. 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	5	0	5	2	12	14	0	3	3	22
07:15 AM	2	1	3	2	3	5	0	4	4	12
07:30 AM	7	0	7	2	9	11	1	6	7	25
07:45 AM	7	1	8	3	5	8	0	7	7	23
Total Volume	21	2	23	9	29	38	1	20	21	82
% App. Total	91.3	8.7		23.7	76.3		4.8	95.2		
PHF	.750	.500	.719	.750	.604	.679	.250	.714	.750	.820

County of Kern
N/S: Sierra Highway
E/W: Backus Road
Weather: Clear

File Name : 06_KCO_Sierra_Backus AM
Site Code : 99924607
Start Date : 6/25/2024
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.	5	0	5	2	12	14	0	3	3
+15 mins.	2	1	3	2	3	5	0	4	4
+30 mins.	7	0	7	2	9	11	1	6	7
+45 mins.	7	1	8	3	5	8	0	7	7
Total Volume	21	2	23	9	29	38	1	20	21
% App. Total	91.3	8.7		23.7	76.3		4.8	95.2	
PHF	.750	.500	.719	.750	.604	.679	.250	.714	.750

County of Kern
N/S: Sierra Highway
E/W: Backus Road
Weather: Clear

File Name : 06_KCO_Sierra_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

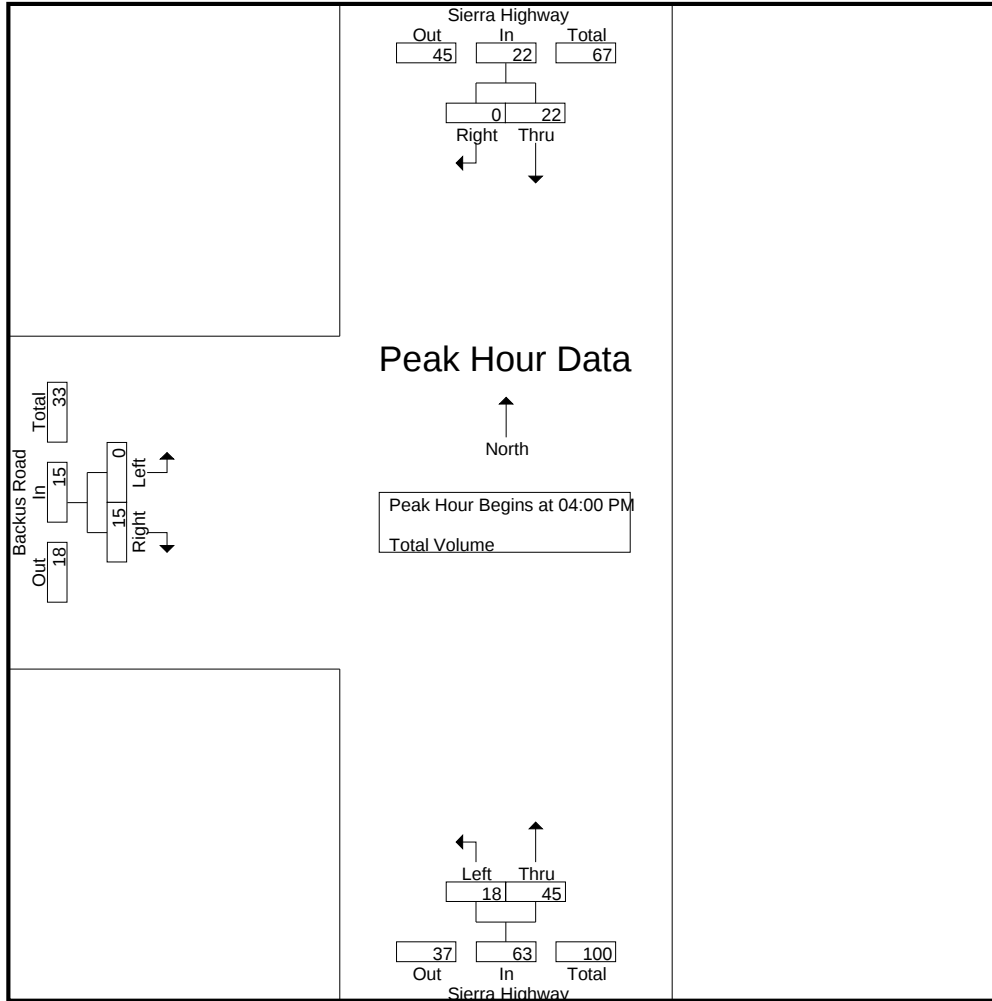
Groups Printed- Total Volume

	Sierra Highway Southbound			Sierra Highway Northbound			Backus Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	6	0	6	3	13	16	0	6	6	28
04:15 PM	6	0	6	9	15	24	0	2	2	32
04:30 PM	4	0	4	3	5	8	0	3	3	15
04:45 PM	6	0	6	3	12	15	0	4	4	25
Total	22	0	22	18	45	63	0	15	15	100
05:00 PM	8	0	8	5	6	11	0	4	4	23
05:15 PM	7	0	7	2	12	14	1	6	7	28
05:30 PM	2	0	2	2	12	14	0	4	4	20
05:45 PM	5	1	6	5	6	11	1	3	4	21
Total	22	1	23	14	36	50	2	17	19	92
Grand Total	44	1	45	32	81	113	2	32	34	192
Apprch %	97.8	2.2		28.3	71.7		5.9	94.1		
Total %	22.9	0.5	23.4	16.7	42.2	58.9	1	16.7	17.7	

	Sierra Highway Southbound			Sierra Highway Northbound			Backus Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	6	0	6	3	13	16	0	6	6	28
04:15 PM	6	0	6	9	15	24	0	2	2	32
04:30 PM	4	0	4	3	5	8	0	3	3	15
04:45 PM	6	0	6	3	12	15	0	4	4	25
Total Volume	22	0	22	18	45	63	0	15	15	100
% App. Total	100	0		28.6	71.4		0	100		
PHF	.917	.000	.917	.500	.750	.656	.000	.625	.625	.781

County of Kern
N/S: Sierra Highway
E/W: Backus Road
Weather: Clear

File Name : 06_KCO_Sierra_Backus PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 2



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

	04:30 PM			04:00 PM			04:45 PM		
+0 mins.	4	0	4	3	13	16	0	4	4
+15 mins.	6	0	6	9	15	24	0	4	4
+30 mins.	8	0	8	3	5	8	1	6	7
+45 mins.	7	0	7	3	12	15	0	4	4
Total Volume	25	0	25	18	45	63	1	18	19
% App. Total	100	0		28.6	71.4		5.3	94.7	
PHF	.781	.000	.781	.500	.750	.656	.250	.750	.679

Location: County of Kern
 N/S: Sierra Highway
 E/W: Backus Road



Date: 6/25/2024
 Day: Tuesday

PEDESTRIANS

		North Leg Sierra Highway	East Leg Dead End	South Leg Sierra Highway	West Leg Backus Road	
		Pedestrians	Pedestrians	Pedestrians	Pedestrians	
	7:00 AM	2	0	0	0	2
	7:15 AM	0	0	0	0	0
	7:30 AM	0	0	1	0	1
	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:	2	0	1	0	3

		North Leg Sierra Highway	East Leg Dead End	South Leg Sierra Highway	West Leg Backus 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	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: County of Kern
 N/S: Sierra Highway
 E/W: Backus Road



Date: 6/25/2024
 Day: Tuesday

BICYCLES

		Southbound Sierra Highway			Westbound Dead End			Northbound Sierra Highway			Eastbound Backus 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 Sierra Highway			Westbound Dead End			Northbound Sierra Highway			Eastbound Backus 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

County of Kern
N/S: Sierra Highway
E/W: Dawn Road
Weather: Clear

File Name : 07_KCO_Sierra_Dawn AM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

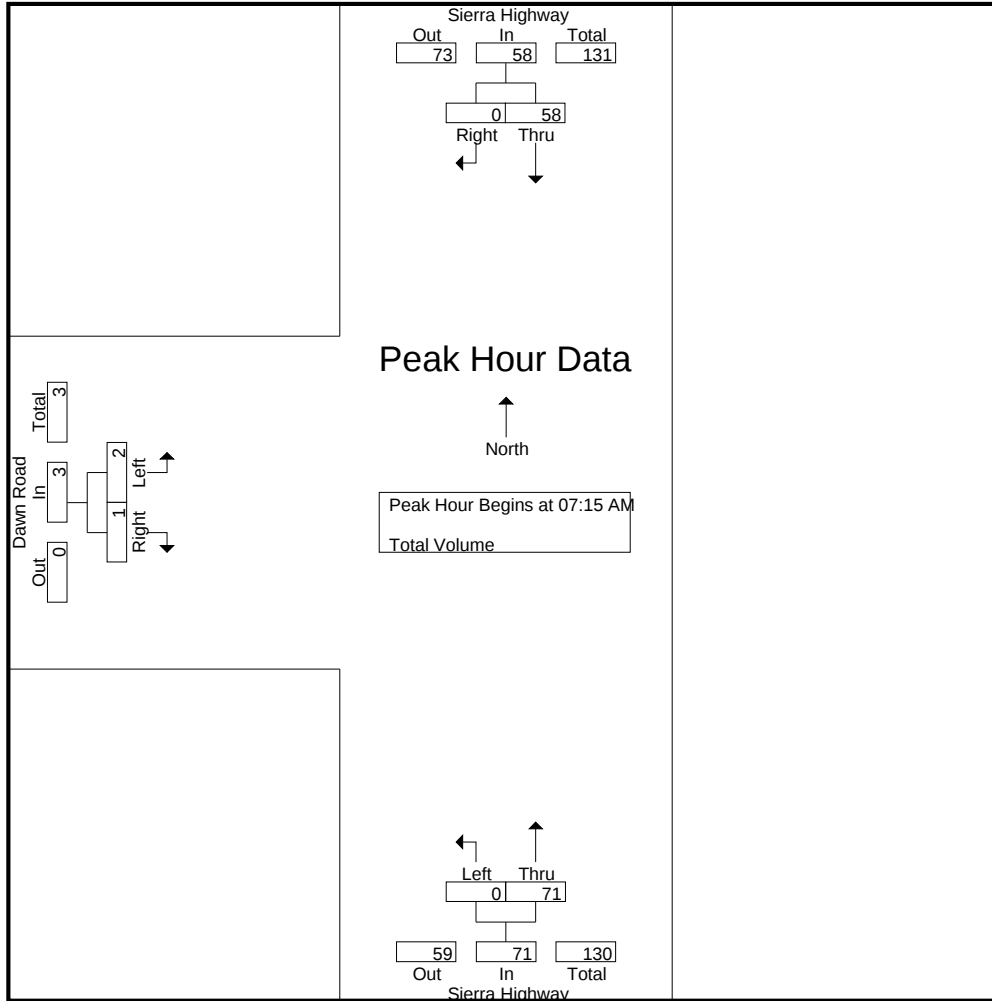
Groups Printed- Total Volume

	Sierra Highway Southbound			Sierra Highway Northbound			Dawn Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	7	0	7	0	24	24	0	0	0	31
07:15 AM	12	0	12	0	15	15	0	0	0	27
07:30 AM	15	0	15	0	19	19	0	0	0	34
07:45 AM	17	0	17	0	19	19	2	1	3	39
Total	51	0	51	0	77	77	2	1	3	131
08:00 AM	14	0	14	0	18	18	0	0	0	32
08:15 AM	14	0	14	0	8	8	0	0	0	22
08:30 AM	9	0	9	0	16	16	0	0	0	25
08:45 AM	19	0	19	0	11	11	0	0	0	30
Total	56	0	56	0	53	53	0	0	0	109
Grand Total	107	0	107	0	130	130	2	1	3	240
Apprch %	100	0		0	100		66.7	33.3		
Total %	44.6	0	44.6	0	54.2	54.2	0.8	0.4	1.2	

	Sierra Highway Southbound			Sierra Highway Northbound			Dawn Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	12	0	12	0	15	15	0	0	0	27
07:30 AM	15	0	15	0	19	19	0	0	0	34
07:45 AM	17	0	17	0	19	19	2	1	3	39
08:00 AM	14	0	14	0	18	18	0	0	0	32
Total Volume	58	0	58	0	71	71	2	1	3	132
% App. Total	100	0		0	100		66.7	33.3		
PHF	.853	.000	.853	.000	.934	.934	.250	.250	.250	.846

County of Kern
 N/S: Sierra Highway
 E/W: Dawn Road
 Weather: Clear

File Name : 07_KCO_Sierra_Dawn AM
 Site Code : 99924607
 Start Date : 6/25/2024
 Page No : 2



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

	07:30 AM			07:00 AM			07:00 AM		
+0 mins.	15	0	15	0	24	24	0	0	0
+15 mins.	17	0	17	0	15	15	0	0	0
+30 mins.	14	0	14	0	19	19	0	0	0
+45 mins.	14	0	14	0	19	19	2	1	3
Total Volume	60	0	60	0	77	77	2	1	3
% App. Total	100	0		0	100		66.7	33.3	
PHF	.882	.000	.882	.000	.802	.802	.250	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Kern
N/S: Sierra Highway
E/W: Dawn Road
Weather: Clear

File Name : 07_KCO_Sierra_Dawn PM
Site Code : 99924607
Start Date : 6/25/2024
Page No : 1

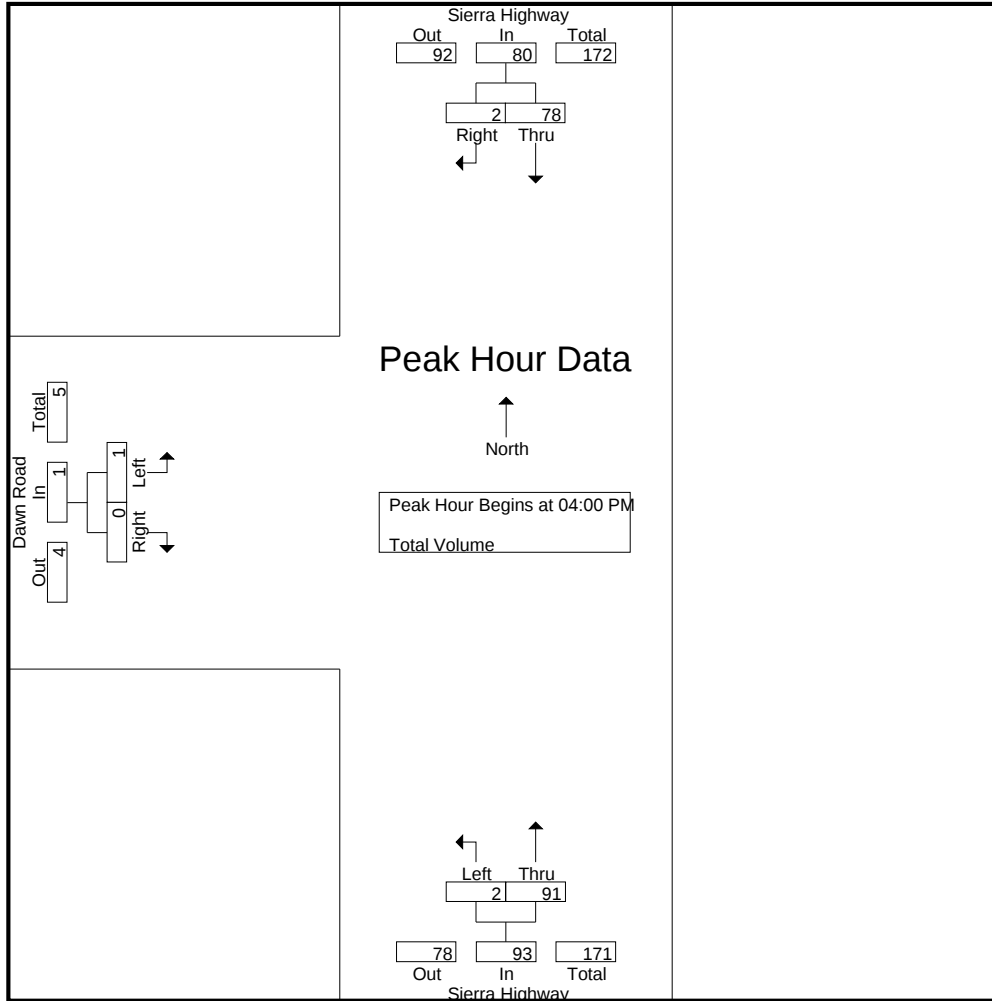
Groups Printed- Total Volume

	Sierra Highway Southbound			Sierra Highway Northbound			Dawn Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	28	1	29	1	26	27	0	0	0	56
04:15 PM	20	0	20	0	23	23	0	0	0	43
04:30 PM	16	1	17	1	10	11	1	0	1	29
04:45 PM	14	0	14	0	32	32	0	0	0	46
Total	78	2	80	2	91	93	1	0	1	174
05:00 PM	18	0	18	0	15	15	0	0	0	33
05:15 PM	19	0	19	0	17	17	1	0	1	37
05:30 PM	18	0	18	0	15	15	0	0	0	33
05:45 PM	18	2	20	0	16	16	0	0	0	36
Total	73	2	75	0	63	63	1	0	1	139
Grand Total	151	4	155	2	154	156	2	0	2	313
Apprch %	97.4	2.6		1.3	98.7		100	0		
Total %	48.2	1.3	49.5	0.6	49.2	49.8	0.6	0	0.6	

	Sierra Highway Southbound			Sierra Highway Northbound			Dawn Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	28	1	29	1	26	27	0	0	0	56
04:15 PM	20	0	20	0	23	23	0	0	0	43
04:30 PM	16	1	17	1	10	11	1	0	1	29
04:45 PM	14	0	14	0	32	32	0	0	0	46
Total Volume	78	2	80	2	91	93	1	0	1	174
% App. Total	97.5	2.5		2.2	97.8		100	0		
PHF	.696	.500	.690	.500	.711	.727	.250	.000	.250	.777

County of Kern
N/S: Sierra Highway
E/W: Dawn Road
Weather: Clear

File Name : 07_KCO_Sierra_Dawn PM
Site Code : 99924607
Start Date : 6/25/2024
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			04:30 PM		
+0 mins.	28	1	29	1	26	27	1	0	1
+15 mins.	20	0	20	0	23	23	0	0	0
+30 mins.	16	1	17	1	10	11	0	0	0
+45 mins.	14	0	14	0	32	32	1	0	1
Total Volume	78	2	80	2	91	93	2	0	2
% App. Total	97.5	2.5		2.2	97.8		100	0	
PHF	.696	.500	.690	.500	.711	.727	.500	.000	.500

Location: County of Kern
 N/S: Sierra Highway
 E/W: Dawn Road



Date: 6/25/2024
 Day: Tuesday

PEDESTRIANS

		North Leg Sierra Highway	East Leg Dead End	South Leg Sierra Highway	West Leg Dawn Road		
		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 Sierra Highway	East Leg Dead End	South Leg Sierra Highway	West Leg Dawn 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	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: County of Kern
N/S: Sierra Highway
E/W: Dawn Road



Date: 6/25/2024
Day: Tuesday

BICYCLES

		Southbound Sierra Highway			Westbound Dead End			Northbound Sierra Highway			Eastbound Dawn 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 Sierra Highway			Westbound Dead End			Northbound Sierra Highway			Eastbound Dawn 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

Counts Unlimited, Inc.

County of Kern
Backus Road
W/ State Route 14
24 Hour Directional Classification Count

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

Page 1

KCO005
Site Code: 999-24607

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	4	5	0	0	0	0	0	0	0	0	0	0	9
01:00	0	1	0	0	1	0	0	1	0	0	1	0	0	4
02:00	0	7	0	0	1	0	0	0	1	0	0	0	0	9
03:00	0	10	1	0	1	0	0	0	0	0	0	0	0	12
04:00	2	52	7	0	6	0	0	0	0	0	2	0	0	69
05:00	0	53	12	0	4	0	0	0	0	0	0	0	0	69
06:00	1	58	20	1	4	1	2	4	2	0	1	0	0	94
07:00	1	88	14	0	7	1	0	1	0	0	4	0	0	116
08:00	0	57	15	3	11	1	0	3	1	0	4	0	0	95
09:00	1	61	20	1	6	2	0	0	2	0	2	0	0	95
10:00	1	47	19	1	4	0	0	2	1	0	2	0	0	77
11:00	1	57	14	0	11	4	2	2	1	1	1	0	0	94
12 PM	1	36	17	0	1	1	0	2	1	0	3	2	0	64
13:00	0	41	15	3	8	0	0	1	0	0	5	2	1	76
14:00	0	44	8	1	8	0	0	2	0	0	0	0	1	64
15:00	1	57	13	0	2	0	0	1	1	0	0	0	0	75
16:00	1	29	13	0	7	1	1	1	0	0	0	0	0	53
17:00	0	31	13	0	5	0	0	3	0	0	0	0	0	52
18:00	0	20	7	0	3	1	0	1	0	0	0	0	0	32
19:00	0	20	4	0	2	0	0	1	0	0	0	0	0	27
20:00	0	23	3	0	2	0	0	0	0	0	0	0	0	28
21:00	0	13	4	0	0	0	0	0	0	0	0	0	0	17
22:00	1	9	3	0	0	1	0	1	1	0	0	0	0	16
23:00	0	7	4	0	2	0	0	0	1	0	0	0	0	14
Total	11	825	231	10	96	13	5	26	12	1	25	4	2	1261
Percent	0.9%	65.4%	18.3%	0.8%	7.6%	1.0%	0.4%	2.1%	1.0%	0.1%	2.0%	0.3%	0.2%	
AM Peak	04:00	07:00	06:00	08:00	08:00	11:00	06:00	06:00	06:00	11:00	07:00			07:00
Vol.	2	88	20	3	11	4	2	4	2	1	4			116
PM Peak	12:00	15:00	12:00	13:00	13:00	12:00	16:00	17:00	12:00		13:00	12:00	13:00	13:00
Vol.	1	57	17	3	8	1	1	3	1		5	2	1	76
Grand Total	11	825	231	10	96	13	5	26	12	1	25	4	2	1261
Percent	0.9%	65.4%	18.3%	0.8%	7.6%	1.0%	0.4%	2.1%	1.0%	0.1%	2.0%	0.3%	0.2%	

Counts Unlimited, Inc.

County of Kern
Backus Road
W/ State Route 14
24 Hour Directional Classification Count

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

KCO005
Site Code: 999-24607

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	1	8	1	0	0	0	0	0	1	0	0	0	0	11
01:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
02:00	0	4	1	0	2	0	0	0	0	0	0	0	0	7
03:00	0	2	4	0	3	0	0	0	0	0	0	0	0	9
04:00	0	7	7	0	0	0	0	0	0	0	0	0	0	14
05:00	0	16	5	2	3	1	0	1	1	0	2	0	0	31
06:00	1	7	10	1	7	0	0	0	8	0	3	0	0	37
07:00	0	16	12	3	15	0	0	1	3	0	3	0	0	53
08:00	0	4	9	0	9	0	0	2	0	0	0	0	0	24
09:00	1	10	11	5	7	0	0	1	3	0	2	0	0	40
10:00	1	15	17	2	9	0	0	1	1	0	2	0	0	48
11:00	0	17	16	0	6	0	0	0	2	0	0	0	0	41
12 PM	1	27	17	3	13	0	0	3	2	0	1	0	0	67
13:00	1	23	24	2	14	0	0	2	0	0	1	0	0	67
14:00	0	22	20	2	16	0	0	1	1	0	0	0	0	62
15:00	1	47	27	0	21	1	0	1	0	0	1	0	0	99
16:00	1	47	22	2	22	0	0	1	0	0	0	0	0	95
17:00	1	64	32	0	15	0	0	1	1	0	0	0	0	114
18:00	1	41	22	1	15	0	0	0	0	0	0	0	0	80
19:00	0	42	14	1	3	1	0	1	0	0	0	0	0	62
20:00	0	31	12	0	2	0	0	2	0	0	0	0	0	47
21:00	0	29	5	0	2	0	0	1	0	0	0	0	0	37
22:00	0	13	6	1	1	1	0	0	1	0	0	0	0	23
23:00	0	6	5	0	2	0	0	0	0	0	0	0	0	13
Total	10	501	301	25	187	4	0	19	24	0	15	0	0	1086
Percent	0.9%	46.1%	27.7%	2.3%	17.2%	0.4%	0.0%	1.7%	2.2%	0.0%	1.4%	0.0%	0.0%	
AM Peak	00:00	11:00	10:00	09:00	07:00	05:00		08:00	06:00		06:00			07:00
Vol.	1	17	17	5	15	1		2	8		3			53
PM Peak	12:00	17:00	17:00	12:00	16:00	15:00		12:00	12:00		12:00			17:00
Vol.	1	64	32	3	22	1		3	2		1			114
Grand Total	10	501	301	25	187	4	0	19	24	0	15	0	0	1086
Percent	0.9%	46.1%	27.7%	2.3%	17.2%	0.4%	0.0%	1.7%	2.2%	0.0%	1.4%	0.0%	0.0%	

Counts Unlimited, Inc.

County of Kern
Backus Road
W/ State Route 14
24 Hour Directional Classification Count

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

KCO005
Site Code: 999-24607

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	1	12	6	0	0	0	0	0	1	0	0	0	0	20
01:00	0	4	2	0	1	0	0	1	0	0	1	0	0	9
02:00	0	11	1	0	3	0	0	0	1	0	0	0	0	16
03:00	0	12	5	0	4	0	0	0	0	0	0	0	0	21
04:00	2	59	14	0	6	0	0	0	0	0	2	0	0	83
05:00	0	69	17	2	7	1	0	1	1	0	2	0	0	100
06:00	2	65	30	2	11	1	2	4	10	0	4	0	0	131
07:00	1	104	26	3	22	1	0	2	3	0	7	0	0	169
08:00	0	61	24	3	20	1	0	5	1	0	4	0	0	119
09:00	2	71	31	6	13	2	0	1	5	0	4	0	0	135
10:00	2	62	36	3	13	0	0	3	2	0	4	0	0	125
11:00	1	74	30	0	17	4	2	2	3	1	1	0	0	135
12 PM	2	63	34	3	14	1	0	5	3	0	4	2	0	131
13:00	1	64	39	5	22	0	0	3	0	0	6	2	1	143
14:00	0	66	28	3	24	0	0	3	1	0	0	0	1	126
15:00	2	104	40	0	23	1	0	2	1	0	1	0	0	174
16:00	2	76	35	2	29	1	1	2	0	0	0	0	0	148
17:00	1	95	45	0	20	0	0	4	1	0	0	0	0	166
18:00	1	61	29	1	18	1	0	1	0	0	0	0	0	112
19:00	0	62	18	1	5	1	0	2	0	0	0	0	0	89
20:00	0	54	15	0	4	0	0	2	0	0	0	0	0	75
21:00	0	42	9	0	2	0	0	1	0	0	0	0	0	54
22:00	1	22	9	1	1	2	0	1	2	0	0	0	0	39
23:00	0	13	9	0	4	0	0	0	1	0	0	0	0	27
Total	21	1326	532	35	283	17	5	45	36	1	40	4	2	2347
Percent	0.9%	56.5%	22.7%	1.5%	12.1%	0.7%	0.2%	1.9%	1.5%	0.0%	1.7%	0.2%	0.1%	
AM Peak	04:00	07:00	10:00	09:00	07:00	11:00	06:00	08:00	06:00	11:00	07:00			07:00
Vol.	2	104	36	6	22	4	2	5	10	1	7			169
PM Peak	12:00	15:00	17:00	13:00	16:00	22:00	16:00	12:00	12:00		13:00	12:00	13:00	15:00
Vol.	2	104	45	5	29	2	1	5	3		6	2	1	174
Grand Total	21	1326	532	35	283	17	5	45	36	1	40	4	2	2347
Percent	0.9%	56.5%	22.7%	1.5%	12.1%	0.7%	0.2%	1.9%	1.5%	0.0%	1.7%	0.2%	0.1%	

Counts Unlimited, Inc.

County of Kern
Dawn Road
B/ SR-14 Southbound Ramps - SR-14 Northbound Ramps
24 Hour Directional Classification Count

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

KCO001
Site Code: 999-24607

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
05:00	1	1	1	0	2	0	0	0	0	0	0	0	0	5
06:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
07:00	0	11	2	0	2	0	0	0	0	0	0	0	0	15
08:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
09:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
10:00	0	5	1	0	2	0	0	1	0	0	0	0	0	9
11:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
12 PM	0	3	2	0	2	0	0	0	0	0	0	0	0	7
13:00	0	5	4	0	1	0	0	0	1	0	0	0	0	11
14:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
15:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
16:00	0	8	4	0	0	0	0	0	0	0	0	0	0	12
17:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
18:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4
19:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
21:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	84	33	0	12	0	0	1	1	0	0	0	0	132
Percent	0.8%	63.6%	25.0%	0.0%	9.1%	0.0%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	07:00	06:00		05:00			10:00						07:00
Vol.	1	11	3		2			1						15
PM Peak		14:00	13:00		12:00				13:00					16:00
Vol.		8	4		2				1					12
Grand Total	1	84	33	0	12	0	0	1	1	0	0	0	0	132
Percent	0.8%	63.6%	25.0%	0.0%	9.1%	0.0%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	

[illegible]

Counts Unlimited, Inc.

County of Kern
Dawn Road
B/ SR-14 Southbound Ramps - SR-14 Northbound Ramps
24 Hour Directional Classification Count

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

KCO001
Site Code: 999-24607

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
05:00	1	1	1	0	3	0	0	0	0	0	0	0	0	6
06:00	0	10	4	0	0	0	0	0	0	0	0	0	0	14
07:00	0	11	2	1	2	0	0	0	0	0	0	0	0	16
08:00	0	5	4	0	2	0	0	0	0	0	0	0	0	11
09:00	0	3	3	1	0	0	0	0	0	0	0	0	0	7
10:00	0	8	1	0	4	0	0	1	0	0	0	0	0	14
11:00	1	5	4	0	2	0	0	0	0	0	0	0	0	12
12 PM	0	6	3	0	2	0	0	0	0	0	0	0	0	11
13:00	0	8	5	0	2	0	0	0	1	0	0	0	0	16
14:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13
15:00	0	7	2	0	2	0	0	0	0	0	0	0	0	11
16:00	1	13	8	0	2	0	0	0	0	0	0	0	0	24
17:00	0	13	1	0	2	0	0	0	0	0	0	0	0	16
18:00	0	4	2	0	3	0	0	0	0	0	0	0	0	9
19:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
20:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
21:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	131	51	2	28	0	0	1	1	0	0	0	0	217
Percent	1.4%	60.4%	23.5%	0.9%	12.9%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	07:00	06:00	07:00	10:00			10:00						07:00
Vol.	1	11	4	1	4			1						16
PM Peak	16:00	16:00	16:00		18:00				13:00					16:00
Vol.	1	13	8		3				1					24
Grand Total	3	131	51	2	28	0	0	1	1	0	0	0	0	217
Percent	1.4%	60.4%	23.5%	0.9%	12.9%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	

[illegible]

[illegible]

Counts Unlimited, Inc.

County of Kern
Sierra Highway
N/ Dawn Road
24 Hour Directional Classification Count

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

KCO004
Site Code: 999-24607

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	2	3	0	0	0	0	1	0	0	0	0	0	6
01:00	0	3	3	0	2	0	0	0	0	0	0	0	0	8
02:00	0	2	7	0	1	0	0	0	0	0	0	0	0	10
03:00	0	1	5	0	2	0	0	0	0	0	0	0	0	8
04:00	0	6	68	0	16	0	0	0	0	0	0	0	0	90
05:00	1	12	26	1	15	0	0	1	0	0	0	0	0	56
06:00	0	7	50	2	17	1	1	1	0	0	1	0	0	80
07:00	1	26	31	0	19	0	0	1	1	0	0	0	0	79
08:00	0	19	17	1	12	1	0	5	1	1	0	0	0	57
09:00	0	3	15	4	19	0	0	7	0	0	0	0	0	48
10:00	1	10	11	1	15	0	1	2	1	0	0	0	0	42
11:00	1	16	19	0	11	0	3	2	0	0	0	0	0	52
12 PM	0	18	46	0	14	0	0	1	1	0	0	0	0	80
13:00	0	19	15	0	10	1	0	2	0	0	0	0	0	47
14:00	1	9	38	1	13	0	0	4	1	0	0	0	0	67
15:00	0	16	23	1	10	0	0	3	0	0	0	0	0	53
16:00	0	23	48	1	17	0	0	1	0	0	0	0	0	90
17:00	0	15	47	0	13	0	0	1	0	0	0	0	0	76
18:00	0	12	37	1	18	0	0	2	0	0	0	0	0	70
19:00	0	11	25	0	8	0	0	2	0	0	0	0	0	46
20:00	1	15	43	0	8	0	0	1	0	0	0	0	0	68
21:00	0	17	19	0	5	0	0	1	0	0	0	0	0	42
22:00	0	10	11	0	3	0	0	0	0	0	0	0	0	24
23:00	0	6	4	0	0	0	0	0	0	0	0	0	0	10
Total	6	278	611	13	248	3	5	38	5	1	1	0	0	1209
Percent	0.5%	23.0%	50.5%	1.1%	20.5%	0.2%	0.4%	3.1%	0.4%	0.1%	0.1%	0.0%	0.0%	
AM Peak	05:00	07:00	04:00	09:00	07:00	06:00	11:00	09:00	07:00	08:00	06:00			04:00
Vol.	1	26	68	4	19	1	3	7	1	1	1			90
PM Peak	14:00	16:00	16:00	14:00	18:00	13:00		14:00	12:00					16:00
Vol.	1	23	48	1	18	1		4	1					90
Grand Total	6	278	611	13	248	3	5	38	5	1	1	0	0	1209
Percent	0.5%	23.0%	50.5%	1.1%	20.5%	0.2%	0.4%	3.1%	0.4%	0.1%	0.1%	0.0%	0.0%	

Counts Unlimited, Inc.

County of Kern
Sierra Highway
N/ Dawn Road
24 Hour Directional Classification Count

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

KCO004
Site Code: 999-24607

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	5	1	0	0	0	0	0	0	0	0	0	0	6
01:00	0	3	1	0	1	0	0	1	1	0	0	0	0	7
02:00	0	1	3	0	1	0	0	0	0	0	1	0	0	6
03:00	0	4	2	0	1	0	0	0	0	0	0	0	0	7
04:00	0	3	8	2	6	0	0	0	0	0	0	0	0	19
05:00	1	13	17	0	9	0	0	2	1	0	0	0	0	43
06:00	0	11	13	1	11	0	0	6	0	0	0	0	0	42
07:00	0	28	15	0	4	0	0	2	0	0	1	0	0	50
08:00	0	24	16	0	6	1	0	2	1	0	1	0	0	51
09:00	0	18	14	1	13	0	0	3	0	0	0	0	0	49
10:00	0	31	12	1	14	0	0	4	3	0	0	0	0	65
11:00	0	24	17	0	17	2	0	2	1	1	1	0	0	65
12 PM	0	16	21	1	11	3	0	3	1	0	0	0	0	56
13:00	0	59	13	1	9	0	0	2	7	0	0	0	0	91
14:00	2	40	23	1	9	0	0	1	2	0	1	0	0	79
15:00	0	59	25	4	11	0	0	2	2	0	0	0	0	103
16:00	1	36	23	2	17	2	0	0	2	0	0	0	0	83
17:00	1	24	31	0	12	1	0	1	3	0	0	0	0	73
18:00	0	11	18	3	12	0	0	2	2	0	1	0	0	49
19:00	0	10	16	0	6	1	0	1	0	0	0	0	0	34
20:00	0	6	13	1	1	0	0	0	1	0	0	0	0	22
21:00	0	28	16	0	4	0	0	0	0	0	0	0	0	48
22:00	0	17	3	0	1	0	0	2	0	0	0	0	0	23
23:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
Total	5	480	322	18	177	10	0	36	27	1	6	0	0	1082
Percent	0.5%	44.4%	29.8%	1.7%	16.4%	0.9%	0.0%	3.3%	2.5%	0.1%	0.6%	0.0%	0.0%	
AM Peak	05:00	10:00	05:00	04:00	11:00	11:00		06:00	10:00	11:00	02:00			10:00
Vol.	1	31	17	2	17	2		6	3	1	1			65
PM Peak	14:00	13:00	17:00	15:00	16:00	12:00		12:00	13:00		14:00			15:00
Vol.	2	59	31	4	17	3		3	7		1			103
Grand Total	5	480	322	18	177	10	0	36	27	1	6	0	0	1082
Percent	0.5%	44.4%	29.8%	1.7%	16.4%	0.9%	0.0%	3.3%	2.5%	0.1%	0.6%	0.0%	0.0%	

Counts Unlimited, Inc.

County of Kern
Sierra Highway
N/ Dawn Road
24 Hour Directional Classification Count

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

KCO004
Site Code: 999-24607

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	7	4	0	0	0	0	1	0	0	0	0	0	12
01:00	0	6	4	0	3	0	0	1	1	0	0	0	0	15
02:00	0	3	10	0	2	0	0	0	0	0	1	0	0	16
03:00	0	5	7	0	3	0	0	0	0	0	0	0	0	15
04:00	0	9	76	2	22	0	0	0	0	0	0	0	0	109
05:00	2	25	43	1	24	0	0	3	1	0	0	0	0	99
06:00	0	18	63	3	28	1	1	7	0	0	1	0	0	122
07:00	1	54	46	0	23	0	0	3	1	0	1	0	0	129
08:00	0	43	33	1	18	2	0	7	2	1	1	0	0	108
09:00	0	21	29	5	32	0	0	10	0	0	0	0	0	97
10:00	1	41	23	2	29	0	1	6	4	0	0	0	0	107
11:00	1	40	36	0	28	2	3	4	1	1	1	0	0	117
12 PM	0	34	67	1	25	3	0	4	2	0	0	0	0	136
13:00	0	78	28	1	19	1	0	4	7	0	0	0	0	138
14:00	3	49	61	2	22	0	0	5	3	0	1	0	0	146
15:00	0	75	48	5	21	0	0	5	2	0	0	0	0	156
16:00	1	59	71	3	34	2	0	1	2	0	0	0	0	173
17:00	1	39	78	0	25	1	0	2	3	0	0	0	0	149
18:00	0	23	55	4	30	0	0	4	2	0	1	0	0	119
19:00	0	21	41	0	14	1	0	3	0	0	0	0	0	80
20:00	1	21	56	1	9	0	0	1	1	0	0	0	0	90
21:00	0	45	35	0	9	0	0	1	0	0	0	0	0	90
22:00	0	27	14	0	4	0	0	2	0	0	0	0	0	47
23:00	0	15	5	0	1	0	0	0	0	0	0	0	0	21
Total	11	758	933	31	425	13	5	74	32	2	7	0	0	2291
Percent	0.5%	33.1%	40.7%	1.4%	18.6%	0.6%	0.2%	3.2%	1.4%	0.1%	0.3%	0.0%	0.0%	
AM Peak	05:00	07:00	04:00	09:00	09:00	08:00	11:00	09:00	10:00	08:00	02:00			07:00
Vol.	2	54	76	5	32	2	3	10	4	1	1			129
PM Peak	14:00	13:00	17:00	15:00	16:00	12:00		14:00	13:00		14:00			16:00
Vol.	3	78	78	5	34	3		5	7		1			173
Grand Total	11	758	933	31	425	13	5	74	32	2	7	0	0	2291
Percent	0.5%	33.1%	40.7%	1.4%	18.6%	0.6%	0.2%	3.2%	1.4%	0.1%	0.3%	0.0%	0.0%	

Counts Unlimited, Inc.

Page 1

County of Kern
Sierra Highway
S/ Dawn Road
24 Hour Directional Classification Count

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

KCO003
Site Code: 999-24607

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	4	3	0	1	0	0	0	0	0	0	0	0	8
01:00	0	4	4	0	1	0	0	0	0	0	0	0	0	9
02:00	0	1	5	0	1	0	0	0	0	0	0	0	0	7
03:00	0	17	37	0	8	0	0	0	0	0	0	0	0	62
04:00	0	33	31	1	11	0	0	0	0	0	0	0	0	76
05:00	1	28	25	3	11	4	0	1	1	0	1	0	0	75
06:00	1	36	26	0	19	0	0	1	0	0	0	0	0	83
07:00	0	19	23	1	14	2	0	3	1	1	0	0	0	64
08:00	0	12	11	4	17	0	0	5	1	1	0	0	0	51
09:00	0	12	5	1	13	1	1	3	0	0	0	0	0	36
10:00	1	17	20	0	12	2	1	1	2	0	0	0	0	56
11:00	0	36	27	0	9	1	0	2	0	0	0	0	0	75
12 PM	2	30	11	1	9	0	0	2	0	0	0	0	0	55
13:00	0	28	16	2	10	1	0	4	1	0	0	0	0	62
14:00	1	22	19	1	7	0	0	3	0	0	0	0	0	53
15:00	0	41	32	0	13	0	0	1	0	0	0	0	0	87
16:00	0	40	27	1	13	0	0	1	0	0	0	0	0	82
17:00	1	27	29	1	14	0	0	1	0	0	1	0	0	74
18:00	0	14	24	0	9	0	0	2	0	0	0	0	0	49
19:00	1	20	38	0	6	0	0	1	0	0	0	0	0	66
20:00	0	18	24	0	6	0	0	0	0	0	0	0	0	48
21:00	0	9	11	0	4	0	0	0	0	0	0	0	0	24
22:00	0	1	10	0	1	0	0	0	0	0	0	0	0	12
23:00	0	3	4	0	0	0	0	0	0	0	0	0	0	7
Total	8	472	462	16	209	11	2	31	6	2	2	0	0	1221
Percent	0.7%	38.7%	37.8%	1.3%	17.1%	0.9%	0.2%	2.5%	0.5%	0.2%	0.2%	0.0%	0.0%	
AM Peak	05:00	06:00	03:00	08:00	06:00	05:00	09:00	08:00	10:00	07:00	05:00			06:00
Vol.	1	36	37	4	19	4	1	5	2	1	1			83
PM Peak	12:00	15:00	19:00	13:00	17:00	13:00		13:00	13:00		17:00			15:00
Vol.	2	41	38	2	14	1		4	1		1			87
Grand Total	8	472	462	16	209	11	2	31	6	2	2	0	0	1221
Percent	0.7%	38.7%	37.8%	1.3%	17.1%	0.9%	0.2%	2.5%	0.5%	0.2%	0.2%	0.0%	0.0%	

Counts Unlimited, Inc.

County of Kern
Sierra Highway
S/ Dawn Road
24 Hour Directional Classification Count

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

Page 2

KCO003
Site Code: 999-24607

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	3	1	0	0	0	0	0	2	0	0	0	0	6
01:00	0	2	2	0	2	0	0	0	0	0	1	0	0	7
02:00	0	0	4	0	1	0	0	0	0	0	0	0	0	5
03:00	0	2	7	2	4	0	0	0	0	0	0	0	0	15
04:00	0	14	15	1	9	0	0	0	0	0	0	0	0	39
05:00	1	14	20	0	7	0	0	6	0	0	0	0	0	48
06:00	0	25	11	1	4	0	0	3	0	1	1	0	0	46
07:00	0	29	13	0	10	2	0	2	1	0	1	0	0	58
08:00	0	14	19	1	13	0	0	4	0	0	0	0	0	51
09:00	0	23	9	1	9	0	0	4	4	0	0	0	0	50
10:00	0	30	17	0	23	1	0	1	2	1	0	1	0	76
11:00	0	21	15	0	13	0	0	3	0	1	0	0	0	53
12 PM	0	40	12	1	7	0	0	3	0	1	0	0	0	64
13:00	2	61	19	1	8	0	0	4	1	0	1	0	0	97
14:00	0	60	16	3	11	0	0	3	2	0	0	0	0	95
15:00	1	49	25	3	15	1	0	0	1	0	0	0	0	95
16:00	2	38	12	0	10	1	0	1	3	0	0	0	0	67
17:00	0	34	14	3	6	0	0	2	3	0	0	0	0	62
18:00	0	16	9	0	4	0	1	1	0	0	0	0	0	31
19:00	0	11	7	0	5	0	0	0	1	0	0	0	0	24
20:00	0	21	13	0	3	0	0	0	0	0	0	0	0	37
21:00	0	30	6	1	2	0	0	1	0	0	0	0	0	40
22:00	0	5	5	0	2	0	0	0	0	0	0	0	0	12
23:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
Total	6	544	274	18	168	5	1	38	20	4	4	1	0	1083
Percent	0.6%	50.2%	25.3%	1.7%	15.5%	0.5%	0.1%	3.5%	1.8%	0.4%	0.4%	0.1%	0.0%	
AM Peak	05:00	10:00	05:00	03:00	10:00	07:00		05:00	09:00	06:00	01:00	10:00		10:00
Vol.	1	30	20	2	23	2		6	4	1	1	1		76
PM Peak	13:00	13:00	15:00	14:00	15:00	15:00	18:00	13:00	16:00	12:00	13:00			13:00
Vol.	2	61	25	3	15	1	1	4	3	1	1			97
Grand Total	6	544	274	18	168	5	1	38	20	4	4	1	0	1083
Percent	0.6%	50.2%	25.3%	1.7%	15.5%	0.5%	0.1%	3.5%	1.8%	0.4%	0.4%	0.1%	0.0%	

Counts Unlimited, Inc.

County of Kern
Sierra Highway
S/ Dawn Road
24 Hour Directional Classification Count

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

KCO003
Site Code: 999-24607

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/25/24	0	7	4	0	1	0	0	0	2	0	0	0	0	14
01:00	0	6	6	0	3	0	0	0	0	0	1	0	0	16
02:00	0	1	9	0	2	0	0	0	0	0	0	0	0	12
03:00	0	19	44	2	12	0	0	0	0	0	0	0	0	77
04:00	0	47	46	2	20	0	0	0	0	0	0	0	0	115
05:00	2	42	45	3	18	4	0	7	1	0	1	0	0	123
06:00	1	61	37	1	23	0	0	4	0	1	1	0	0	129
07:00	0	48	36	1	24	4	0	5	2	1	1	0	0	122
08:00	0	26	30	5	30	0	0	9	1	1	0	0	0	102
09:00	0	35	14	2	22	1	1	7	4	0	0	0	0	86
10:00	1	47	37	0	35	3	1	2	4	1	0	1	0	132
11:00	0	57	42	0	22	1	0	5	0	1	0	0	0	128
12 PM	2	70	23	2	16	0	0	5	0	1	0	0	0	119
13:00	2	89	35	3	18	1	0	8	2	0	1	0	0	159
14:00	1	82	35	4	18	0	0	6	2	0	0	0	0	148
15:00	1	90	57	3	28	1	0	1	1	0	0	0	0	182
16:00	2	78	39	1	23	1	0	2	3	0	0	0	0	149
17:00	1	61	43	4	20	0	0	3	3	0	1	0	0	136
18:00	0	30	33	0	13	0	1	3	0	0	0	0	0	80
19:00	1	31	45	0	11	0	0	1	1	0	0	0	0	90
20:00	0	39	37	0	9	0	0	0	0	0	0	0	0	85
21:00	0	39	17	1	6	0	0	1	0	0	0	0	0	64
22:00	0	6	15	0	3	0	0	0	0	0	0	0	0	24
23:00	0	5	7	0	0	0	0	0	0	0	0	0	0	12
Total	14	1016	736	34	377	16	3	69	26	6	6	1	0	2304
Percent	0.6%	44.1%	31.9%	1.5%	16.4%	0.7%	0.1%	3.0%	1.1%	0.3%	0.3%	0.0%	0.0%	
AM Peak	05:00	06:00	04:00	08:00	10:00	05:00	09:00	08:00	09:00	06:00	01:00	10:00		10:00
Vol.	2	61	46	5	35	4	1	9	4	1	1	1		132
PM Peak	12:00	15:00	15:00	14:00	15:00	13:00	18:00	13:00	16:00	12:00	13:00			15:00
Vol.	2	90	57	4	28	1	1	8	3	1	1			182
Grand Total	14	1016	736	34	377	16	3	69	26	6	6	1	0	2304
Percent	0.6%	44.1%	31.9%	1.5%	16.4%	0.7%	0.1%	3.0%	1.1%	0.3%	0.3%	0.0%	0.0%	

APPENDIX B

Volume Development Worksheets

	EXISTING (2024) BALANCED PCE VOLUMES - AM PEAK HOUR														
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PHF
1	Mojave Tropico Rd & Backus Rd	15	5	9	4	0	8	12	130	7	9	50	2	251	0.92
2	SR 14 SB Ramps & Backus Rd	0	0	0	4	0	24	0	36	124	4	43	0	235	0.93
3	SR 14 NB Ramps & Backus Rd	34	2	7	0	0	0	18	22	0	0	13	4	100	0.96
4	SR 14 SB Ramps & Dawn Rd	0	0	0	1	3	6	0	18	9	2	2	0	41	0.68
5	SR 14 NB Ramps & Dawn Rd	2	4	2	0	0	0	16	3	0	0	2	2	31	0.95
6	Project Driveway & Dawn Rd	0	0	0	0	0	0	0	5	0	0	4	0	9	0.00
7	Sierra Hwy & Backus Rd	12	37	0	0	27	5	2	0	27	0	0	0	110	0.82
8	Sierra Hwy & Dawn Rd	2	98	0	0	80	2	3	0	2	0	0	0	187	0.85

	EXISTING (2024) BALANCED PCE VOLUMES - PM PEAK HOUR														
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PHF
1	Mojave Tropico Rd & Backus Rd	15	2	14	2	4	2	0	34	11	18	120	3	225	0.83
2	SR 14 SB Ramps & Backus Rd	0	0	0	12	3	26	0	21	35	8	134	0	239	0.87
3	SR 14 NB Ramps & Backus Rd	128	2	11	0	0	0	11	22	0	0	14	9	197	0.78
4	SR 14 SB Ramps & Dawn Rd	0	0	0	4	7	13	0	11	4	4	10	0	53	0.80
5	SR 14 NB Ramps & Dawn Rd	7	2	4	0	0	0	11	4	0	0	7	3	38	0.83
6	Project Driveway & Dawn Rd	0	0	0	0	0	0	0	8	0	0	10	0	18	0.00
7	Sierra Hwy & Backus Rd	23	56	0	0	27	0	7	0	26	0	0	0	139	0.78
8	Sierra Hwy & Dawn Rd	5	111	0	0	95	5	2	0	6	0	0	0	224	0.78

	YEAR 2028 BEFORE CONSTRUCTION PCE VOLUMES - AM PEAK HOUR												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	17	6	10	5	0	9	13	141	8	10	54	3
2	SR 14 SB Ramps & Backus Rd	0	0	0	5	0	26	0	39	134	5	47	0
3	SR 14 NB Ramps & Backus Rd	37	3	8	0	0	0	20	24	0	0	15	5
4	SR 14 SB Ramps & Dawn Rd	0	0	0	2	4	7	0	20	10	3	3	0
5	SR 14 NB Ramps & Dawn Rd	3	5	3	0	0	0	18	4	0	0	3	3
6	Project Driveway & Dawn Rd	0	0	0	0	0	0	0	6	0	0	5	0
7	Sierra Hwy & Backus Rd	13	40	0	0	30	6	3	0	30	0	0	0
8	Sierra Hwy & Dawn Rd	3	106	0	0	87	3	4	0	3	0	0	0

	YEAR 2028 BEFORE CONSTRUCTION PCE VOLUMES - PM PEAK HOUR												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	17	3	16	3	5	3	0	37	12	20	130	4
2	SR 14 SB Ramps & Backus Rd	0	0	0	13	4	29	0	23	38	9	145	0
3	SR 14 NB Ramps & Backus Rd	139	3	12	0	0	0	12	24	0	0	16	10
4	SR 14 SB Ramps & Dawn Rd	0	0	0	5	8	15	0	12	5	5	11	0
5	SR 14 NB Ramps & Dawn Rd	8	3	5	0	0	0	12	5	0	0	8	4
6	Project Driveway & Dawn Rd	0	0	0	0	0	0	0	9	0	0	11	0
7	Sierra Hwy & Backus Rd	25	61	0	0	30	0	8	0	29	0	0	0
8	Sierra Hwy & Dawn Rd	6	120	0	0	103	6	3	0	7	0	0	0

Annual Growth Rate 2%
(per email from Paul Candelaria at Kern County on 07/09/2024)

	BALANCING											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1												
2												
3			1									
4												
5												
6								1			1	
7						1						
8												

	BALANCING											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1												
2											1	
3			1									
4												
5												
6								1			1	
7						1						
8												

	YEAR 2028 BEFORE CONSTRUCTION - AM PEAK HOUR - BALANCED PCE VOLUMES														
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PHF
1	Mojave Tropico Rd & Backus Rd	17	6	10	5	0	9	13	141	8	10	54	3	276	0.92
2	SR 14 SB Ramps & Backus Rd	0	0	0	5	0	26	0	39	134	5	47	0	256	0.93
3	SR 14 NB Ramps & Backus Rd	37	3	9	0	0	0	20	24	0	0	15	5	113	0.96
4	SR 14 SB Ramps & Dawn Rd	0	0	0	2	4	7	0	20	10	3	3	0	49	0.68
5	SR 14 NB Ramps & Dawn Rd	3	5	3	0	0	0	18	4	0	0	3	3	39	0.95
6	Project Driveway & Dawn Rd	0	0	0	0	0	0	0	7	0	0	6	0	13	0.00
7	Sierra Hwy & Backus Rd	13	40	0	0	30	7	3	0	30	0	0	0	123	0.82
8	Sierra Hwy & Dawn Rd	3	106	0	0	87	3	4	0	3	0	0	0	206	0.85

	YEAR 2028 BEFORE CONSTRUCTION - PM PEAK HOUR - BALANCED PCE VOLUMES														
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PHF
1	Mojave Tropico Rd & Backus Rd	17	3	16	3	5	3	0	37	12	20	130	4	250	0.83
2	SR 14 SB Ramps & Backus Rd	0	0	0	13	4	29	0	23	38	9	146	0	262	0.87
3	SR 14 NB Ramps & Backus Rd	139	3	13	0	0	0	12	24	0	0	16	10	217	0.78
4	SR 14 SB Ramps & Dawn Rd	0	0	0	5	8	15	0	12	5	5	11	0	61	0.80
5	SR 14 NB Ramps & Dawn Rd	8	3	5	0	0	0	12	5	0	0	8	4	45	0.83
6	Project Driveway & Dawn Rd	0	0	0	0	0	0	0	10	0	0	12	0	22	0.00
7	Sierra Hwy & Backus Rd	25	61	0	0	30	1	8	0	29	0	0	0	154	0.78
8	Sierra Hwy & Dawn Rd	6	120	0	0	103	6	3	0	7	0	0	0	245	0.78

Re: Willow Rock Project - Traffic Study

PC Paul Candelaria <paulc@kerncounty.com>
To Akkinepally, Vamshi
Cc Erin Ekblad; Paris, Jeremy
i You replied to this message on 7/9/2024 8:48 AM.

Good morning, Vamshi,

I apologize for the late reply. The growth factor you can use is 2% for that area.

Best Regards,

Paul Candelaria
Senior Engineer
Kern County Public Works Department.
(661) 862-8869 Direct
(661) 862-8851 Fax
paulc@kerncounty.com

Construction Trip Generation

Vehicle Type	AM Peak Hour			PM Peak Hour			Daily		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
Workers (Cars)	749	0	749	0	749	749	749	749	1,498
Water Trucks (in veh)	1	1	2	1	1	2	2	2	4
Water Trucks (in PCE)	2	2	4	2	2	4	4	4	8
Haul Trucks (in veh)	18	18	36	18	18	36	180	180	360
Haul Trucks (in PCE)	36	36	72	36	36	72	360	360	720
Total Trucks in PCE	38	38	76	38	38	76	364	364	728
Total Construction Traffic (in PCE)	787	38	825	38	787	825	1,113	1,113	2,226

Specialized Workers	85%	637
Non-Specialized Workers	15%	112

City	Direction	% Non-Spl
Rosamond	S	36%
Lancaster	S	17%
Palmdale	S	8%
Los Angeles	S	3%
Mojave	N	2%
Santa Clarita	S	2%
California City	N	2%
Golden Hills	N	1%
Quartz Hill	S	1%
Tehachapi	N	1%
Other	S	27%

%	Dir	Non-Spl
94%	S	105
6%	N	7

City	Direction	% Spl
Rosamond	S	8%
Lancaster	S	41%
Palmdale	S	31%
Mojave	N	20%

%	Dir	Spl
80%	S	510
20%	N	127

Table 2: Residential Locations of Nonspecialized Workers

Residential Location	Percentage of Workers)
Rosamond CDP, CA	36%
Lancaster, CA	17%
Palmdale, CA	8%
Los Angeles, CA	3%
Mojave CDP, CA	2%
Santa Clarita, CA	2%
California City, CA	2%
Golden Hills CDP, CA	1%
Quartz Hill CDP, CA	1%
Tehachapi, CA	1%
Other Locations	27%
Total	100%

Source: U.S. Census Bureau, OnTheMap Application
<https://onthemap.ces.census.gov/>
CA = California; CDP = census-designated place

Table 3: Residential Distribution of Specialized Workers

Hotel Location	Number of Hotels (approximate)	Distribution of Workers
Rosamond CDP, CA	4	8%
Lancaster, CA	21	41%
Palmdale, CA	16	31%
Mojave CDP, CA	10	20%

CA = California; CDP = census-designated place

	INBOUND	SPECIALIZED WORKER TRIP DISTRIBUTION - AM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd				20%								
5	SR 14 NB Ramps & Dawn Rd			75%					20%				
6	Project Driveway & Dawn Rd							95%					5%
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd	5%											

	OUTBOUND	SPECIALIZED WORKER TRIP DISTRIBUTION - AM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd												
5	SR 14 NB Ramps & Dawn Rd												
6	Project Driveway & Dawn Rd												
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd												

	INBOUND	SPECIALIZED WORKER TRIP DISTRIBUTION - PM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd												
5	SR 14 NB Ramps & Dawn Rd												
6	Project Driveway & Dawn Rd												
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd												

	OUTBOUND	SPECIALIZED WORKER TRIP DISTRIBUTION - PM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd										75%		
5	SR 14 NB Ramps & Dawn Rd											75%	20%
6	Project Driveway & Dawn Rd				5%		95%						
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd									5%			

Spl	IN	OUT	TOTAL
AM	637	0	637
PM	0	637	637

IN	SPECIALIZED WORKER TRIPS - AM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	127	0	0	0	0	0	0	0	0
5	0	0	478	0	0	0	0	127	0	0	0	0
6	0	0	0	0	0	0	605	0	0	0	0	32
7	0	0	0	0	0	0	0	0	0	0	0	0
8	32	0	0	0	0	0	0	0	0	0	0	0

OUT	SPECIALIZED WORKER TRIPS - AM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0

IN	SPECIALIZED WORKER TRIPS - PM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0

OUT	SPECIALIZED WORKER TRIPS - PM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	478	0	0
5	0	0	0	0	0	0	0	0	0	0	478	127
6	0	0	0	32	0	605	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	32	0	0	0

	SPECIALIZED WORKER TRIPS - AM PEAK HOUR												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
3	SR 14 NB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
4	SR 14 SB Ramps & Dawn Rd	0	0	0	127	0	0	0	0	0	0	0	0
5	SR 14 NB Ramps & Dawn Rd	0	0	478	0	0	0	0	127	0	0	0	0
6	Project Driveway & Dawn Rd	0	0	0	0	0	0	605	0	0	0	0	32
7	Sierra Hwy & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
8	Sierra Hwy & Dawn Rd	32	0	0	0	0	0	0	0	0	0	0	0

	SPECIALIZED WORKER TRIPS - PM PEAK HOUR												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
3	SR 14 NB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
4	SR 14 SB Ramps & Dawn Rd	0	0	0	0	0	0	0	0	0	478	0	0
5	SR 14 NB Ramps & Dawn Rd	0	0	0	0	0	0	0	0	0	0	478	127
6	Project Driveway & Dawn Rd	0	0	0	32	0	605	0	0	0	0	0	0
7	Sierra Hwy & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
8	Sierra Hwy & Dawn Rd	0	0	0	0	0	0	0	0	32	0	0	0

	INBOUND	NON-SPL WORKER TRIP DISTRIBUTION - AM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd				6%								
5	SR 14 NB Ramps & Dawn Rd			89%					6%				
6	Project Driveway & Dawn Rd							95%					5%
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd	5%											

	OUTBOUND	NON-SPL WORKER TRIP DISTRIBUTION - AM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd												
5	SR 14 NB Ramps & Dawn Rd												
6	Project Driveway & Dawn Rd												
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd												

	INBOUND	NON-SPL WORKER TRIP DISTRIBUTION - PM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd												
5	SR 14 NB Ramps & Dawn Rd												
6	Project Driveway & Dawn Rd												
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd												

	OUTBOUND	NON-SPL WORKER TRIP DISTRIBUTION - PM PEAK HOUR											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd												
2	SR 14 SB Ramps & Backus Rd												
3	SR 14 NB Ramps & Backus Rd												
4	SR 14 SB Ramps & Dawn Rd										89%		
5	SR 14 NB Ramps & Dawn Rd											89%	6%
6	Project Driveway & Dawn Rd				5%		95%						
7	Sierra Hwy & Backus Rd												
8	Sierra Hwy & Dawn Rd									5%			

Non-Spl	IN	OUT	TOTAL
AM	112	0	112
PM	0	112	112

IN	NON-SPL WORKER TRIPS - AM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	7	0	0	0	0	0	0	0	0
5	0	0	100	0	0	0	0	7	0	0	0	0
6	0	0	0	0	0	0	106	0	0	0	0	6
7	0	0	0	0	0	0	0	0	0	0	0	0
8	6	0	0	0	0	0	0	0	0	0	0	0

OUT	NON-SPL WORKER TRIPS - AM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0

IN	NON-SPL WORKER TRIPS - PM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0

OUT	NON-SPL WORKER TRIPS - PM PEAK HOUR											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	100	0	0
5	0	0	0	0	0	0	0	0	0	0	100	7
6	0	0	0	6	0	106	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	6	0	0	0

	NON-SPL WORKER TRIPS - AM PEAK HOUR												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
3	SR 14 NB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
4	SR 14 SB Ramps & Dawn Rd	0	0	0	7	0	0	0	0	0	0	0	0
5	SR 14 NB Ramps & Dawn Rd	0	0	100	0	0	0	0	7	0	0	0	0
6	Project Driveway & Dawn Rd	0	0	0	0	0	106	0	0	0	0	0	6
7	Sierra Hwy & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
8	Sierra Hwy & Dawn Rd	6	0	0	0	0	0	0	0	0	0	0	0

	NON-SPL WORKER TRIPS - PM PEAK HOUR												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
3	SR 14 NB Ramps & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
4	SR 14 SB Ramps & Dawn Rd	0	0	0	0	0	0	0	0	0	100	0	0
5	SR 14 NB Ramps & Dawn Rd	0	0	0	0	0	0	0	0	0	0	100	7
6	Project Driveway & Dawn Rd	0	0	0	6	0	106	0	0	0	0	0	0
7	Sierra Hwy & Backus Rd	0	0	0	0	0	0	0	0	0	0	0	0
8	Sierra Hwy & Dawn Rd	0	0	0	0	0	0	0	0	6	0	0	0

[illegible][illegible]

Water (PCE)	IN	OUT	TOTAL
AM	2	2	4
PM	2	2	4

[illegible][illegible][illegible][illegible][illegible][illegible]

	INBOUND	HAUL TRUCK TRIP DISTRIBUTION											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd								100%				
2	SR 14 SB Ramps & Backus Rd								5%	95%			
3	SR 14 NB Ramps & Backus Rd								5%				
4	SR 14 SB Ramps & Dawn Rd				95%								
5	SR 14 NB Ramps & Dawn Rd								95%				
6	Project Driveway & Dawn Rd							95%					5%
7	Sierra Hwy & Backus Rd									5%			
8	Sierra Hwy & Dawn Rd						5%						

	OUTBOUND	HAUL TRUCK TRIP DISTRIBUTION											
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd											100%	
2	SR 14 SB Ramps & Backus Rd											100%	
3	SR 14 NB Ramps & Backus Rd	95%										5%	
4	SR 14 SB Ramps & Dawn Rd												
5	SR 14 NB Ramps & Dawn Rd												95%
6	Project Driveway & Dawn Rd				5%		95%						
7	Sierra Hwy & Backus Rd	5%											
8	Sierra Hwy & Dawn Rd						5%						

Haul (PCE)	IN	OUT	TOTAL
AM	36	36	72
PM	36	36	72

IN	HAUL TRUCK TRIPS - AM PEAK HOUR - PCE											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	36	0	0	0	0
2	0	0	0	0	0	0	0	2	34	0	0	0
3	0	0	0	0	0	0	0	2	0	0	0	0
4	0	0	0	34	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	34	0	0	0	0
6	0	0	0	0	0	0	34	0	0	0	0	2
7	0	0	0	0	0	0	0	0	2	0	0	0
8	0	0	0	0	0	2	0	0	0	0	0	0

OUT	HAUL TRUCK TRIPS - AM PEAK HOUR - PCE											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	36	0
2	0	0	0	0	0	0	0	0	0	0	36	0
3	34	0	0	0	0	0	0	0	0	0	2	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	34
6	0	0	0	2	0	34	0	0	0	0	0	0
7	2	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	2	0	0	0	0	0

IN	HAUL TRUCK TRIPS - PM PEAK HOUR - PCE											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	36	0	0	0	0
2	0	0	0	0	0	0	0	2	34	0	0	0
3	0	0	0	0	0	0	0	2	0	0	0	0
4	0	0	0	34	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	34	0	0	0	0
6	0	0	0	0	0	0	34	0	0	0	0	2
7	0	0	0	0	0	0	0	0	2	0	0	0
8	0	0	0	0	0	2	0	0	0	0	0	0

OUT	HAUL TRUCK TRIPS - PM PEAK HOUR - PCE											
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	0	0	0	0	0	0	0	0	0	0	36	0
2	0	0	0	0	0	0	0	0	0	0	36	0
3	34	0	0	0	0	0	0	0	0	0	2	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	34
6	0	0	0	2	0	34	0	0	0	0	0	0
7	2	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	2	0	0	0	0	0

	HAUL TRUCK TRIPS - AM PEAK HOUR - PCE												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	36	0	0	36	0
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	2	34	0	36	0
3	SR 14 NB Ramps & Backus Rd	34	0	0	0	0	0	0	2	0	0	2	0
4	SR 14 SB Ramps & Dawn Rd	0	0	0	34	0	0	0	0	0	0	0	0
5	SR 14 NB Ramps & Dawn Rd	0	0	0	0	0	0	0	34	0	0	0	34
6	Project Driveway & Dawn Rd	0	0	0	2	0	34	34	0	0	0	0	2
7	Sierra Hwy & Backus Rd	2	0	0	0	0	0	0	0	2	0	0	0
8	Sierra Hwy & Dawn Rd	0	0	0	0	0	2	2	0	0	0	0	0

	HAUL TRUCK TRIPS - PM PEAK HOUR - PCE												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	36	0	0	36	0
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	2	34	0	36	0
3	SR 14 NB Ramps & Backus Rd	34	0	0	0	0	0	0	2	0	0	2	0
4	SR 14 SB Ramps & Dawn Rd	0	0	0	34	0	0	0	0	0	0	0	0
5	SR 14 NB Ramps & Dawn Rd	0	0	0	0	0	0	0	34	0	0	0	34
6	Project Driveway & Dawn Rd	0	0	0	2	0	34	34	0	0	0	0	2
7	Sierra Hwy & Backus Rd	2	0	0	0	0	0	0	0	2	0	0	0
8	Sierra Hwy & Dawn Rd	0	0	0	0	0	2	2	0	0	0	0	0

	CONSTRUCTION TRIPS - AM PEAK HOUR - PCE													TOTAL	PHF
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	36	0	0	36	0	72	0.92
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	2	34	0	36	0	72	0.93
3	SR 14 NB Ramps & Backus Rd	34	0	0	0	0	0	0	2	0	0	2	0	38	0.96
4	SR 14 SB Ramps & Dawn Rd	0	0	0	169	0	0	0	0	0	1	0	0	170	0.68
5	SR 14 NB Ramps & Dawn Rd	0	0	579	0	0	0	0	169	0	0	1	35	784	0.95
6	Project Driveway & Dawn Rd	0	0	0	2	0	36	747	0	0	0	0	40	825	0.00
7	Sierra Hwy & Backus Rd	2	0	0	0	0	0	0	0	2	0	0	0	4	0.82
8	Sierra Hwy & Dawn Rd	38	0	0	0	0	2	2	0	0	0	0	0	42	0.85

	CONSTRUCTION TRIPS - PM PEAK HOUR - PCE														
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PHF
1	Mojave Tropico Rd & Backus Rd	0	0	0	0	0	0	0	36	0	0	36	0	72	0.83
2	SR 14 SB Ramps & Backus Rd	0	0	0	0	0	0	0	2	34	0	36	0	72	0.87
3	SR 14 NB Ramps & Backus Rd	34	0	0	0	0	0	0	2	0	0	2	0	38	0.78
4	SR 14 SB Ramps & Dawn Rd	0	0	0	35	0	0	0	0	0	579	0	0	614	0.80
5	SR 14 NB Ramps & Dawn Rd	0	0	1	0	0	0	0	35	0	0	579	169	784	0.83
6	Project Driveway & Dawn Rd	0	0	0	40	0	747	36	0	0	0	0	2	825	0.00
7	Sierra Hwy & Backus Rd	2	0	0	0	0	0	0	0	2	0	0	0	4	0.78
8	Sierra Hwy & Dawn Rd	0	0	0	0	0	2	2	0	38	0	0	0	42	0.78

YEAR 2028 DURING CONSTRUCTION PCE VOLUMES - AM PEAK HOUR													
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	17	6	10	5	0	9	13	177	8	10	90	3
2	SR 14 SB Ramps & Backus Rd	0	0	0	5	0	26	0	41	168	5	83	0
3	SR 14 NB Ramps & Backus Rd	71	3	9	0	0	0	20	26	0	0	17	5
4	SR 14 SB Ramps & Dawn Rd	0	0	0	171	4	7	0	20	10	4	3	0
5	SR 14 NB Ramps & Dawn Rd	3	5	582	0	0	0	18	173	0	0	4	38
6	Project Driveway & Dawn Rd	0	0	0	2	0	36	747	7	0	0	6	40
7	Sierra Hwy & Backus Rd	15	40	0	0	30	7	3	0	32	0	0	0
8	Sierra Hwy & Dawn Rd	41	106	0	0	87	5	6	0	3	0	0	0

YEAR 2028 DURING CONSTRUCTION PCE VOLUMES - PM PEAK HOUR													
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mojave Tropico Rd & Backus Rd	17	3	16	3	5	3	0	73	12	20	166	4
2	SR 14 SB Ramps & Backus Rd	0	0	0	13	4	29	0	25	72	9	182	0
3	SR 14 NB Ramps & Backus Rd	173	3	13	0	0	0	12	26	0	0	18	10
4	SR 14 SB Ramps & Dawn Rd	0	0	0	40	8	15	0	12	5	584	11	0
5	SR 14 NB Ramps & Dawn Rd	8	3	6	0	0	0	12	40	0	0	587	173
6	Project Driveway & Dawn Rd	0	0	0	40	0	747	36	10	0	0	12	2
7	Sierra Hwy & Backus Rd	27	61	0	0	30	1	8	0	31	0	0	0
8	Sierra Hwy & Dawn Rd	6	120	0	0	103	8	5	0	45	0	0	0

BALANCING													
#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
1													
2													
3													
4													
5													
6													
7													
8													

#	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
1													
2													
3													
4													
5													
6													
7													
8													

	YEAR 2028 DURING CONSTRUCTION PCE VOLUMES - AM PEAK HOUR														
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PHF
1	Mojave Tropico Rd & Backus Rd	17	6	10	5	0	9	13	177	8	10	90	3	348	0.92
2	SR 14 SB Ramps & Backus Rd	0	0	0	5	0	26	0	41	168	5	83	0	328	0.93
3	SR 14 NB Ramps & Backus Rd	71	3	9	0	0	0	20	26	0	0	17	5	151	0.96
4	SR 14 SB Ramps & Dawn Rd	0	0	0	171	4	7	0	20	10	4	3	0	219	0.68
5	SR 14 NB Ramps & Dawn Rd	3	5	582	0	0	0	18	173	0	0	4	38	823	0.95
6	Project Driveway & Dawn Rd	0	0	0	2	0	36	747	7	0	0	6	40	838	0.00
7	Sierra Hwy & Backus Rd	15	40	0	0	30	7	3	0	32	0	0	0	127	0.82
8	Sierra Hwy & Dawn Rd	41	106	0	0	87	5	6	0	3	0	0	0	248	0.85

	YEAR 2028 DURING CONSTRUCTION PCE VOLUMES - PM PEAK HOUR														
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PHF
1	Mojave Tropico Rd & Backus Rd	17	3	16	3	5	3	0	73	12	20	166	4	322	0.83
2	SR 14 SB Ramps & Backus Rd	0	0	0	13	4	29	0	25	72	9	182	0	334	0.87
3	SR 14 NB Ramps & Backus Rd	173	3	13	0	0	0	12	26	0	0	18	10	255	0.78
4	SR 14 SB Ramps & Dawn Rd	0	0	0	40	8	15	0	12	5	584	11	0	675	0.80
5	SR 14 NB Ramps & Dawn Rd	8	3	6	0	0	0	12	40	0	0	587	173	829	0.83
6	Project Driveway & Dawn Rd	0	0	0	40	0	747	36	10	0	0	12	2	847	0.00
7	Sierra Hwy & Backus Rd	27	61	0	0	30	1	8	0	31	0	0	0	158	0.78
8	Sierra Hwy & Dawn Rd	6	120	0	0	103	8	5	0	45	0	0	0	287	0.78

APPENDIX C

HCM 6th Analysis Worksheets

2024 EXISTING

AM PEAK

HCM 6th TWSC

1: Mojave Tropico Rd & Backus Rd

Existing (2024)

Timing Plan: AM PEAK

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	12	130	7	9	50	2	15	5	9	4	0	8					
Future Vol, veh/h	12	130	7	9	50	2	15	5	9	4	0	8					
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	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	13	141	8	10	54	2	16	5	10	4	0	9					

Major/Minor	Major1	Major2	Minor1	Minor2													
Conflicting Flow All	56	0	0	149	0	0	251	247	145	254	250	55					
Stage 1	-	-	-	-	-	-	171	171	-	75	75	-					
Stage 2	-	-	-	-	-	-	80	76	-	179	175	-					
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	1562	-	-	1445	-	-	707	659	908	703	656	1018					
Stage 1	-	-	-	-	-	-	836	761	-	939	836	-					
Stage 2	-	-	-	-	-	-	934	836	-	827	758	-					
Platoon blocked, %	-	-	-	-	-	-											
Mov Cap-1 Maneuver	1562	-	-	1445	-	-	692	648	908	683	646	1018					
Mov Cap-2 Maneuver	-	-	-	-	-	-	692	648	-	683	646	-					
Stage 1	-	-	-	-	-	-	828	754	-	931	830	-					
Stage 2	-	-	-	-	-	-	920	830	-	805	751	-					

Approach	EB	WB	NB	SB													
HCM Control Delay, s	0.6	1.1	10.1	9.2													
HCM LOS					B				A								

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1									
Capacity (veh/h)	738	1562	-	-	1445	-	-	875									
HCM Lane V/C Ratio	0.043	0.008	-	-	0.007	-	-	0.015									
HCM Control Delay (s)	10.1	7.3	0	-	7.5	0	-	9.2									
HCM Lane LOS	B	A	A	-	A	A	-	A									
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0									

HCM 6th TWSC
2: SR 14 SB Ramps & Backus Rd

Existing (2024)
Timing Plan: AM PEAK

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	0	36	124	4	43	0	0	0	0	4	0	24
Future Vol, veh/h	0	36	124	4	43	0	0	0	0	4	0	24
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	39	133	4	46	0	0	0	0	4	0	26
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	172	0	0				160	226	46
Stage 1	-	-	-	-	-	-				54	54	-
Stage 2	-	-	-	-	-	-				106	172	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1417	-	0				836	677	1029
Stage 1	0	-	-	-	-	0				974	854	-
Stage 2	0	-	-	-	-	0				923	760	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1417	-	-				833	0	1029
Mov Cap-2 Maneuver	-	-	-	-	-	-				833	0	-
Stage 1	-	-	-	-	-	-				974	0	-
Stage 2	-	-	-	-	-	-				920	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			0.6			8.7					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1417	-	996							
HCM Lane V/C Ratio	-	-	0.003	-	0.03							
HCM Control Delay (s)	-	-	7.5	0	8.7							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.1							

HCM 6th TWSC
3: SR 14 NB Ramps & Backus Rd

Existing (2024)
Timing Plan: AM PEAK

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↱			↰↱				
Traffic Vol, veh/h	18	22	0	0	13	4	34	2	7	0	0	0
Future Vol, veh/h	18	22	0	0	13	4	34	2	7	0	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	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	23	0	0	14	4	35	2	7	0	0	0

Major/Minor	Major1		Major2		Minor1					
Conflicting Flow All	18	0	-	-	-	0	77	79	23	
Stage 1	-	-	-	-	-	-	61	61	-	
Stage 2	-	-	-	-	-	-	16	18	-	
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-	
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	
Pot Cap-1 Maneuver	1612	-	0	0	-	-	931	815	1060	
Stage 1	-	-	0	0	-	-	967	848	-	
Stage 2	-	-	0	0	-	-	1012	884	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1612	-	-	-	-	-	920	0	1060	
Mov Cap-2 Maneuver	-	-	-	-	-	-	920	0	-	
Stage 1	-	-	-	-	-	-	955	0	-	
Stage 2	-	-	-	-	-	-	1012	0	-	

Approach	EB	WB	NB
HCM Control Delay, s	3.3	0	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	941	1612	-	-	-
HCM Lane V/C Ratio	0.048	0.012	-	-	-
HCM Control Delay (s)	9	7.3	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

HCM 6th TWSC
4: SR 14 SB Ramps & Dawn Rd

Existing (2024)
Timing Plan: AM PEAK

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	0	18	9	2	2	0	0	0	0	1	3	6
Future Vol, veh/h	0	18	9	2	2	0	0	0	0	1	3	6
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	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	26	13	3	3	0	0	0	0	1	4	9
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	39	0	0				42	48	3
Stage 1	-	-	-	-	-	-				9	9	-
Stage 2	-	-	-	-	-	-				33	39	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1584	-	0				974	847	1087
Stage 1	0	-	-	-	-	0				1019	892	-
Stage 2	0	-	-	-	-	0				995	866	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1584	-	-				972	0	1087
Mov Cap-2 Maneuver	-	-	-	-	-	-				972	0	-
Stage 1	-	-	-	-	-	-				1019	0	-
Stage 2	-	-	-	-	-	-				993	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			3.6			8.4					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1584	-	1069							
HCM Lane V/C Ratio	-	-	0.002	-	0.014							
HCM Control Delay (s)	-	-	7.3	0	8.4							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0							

HCM 6th TWSC
5: SR 14 NB Ramps & Dawn Rd

Existing (2024)
Timing Plan: AM PEAK

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	16	3	0	0	2	2	2	4	2	0	0	0
Future Vol, veh/h	16	3	0	0	2	2	2	4	2	0	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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	17	3	0	0	2	2	2	4	2	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	4	0	-	-	-	0	40	41	3			
Stage 1	-	-	-	-	-	-	37	37	-			
Stage 2	-	-	-	-	-	-	3	4	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1631	-	0	0	-	-	977	855	1087			
Stage 1	-	-	0	0	-	-	991	868	-			
Stage 2	-	-	0	0	-	-	1025	897	-			
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1631	-	-	-	-	-	967	0	1087			
Mov Cap-2 Maneuver	-	-	-	-	-	-	967	0	-			
Stage 1	-	-	-	-	-	-	981	0	-			
Stage 2	-	-	-	-	-	-	1025	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	6.1			0			8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	1023	1631	-	-	-							
HCM Lane V/C Ratio	0.008	0.01	-	-	-							
HCM Control Delay (s)	8.5	7.2	0	-	-							
HCM Lane LOS	A	A	A	-	-							
HCM 95th %tile Q(veh)	0	0	-	-	-							

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	5	4	0	0	0
Future Vol, veh/h	0	5	4	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5	4	0	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	4	0	-	0	9	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	5	-
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	1631	-	-	-	1017	1085
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	1023	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1631	-	-	-	1017	1085
Mov Cap-2 Maneuver	-	-	-	-	1017	-
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	1023	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1631	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	-	-	0	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	27	12	37	27	5
Future Vol, veh/h	2	27	12	37	27	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	33	15	45	33	6
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	111	36	39	0	-	0
Stage 1	36	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	891	1042	1584	-	-	-
Stage 1	992	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	882	1042	1584	-	-	-
Mov Cap-2 Maneuver	882	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.6	1.8		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1584	-	1029	-	-	
HCM Lane V/C Ratio	0.009	-	0.034	-	-	
HCM Control Delay (s)	7.3	0	8.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	2	98	80	2
Future Vol, veh/h	3	2	2	98	80	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	2	2	115	94	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	214	95	96	0	-	0
Stage 1	95	-	-	-	-	-
Stage 2	119	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	779	967	1510	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	778	967	1510	-	-	-
Mov Cap-2 Maneuver	778	-	-	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	0.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1510	-	844	-	-	
HCM Lane V/C Ratio	0.002	-	0.007	-	-	
HCM Control Delay (s)	7.4	0	9.3	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

PM PEAK

HCM 6th TWSC

1: Mojave Tropico Rd & Backus Rd

Existing (2024)

Timing Plan: PM PEAK

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	0	34	11	18	120	3	15	2	14	2	4	2	↕	
Future Vol, veh/h	0	34	11	18	120	3	15	2	14	2	4	2		
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	83	83	83	83	83	83	83	83	83	83	83	83		
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0		
Mvmt Flow	0	41	13	22	145	4	18	2	17	2	5	2		

Major/Minor	Major1	Major2	Minor1	Minor2													
Conflicting Flow All	149	0	0	54	0	0	243	241	48	248	245	147					
Stage 1	-	-	-	-	-	-	48	48	-	191	191	-					
Stage 2	-	-	-	-	-	-	195	193	-	57	54	-					
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	1445	-	-	1564	-	-	715	664	1027	710	661	905					
Stage 1	-	-	-	-	-	-	971	859	-	815	746	-					
Stage 2	-	-	-	-	-	-	811	745	-	960	854	-					
Platoon blocked, %																	
Mov Cap-1 Maneuver	1445	-	-	1564	-	-	701	654	1027	689	651	905					
Mov Cap-2 Maneuver	-	-	-	-	-	-	701	654	-	689	651	-					
Stage 1	-	-	-	-	-	-	971	859	-	815	735	-					
Stage 2	-	-	-	-	-	-	791	734	-	942	854	-					

Approach	EB	WB	NB	SB										
HCM Control Delay, s	0	0.9	9.6	10.1										
HCM LOS			A	B										

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	814	1445	-	-	1564	-	-	711						
HCM Lane V/C Ratio	0.046	-	-	-	0.014	-	-	0.014						
HCM Control Delay (s)	9.6	0	-	-	7.3	0	-	10.1						
HCM Lane LOS	A	A	-	-	A	A	-	B						
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0						

HCM 6th TWSC
2: SR 14 SB Ramps & Backus Rd

Existing (2024)
Timing Plan: PM PEAK

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	0	21	35	8	134	0	0	0	0	12	3	26
Future Vol, veh/h	0	21	35	8	134	0	0	0	0	12	3	26
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	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	24	40	9	154	0	0	0	0	14	3	30
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	64	0	0				216	236	154
Stage 1	-	-	-	-	-	-				172	172	-
Stage 2	-	-	-	-	-	-				44	64	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1551	-	0				777	668	897
Stage 1	0	-	-	-	-	0				863	760	-
Stage 2	0	-	-	-	-	0				984	846	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1551	-	-				772	0	897
Mov Cap-2 Maneuver	-	-	-	-	-	-				772	0	-
Stage 1	-	-	-	-	-	-				863	0	-
Stage 2	-	-	-	-	-	-				978	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			0.4			9.5					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1551	-	853							
HCM Lane V/C Ratio	-	-	0.006	-	0.055							
HCM Control Delay (s)	-	-	7.3	0	9.5							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.2							

HCM 6th TWSC
3: SR 14 NB Ramps & Backus Rd

Existing (2024)
Timing Plan: PM PEAK

Intersection												
Int Delay, s/veh	7.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	11	22	0	0	14	9	128	2	11	0	0	0
Future Vol, veh/h	11	22	0	0	14	9	128	2	11	0	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	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	28	0	0	18	12	164	3	14	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	30	0	-	-	-	0	80	86	28			
Stage 1	-	-	-	-	-	-	56	56	-			
Stage 2	-	-	-	-	-	-	24	30	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1596	-	0	0	-	-	927	808	1053			
Stage 1	-	-	0	0	-	-	972	852	-			
Stage 2	-	-	0	0	-	-	1004	874	-			
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1596	-	-	-	-	-	919	0	1053			
Mov Cap-2 Maneuver	-	-	-	-	-	-	919	0	-			
Stage 1	-	-	-	-	-	-	963	0	-			
Stage 2	-	-	-	-	-	-	1004	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	2.4			0			9.8					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	928	1596	-	-	-							
HCM Lane V/C Ratio	0.195	0.009	-	-	-							
HCM Control Delay (s)	9.8	7.3	0	-	-							
HCM Lane LOS	A	A	A	-	-							
HCM 95th %tile Q(veh)	0.7	0	-	-	-							

HCM 6th TWSC
4: SR 14 SB Ramps & Dawn Rd

Existing (2024)
Timing Plan: PM PEAK

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	11	4	4	10	0	0	0	0	4	7	13
Future Vol, veh/h	0	11	4	4	10	0	0	0	0	4	7	13
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	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	14	5	5	13	0	0	0	0	5	9	16
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	19	0	0				40	42	13
Stage 1	-	-	-	-	-	-				23	23	-
Stage 2	-	-	-	-	-	-				17	19	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1611	-	0				977	854	1073
Stage 1	0	-	-	-	-	0				1005	880	-
Stage 2	0	-	-	-	-	0				1011	884	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1611	-	-				974	0	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-				974	0	-
Stage 1	-	-	-	-	-	-				1005	0	-
Stage 2	-	-	-	-	-	-				1008	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			2.1			8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1611	-	1048							
HCM Lane V/C Ratio	-	-	0.003	-	0.029							
HCM Control Delay (s)	-	-	7.2	0	8.5							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.1							

HCM 6th TWSC
5: SR 14 NB Ramps & Dawn Rd

Existing (2024)
Timing Plan: PM PEAK

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	11	4	0	0	7	3	7	2	4	0	0	0
Future Vol, veh/h	11	4	0	0	7	3	7	2	4	0	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	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	5	0	0	8	4	8	2	5	0	0	0

Major/Minor	Major1		Major2		Minor1					
Conflicting Flow All	12	0	-	-	-	0	41	43	5	
Stage 1	-	-	-	-	-	-	31	31	-	
Stage 2	-	-	-	-	-	-	10	12	-	
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-	
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	
Pot Cap-1 Maneuver	1620	-	0	0	-	-	975	853	1084	
Stage 1	-	-	0	0	-	-	997	873	-	
Stage 2	-	-	0	0	-	-	1018	890	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1620	-	-	-	-	-	967	0	1084	
Mov Cap-2 Maneuver	-	-	-	-	-	-	967	0	-	
Stage 1	-	-	-	-	-	-	989	0	-	
Stage 2	-	-	-	-	-	-	1018	0	-	

Approach	EB	WB	NB
HCM Control Delay, s	5.3	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1007	1620	-	-	-
HCM Lane V/C Ratio	0.016	0.008	-	-	-
HCM Control Delay (s)	8.6	7.2	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	0	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	10	0	0	0
Future Vol, veh/h	0	8	10	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	9	11	0	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	11	0	-	0	20	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	9	-
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	1621	-	-	-	1002	1076
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1019	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1621	-	-	-	1002	1076
Mov Cap-2 Maneuver	-	-	-	-	1002	-
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1019	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1621	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	-	-	0	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	26	23	56	27	0
Future Vol, veh/h	7	26	23	56	27	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	33	29	72	35	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	165	35	35	0	-	0
Stage 1	35	-	-	-	-	-
Stage 2	130	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	830	1044	1589	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	814	1044	1589	-	-	-
Mov Cap-2 Maneuver	814	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.8	2.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1589	-	985	-	-	
HCM Lane V/C Ratio	0.019	-	0.043	-	-	
HCM Control Delay (s)	7.3	0	8.8	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	6	5	111	95	5
Future Vol, veh/h	2	6	5	111	95	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	8	6	142	122	6
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	279	125	128	0	-	0
Stage 1	125	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	715	931	1470	-	-	-
Stage 1	906	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	712	931	1470	-	-	-
Mov Cap-2 Maneuver	712	-	-	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.2	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1470	-	865	-	-	
HCM Lane V/C Ratio	0.004	-	0.012	-	-	
HCM Control Delay (s)	7.5	0	9.2	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

2028 BEFORE CONSTRUCTION

AM PEAK

HCM 6th TWSC

1: Mojave Tropico Rd & Backus Rd

2028 Before Construction

Timing Plan: AM PEAK

Intersection																	
Int Delay, s/veh		2.3															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR					
Lane Configurations																	
Traffic Vol, veh/h	13	141	8	10	54	3	17	6	10	5	0	9					
Future Vol, veh/h	13	141	8	10	54	3	17	6	10	5	0	9					
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	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	14	153	9	11	59	3	18	7	11	5	0	10					

Major/Minor	Major1	Major2	Minor1	Minor2													
Conflicting Flow All	62	0	0	162	0	0	274	270	158	278	273	61					
Stage 1	-	-	-	-	-	-	186	186	-	83	83	-					
Stage 2	-	-	-	-	-	-	88	84	-	195	190	-					
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	1554	-	-	1429	-	-	683	640	893	678	637	1010					
Stage 1	-	-	-	-	-	-	820	750	-	930	830	-					
Stage 2	-	-	-	-	-	-	925	829	-	811	747	-					
Platoon blocked, %	-	-	-	-	-	-											
Mov Cap-1 Maneuver	1554	-	-	1429	-	-	667	628	893	656	626	1010					
Mov Cap-2 Maneuver	-	-	-	-	-	-	667	628	-	656	626	-					
Stage 1	-	-	-	-	-	-	812	743	-	921	823	-					
Stage 2	-	-	-	-	-	-	909	822	-	786	740	-					

Approach	EB	WB	NB	SB													
HCM Control Delay, s	0.6	1.1	10.3	9.3													
HCM LOS			B	A													

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1									
Capacity (veh/h)	714	1554	-	-	1429	-	-	847									
HCM Lane V/C Ratio	0.05	0.009	-	-	0.008	-	-	0.018									
HCM Control Delay (s)	10.3	7.3	0	-	7.5	0	-	9.3									
HCM Lane LOS	B	A	A	-	A	A	-	A									
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1									

HCM 6th TWSC
2: SR 14 SB Ramps & Backus Rd

2028 Before Construction
Timing Plan: AM PEAK

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	0	39	134	5	47	0	0	0	0	5	0	26
Future Vol, veh/h	0	39	134	5	47	0	0	0	0	5	0	26
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	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	0	42	146	5	51	0	0	0	0	5	0	28
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	188	0	0				176	249	51
Stage 1	-	-	-	-	-	-				61	61	-
Stage 2	-	-	-	-	-	-				115	188	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1398	-	0				818	657	1023
Stage 1	0	-	-	-	-	0				967	848	-
Stage 2	0	-	-	-	-	0				915	748	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1398	-	-				815	0	1023
Mov Cap-2 Maneuver	-	-	-	-	-	-				815	0	-
Stage 1	-	-	-	-	-	-				967	0	-
Stage 2	-	-	-	-	-	-				911	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			0.7			8.8					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1398	-	983							
HCM Lane V/C Ratio	-	-	0.004	-	0.034							
HCM Control Delay (s)	-	-	7.6	0	8.8							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.1							

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	20	24	0	0	15	5	37	3	9	0	0	0
Future Vol, veh/h	20	24	0	0	15	5	37	3	9	0	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	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	22	26	0	0	16	5	40	3	10	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	21	0	-	-	-	0	89	91	26			
Stage 1	-	-	-	-	-	-	70	70	-			
Stage 2	-	-	-	-	-	-	19	21	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1608	-	0	0	-	-	917	803	1056			
Stage 1	-	-	0	0	-	-	958	841	-			
Stage 2	-	-	0	0	-	-	1009	882	-			
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1608	-	-	-	-	-	904	0	1056			
Mov Cap-2 Maneuver	-	-	-	-	-	-	904	0	-			
Stage 1	-	-	-	-	-	-	945	0	-			
Stage 2	-	-	-	-	-	-	1009	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	3.3			0			9.1					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	930	1608	-	-	-							
HCM Lane V/C Ratio	0.057	0.014	-	-	-							
HCM Control Delay (s)	9.1	7.3	0	-	-							
HCM Lane LOS	A	A	A	-	-							
HCM 95th %tile Q(veh)	0.2	0	-	-	-							

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	20	10	3	3	0	0	0	0	2	4	7
Future Vol, veh/h	0	20	10	3	3	0	0	0	0	2	4	7
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	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	0	22	11	3	3	0	0	0	0	2	4	8
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	33	0	0				37	42	3
Stage 1	-	-	-	-	-	-				9	9	-
Stage 2	-	-	-	-	-	-				28	33	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1592	-	0				981	854	1087
Stage 1	0	-	-	-	-	0				1019	892	-
Stage 2	0	-	-	-	-	0				1000	872	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1592	-	-				979	0	1087
Mov Cap-2 Maneuver	-	-	-	-	-	-				979	0	-
Stage 1	-	-	-	-	-	-				1019	0	-
Stage 2	-	-	-	-	-	-				998	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			3.6			8.4					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1592	-	1061							
HCM Lane V/C Ratio	-	-	0.002	-	0.013							
HCM Control Delay (s)	-	-	7.3	0	8.4							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0							

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	18	4	0	0	3	3	3	5	3	0	0	0
Future Vol, veh/h	18	4	0	0	3	3	3	5	3	0	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	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	20	4	0	0	3	3	3	5	3	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	6	0	-	-	-	0	49	50	4			
Stage 1	-	-	-	-	-	-	44	44	-			
Stage 2	-	-	-	-	-	-	5	6	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1628	-	0	0	-	-	965	845	1085			
Stage 1	-	-	0	0	-	-	984	862	-			
Stage 2	-	-	0	0	-	-	1023	895	-			
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1628	-	-	-	-	-	953	0	1085			
Mov Cap-2 Maneuver	-	-	-	-	-	-	953	0	-			
Stage 1	-	-	-	-	-	-	972	0	-			
Stage 2	-	-	-	-	-	-	1023	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	5.9			0			8.6					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	1015	1628	-	-	-							
HCM Lane V/C Ratio	0.012	0.012	-	-	-							
HCM Control Delay (s)	8.6	7.2	0	-	-							
HCM Lane LOS	A	A	A	-	-							
HCM 95th %tile Q(veh)	0	0	-	-	-							

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	6	0	0	0
Future Vol, veh/h	0	7	6	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	7	0	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	7	0	-	0	15	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	8	-
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	1627	-	-	-	1009	1081
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1020	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1627	-	-	-	1009	1081
Mov Cap-2 Maneuver	-	-	-	-	1009	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1020	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1627	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	-	0
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	30	13	40	30	7
Future Vol, veh/h	3	30	13	40	30	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	33	14	43	33	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	108	37	41	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	894	1041	1581	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	1041	1581	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.6	1.8		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1581	-	1025	-	-	
HCM Lane V/C Ratio	0.009	-	0.035	-	-	
HCM Control Delay (s)	7.3	0	8.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	3	3	106	87	3
Future Vol, veh/h	4	3	3	106	87	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	3	3	115	95	3
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	218	97	98	0	-	0
Stage 1	97	-	-	-	-	-
Stage 2	121	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	775	965	1508	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	773	965	1508	-	-	-
Mov Cap-2 Maneuver	773	-	-	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	0.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1508	-	845	-	-	
HCM Lane V/C Ratio	0.002	-	0.009	-	-	
HCM Control Delay (s)	7.4	0	9.3	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

PM PEAK

HCM 6th TWSC

1: Mojave Tropico Rd & Backus Rd

2028 Before Construction

Timing Plan: PM PEAK

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	0	37	12	20	130	4	17	3	16	3	5	3					
Future Vol, veh/h	0	37	12	20	130	4	17	3	16	3	5	3					
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	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	0	40	13	22	141	4	18	3	17	3	5	3					

Major/Minor	Major1	Major2	Minor1	Minor2													
Conflicting Flow All	145	0	0	53	0	0	238	236	47	244	240	143					
Stage 1	-	-	-	-	-	-	47	47	-	187	187	-					
Stage 2	-	-	-	-	-	-	191	189	-	57	53	-					
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	1450	-	1566	-	-	-	721	668	1028	714	665	910					
Stage 1	-	-	-	-	-	-	972	860	-	819	749	-					
Stage 2	-	-	-	-	-	-	815	748	-	960	855	-					
Platoon blocked, %	-	-	-	-	-	-											
Mov Cap-1 Maneuver	1450	-	1566	-	-	-	706	658	1028	691	655	910					
Mov Cap-2 Maneuver	-	-	-	-	-	-	706	658	-	691	655	-					
Stage 1	-	-	-	-	-	-	972	860	-	819	738	-					
Stage 2	-	-	-	-	-	-	794	737	-	940	855	-					

Approach	EB	WB	NB	SB													
HCM Control Delay, s	0	1	9.6	10.1													
HCM LOS			A	B													

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1									
Capacity (veh/h)	814	1450	-	-	1566	-	-	720									
HCM Lane V/C Ratio	0.048	-	-	-	0.014	-	-	0.017									
HCM Control Delay (s)	9.6	0	-	-	7.3	0	-	10.1									
HCM Lane LOS	A	A	-	-	A	A	-	B									
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1									

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	0	23	38	9	146	0	0	0	0	13	4	29
Future Vol, veh/h	0	23	38	9	146	0	0	0	0	13	4	29
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	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	0	25	41	10	159	0	0	0	0	14	4	32
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	66	0	0				225	245	159
Stage 1	-	-	-	-	-	-				179	179	-
Stage 2	-	-	-	-	-	-				46	66	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1549	-	0				768	661	892
Stage 1	0	-	-	-	-	0				857	755	-
Stage 2	0	-	-	-	-	0				982	844	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1549	-	-				763	0	892
Mov Cap-2 Maneuver	-	-	-	-	-	-				763	0	-
Stage 1	-	-	-	-	-	-				857	0	-
Stage 2	-	-	-	-	-	-				975	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			0.4			9.5					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1549	-	848							
HCM Lane V/C Ratio	-	-	0.006	-	0.059							
HCM Control Delay (s)	-	-	7.3	0	9.5							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.2							

HCM 6th TWSC
3: SR 14 NB Ramps & Backus Rd

2028 Before Construction
Timing Plan: PM PEAK

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	12	24	0	0	16	10	139	3	13	0	0	0
Future Vol, veh/h	12	24	0	0	16	10	139	3	13	0	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	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	13	26	0	0	17	11	151	3	14	0	0	0
Major/Minor	Major1		Major2		Minor1							
Conflicting Flow All	28	0	-	-	-	0	75	80	26			
Stage 1	-	-	-	-	-	-	52	52	-			
Stage 2	-	-	-	-	-	-	23	28	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1599	-	0	0	-	-	933	814	1056			
Stage 1	-	-	0	0	-	-	976	856	-			
Stage 2	-	-	0	0	-	-	1005	876	-			
Platoon blocked, %	-	-	-	-	-	-	-	-	-			
Mov Cap-1 Maneuver	1599	-	-	-	-	-	926	0	1056			
Mov Cap-2 Maneuver	-	-	-	-	-	-	926	0	-			
Stage 1	-	-	-	-	-	-	968	0	-			
Stage 2	-	-	-	-	-	-	1005	0	-			
Approach	EB		WB		NB							
HCM Control Delay, s	2.4		0		9.7							
HCM LOS					A							
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	936	1599	-	-	-							
HCM Lane V/C Ratio	0.18	0.008	-	-	-							
HCM Control Delay (s)	9.7	7.3	0	-	-							
HCM Lane LOS	A	A	A	-	-							
HCM 95th %tile Q(veh)	0.7	0	-	-	-							

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	5	5	11	0	0	0	0	5	8	15
Future Vol, veh/h	0	12	5	5	11	0	0	0	0	5	8	15
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	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	0	13	5	5	12	0	0	0	0	5	9	16
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	18	0	0				38	40	12
Stage 1	-	-	-	-	-	-				22	22	-
Stage 2	-	-	-	-	-	-				16	18	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0				979	856	1074
Stage 1	0	-	-	-	-	0				1006	881	-
Stage 2	0	-	-	-	-	0				1012	884	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1612	-	-				976	0	1074
Mov Cap-2 Maneuver	-	-	-	-	-	-				976	0	-
Stage 1	-	-	-	-	-	-				1006	0	-
Stage 2	-	-	-	-	-	-				1009	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			2.3			8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1612	-	1048							
HCM Lane V/C Ratio	-	-	0.003	-	0.029							
HCM Control Delay (s)	-	-	7.2	0	8.5							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.1							

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	12	5	0	0	8	4	8	3	5	0	0	0
Future Vol, veh/h	12	5	0	0	8	4	8	3	5	0	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	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	13	5	0	0	9	4	9	3	5	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	13	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1619	-	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1619	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	5.1	0	8.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	1008	1619	-	-	-
HCM Lane V/C Ratio	0.017	0.008	-	-	-
HCM Control Delay (s)	8.6	7.2	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	12	0	0	0
Future Vol, veh/h	0	10	12	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	11	13	0	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	13	0	-	0	24	13
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	11	-
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	1619	-	-	-	997	1073
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1017	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1619	-	-	-	997	1073
Mov Cap-2 Maneuver	-	-	-	-	997	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1017	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1619	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	-	-	0	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	29	25	61	30	1
Future Vol, veh/h	8	29	25	61	30	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	32	27	66	33	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	154	34	34	0	-	0
Stage 1	34	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	842	1045	1591	-	-	-
Stage 1	994	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	827	1045	1591	-	-	-
Mov Cap-2 Maneuver	827	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.8	2.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1591	-	989	-	-	
HCM Lane V/C Ratio	0.017	-	0.041	-	-	
HCM Control Delay (s)	7.3	0	8.8	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	7	6	120	103	6
Future Vol, veh/h	3	7	6	120	103	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	8	7	130	112	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	260	116	119	0	-	0
Stage 1	116	-	-	-	-	-
Stage 2	144	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	733	942	1482	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	729	942	1482	-	-	-
Mov Cap-2 Maneuver	729	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.2	0.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1482	-	866	-	-	
HCM Lane V/C Ratio	0.004	-	0.013	-	-	
HCM Control Delay (s)	7.4	0	9.2	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

2028 DURING CONSTRUCTION

AM PEAK

HCM 6th TWSC

1: Mojave Tropico Rd & Backus Rd

2028 During Construction

Timing Plan: AM PEAK

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	13	177	8	10	90	3	17	6	10	5	0	9	↕↕
Future Vol, veh/h	13	177	8	10	90	3	17	6	10	5	0	9	
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	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	14	192	9	11	98	3	18	7	11	5	0	10	

Major/Minor	Major1	Major2	Minor1	Minor2	
Conflicting Flow All	101	0	0	201	0
Stage 1	-	-	-	-	225
Stage 2	-	-	-	-	127
Critical Hdwy	4.1	-	4.1	-	7.1
Critical Hdwy Stg 1	-	-	-	-	6.1
Critical Hdwy Stg 2	-	-	-	-	6.1
Follow-up Hdwy	2.2	-	2.2	-	3.5
Pot Cap-1 Maneuver	1504	-	1383	-	607
Stage 1	-	-	-	-	782
Stage 2	-	-	-	-	882
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1504	-	1383	-	592
Mov Cap-2 Maneuver	-	-	-	-	592
Stage 1	-	-	-	-	774
Stage 2	-	-	-	-	866

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.7	10.9	9.7
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	647	1504	-	-	1383	-	-	780
HCM Lane V/C Ratio	0.055	0.009	-	-	0.008	-	-	0.02
HCM Control Delay (s)	10.9	7.4	0	-	7.6	0	-	9.7
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC
2: SR 14 SB Ramps & Backus Rd

2028 During Construction
Timing Plan: AM PEAK

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	41	168	5	83	0	0	0	0	5	0	26
Future Vol, veh/h	0	41	168	5	83	0	0	0	0	5	0	26
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	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	0	45	183	5	90	0	0	0	0	5	0	28
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	228	0	0				237	328	90
Stage 1	-	-	-	-	-	-				100	100	-
Stage 2	-	-	-	-	-	-				137	228	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1352	-	0				756	594	973
Stage 1	0	-	-	-	-	0				929	816	-
Stage 2	0	-	-	-	-	0				895	719	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1352	-	-				753	0	973
Mov Cap-2 Maneuver	-	-	-	-	-	-				753	0	-
Stage 1	-	-	-	-	-	-				929	0	-
Stage 2	-	-	-	-	-	-				891	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			0.4			9					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1352	-	929							
HCM Lane V/C Ratio	-	-	0.004	-	0.036							
HCM Control Delay (s)	-	-	7.7	0	9							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.1							

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	20	26	0	0	17	5	71	3	9	0	0	0
Future Vol, veh/h	20	26	0	0	17	5	71	3	9	0	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	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	22	28	0	0	18	5	77	3	10	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	23	0	-	-	-	0	93	95	28			
Stage 1	-	-	-	-	-	-	72	72	-			
Stage 2	-	-	-	-	-	-	21	23	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1605	-	0	0	-	-	912	799	1053			
Stage 1	-	-	0	0	-	-	956	839	-			
Stage 2	-	-	0	0	-	-	1007	880	-			
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1605	-	-	-	-	-	899	0	1053			
Mov Cap-2 Maneuver	-	-	-	-	-	-	899	0	-			
Stage 1	-	-	-	-	-	-	943	0	-			
Stage 2	-	-	-	-	-	-	1007	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	3.2			0			9.4					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	914	1605	-	-	-							
HCM Lane V/C Ratio	0.099	0.014	-	-	-							
HCM Control Delay (s)	9.4	7.3	0	-	-							
HCM Lane LOS	A	A	A	-	-							
HCM 95th %tile Q(veh)	0.3	0	-	-	-							

Intersection												
Int Delay, s/veh	8.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	20	10	4	3	0	0	0	0	171	4	7
Future Vol, veh/h	0	20	10	4	3	0	0	0	0	171	4	7
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	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	0	22	11	4	3	0	0	0	0	186	4	8
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	33	0	0				39	44	3
Stage 1	-	-	-	-	-	-				11	11	-
Stage 2	-	-	-	-	-	-				28	33	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1592	-	0				978	852	1087
Stage 1	0	-	-	-	-	0				1017	890	-
Stage 2	0	-	-	-	-	0				1000	872	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1592	-	-				975	0	1087
Mov Cap-2 Maneuver	-	-	-	-	-	-				975	0	-
Stage 1	-	-	-	-	-	-				1017	0	-
Stage 2	-	-	-	-	-	-				997	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			4.2			9.6					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1592	-	979							
HCM Lane V/C Ratio	-	-	0.003	-	0.202							
HCM Control Delay (s)	-	-	7.3	0	9.6							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.8							

Intersection												
Int Delay, s/veh	14.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↱			↰↱				
Traffic Vol, veh/h	18	173	0	0	4	38	3	5	582	0	0	0
Future Vol, veh/h	18	173	0	0	4	38	3	5	582	0	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	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	20	188	0	0	4	41	3	5	633	0	0	0
Major/Minor	Major1		Major2		Minor1							
Conflicting Flow All	45	0	-	-	-	0	253	273	188			
Stage 1	-	-	-	-	-	-	228	228	-			
Stage 2	-	-	-	-	-	-	25	45	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1576	-	0	0	-	-	740	637	859			
Stage 1	-	-	0	0	-	-	815	719	-			
Stage 2	-	-	0	0	-	-	1003	861	-			
Platoon blocked, %	-	-	-	-	-	-	-	-	-			
Mov Cap-1 Maneuver	1576	-	-	-	-	-	730	0	859			
Mov Cap-2 Maneuver	-	-	-	-	-	-	730	0	-			
Stage 1	-	-	-	-	-	-	804	0	-			
Stage 2	-	-	-	-	-	-	1003	0	-			
Approach	EB		WB		NB							
HCM Control Delay, s	0.7		0		20.5							
HCM LOS					C							
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	858	1576	-	-	-							
HCM Lane V/C Ratio	0.747	0.012	-	-	-							
HCM Control Delay (s)	20.5	7.3	0	-	-							
HCM Lane LOS	C	A	A	-	-							
HCM 95th %tile Q(veh)	7	0	-	-	-							

Intersection						
Int Delay, s/veh	9.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	747	7	6	40	2	36
Future Vol, veh/h	747	7	6	40	2	36
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	812	8	7	43	2	39
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	50	0	-	0	1661	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	1632	-
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	1570	-	-	-	108	1052
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	177	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1570	-	-	-	52	1052
Mov Cap-2 Maneuver	-	-	-	-	52	-
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	177	-
Approach	EB	WB		SB		
HCM Control Delay, s	9.6	0		12.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1570	-	-	-	523	
HCM Lane V/C Ratio	0.517	-	-	-	0.079	
HCM Control Delay (s)	9.7	0	-	-	12.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	3.1	-	-	-	0.3	

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	32	15	40	30	7
Future Vol, veh/h	3	32	15	40	30	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	35	16	43	33	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	112	37	41	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	890	1041	1581	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	881	1041	1581	-	-	-
Mov Cap-2 Maneuver	881	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.6	2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1581	-	1025	-	-	
HCM Lane V/C Ratio	0.01	-	0.037	-	-	
HCM Control Delay (s)	7.3	0	8.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	3	41	106	87	5
Future Vol, veh/h	6	3	41	106	87	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	3	45	115	95	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	303	98	100	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	693	963	1505	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	671	963	1505	-	-	-
Mov Cap-2 Maneuver	671	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.9	2.1		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1505	-	746	-	-	
HCM Lane V/C Ratio	0.03	-	0.013	-	-	
HCM Control Delay (s)	7.5	0	9.9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0	-	-	

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	20	10	4	3	0	0	0	0	171	4	7
Future Vol, veh/h	0	20	10	4	3	0	0	0	0	171	4	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	22	11	4	3	0	0	0	0	186	4	8
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.3	7.5	8.4
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	57%	94%
Vol Thru, %	67%	43%	2%
Vol Right, %	33%	0%	4%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	30	7	182
LT Vol	0	4	171
Through Vol	20	3	4
RT Vol	10	0	7
Lane Flow Rate	33	8	198
Geometry Grp	1	1	1
Degree of Util (X)	0.038	0.01	0.227
Departure Headway (Hd)	4.155	4.497	4.135
Convergence, Y/N	Yes	Yes	Yes
Cap	867	800	868
Service Time	2.156	2.498	2.158
HCM Lane V/C Ratio	0.038	0.01	0.228
HCM Control Delay	7.3	7.5	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0	0.9

PM PEAK

HCM 6th TWSC

1: Mojave Tropico Rd & Backus Rd

2028 During Construction

Timing Plan: PM PEAK

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	0	73	12	20	166	4	17	3	16	3	5	3							
Future Vol, veh/h	0	73	12	20	166	4	17	3	16	3	5	3							
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	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	0	79	13	22	180	4	18	3	17	3	5	3							

Major/Minor	Major1	Major2	Minor1	Minor2															
Conflicting Flow All	184	0	0	92	0	0	316	314	86	322	318	182							
Stage 1	-	-	-	-	-	-	86	86	-	226	226	-							
Stage 2	-	-	-	-	-	-	230	228	-	96	92	-							
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	1403	-	-	1515	-	-	641	605	978	635	602	866							
Stage 1	-	-	-	-	-	-	927	827	-	781	721	-							
Stage 2	-	-	-	-	-	-	777	719	-	916	823	-							
Platoon blocked, %	-	-	-	-	-	-													
Mov Cap-1 Maneuver	1403	-	-	1515	-	-	626	595	978	613	592	866							
Mov Cap-2 Maneuver	-	-	-	-	-	-	626	595	-	613	592	-							
Stage 1	-	-	-	-	-	-	927	827	-	781	709	-							
Stage 2	-	-	-	-	-	-	756	707	-	896	823	-							

Approach	EB	WB	NB	SB															
HCM Control Delay, s	0	0.8	10.1	10.6															
HCM LOS			B	B															

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1											
Capacity (veh/h)	741	1403	-	-	1515	-	-	655											
HCM Lane V/C Ratio	0.053	-	-	-	0.014	-	-	0.018											
HCM Control Delay (s)	10.1	0	-	-	7.4	0	-	10.6											
HCM Lane LOS	B	A	-	-	A	A	-	B											
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1											

HCM 6th TWSC
2: SR 14 SB Ramps & Backus Rd

2028 During Construction
Timing Plan: PM PEAK

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↱						↰↱	
Traffic Vol, veh/h	0	25	72	9	182	0	0	0	0	13	4	29
Future Vol, veh/h	0	25	72	9	182	0	0	0	0	13	4	29
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	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	0	27	78	10	198	0	0	0	0	14	4	32
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	105	0	0				284	323	198
Stage 1	-	-	-	-	-	-				218	218	-
Stage 2	-	-	-	-	-	-				66	105	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1499	-	0				710	598	848
Stage 1	0	-	-	-	-	0				823	726	-
Stage 2	0	-	-	-	-	0				962	812	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1499	-	-				705	0	848
Mov Cap-2 Maneuver	-	-	-	-	-	-				705	0	-
Stage 1	-	-	-	-	-	-				823	0	-
Stage 2	-	-	-	-	-	-				955	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			0.3			9.8					
HCM LOS							A					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1499	-	798							
HCM Lane V/C Ratio	-	-	0.007	-	0.063							
HCM Control Delay (s)	-	-	7.4	0	9.8							
HCM Lane LOS	-	-	A	A	A							
HCM 95th %tile Q(veh)	-	-	0	-	0.2							

Intersection												
Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	12	26	0	0	18	10	173	3	13	0	0	0
Future Vol, veh/h	12	26	0	0	18	10	173	3	13	0	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	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	13	28	0	0	20	11	188	3	14	0	0	0
Major/Minor	Major1		Major2		Minor1							
Conflicting Flow All	31	0	-	-	-	0	80	85	28			
Stage 1	-	-	-	-	-	-	54	54	-			
Stage 2	-	-	-	-	-	-	26	31	-			
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-			
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3			
Pot Cap-1 Maneuver	1595	-	0	0	-	-	927	809	1053			
Stage 1	-	-	0	0	-	-	974	854	-			
Stage 2	-	-	0	0	-	-	1002	873	-			
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1595	-	-	-	-	-	920	0	1053			
Mov Cap-2 Maneuver	-	-	-	-	-	-	920	0	-			
Stage 1	-	-	-	-	-	-	966	0	-			
Stage 2	-	-	-	-	-	-	1002	0	-			
Approach	EB		WB		NB							
HCM Control Delay, s	2.3		0		10							
HCM LOS					B							
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR							
Capacity (veh/h)	928	1595	-	-	-							
HCM Lane V/C Ratio	0.221	0.008	-	-	-							
HCM Control Delay (s)	10	7.3	0	-	-							
HCM Lane LOS	B	A	A	-	-							
HCM 95th %tile Q(veh)	0.8	0	-	-	-							

Intersection												
Int Delay, s/veh	12.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	5	584	11	0	0	0	0	40	8	15
Future Vol, veh/h	0	12	5	584	11	0	0	0	0	40	8	15
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	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	0	13	5	635	12	0	0	0	0	43	9	16
Major/Minor	Major1			Major2			Minor2					
Conflicting Flow All	-	0	0	18	0	0				1298	1300	12
Stage 1	-	-	-	-	-	-				1282	1282	-
Stage 2	-	-	-	-	-	-				16	18	-
Critical Hdwy	-	-	-	4.1	-	-				6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-				5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.4	5.5	-
Follow-up Hdwy	-	-	-	2.2	-	-				3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	1612	-	0				180	163	1074
Stage 1	0	-	-	-	-	0				263	238	-
Stage 2	0	-	-	-	-	0				1012	884	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1612	-	-				109	0	1074
Mov Cap-2 Maneuver	-	-	-	-	-	-				109	0	-
Stage 1	-	-	-	-	-	-				263	0	-
Stage 2	-	-	-	-	-	-				610	0	-
Approach	EB			WB			SB					
HCM Control Delay, s	0			8.5			50.8					
HCM LOS							F					
Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1							
Capacity (veh/h)	-	-	1612	-	144							
HCM Lane V/C Ratio	-	-	0.394	-	0.476							
HCM Control Delay (s)	-	-	8.7	0	50.8							
HCM Lane LOS	-	-	A	A	F							
HCM 95th %tile Q(veh)	-	-	1.9	-	2.2							

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔				
Traffic Vol, veh/h	12	40	0	0	587	173	8	3	6	0	0	0
Future Vol, veh/h	12	40	0	0	587	173	8	3	6	0	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	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	13	43	0	0	638	188	9	3	7	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	826	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	813	-	0
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	813	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	2.2	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	488	813	-	-	-
HCM Lane V/C Ratio	0.038	0.016	-	-	-
HCM Control Delay (s)	12.7	9.5	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection						
Int Delay, s/veh	19.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	10	12	2	40	747
Future Vol, veh/h	36	10	12	2	40	747
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	39	11	13	2	43	812
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	15	0	-	0	103	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	89	-
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	1616	-	-	-	900	1072
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	940	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1616	-	-	-	878	1072
Mov Cap-2 Maneuver	-	-	-	-	878	-
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	940	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.7	0		20.8		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1616	-	-	-	1060	
HCM Lane V/C Ratio	0.024	-	-	-	0.807	
HCM Control Delay (s)	7.3	0	-	-	20.8	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	9.2	

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	31	27	61	30	1
Future Vol, veh/h	8	31	27	61	30	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	34	29	66	33	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	158	34	34	0	-	0
Stage 1	34	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	838	1045	1591	-	-	-
Stage 1	994	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	1045	1591	-	-	-
Mov Cap-2 Maneuver	822	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.8	2.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1591	-	990	-	-	
HCM Lane V/C Ratio	0.018	-	0.043	-	-	
HCM Control Delay (s)	7.3	0	8.8	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	45	6	120	103	8
Future Vol, veh/h	5	45	6	120	103	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	49	7	130	112	9
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	261	117	121	0	-	0
Stage 1	117	-	-	-	-	-
Stage 2	144	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	732	941	1479	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	728	941	1479	-	-	-
Mov Cap-2 Maneuver	728	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.2	0.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1479	-	914	-	-	
HCM Lane V/C Ratio	0.004	-	0.059	-	-	
HCM Control Delay (s)	7.4	0	9.2	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

Intersection	
Intersection Delay, s/veh	18.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	12	5	584	11	0	0	0	0	40	8	15
Future Vol, veh/h	0	12	5	584	11	0	0	0	0	40	8	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	13	5	635	12	0	0	0	0	43	9	16
Number of Lanes	0	1	0	0	1	0	0	0	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.7	19.6	9
HCM LOS	A	C	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	98%	63%
Vol Thru, %	71%	2%	13%
Vol Right, %	29%	0%	24%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	17	595	63
LT Vol	0	584	40
Through Vol	12	11	8
RT Vol	5	0	15
Lane Flow Rate	18	647	68
Geometry Grp	1	1	1
Degree of Util (X)	0.023	0.76	0.103
Departure Headway (Hd)	4.575	4.231	5.4
Convergence, Y/N	Yes	Yes	Yes
Cap	784	841	668
Service Time	2.591	2.32	3.401
HCM Lane V/C Ratio	0.023	0.769	0.102
HCM Control Delay	7.7	19.6	9
HCM Lane LOS	A	C	A
HCM 95th-tile Q	0.1	7.3	0.3

